



# Virtual Sites as Learning Spaces

Critical Issues on  
Languaging Research in  
Changing Eduscapes

Edited by  
**Sangeeta Bagga-Gupta**  
**Giulia Messina Dahlberg**  
**Ylva Lindberg**

palgrave  
macmillan

## Virtual Sites as Learning Spaces

“*Virtual Sites as Learning Spaces* is a fascinating and well-timed volume, unique in the combination of a social science and humanity perspective on learning in the virtual, and in how it allows a radical rupture with old frameworks on learning, language and identity, triggering the reader to imagine entirely new ones.”

—Mariëtte de Haan, *Professor of Intercultural Education, Utrecht University, Netherlands*, and co-editor of *Media and Migration—Learning in a Globalized World* (2016)

“As distinctions between online and offline contexts become increasingly blurred, our understandings of education and communication need refinement. This volume tackles a range of important questions about the multifaceted nature of language, literacies and learning across a range of digital-analogue contexts—from Facebook to Wikipedia. It is an empirically-rich and theoretically-varied addition to the critical literature on technology and education.”

—Neil Selwyn, *Monash University, Australia*, and author of *Is Technology Good for Education?* (2016)

“The authors provide the reader with effective examples and a generative analytical framework to acknowledge the continuum and the permeability between apparent current dichotomies such as digital-analogue. In a brilliant way educators are introduced to the frames and the norms that have been developing in relation to the ways different technologies are linked, used and interpreted by humans. A must-read for those interested in the connection between education and the evolving techno-scape.”

—Alessio Surian, *University of Padova, Italy*

Sangeeta Bagga-Gupta  
Giulia Messina Dahlberg • Ylva Lindberg  
Editors

# Virtual Sites as Learning Spaces

Critical Issues on Language Research  
in Changing Eduscapes

palgrave  
macmillan

*Editors*

Sangeeta Bagga-Gupta  
School of Education and Communication  
Jönköping University  
Jönköping, Sweden

Giulia Messina Dahlberg  
Department of Education and  
Special Education  
University of Gothenburg  
Gothenburg, Sweden

Ylva Lindberg  
School of Education and Communication  
Jönköping University  
Jönköping, Sweden

ISBN 978-3-030-26928-9      ISBN 978-3-030-26929-6 (eBook)  
<https://doi.org/10.1007/978-3-030-26929-6>

© The Editor(s) (if applicable) and The Author(s) 2019

The chapters “Inscriptions and Digitalization Initiatives Across Time in the Nation-State of Sweden: The Relevance of Shifts and Continuities in Policy Accounts for Teachers’ Work”, “The Story Event “The Beauty and the Beast” in Second Life: Literature Studies and the (Non-)Adoption of Virtual Worlds”, ““Oh It Was a Woman! Had I Known I Would Have Reacted Otherwise!”: Developing Digital Methods to Switch Identity-Related Properties in Order to Reveal Linguistic Stereotyping” and “Handling Languageing During Empirical Research: Ethnography as Action in and Across Time and Physical-Virtual Sites” are licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>). For further details see license information in the chapters.

This work is subject to copyright. All rights are solely and exclusively licensed by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, express or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Palgrave Macmillan imprint is published by the registered company Springer Nature Switzerland AG. The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland



## Foreword

Over a decade ago, I began the “Wired Up” project with two colleagues in The Netherlands (Mariette de Haan and Sandra Ponzanesi, both of Utrecht University). The purpose of Wired Up was to research how migrant youth used new technologies and media, and how their uses related to their experiences of migration. It was through the course of that work in Europe that I became acquainted with Sangeeta Bagga-Gupta and Giulia Messina Dahlberg, with their research group CCD (Communication, Culture, and Diversity), and with other scholars doing important work in related areas across northern Europe. Bagga-Gupta and Messina Dahlberg made a significant contribution to a special themed issue of *Learning, Media, and Technology*, edited by the Wired Up team. The moment seemed ripe—we had produced one of the very first edited journal issues out on learning, new media, and migration. About a year after that publication, Bagga-Gupta and Messina Dahlberg hosted the “Virtual Sites for Languageing Spaces” (ViLS-2) meeting in Örebro, Sweden, which I was enthusiastic to attend, and at which I met the third editor of the present volume, Ylva Lindberg, and became aware of her fascinating work on these issues as well.

But beyond the fortunate background of people meeting people around shared interests and commitments—a kind of affinity group—what really brings the Wired Up project to my mind in relation to this collection is the ambitious reach across the social sciences and humanities

that is present herein. While the field has been stewing on these approaches and co-locating them (sometimes in integrated ways, sometimes as forms of parallel play), this edited collection expands and sketches new futures across research questions and their multifaceted approaches. These transdisciplinary movements across social science and humanities can be captured, somewhat, in the multiple meanings of the expression “virtual sites,” the leading terms of the collection’s title. From a social science perspective, a “virtual site” may be associated with digital mediation itself, as contributing to something like an environment, social space, or ecology for learning. Here, the meaning of “virtual sites” can play with the other-worldliness of the digital realm, and the associated and complex ideas of how various “sites” for learning and identity are produced, are bounded or unbounded, are created by practices and structures, and are associated with power relations. The problem, the social scientist might say, is an updated version of the old “cyberspace” problem—if virtual sites are not entirely different spaces, then just what are they?

In this volume, a humanities perspective also speaks to these issues, and here with a unique and powerful focus on language. Work in digital communication often has either little or only indirect focus on language itself, yet in this volume the meaning of “virtual sites” extends into other trajectories through explorations of languaging, text, genre, fiction, and related issues. What comes to life about virtuality in these language explorations is that the virtual is not opposite or apart from the real; rather, the virtual is always entangled with the ideas of realization or actualization (Farman 2013). The virtual layers and multiplies the real: nonfiction/fiction, person/character, event/plot, and representation/imagination are always implicated in one another. Of course, entanglements of the real and the virtual are true for social science as well, but especially through language the imaginative power of *what could be*, and how such becomings are tied up with modal possibilities that stretch beyond the word, becomes powerfully present in the work. Looking closely at language/ing—in “virtual sites,” and moreover, *as* a site of virtuality—is the tapestry that this work weaves with/in the expansive and complex versions of life that have emerged through new forms of media, learning, and communication.

In a transdisciplinary mode, then, scholars and researchers should read this volume to reconsider and develop a more expansive view of learning.

In virtual sites? Of course, but where is there *not* a virtual site any longer? It was once said that our latest technologies have always functioned as a metaphor for our latest models of thinking or of the brain. Greek water technology, for instance, led to the four humors, and how they must be kept in balance. By the eighteenth century, the flows of fluids (e.g., water clocks) and mechanisms were used as metaphors for movements in the brain (Brooks 2014). Much later the computer functioned in these ways as a metaphor for thought (e.g., cognitive processing theory, parallel distributed processing) and later still the Internet (distributed cognition, networked learning). So, what about learning? How do new technologies and practices shape our imagination, methods, and metaphors for illuminating learning?

Social learning theorists like to repeat that learning is “situated.” From a social learning perspective, when we more seriously engage with understanding learning outside the individual, our ideas of “learning” will then always reflect our latest notion of “situation” or “site” as well. This volume pushes open the idea of situation and should be read with that goal—and gift—in view. If learning is situated, then just where is it situated? How are situations made? The situations for learning provided by earlier situated learning theorists—primarily localized contexts of observable action, and many involving some kind of material craft knowledge—created new theory for learning but simply no longer relate well to the full complexities of our distributed lives. The movement from situation to virtual sites indexed in this volume is complicated and troublesome, yet also full of hope in an expansive human capacity to create new situations and simultaneously “find” ourselves within them.

Along with “situation,” then, what we find recast in this volume is the notion of “participation” in learning; for social learning theorists, the book offers a more dynamic and productive engine through which to conceive of participation as not merely being located “in” situations, but as producing social spaces through which learning happens, in all of its particularity. Much of this work happens through a focus on language, and the possibilities that language scholars have discussed for some time to not only be referential to some context, but to be contextually productive as well (e.g., Duranti & Goodwin, 1992). As such, the chapters in the volume explore the policy document as a kind of virtual site, knowl-

edge promotion (and demotion) in Wikipedia as a language process, and how bots interact together with humans in the process of editing. The chapters also explore how virtual learning sites creatively change linguistic and cultural norms of interaction, and how multi-modal resources are deployed in the design of a mobile language learning app. Pedagogy in/with virtual sites is re-inspired, for example by an analysis of how an expansive text universe (far beyond an individual literary work) functions as a text-world, and another detailed sociolinguistic pedagogy into modes of stereotyping. Other chapters specifically attend to problems of method—including a fascinating piece on using literary methods to explore online interactions in a virtual world.

Thus, the chapters can and should be read as individual investigations and world-stirrings concerning researching virtual sites of learning, each turning the objects of our assumptions concerning learning (e.g., the situation, participation, language, the individual) around in new ways for critical conversation. All the same, and in keeping with the leanings of the volume toward multiplicity and complexity, and toward the interplay of languaging, the work is best read as a kind of palimpsest. Individual studies and chapters overlay one another, directly and indirectly posing significant questions to the reader: What is learning and how is language active in it? How is learning produced in the here-and-now and the not-yet? How are learning possibilities cut off or controlled? None of these or other big questions can be addressed by a single piece, nor could they be modeled. Rather, it is through their relation to one another—the dialogues and movements between them—that we come to new understandings as well as new questions. No longer can scholars and students of learning conceive of social practice as playing chess on a single game board—capturing all the visible moves of the players. Rather, we must look at and through the multiple surfaces of different chess “boards” stacked atop one another. We must look and engage level by level, move by move, utterance by utterance, and see how the pieces, material and semiotic, engage in new forms of worldmaking even as they produce new kinds of learners.

## References

- Brooks, R. A. (2014). What Scientific Idea Is Ready for Retirement? Computational Metaphor. *Edge*. Retrieved May 19, 2019, from <https://www.edge.org/response-detail/25336>
- Duranti, A., & Goodwin, C. (Eds.). (1992). *Rethinking Context: Language as an Interactive Phenomenon* (Vol. 11). Cambridge: Cambridge University Press.
- Farman, J. (2013). *Mobile Interface Theory: Embodied Space and Locative Media*. New York: Routledge.

# Preface

There is little in the “connected knowledge society” that is not being shaped by digitalization or being envisaged as changing (not uncommonly for the better) by digitalization. Such ideas and visions notwithstanding, the continuing disparity in human existence, and the magical promise of digitalization, points towards a paradox and calls attention to the role of scholarship in creating a body of knowledge that is theoretically and empirically framed, rather than normatively framed. This volume thus attempts to unpack dimensions related to the type of research endeavours that continue to remain at the periphery.

While the Gutenberg press revolutionized issues of access in fundamental ways, the relegation, and even redundancy, of the printing press and the physical text into second place in the aftermath of digitalization has (re)opened the promise of new avenues of access, inclusion and democracy in ways that were, if not unthinkable, the stuff of science fiction only a generation ago. Where someone is, how and when people meet, and what such meetings offer in terms of positionality, (non)access, opportunities and learning constitute some questions that disrupt assumptions in a number of hegemonic frameworks in the social, humanistic and educational sciences. Such disruptions not only create analytical and methodological dissonance in mainstream scholarship, they also emerge as challenges for scientific enquiry by taking on board the very theoretical and methodological implications of such disruptions. The

research presented in the 13 chapters that make up the volume *Virtual sites as learning spaces*. *Critical issues on languaging research in changing eduscapes* attempt to take these disruptions seriously. As such, they attempt to go beyond normative research on the impact of digitalization on learning or on models that promise to improve learning through the use of different analogue and digital tools.

The research presented in this volume attempts to understand the wide-ranging repercussions that digitalization has had, and continues to have, on the nature and quality of human existence across the globe. This includes how digitalization is changing the nature of research methodological framings and data that is possible to generate across spaces in current projects.

The individual contributions in this volume together aim to explicitly fill a gap in the scholarship between the domains of Communication Studies and Educational Sciences across physical-virtual spaces as these intersect in the twenty-first century. The areas of scholarship that this volume brings together includes Computer Assisted Language Learning, Literacy, Literature, Applied Linguistics, Education and Pedagogy, Second Language Acquisition, Bi/Multilingualism and Multimodality. In addition, this scholarship center-stages empirical analysis. Thus, while the chapters represent different domains and disciplines, an important contribution of the volume relates to explicitly discussing methodological and conceptual issues of relevance in the light of present-day diversification, including virtual and physical mobility across time and space. By attempting to focus on “languaging”, that is, communicative practices in the making, and its intersection with both analogue and virtual learning spaces, the scholarship in this volume highlights the constant movement between analogue-virtual dimensions, as well as the linked communication that continuously re-shapes participants’ identity positionings.

The individual chapters go beyond a focus on “educational technology” *per se* and include a range of different virtual sites and analytical scales, which together present a variation of perspectives, theories and methods. The strong empirical *as well as* theoretical focus contributes towards a nuanced understanding of sites for learning language, literacy and literature, as well as of the ongoing communication in these set-

tings—beyond digital-physical and virtual/real dichotomies. This means that while the scholarship presented in the volume attempts to go beyond normative stances, we suggest—together with the scholars whose work is presented here—that a crucial way ahead in the epistemological task lies in going beyond the binaries of digital/virtual/online ... versus real/physical/offline ... as categories deployed to designate spaces. Instead, by focusing upon *processes* and *membership* patterns in and across social practices, it presents alternative ways of conceptualizing *virtual sites as spaces for learning* with empirically pushed, inductive and curiosity-driven research endeavours.

The volume *Virtual Sites as Learning Spaces. Critical issues on languaging research in changing eduscapes* has grown from and been enhanced by specific concluded and ongoing research and educational projects at the network-based research environment Communication, Culture and Diversity (CCD) ([www.ju.se/ccd](http://www.ju.se/ccd)). More central to its emergence has been project CINLE where issues of everyday languaging and learning in virtual platforms have been in the spotlight ([www.ju.se/ccd/cinle](http://www.ju.se/ccd/cinle)). In addition to publications from the project, two international activities on the themes of *Virtual Learning Sites, ViLS* in 2013 and 2015, brought together senior and junior international scholars at Örebro University, Sweden, where CCD was situated until 2016. The events were supported by the Swedish Research Council and the Faculty of Humanities and Social Sciences at Örebro University. These specific events comprised the contexts for the initiation and creation of this volume. The ViLS theme has shared and/or framed other parallel projects at CCD in a number of ways. National and international scholars from across the global North-South (including the North in the South and the South in the North) have not only enriched these dialogues from their specific domains of expertise and vantage points, but have also fine-tuned our ways of understanding the theoretical thrust wherein digitalization blurs the global North-South in important ways. We are grateful to the coordinators, leaders and administrators of the CCD research group during the lifespan of the CINLE project and the organization of the two ViLS events. We are also grateful for the input the chapters received from scholars associated with the CCD group, as well as to Palgrave's anonymous reviewer. We would like to acknowledge the



critical readings of different parts of this volume by the following colleagues:

*Susanne Almgren*, Sweden, *Sune Auken*, Denmark, *Rebekah Cupitt*, Sweden and England, *Zlatan Filipovic*, Sweden, *Jens Jørgen Hansen*, Denmark, *Lung-Lung Hu*, Sweden, *Francis Hult*, Sweden and USA, *Sverker Johansson*, Sweden, *Leena Kuure*, Finland, *Alessio Surian*, Italy, and *Elina Tapio*, Finland.

CCD is situated, since 2016, at Jönköping University, Sweden. This relocation has led to expanded perspectives and the initiation of two cross-disciplinary projects: DIP—Digitalization Initiatives, and Practices, [www.ju.se/ccd/dip](http://www.ju.se/ccd/dip), and LeaDMe—Learning, Digitalization, and Media, [www.ju.se/ccd/leadme](http://www.ju.se/ccd/leadme). The DIP project focuses on agency at macro, meso and micro scales with respect to digitalization in schools, and aims to shed light on the participants' roles and the policy processes that lead to digitalization initiatives in and across the educational landscape of Sweden. The LeaDMe project aims at bridging the gap between learning, digitalization and media in the educational sciences, by critically integrating global, digital and media perspectives in teacher education and educational research at the advanced levels.

The 13 chapters presented in this volume have been organized into four thematic sections. The first theme, *Institutional framings and policy*, brings together three chapters: “On epistemological issues in technologically infused spaces. Notes on virtual sites for learning” by Sangeeta Bagga-Gupta and Giulia Messina Dahlberg; “Inscriptions and digitalization initiatives across time in the nation-state of Sweden: The relevance of shifts and continuities in policy accounts for teachers' work” by Lars Almén and Bagga-Gupta and “Authenticity of language practices in virtual learning sites” by Jonathan R. White. The subsequent four chapters are presented under theme two, *Genre framings*: “Wikipedia's falling stars. Arguments for demotion when articles lose their status as Featured Articles” by Maria Mattus; “The story event ‘The Beauty and the Beast’ in Second Life: Literature studies and the (non-)adoption of virtual worlds” by Ylva Lindberg; “Text universe: A pedagogical strategy to teach literary classics” by Anette Svensson and Stefan Lundström, and “Wikipedia as a virtual learning site and a multilingual languaging site” by Sverker Johansson and Lindberg. The four chapters that constitute the

third theme in the volume all focus on *Identity and learning framings*: “‘Oh it was a woman! Had I known I would have reacted otherwise!’: Using digital methods to switch identity-related properties in order to reveal linguistic stereotyping” by Mattias Lindvall-Östling, Mats Deutschmann and Anders Steinvall; “Going on trial’: Teachers’ team performance in social media groups when facing problematic work-related issues” by Louise Peterson, Annika Lantz-Andersson, Thomas Hillman, Mona Lundin and Annika Bergviken Rensfeldt; “The construction of time, space and the body in virtual sites and the impact on language learner identities” by Regine Hampel and “Self-directed language learning: A semiotic analysis of a language learning app” by Wing Yee Jenifer Ho. The last two chapters are presented under theme four, *Researching virtual learning sites*: “Handling languaging during empirical research: Ethnography as action in and across time and physical-virtual sites” by Sangeeta Bagga-Gupta, Giulia Messina Dahlberg and Annaliina Gynne and “On methodology and the educational sciences—Reflections on the ViLS contributions” by Ylva Lindberg.

We, the editors of this volume, are what Sinfree Makoni calls “nomadic scholars” with experiences of leading nomadic lives across geopolitical physical and virtual spaces. We are also experienced users of multiple language varieties—oral, written and signed—and different analogue and digital tools. In addition to having shifted with the re-configuration of our network-based research group in 2016, we are situated in scholarship across different disciplines, the virtual-physical domains of scholarship and different nation-states.

Jönköping, Sweden  
 Göteborg, Sweden  
 Jönköping, Sweden  
 17 June 2019

Sangeeta Bagga-Gupta  
 Giulia Messina Dahlberg  
 Ylva Lindberg

# Contents

<b>Part I</b>	<b>Institutional Framings and Policies</b>	<b>1</b>
<b>1</b>	<b>On Epistemological Issues in Technologically Infused Spaces: Notes on Virtual Sites for Learning</b>	<b>3</b>
	<i>Sangeeta Bagga-Gupta and Giulia Messina Dahlberg</i>	
1	Introduction	3
2	Contemporary Learning Arenas: Conceptual Challenges	6
3	Unpacking Virtual Sites for Learning	9
4	Learning Anywhere/Anytime for Anyone? Back to the Future	14
5	Back to the Present and Looking Ahead: Concluding Remarks on Conceptual Challenges in the Study of Contemporary Learning Arenas	19
	References	21
<b>2</b>	<b>Inscriptions and Digitalization Initiatives Across Time in the Nation-State of Sweden: The Relevance of Shifts and Continuities in Policy Accounts for Teachers' Work</b>	<b>27</b>
	<i>Lars Almén and Sangeeta Bagga-Gupta</i>	
1	Introduction	27

2	Inscriptions, Languageing, Agency: Nexus Analysis as an Analytical Lens and Inspiration for Methodological Framings	30
3	The Nature of Shifts and Continuities	37
4	Discussion and Reflections	49
	Appendix 1	54
	References	59
<b>3</b>	<b>Authenticity of Language Practices in Virtual Learning Sites</b>	<b>63</b>
	<i>Jonathan R. White</i>	
1	Introduction	63
2	Background	64
3	Methodology	70
4	Results from the Questionnaire	72
5	Norms in Virtual Learning Sites	81
6	Conclusions	86
	Appendix: The Questionnaire	88
	References	91
<b>Part II</b>	<b>Genre Framings</b>	<b>95</b>
<b>4</b>	<b>Wikipedia's Falling Stars. Arguments for Demotion When Articles Lose Their Status as Featured Articles</b>	<b>97</b>
	<i>Maria Mattus</i>	
1	Introduction	97
2	Wikipedia as a Site for Virtual Learning	98
3	"A Little Knowledge Is a Dangerous Thing"	100
4	The Demotion Process	101
5	Analytical Framework	103
6	Material: Passages from Downgraded Articles' Talk Pages	106
7	Results: Users' Engagement and Arguments	106
8	Rhetorical Aspects	113
9	Conclusions	114
	References	117

<b>5</b>	<b>The Story Event “The Beauty and the Beast” in Second Life: Literature Studies and the (Non-)Adoption of Virtual Worlds</b>	121
	<i>Ylva Lindberg</i>	
1	Introduction	121
2	The Context of Literature and Learning with Virtual Worlds	122
3	The (Non-)Adoption of Virtual-World Technology in Education	125
4	Second Life and Virtual Worlds as “Promising” Learning Tools	127
5	The Literary Theme of Amor and Eros in a Real-Fictional-Virtual Continuum	130
6	Literary Learning as Embedded and Embodied Knowledge	145
	References	148
<b>6</b>	<b>Text Universe: A Pedagogical Strategy to Teach Literary Classics</b>	153
	<i>Anette Svensson and Stefan Lundström</i>	
1	Introduction	153
2	<i>Pride and Prejudice</i> as Text Universe	154
3	<i>Pride and Prejudice</i> Remakes	160
4	<i>Pride and Prejudice</i> Makeovers	163
5	Text Universes as Virtual Sites for Learning How to Mean	173
	References	177
<b>7</b>	<b>Wikipedia as a Virtual Learning Site and a Multilingual Languageing Site</b>	181
	<i>Sverker Johansson and Ylva Lindberg</i>	
1	Community and Culture of Wikipedia	182
2	Creation and Growth of Wikipedia Contents	185
3	Argumentation Patterns in Different Wikipedia Languages	189

4	Methods and Data	190
5	Results	194
6	Conclusions	199
	References	200
<b>Part III Identity and Learning Framings</b>		<b>205</b>
<b>8</b>	<b>“Oh It Was a Woman! Had I Known I Would Have Reacted Otherwise!”: Developing Digital Methods to Switch Identity-Related Properties in Order to Reveal Linguistic Stereotyping</b>	<b>207</b>
	<i>Mattias Lindvall-Östling, Mats Deutschmann, and Anders Steinvall</i>	
1	Introduction and Background	207
2	Method Development	215
3	Summary and Looking Ahead	233
	References	235
<b>9</b>	<b>“Going on Trial”: Teachers’ Team Performance in Social Media Groups When Facing Problematic Work-Related Issues</b>	<b>241</b>
	<i>Louise Peterson, Annika Lantz-Andersson, Thomas Hillman, Mona Lundin, and Annika Bergviken Rensfeldt</i>	
1	Introduction	241
2	Teachers’ Participation in Social Media	243
3	Theoretical Framework	245
4	Study Design and Methodological Considerations	246
5	Findings	249
6	Discussion	263
	References	265

<b>10</b>	<b>The Conceptualization of Time, Space, and the Body in Virtual Sites and the Impact on Language Learner Identities</b>	269
	<i>Regine Hampel</i>	
1	Introduction, Research Questions, and Approach	269
2	Theoretical Framework: (Language) Learner Identity	272
3	The Impact of New Technologies on Time, Place, and the Body in the Context of Language Learning	276
4	Implications for Language Learner Identity	286
5	Conclusion	288
	References	290
<b>11</b>	<b>Self-Directed Language Learning: A Semiotic Analysis of a Language Learning App</b>	295
	<i>Wing Yee Jenifer Ho</i>	
1	Introduction	295
2	Mobility and Language Learning	296
3	Multimodality and Language Learning Apps	299
4	A Social Semiotic Approach to Learning	300
5	An Introduction to <i>Memrise</i>	302
6	Pedagogic Work of Modes	305
7	Implications to Chinese Learning	315
8	Orchestration of Modes	317
9	Is Technology for Language Learning a Panacea?	319
10	Conclusions	320
	References	322

<b>Part IV</b>	<b>Researching Virtual Learning Sites</b>	329
<b>12</b>	<b>Handling Languageing During Empirical Research: Ethnography as Action in and Across Time and Physical-Virtual Sites</b>	331
	<i>Sangeeta Bagga-Gupta, Giulia Messina Dahlberg, and Annaliina Gynne</i>	
1	Introduction and Aim	331
2	On Performing Research: Theoretical Framings	335
3	On Data and Projects	340
4	Research <i>as</i> Action: Challenges and Opportunities	342
5	Reflexivity and Creativity: “Unboxing” the Research Process	368
	Appendix	373
	References	376
<b>13</b>	<b>On Methodology and the Educational Sciences—Reflections on the ViLS Contributions</b>	383
	<i>Ylva Lindberg</i>	
1	Doings with Tools and Implications for Learning	383
2	Learning Language, Literacy, and Literature in and with Digital Tools	386
3	Transformed Identities in Learning with Virtual Sites	391
4	Methodological Considerations	397
	References	400
<b>Index</b>		403



## Notes on contributors

**Lars Almén** is a doctoral candidate in Education and holds a Master of Educational Sciences. His research interest is digitalization of education, with a particular focus on implementation processes of digital tools in education and their influence on learning and education. With this research interest as a point of departure, he has conducted ethnographic and socioculturally framed field studies in Swedish lower secondary schools. Parallel with his PhD studies, he works as an upper secondary school teacher. Almén is a member of the research group CCD—Communication, Culture and Diversity—and works with course development in the project LeaDMe—Learning, Digitalization, and Media—at Jönköping University, Sweden.

**Sangeeta Bagga-Gupta** is Full Professor of Education with a multidisciplinary background at Jönköping University, Sweden. She has been Professor of Education with a focus on Didactics at Örebro University, Sweden and has been visiting professor at universities in Italy and India. She conducted her doctoral studies at the multidisciplinary department of Communication Studies at Linköping University, Sweden, and her postdoctoral studies at Gallaudet University in Washington DC, USA. Her multidisciplinary research focuses on communication broadly, identity and learning from ethnographically framed, multi-scalar, socio-cultural and de-colonial framings. She publishes extensively and is

multilingual in oral, written and signed languages. She is the director of the research environment LPS, Learning Practices inside and outside Schools ([www.ju.se/lps](http://www.ju.se/lps)), and is the scientific leader of the research group CCD ([www.ju.se/ccd](http://www.ju.se/ccd)). She leads the Swedish Research Council project PAL, Participation for All ([www.ju.se/ccd/pal](http://www.ju.se/ccd/pal)).

**Annika Bergviken Rensfeldt** is Associate Professor of Education with a specialization in IT and Learning at the University of Gothenburg, Department of Education, Communication and Learning in Sweden. Her research is focused on critical sociological aspects of digitalization and education, and aspects of digital labour, digital inequalities, and policy governance and networks within the educational technology sector. Annika has been a member of a research project on teacher professional learning and social media funded by the Swedish Research Council. She is leading a research project on teacher's digital work funded by the Swedish Research Council for Working Life Research, Forte.

**Mats Deutschmann** is Full Professor of English at Örebro University, Sweden. He was previously Associate Professor at Umeå University, and he is also Fellow Professor at the University of Seychelles. He has a diverse multidisciplinary research focus which includes sociolinguistics, the status of minority languages in post-colonial educational contexts, language didactics and learning designs with a special focus on e-learning and digital humanities. He is leading two projects on language and stereotyping: the Swedish Research Council project *Raising Awareness through Virtual Experiencing* (RAVE) and the Wallenberg Foundation-funded project *A Cross-Cultural Perspective on Raising of Awareness through Virtual Experiencing* (C-RAVE). Both projects approach the challenge of finding ways to increase sociolinguistic awareness of issues related to language and stereotyping.

**Annaliina Gynne** is Senior Lecturer of Swedish as a Second Language at the School of Education, Culture and Communication at Mälardalen University. She holds a PhD in Education and her research interests include multilingual and multicultural education, languaging, learning and identity work. Previously, Gynne's research has focused on issues related to languaging and meaning making practices among multilingual

young people in minority educational settings in Sweden. Recently, she has worked with research and development projects in educational settings where digitalization and multilingual pedagogies have been key. All these projects have been ethnographically framed.

**Regine Hampel** is Full Professor of Open and Distance Language Learning at the Open University, UK, and holds the role of Associate Dean (Research Excellence) in the Faculty of Wellbeing, Education and Language Studies. Her research focuses on the use of digital technologies for language learning and teaching, contributing to new theoretical and pedagogical perspectives that go beyond narrow cognitive approaches and that take account of sociocultural theories of learning and ecological principles, as well as the multimodal nature of new media. She is particularly interested in the affordances of these tools and the potential they offer for learner interaction, communication and real-world learning, as well as the implications for task design, online teaching skills and new literacies. This work has fed into a wide range of presentations and publications, including a forthcoming book, *Disruptive Technologies and the Language Classroom: A Complex Systems Theory Approach* (Palgrave Macmillan).

**Thomas Hillman** is Associate Professor of Education with a specialization in Information Technology and Learning at the University of Gothenburg, Sweden. With a background in the design of products and environments for learning, his research investigates technology use for learning in both formal and informal settings with a focus on the mutually constitutive relationship between the development of technologies and the transformation of epistemic practices. In recent years, Hillman's work has focused on the blurring boundaries between online and offline activities in many aspects of contemporary life. Much of his research relies on extensive use of digital records of the ways people interact with technologies, and Hillman works to adapt and develop methods and tools for gaining access to and making sense of these activities.

**Wing Yee Jenifer Ho** is Assistant Professor in the Department of English, City University of Hong Kong. She holds a PhD in Applied Linguistics from UCL Institute of Education, London, UK. Her research

interests lie in the area of social semiotic multimodality and translanguaging in the context of language learning “in the wild”. She is also interested in conducting research related to language learning using mobile technologies. In addition, she is keen to develop innovative qualitative research methods in order to capture the complexity of out-of-class language learning. Her latest research employs a multimodal lens to explore the widespread popularity of online English teaching materials that are created by the public to a global audience.

**Sverker Johansson** is Senior Advisor at Dalarna University, with a background in both physics and linguistics from the University of Lund, Sweden. His physics research was done at CERN, Switzerland, and the Manne Siegbahn Institute, Stockholm, Sweden. For many years he was an associate professor and Vice Dean at the School of Education and Communication, Jönköping University, Sweden. His main research interest is the evolutionary origins of language, and he is one of the editors of the *Journal of Language Evolution* and a member of the organizing committee for the Protolang conference series. Wikipedia, the online encyclopedia, is for Johansson a secondary research interest, a tool for pedagogical experiments, and a site for developing and running text-generating bot software. A substantial fraction of all Wikipedia articles was created by his Lsjbot software.

**Annika Lantz-Andersson** is Associate Professor of Education, and Vice Dean at the Faculty of Education, University of Gothenburg, Sweden. Her research is rooted in sociohistorical traditions with a dialogic focus on interaction, the use of digital resources, and their implications for learning and teaching. Lantz-Andersson has been involved in several research projects concerning peoples’ participation and learning in contemporary media ecologies. This interest has, for example, involved young peoples’ interaction and socialization in social media arenas and the implications for learning in these contexts. She has directed her research towards teachers’ professional digital competence, and the latest research project has had a specific focus on teachers’ professional learning by means of discussions in social media groups, outside governing structures and school organizations.

**Ylva Lindberg** is Associate Professor at the School of Education and Communication, Jönköping University, Sweden. She holds a position as Associate Dean of Research and is senior leader of the international network-based research group CCD. Her work in comparative literature comprises fields pertaining to language, communication and media, and explores cultural transfers, exchanges and positionings, specifically in the global circulation of literature in French. Lindberg is a member of the board of NNCORE, the Nordic Network of Comics Research, and is on the editorial board of the peer-reviewed monograph series Stockholm Studies in Media Arts Japan, edited by Stockholm University Press. Lindberg is also the leader, together with Professor Sangeeta Bagga-Gupta, of the strategic project LeaDMe, Jönköping University, Sweden.

**Mattias Lindvall-Östling** is a PhD student in English at Örebro University, Sweden. His primary area of research is sociolinguistics with a focus on language, power and identity. He is working on his dissertation dealing with language stereotypes and their influence on the perception of language production. He is also working in the Raising Awareness through Virtual Experience project funded by the Swedish Research Council, which deals with pedagogic issues of stereotyping.

**Mona Lundin** is an Associate Professor in the Department of Education, Communication and Learning, University of Gothenburg, Sweden. Her research interests focus on communication and learning and the use of technologies in professional contexts. She has recently led a research project on teacher professional learning and social media, funded by the Swedish Research Council. She is part of a new project funded by Forte. Taking a critical sociological approach, this project aims to understand and identify the possibilities and constraints of teachers' digital work through a focus on instances where there are pronounced differences between the demands made on teachers and the support offered. Lundin is also a director of PhD studies in her department.

**Stefan Lundström** is Associate Professor of Swedish and Education at Luleå University of Technology, Sweden. His research concerns Swedish L1 education, especially teaching literature, media habits among youth in

and outside institutional education, gamified learning and curriculum policy. He is particularly interested in how fiction in different media relates to learning in the digital age. Lundström has a background as an upper secondary teacher and has for many years been working with teacher education in Sweden. He is head of the graduate school of Practice Based School Research at Luleå University of Technology.

**Maria Mattus** has been a senior lecturer of Media and Communication Science at the School of Education and Communication, Jönköping University, Jönköping, Sweden since 2008. Maria has previously worked as a commercial artist at a newspaper and an advertising agency for several years. Maria is working on a project within Encell where she is looking at Wikipedia as a place for adult learning. The starting point is that the involvement in the creation of the user-generated wiki encyclopedia Wikipedia, develops the individual and is part of her/his lifelong learning. Maria's research interests concern both communicative and learning aspects of the Internet—questions about credibility, criticism of sources, creation processes, cooperation/collaboration and media literacy become part of the picture.

**Giulia Messina Dahlberg** is Senior Lecturer of Education in the Department of Education and Special Education, University of Gothenburg, Sweden, and member of the research group CCD. Messina Dahlberg holds a PhD in Education and her research interests deal with the study of how university students and teachers engage with online sites for learning. She is particularly interested in the communicative practices of individuals dealing with a range of tasks both inside and outside institutional education (online) settings, especially when participants engage with different language varieties and modalities. In her research and course development, Messina Dahlberg has lately engaged with the conditions for equity and inclusion provided for students with disabilities in higher education. She is an active researcher in the Swedish Research Council project PAL ([www.ju.se/ccd/pal](http://www.ju.se/ccd/pal)).

**Louise Peterson** is Senior Lecturer in the Department of Education, Communication and Learning, University of Gothenburg, Sweden. Her research interests include peoples' use of digital technologies in different

settings and how learning takes place and can be understood in boundaries between institutional and non-institutional settings. She primarily conducts interdisciplinary studies of peoples' interactions and communication in online environments, as well as of children's social activities face-to-face.

**Anders Steinvall** PhD, is Senior Lecturer of English Linguistics in the Department of Language Studies, Umeå University, Sweden. An experienced teacher of English language courses and linguistics courses, he has taught campus courses as well as online language courses and worked with computer-assisted language learning tools for more than 20 years. He has participated in pedagogical projects involving the use of ICT in higher education covering many different fields such as online assessment; peer-based intervention and key-stroke logging for developing students' translations; ICT support in order to calibrate peer review procedures; and Second Life for awareness-raising activities. A firm believer in sociocultural and social-constructivist views of learning, he uses ICT as a support tool for students, but also as a tool for stimulating discussions and debriefings whose goals are that students reach new heights of learning. He is an active researcher in the Swedish Research Council project RAVE.

**Anette Svensson** is Associate Professor of Literature Teaching and Learning and Senior Lecturer of English Literature at the School of Education and Communication, Jönköping University, Sweden. Her research projects are situated in the area of literature and language teaching and learning, with a specific focus on the media habits of Swedish youth and the use of multimodal narratives in Literary studies at upper secondary and university levels. Her research work comprises the pedagogical implications of working with a variety of text and media forms in relation to creative learning and analytical and critical thinking.

**Jonathan R. White** is an Associate Professor of English Linguistics in the Department of English at Dalarna University (Högskolan Dalarna), Sweden. As well as being part of the ViLS network within the CCD research group, Jonathan is also a member of the NOS-HS-funded proj-

ect Social Media from Nordic to Global Contexts. His research is based in computer-mediated communication in textchat and multimodal environments. The processes and contexts for reducing language by shortening word forms or through ellipses are one area of focus. He also carries out research on authenticity in language learning, and especially in the changes to attitudes to grammar norms caused by computer-mediated communication language use. His research covers the domains of sociopragmatics, computer-assisted language learning and language attitudes.



# List of Figures

Fig. 1.1	Illustration of contemporary digital–physical social practices	8
Fig. 1.2	Gravitational and centripetal forces in virtual sites for learning	10
Fig. 1.3	Account of a <i>possible future</i> in the Swedish report on New Information Technology in Education (Ministry of Education, 1994): Jonas who studies German	15
Fig. 1.4	“What are we learning from online education” by Daphne Koller, co-founder of the Massive Online Open Courses (MOOC) platform Coursera (TED talk ( <a href="http://www.ted.com/talks/daphne_koller_what_we_re_learning_from_online_education">http://www.ted.com/talks/daphne_koller_what_we_re_learning_from_online_education</a> ), accessed 2 May 2019), June 2012)	18
Fig. 2.1	Social action in the intersection between the historical body, the interaction order and the discourses in place. Source: Scollon and Scollon (2004, p. 20)	32
Fig. 2.2	The knowledge/agency graph. Source: After Scollon (2008, p. 134)	34
Fig. 2.3	The chained nature of policy documents across time and scales	37
Fig. 3.1	Should ELF be taught rather than a native variety in schools?	76
Fig. 3.2	I would prefer to learn ELF rather than a native variety	77
Fig. 3.3	I would like to be identified as a speaker of ELF	77
Fig. 5.1	An intimate spot in a romantic place in Second Life	137
Fig. 5.2	“A wolf-like avatar appears in front of me”	138
Fig. 5.3	“While waiting and watching, Miss M and Mr V enter the scene”	139

Fig. 7.1	Discussion size versus article size, pooled data from all languages. Each data point corresponds to a single article with associated discussion page. The horizontal axis shows article size in bytes and the vertical axis discussion size. Note logarithmic scale on both axes	192
Fig. 7.2	Discussion size versus article age, pooled data from all languages. Each data point corresponds to a single article with associated discussion page. The horizontal axis shows article age in days and the vertical axis discussion size. Note logarithmic scale on vertical axis	193
Fig. 7.3	Languages ordered by normalized discussion size (on horizontal axis: 1=global average). (a) Top half of the list. (b) Bottom half of the list	195
Fig. 7.4	Tree built through neighbor-joining of languages according to the distance between their normalized discussion parameters. Language names in <b>bold</b> are consistently placed when the article sample is split in half; the placement of non-bold languages should be treated with caution	196
Fig. 8.1	Overview of the matched-guise set-up used in RAVE	214
Fig. 8.2	Cycles in methods development	216
Fig. 8.3	Drawing attention to one of the conversational participants using iconic symbols. Note how “Robin” is represented as male in one version and female in the other version	225
Fig. 8.4	Typical response pattern to Linguistic Stereotyping Inventory: (-2) indicates typically male; (0) indicates neutral; (+2) indicates typically female	227
Fig. 11.1	A reproduction of the screenshot of Swedish 1 course	304
Fig. 11.2	A reproduction of the learning page	307
Fig. 11.3	A reproduction of the image of a flower and lightning to indicate a difficult word	312
Fig. 11.4	A reproduction of the image of the blue speaker	312
Fig. 11.5	A reproduction of the image of a user-generated meme to illustrate the relationship of the components of a character	313
Fig. 12.1	Timeline for the projects which are engaged within the study (projects GTGS and PAL are ongoing, while fieldwork in projects DS, DIMUL and CINLE has concluded); data from project PAL are not used for illustrative purposes in this study	340
Fig. 12.2	Trajectories across physical-digital spaces in the five projects	343

Fig. 12.3	Student sitting simultaneously at the desk <i>and</i> inside Adobe Connect: A video-conferencing environment (project CINLE)	345
Fig. 12.4	Blog post as an illustration of (a) chaining and (b) crossing time and space (project DIMUL)	346
Fig. 12.5	Chained oral-written-signed embodied communication at a kick-start event of a theatre production (Project DS)	347
Fig. 12.6	Languageing in pedagogical instructions, working process and final project presentation (project DIMUL; see also Gynne & Bagga-Gupta, 2015). (a) Task-as-planned: “Bilingual” pedagogical instructions in Swedish and Finnish varieties. (b) Heteroglossia in task-in-progress: Internet searches in English/Swedish/Finnish varieties, authoring text in Finnish variety. (c) Task-as-finished: “Monolingual” project report in Finnish variety	351
Fig. 12.7	Cyclic-chained activity of signer-writer pupils and teacher during STS lessons (project DS)	353
Fig. 12.8	Example of transcription system where screen shots are used (project CINLE; adapted from Messina Dahlberg & Bagga-Gupta, 2014). Note on transcription conventions used in Fig. 12.8: Grey highlighted: participants’ topicalization of the chat-tool content; T-I-C-C: orally spelled word	355
Fig. 12.9	Example of transcription that uses arrows to highlight chaining across modes and literacy practices, online and offline (project CINLE; adapted from Messina Dahlberg & Bagga-Gupta, 2016)	356
Fig. 12.10	Literacy practices and chaining at the borderlands of digital/physical or online/offline spaces (project CINLE; adapted from Messina Dahlberg & Bagga-Gupta, 2016)	357
Fig. 12.11	Adult Hindi- <i>ENGLISH</i> written communication (project GTGS, reproduced from Bagga-Gupta, 1995, p. 125). Note on transcription conventions used in Fig. 12.11: <i>Abcd efi</i> : Hindi words in the text; <i>ABCK EFI</i> : English loan words in the text; <i>Abcd</i> : specific Hindi words retained in the text (eg. <i>Jhuggies</i> )	358
Fig. 12.12	Analysts’ account of attending to multilayered oral-written complexity in academic reporting (project GTGS; reproduced from Bagga-Gupta, 1995)	359

- Fig. 12.13 Chaining and meaning-making—representation of original oral talk and translated oral talk (project GTGS, 2012 dataset). Note on transcription conventions used in Fig. 12.13: Oral talk in bambaiya-hindi: presented in Devanagri script; Oral talk in English: presented in Latin script underlined 360
- Fig. 12.14 Chaining and meaning-making—adult-teenagers STS—Swedish communication (project DS; adapted from Bagga-Gupta, 2004, pp. 193–194) 361
- Fig. 12.15 The reiterative processes of data-creation and analysis (project CINLE; adapted from Messina Dahlberg, 2015) 363
- Fig. 12.16 The many positions of a researcher. Researcher identity-positions in project DIMUL 365
- Fig. 12.17 Being there, but also here. Doing research at borderlands (projects CINLE and GTGS) 366
- Fig. 12.18 Doing research in collaboration across time and space: IRL, online, while contributing individually by writing at one's desk 367

## List of Tables and Excerpts

Table 2.1	Policy documents 1994–2016 that make up the dataset	54
Table 3.1	The importance of English	73
Table 3.2	Appropriateness of ELF with native speakers	79
Table 3.3	Appropriateness of ELF with non-native speakers	80
Table 5.1	The nine romantic locations liked by more than 50 users on SL's destination guide website	134
Table 7.1	Languages used in the analysis	191
Table 7.2	Words that are overrepresented in discussions compared with articles, in selected languages. Frequent word types are color-coded, with negations shown in blue, first-person forms in yellow, and second-person forms in peach	198
Table 8.1	Versions first case trial	220
Table 8.2	Real and estimated impressions of some aspects of Terry's (competitive speaker) conversational behaviour	221
Excerpt 9.1	The dramaturgical framing	250
Excerpt 9.2	Supportive work: Loyalty to the dramaturgical framing	252
Excerpt 9.3	Supportive work: Displaying emotional support, motivational support and encouragement	253
Excerpt 9.4	Supportive work: Displaying solidarity and collective identity	255
Excerpt 9.5	Supportive work: Establishing a group identity as "we Facebook group members"	256

Excerpt 9.6	Supportive work: Displaying loyalty to the dramaturgical frame, acknowledging the original request and providing offerings to the request	257
Excerpt 9.7	Remedial work: Tact and avoiding virtual offence	258
Excerpt 9.8	Professional identity repair work: Justification by sustaining the dramaturgical framing and denial of the harm done by social comparison of professions	261
Excerpt 9.9	Displays of shift in loyalty to the dramaturgical framing	262
Table 11.1	A summary of the pedagogic work performed by individual mode (adapted from Adami, 2014a and Ho, 2018b)	309
Table 12.1	Overview of the figures and issues dealt with in the analytical sections of the chapter	341
Table 12.2	Main foci, data sources, main results and language-varieties in the five projects	373

# Part I

## Institutional Framings and Policies



# 1

## On Epistemological Issues in Technologically Infused Spaces: Notes on Virtual Sites for Learning

Sangeeta Bagga-Gupta and Giulia Messina Dahlberg

### 1 Introduction

Contemporary human existence is, at least in large parts of the global-North, including the North in the global-South, implicitly and explicitly marked by technologically infused lives. From digitally mediated entertainment consumption across public and private spaces, to highly specialized digitalized medical interventions, to digitally framed religious platforms, to learning in and through digital spaces, there exist virtually (pun unintended) no dimensions of contemporary human existence that are not technologically marked and/or mediated. Having said this, an important caveat is paying heed to the need for recognizing the permeability and even *non-boundary marked* nature of this technologically

---

S. Bagga-Gupta (✉)

School of Education and Communication, Jönköping University,

Jönköping, Sweden

e-mail: [sangeeta.bagga-gupta@ju.se](mailto:sangeeta.bagga-gupta@ju.se)

G. Messina Dahlberg

Department of Education and Special Education, University of Gothenburg,

Gothenburg, Sweden



infused existence. Thus, physical–virtual, digital–analogue, online–offline and the myriad other ways of describing contemporary lives need to be recognized. It is not one or the other—there is a continuum and permeability between these (apparent) dichotomies, in and across spaces and arenas. This necessitates explicitly asking what constitutes and what does not constitute virtual sites in current times (or for that matter what constitutes physical sites). Such recognition has profound implications for understanding the nature of learning in the twenty-first century.

The contemporary technologically infused human existence is also marked by shifts that are often described in terms of (at least) four phases or generations. From the initial connectivity and access to information beyond physical texts and communication enabled by the internet in the 1960s that expanded exponentially in the 1990s, to the participation in the creation of content by anyone, anywhere and anytime with an internet connection in the new millennium. This latter *social web* phase was named Web 2.0 (thus giving the first phase the title of Web 1.0). By the end of the first decade of the twenty-first century, discussions regarding the next generation of the internet emerged. Web 3.0 is envisaged as going beyond,

the use of the traditional web by including natural ways of interacting with real-life objects that typically have not been considered as computing entities, such as cars, health support equipments, clothing [...where] the human is the focal point [...and the web] support[s] our daily activities in such a way that it will no longer matter if the given interactions are human to human, human to computer or even computer to computer, while we will be able to access services, information and fulfill any other communication needs in a fully global and ubiquitous environment. (Mahfujur, Abulmotaleb, Juan,, & Mahfujur, 2008, p. 9)

Web 3.0 is variously labeled as the *flexible web* or the *phone web* that is “intelligent” and includes important search tools and mobility dimensions. According to futuristic pundits, we are now shifting to Web 4.0 (or even Web 4.0 5.0) where artificial intelligence (AI), in the form of virtual assistants, can propose options based on algorithms gathered about our preferences and this “connects all devices in the real and virtual world in real-time” (<https://flatworldbusiness.wordpress.com/flat-education/previously/web-1-0-vs-web-2-0-vs-web-3-0-a-bird-eye-on-the-definition/>,

accessed 2 May 2019). The AI-supported Web 4.0 5.0 is envisaged as *symbiotic* and with an *emotional* component. While these shifts—presented here as overarching brushstrokes—mask the parallel presence of the different phases in contemporary times, the trajectory from the “web of things to the web of thoughts” ([https://flatworldbusiness.files.wordpress.com/2010/11/smartweb\\_web\\_5-0\\_evolution\\_confidential\\_-v004.jpg](https://flatworldbusiness.files.wordpress.com/2010/11/smartweb_web_5-0_evolution_confidential_-v004.jpg), accessed 2 may 2019) labels the phases in terms of from *content* to *communication* to *context* to *things* and to *thoughts*. These dimensions, we argue, are relevant for re-envisaging the what, where, when, why and how associated with learning. Such a stance is crucial for understanding the “in the wild” (Rogers & Marshall, 2017) nature of the research enterprise. This suggests that digitalization brings centerstage the omnipresent nature of learning—something that is always ongoing, that is, *learning in the wild*. Learning has, however, always been uncontrolled and something that happens beyond people’s conscious decisions. While digitalization makes apparent the glow of learning, the conditions for learning as well as teaching, have changed drastically over the last few decades. Such shifts, we argue, although very often framed in positively loaded terminology such as “innovation”, “change”, “flexibility” and “access”, in relation to the implementation and use of digital technology, are the result of circulating continua that bring together different dimensions of research, policy and practice.

We aim, in this chapter, to investigate and shed light on the nature of these continua by discussing how virtual sites for learning are created in practice, in policy and in research. Furthermore, we augment our arguments through a series of illustrative examples. More specifically, taking learning as the constant and ubiquitous ontological dimension of human existence, we focus on (1) virtual sites (both as they have been explored in research as well as how they have been (re)presented in policy) as the loci for identifying answers to what is real and what is virtual and their concomitant boundaries, (2) the myth of technology as educational panacea, and (3) the challenges that the dematerialization of our everyday wired lives bring to the future of the research endeavor.

A conceptual *mind as action* theoretical framing with relevance to contemporary learning is discussed and illustrated in Sect. 2, before the implications of such conceptual challenges are outlined in Sect. 3. Section

4 presents policy envisagings from the mid-1990s and compares them to more recent promises of the “online revolution”. The final section of this chapter presents concluding remarks on the conceptual challenges in the study of contemporary learning arenas.

## 2 Contemporary Learning Arenas: Conceptual Challenges

Drawing upon more recent paradigmatic shifts, we conceptualize learning in terms of participation trajectories wherein the individual mind is by-and-large in interaction with other humans and with cultural and physical tools (Hutchins, 1995; Säljö, 2010). This line of thought is a result of a paradigmatic upheaval wherein socialization processes are envisaged as going beyond understandings of humans as isolated individuals whose cognition or learning is contingent on their isolated brains; such a *social theory of mind* conceptualizes learning as being situated and distributed across people-in-(inter)action-with-others-and-with-tools (Hutchins, 1995; Säljö, 2010). Wertsch (1998) succinctly uses the metaphor of the *copyright age* when he describes the unit and focus of analysis in the human sciences in terms of a centralized mindset. Drawing on Frye (1957), Wertsch illustrates his standpoint by describing the supremacy accorded to the human mind during the creative work of a painter or a poet, as if they produce their work *ex nihilo* (Wertsch, 1998). This amounts to the silencing of the sociohistorical context, that is, it is not accounted for, and thus neglected, in the analysis of human behavior. Wertsch and other scholars (e.g. Hutchins, 1995; Resnick, 1994; Rogoff, 1990) argue instead in favor of a shift toward a de-centralized mindset, where analytic efforts are put on the individual in interaction with tools, thus taking *mediated action* as the unit of analysis (Wertsch, 1998). Key assumptions that conceptually frame such an understanding of learning include the ubiquitous nature of development which is learning *across* social practices—inside as well as outside institutional arenas (including *across* the life span). Humans are doomed to learn (Bagga-Gupta, 2017a). Such an understanding needs to tweeze apart what is generally meant by

learning in institutional arenas such as schools, universities in general and classrooms in particular (Nature, 2010, <https://www.nature.com/articles/464813b.pdf>, accessed 15 April 2019). Schools and other societal institutions for learning that have emerged phylogenetically and for the specific purposes of the socialization of the next generation privilege specific types of learning. However, these institutions' monopoly over learning is both over exaggerated and under estimated: exaggerated in terms of the relevance accorded to specific sites of learning and under estimated in terms of the content—the what—of learning. Different types of learning take place inside school spaces (see, for instance, discussions on the “hidden curriculum”, Freire, 1972; Jackson, 1968)—a matter that continues to dodge the testing bandwagon culture in education. Learning subject matter is—from a conceptual mind as social action framing—as significant as learning to be a good, poor, bossy, sissy pupil. Furthermore, going beyond the regurgitation—input-output metaphor of learning knowledge, learning—and more importantly, *knowing*, thus implies different things conceptually; here the what of learning (or knowing) is just as significant as the why, the when, the where and the how of it. Accessing and becoming a member in specific kinds of social activities (music, mathematics, cycling, cooking, gardening) and participating in them are thus central to learning and knowing the nitty-grittiness of those specific social activities (Bagga-Gupta, 2019a). Thus, learning is contingent on both moving from a position of an outsider to a periphery and from a peripheral position to that of an experienced knower (Lave & Wenger, 1991). The epistemological shift that supports this stance suggests the need to leave behind the idea of teachers as the knowers and experts, to the centrality of social practices wherein *all members*—teachers, pupils and peers—co-participate in and across a range of activities. Such a shift is heuristic in that it masks ontological dimensions of all learning and of the identity positionings involved in being a learner. This highlights the augmentation of the *learning about* to including *learning to be*. The latter entails enculturation into specific social practices—newer and ever-changing *ways of being*, seeing, knowing.

With this as background, let us look at an example of a contemporary classroom where the physical and digital constitute sites that are in flux.

Gina, Louise, Anna and Maria attend an Italian beginner course. They meet for two hours in the evening every week and discuss different topics. The main goal of the meetings, according to the course plan, is to develop participants' oral skills in the target language. Today, the topic is "Daily routines". The four students start the meeting together with other course participants in a bigger group of almost 30 people. After a plenary introduction by the course leader, Gina, Louise, Anna and Maria are invited into another room, where they congregate to focus on a series of tasks. On the whiteboard, some written questions guide participants in their conversations on "Daily routines". Participants negotiate their turns to take the floor in the conversation, they talk about their routines and thereafter ask the next participant one question (among the ones visible on the WB). The meeting is student-lead and participants spend approximately half an hour talking about the questions on the WB and also other things. They mainly use Italian in their oral talk when "on task", but also Swedish when talking *about* the task as well as other topics. Towards the end of the meeting, Gina says that she usually has her girlfriends over for dinner on Mondays and she adds "now they have come" (It: ecco hanno venuto!). Participants can also hear a dog barking. Anna asks what kind of dog it is. They talk about this for the remainder of the session.

The participants are in their homes, while attending this Italian classroom session. The session takes place in a virtual site for learning (see Figure 1.2).

**Fig. 1.1** Illustration of contemporary digital–physical social practices

The vignette presented in Fig. 1.1 illustrates mundane ways in which students of an online language course delivered by a university in the nation-state of Sweden interact during lessons: they are allocated materials and they usually prepare topics prior to attending online classes. Their meeting routines assist them in leading the meeting in accordance with the instructions of the course leader, as well as one another's expectations. Here, a range of semiotic resources, including named language-varieties (Swedish, Italian, in addition to others) and modalities (written, oral), and digital tools (webcams, microphones, computers or mobiles) are deployed and are in tandem. Participants negotiate their "being" inside the space of the virtual site using their voices (oral language), as well as written language. Their presence, when deprived of a visible body (besides the small image of the webcam), needs to be verbalized and made explicit regularly in order to become visible and acknowledged (boyd, 2007). In such learning environments, participants can hear one another's voices (sometimes with difficulty), they can (sometimes) see one another's faces in webcam images and they can write to one another using chat tools available in the institutional site. Participants' presence inside such virtual spaces is mediated through digital technology. How human presence and participation are framed in digital networks or vir-

tual sites (as illustrated above) is a much-debated issue both at a pedagogical level and a methodological/analytical one (e.g. Castells, 2005; Cousin, 2005; Engeström, 2007; Ito, 2008); individuals who want to access educational content that has historically been the prerogative of those who could travel and physically enter institutions that provided such content can now achieve this goal without physically moving at all. Students (and teachers) can stay at home and congregate in the virtual sites of classrooms from almost any place, as long as they have an internet connection. This means that contemporary learning is understood in terms of a relationship of mutual interdependence between human agency, socially organized activities and technology (Ludvigsen, Lund, Rasmussen, & Säljö, 2011). This implies that it is neither fruitful nor interesting to identify the source of social transformation vis-à-vis technological innovations since they are understood as being complementary. Castells goes one step further in this direction and claims that “we know that technology does not determine society: it *is* society” (2005, p. 3). We could replace the noun *society* with *participation* or *learning*, and the sentence would still highlight the inextricable relationship that exists between technology and its users, in ways that shape an activity or a process with regard to its norms and rules, as well as its spatial and temporal boundaries. The management of these boundaries is a non-trivial endeavor for the participants in online activities like the one represented in Fig. 1.1. What is in and what is outside the virtual classroom? What are the implications of the use and the movement of a range of tools and ideas across physical/online spaces?

### 3 Unpacking Virtual Sites for Learning

Figure 1.2 illustrates the ways in which the virtual site of a contemporary language classroom—like the setting represented in Fig. 1.1—has elements of gravitational forces and a centripetal center that attract the students in the course. Students are, according to this logic, expected to “be there” in order to participate in the course activities *as long as* this is legitimate and relevant for such practices. Inversely, other practices that occur in the proximity of the physical (perhaps private) spaces occupied by the



Fig. 1.2 Gravitational and centripetal forces in virtual sites for learning

participants are often kept *outside* the realm of the virtual classroom by the inward trajectory and logic of its centripetal force. An important consequence of the metaphors represented in Fig. 1.2, and that our previous studies have consistently shown, is that the demarcation line between what enters the spaces of virtual classrooms and what is left to gravitate to its peripheries is, at times, neither what we, as researchers, nor the participants would expect. Participants' private spheres at times enter the virtual sites (see Fig. 1.1), thus disrupting the order of things. Conversations take unexpected turns, new topics emerge, educational tasks are abandoned in favor of new questions and other tasks that may or may not contribute to the institutionally framed pedagogical activity planned for the specific classroom session. The shared spaces of virtual sites for learning are, in fact, co-constructed *in different modalities* and *interaction* by participants. Such a *performative stance* toward human communication is—in the epis-

temological shifts alluded to in the previous section—discussed analytically in terms of *linguaging*. Furthermore, how communication plays out across different permeable and non-boundary marked social practices is analytically important for examining “doing identity” or the “many-ways-of-being” (Bagga-Gupta, Feilberg, & Hansen, 2017) or identity positioning as these play out in routine or common social practices.

Culture and language then emerge out of *social practices* where individuals have access to tools and infrastructures that allow them to participate in a range of practices in meaningful ways (Bliss & Säljö, 1999). Furthermore, language, as the tool of tools (Vygotsky, 1978), allows human beings to negotiate and appropriate the ways-of-being of the communities that they are members of (Bagga-Gupta, 2013). This shift has relevance in that the focus is on the *doings* in social practices—in terms of the patterns of languaging, that is, the (named) language varieties, modalities, embodiment and so on as these play out in relation to the identity positionings of members participating in and creating the specific social practices. Routine dimensions of communication across arenas become the basis for how identity gets done and develops. Such an epistemological framing considers how languaging and identity are conceptualized in textual arenas like media, policy and so on as well as how they get done in contemporary social practices. Such a stance requires explorations of how communicative resources—across varieties or modalities—are handled by people in everyday social practices in the wild, that is, inside and outside institutional settings.

While such an understanding of languaging and identity positioning is gaining recognition within some academic domains, such scholarship is primarily conducted in demarcated areas: written communication within (New) Literacy Studies, multiple language usage in Bilingual Studies, Second Language Acquisition or Foreign Language research, signed communication in deafness scholarship, digital communication within Multimodal Studies, Computer-Assisted Language Learning (CALL) and so on. Even though each of these areas potentially plays a significant role in holistically illuminating human communication generally and learning particularly, their demarcated epistemological trajectories constitute an important caveat in the scholarship (Bagga-Gupta, 2017b, 2019b; Bagga-Gupta & Rao, 2018; Messina Dahlberg & Bagga-Gupta, 2019; compare Douglas Fir Group, 2016).



Synchronous meetings and spaces like the ones described in Figs. 1.1 and 1.2 are intended to create a mutual connection between the students and the university providing a course, bridging geographical distances between them: “here” (or “there”), students become engaged in the interaction. Even in such virtual environments with their boundaries, rules and shared histories, participants communicate and attempt to create a community without probably ever actually meeting in real life. Computer-mediated communication (CMC) in virtual sites for learning allows such opportunities (and contradictions) to become part of people’s everyday lives. Here further research is needed to illuminate complexities of what gets glossed as online learning or what can be termed circulating continua; in such spaces, alternative patterns of communication, participation and learning are likely to emerge (Bliss & Säljö, 1999; Lamy & Hampel, 2007; Säljö, 2010).

Blommaert (2008) offers a perspective on emerging geocultural processes in which language and language events are dislocated from a fixed position in time and space. Globalization, in such an account, means that sociolinguistically the world has not become a village, but rather a *network of villages*, connected in rather unexpected and unpredictable ways. Far from being a new phenomenon, globalization is now a speeding process that cannot be ignored. We are—in the global-North (at least)—surrounded by semiotic resources, including language, that have both global and local, that is, *glocal* dimensions (Messina Dahlberg & Bagga-Gupta, 2015). Locality powerfully frames the organization of meanings of signs that have become mobile and yet retain a strong sense of the local. This is a consequence of geocultural processes of globalization.

The use of the term glocalization has been offered in the scholarship to forefront the movement of people, semiotic resources, and artifacts across time and space, or, in other words, a *mobile sociology of education* (Landri & Neumann, 2014). This constitutes both a methodological and a theoretical stance. Glocality highlights that “(s)tudies of the Internet often ignore the role of physical place and context in everyday life, and studies of ecological context often ignore that a variety of media (old and new) can be used to form and maintain social ties” (Hampton, 2010, p. 3). Thus glocality, as an analytical aperture, adds an important dimension to the study of online encounters, by attending to *pieces of locality* (see

Messina Dahlberg & Bagga-Gupta, 2015) that enter the spaces of virtual classrooms that shape and are shaped by the ongoing interactions in those spaces. Glocality, related to the increasing focus on the relevance of the wild, also brings to the fore issues of boundaries, which are methodological/analytical, in terms of defining the field and the units of analysis (see Chap. 12, this volume), as well as ontological, since participants are members in activities in educational courses, but also need to negotiate the context(s) in which they are physically located. Space and time are thus dimensions that both obey the laws of physics *and* are created by and through interaction: time and space (along with language) become verbs, *spacing* and *timing*, since they are shaped and negotiated in the moment-by-moment interaction: “spacing and timing as actions, verbs rather than nouns, thus pointing to the ways in which they are performative rather than simply existing as properties of the world to be left unexamined” (Edwards, 2012, p. 208). Furthermore, these two dimensions are no longer conceptualized in terms of separate and different units. Edwards (2012), for instance, shows how school timetables frame the organization of both space and time, and are thus inseparable and interactively relational aspects of the world in social theory. If you pull one string, the other one moves too.

Such a conceptualization of TimeSpace as a single and performative dimension has been fruitful for gaining deeper understandings of the kinds of spaces that constitute virtual sites for learning (see also Messina Dahlberg & Bagga-Gupta, 2015). However, the significant issue here is the need for empirically mapping and examining the “power geometries of everyday life” (Massey, 2004 cited in Edwards, 2012) and challenging the idea of virtual sites for learning as a simulacrum of the classroom as a container in favor of “a nexus-like perspective” (Leander, Philips, & Taylor, 2010, p. 332) in which information, tools and resources enter the spaces of virtual classrooms from multiple directions (see also Thomas et al., 2007; see Fig. 1.2). This brings us back to the idea of networks—a powerful metaphor that can illustrate the complexity and richness of human *wired* lives.

The possibility to be both “here and there”, to connect with and have access to both educational content and other people who share an interest in a specific content has long entailed a source of fascination and

unconditional hope in the potentials that flexibility and openness may bring to education and learning; such hopes build upon the idealized taken-for-granted relationship of direct causality between the use of digital technology and increased freedom, equity and inclusion for all in what is labeled as the knowledge society post WWII (Phillips, Yu, Hameed, & El Akhdary, 2017). These relationships have found their ways into the policies and agendas of many geopolitical spaces including geocultural processes. Examples of policy and innovation agendas from some geopolitical spaces of the global-North are presented in the next section.

## 4 Learning Anywhere/Anytime for Anyone? Back to the Future

One possible future regarding distance education, as imagined in a Swedish report from 1994—a quarter of a century ago—is described in Fig. 1.3.<sup>1</sup> The report has the suggestive title “Ny Informationsteknologi i Undervisningen” [New Information technology in Education]. Kari Marklund, the author of the report, accounts for the “new” in the field of information technology, 25 years ago. A contemporary reading of this

---

<sup>1</sup> (All translations from the Swedish original are our own.)

Ring, ring... Jonas vänder sig i sängen och tittar på TV-skärmen han glömt att stänga av kvällen innan. På skärmen ser han ett meddelande från sin studiekamrat Pelle blinka fram. TV-apparaten har under studietiden blivit Jonas vän—ända sedan han började läsa universitetskurser och inhandlade sin bärbara persondator som han kopplade upp mot TV-skärmen i sitt rum. Här kunde han nu se basketbollmatcherna, följa nyhetsprogrammen och klara av en stor del av sina hemläxor. TV:n är via kabel-TV-bolagets nät kopplad till universitetets datanät.

[...] Jonas kopplar in sig på uttalskursen och öppnar ett videofönster vid sidan om textfönster. Han börjar sin uttalskonversation och stoppar dialogen då och då för att repetera ord och meningar han har problem med. Han jämför sitt uttal med videoavsnittets och upprepar det tills han är nöjd. Vid ett tillfälle stoppar han dialogen och lägger in en egen kommentar och minnesanteckning i direktanslutning till problemmomentet. Jonas tar därefter fram det utkast han håller på med för sin tyska uppsats om europeisk handel. Han finner att hans handledare lagt in kommentarer i marginalen.

[...] Seminarier leds av en lärare på universitetsorten. Seminariedeltagarna är samlade på fyra olika platser för att delta i diskussionen [...] S.k. splitscreentechnik används och alla elever kan se varandra och läraren.

Jonas är nöjd med kursen...

Ring, ring... Jonas turns in his bed and looks at his TV screen, which he forgot to switch off the previous night. On the screen he sees a message from his fellow student Pelle blinking. The TV has been Jonas's friend since he started to attend university courses and bought his portable personal computer, which he connected to the TV-screen in his room. Here he could watch basketball games and manage a large part of his school assignments. The TV is connected to the university network via the TV cable company.

[...]

Jonas connects to a pronunciation course and opens a video window next to the text window. He starts a pronunciation exercise and stops the dialogue from time to time to repeat words and sentences he has difficulties with. He compares his pronunciation with the videoclip and repeats it until he is satisfied. On one occasion he stops the dialogue and introduces a comment and a note directly related to the issue at hand. Then, Jonas opens the draft he is working on for his German essay about European trade. He sees that his supervisor has added comments at the margins.

[...]

The seminar is led by a teacher in the university town. The participants congregate from four different locations to take part in the discussion [...] the so-called split-screen technique is used and all students can see one another and the teacher. Jonas is happy with this course....

**Fig. 1.3** Account of a *possible future* in the Swedish report on New Information Technology in Education (Ministry of Education, 1994): Jonas who studies German

report reveals the accuracy of her visions of the future. In a chapter called “Bärbarhet och rörlighet” [Portability and mobility] in the report, Marklund highlights the greater *individual* mobility enabled by such “new” information technology:

In recent years, technological innovation has provided opportunities for a greater individual mobility [...] Being able to personalize the information-bearing device and giving it back its mobility, so that one can take it along to the beach, means that an increasing number of people can make use of new information technology.<sup>2</sup> (Ministry of Education, 1994, p. 20)

<sup>2</sup> Under ett antal år har den tekniska utvecklingen givit möjligheter till större individuell rörlighet. [...] Att kunna personalisera informationsbäraren och återge bärbarheten till den, så att man även kan ta med sig den till badstranden, kommer att innebära att allt fler tar till sig den nya informationstekniken (our translation).

Such emphasis on the possibilities that technology enables for individuals in society is also clear in the description of a fictive online student (Jonas in Fig. 1.3). Marklund attempts to create a portrait of an independent language student who wants to have control over his/her time, space and, thus, mobility. Technology is envisaged as making this possible; in fact, the description highlights what the affordances of technology are capable of doing in terms of constant contact with the university that provides the course, with fellow students and, not least, with the teacher and the course materials. Everything is mediated by technology; the information flow is fast and accessible, and students can meet in groups and they can see and hear one another. The future illustrated in Marklund's description from 1994, where students do not need to travel to the physical location of the university and where they meet via "teleconferencing" is indeed very close to the illustrations in Figs. 1.1 and 1.2. Synchronous meetings are seen as crucial in Marklund's description of the future of education in the twenty-first century. In all examples of possible futures provided in Marklund's account, participants (both students and teachers) have access to information through TV, radio and of course the "net". Technology works well and becomes invisible or as Marklund puts it (writing about so-called virtual reality): "Instead of keyboard and mouse, humans' most natural way to communicate will be through sound, movement and touch. The medium will disappear and will not be perceived at all"<sup>3</sup> (Ministry of Education, 1994, p. 19). Communication, in such an account, is mediated by technological tools which are framed as invisible, since, in an idealized future (like the one invoked in Marklund's report), they never fail to do what they should, namely, to mediate both visual and auditory information, pictures and documents. What the vignette presented in Fig. 1.3 highlights is the issue of connecting the student to the broader community of fellow learners engaged in the same course, using a technology that enables synchronous communication. Students are not singularities, rather they are part of a bigger wired context.

Technological innovations and their connection to learning and development at a national level (as has been the case in the nation-state of

---

<sup>3</sup>Istället för tangentbord och mus kommer människans naturliga sätt att kommunicera med ljud, rörelse och beröring att involveras. Mediet försvinner och uppfattas helt enkelt inte (our translation).

Sweden) have historically been considered a crucial means to increase a nation's collective knowledge and international competitiveness. Such a belief in technology as a panacea for learning has been on the agenda of policy-makers (as well as researchers in the area of educational technology) since the beginning of the last century (see Chap. 2, this volume). In her historical overview of the implementation of technological innovation across the last century, with the illustrative title *De la Belle Époque à Second Life*, Lindberg (2013) discusses the tensions that arise in attempts to merge a positivist approach in the study of technology to a humanist perspective that accounts for philosophical, historical and artistic positions to which technological representations and innovations are strictly bound.

The myth of technology as a panacea for learning described above has existed and continues to be present at all educational levels; digital technology and processes of “digitalization” more broadly have shaped and continue to shape the educational landscape in the nation-state of Sweden. Teachers (including teacher students) and instructors are, in such an environment of digitalization, required to learn how to introduce digitalized methods in their classrooms. Students are framed as being in need of learning how to manage technology in terms of access to information, critical thinking and “digital competence”. The latter has recently been introduced in the national school curriculum at all levels, including adult education (see Chap. 2, this volume). Some examples that are illustrative of such processes include the plethora of reports (of which the one presented above constitutes an illustrative example), agendas (for instance, one-to-one computers and tablets, learning to code), software (for instance, learning platforms/management systems), and, not least, the rise of private companies that sell hardware and software and provide the infrastructure to support the implementation and use of such technology (see also Player-Koro & Beach, 2014; Selwyn, Nemorin, Bulfin, & Johnson, 2017).

In their ethnography of education trade shows as policy events, Player-Koro, Bergviken Rensfeldt and Selwyn (2018) illustrate and critically discuss the ways in which large events like the Scandinavian Educational Technology Transformation show play a crucial role in creating, shaping and promoting a primarily monolithic view of technology in education; such events do not provide opportunities for teachers and other participants to question the hegemonic views that are displayed or

propose alternative understandings of what technology is and what role it could play in educational institutions like schools and adult/tertiary education. There seems to be no space for critical voices in the “Ed-Tech” agenda, which thus reinforces the “hegemonic stance of how technology is implemented in contemporary school systems” (Player-Koro et al., 2018). In a similar vein, online and distance education (and educators or innovators and “tech-savvy” people), as the policy discussion presented above highlights, has been, and continues to be framed as inherently “good”, in terms of its openness, flexibility and ubiquity across space and time. In other words, there seems to be a circular flow of terminology used in the narratives about virtual sites *as* sites of equity, access and empowerment *for all*.

The TED talk by Coursera co-founder Daphne Koller, delivered in 2012, is one example of such circular flows and “webs-of-understandings” (Bagga-Gupta & Messina Dahlberg, 2018). Here concepts become aligned and reinforce one another’s meaning and, to use Hacking’s (1995) terminology, they affect their users into conformity with the expectations that are generated from those very concepts and categories (Brinkmann, 2005). For instance, when a course is labeled in terms of “flexible” and “open”, it is likely that a participant in that course will expect the course to be delivered online and that it can be accessed anytime and anywhere from any type of digital device.

Figure 1.4 presents a snapshot of Daphne Koller’s concluding remarks at the end of her 20-minute TED talk that focuses on the possibilities that technology opens up for individuals’ learning. Similar to Marklund’s

#### The online revolution: education for everyone

“We cannot afford as a society to provide every student with an individual human tutor, but maybe we can afford to provide each student with a computer or a smartphone. [...] Mastery is easy to achieve using computers because the computer doesn’t get tired of showing the same video five times. And it doesn’t even get tired of grading the same work multiple times [...] and even personalization is something that we are starting to see the beginnings of”.

**Fig. 1.4** “What are we learning from online education” by Daphne Koller, co-founder of the Massive Online Open Courses (MOOC) platform Coursera (TED talk ([http://www.ted.com/talks/daphne\\_koller\\_what\\_we\\_re\\_learning\\_from\\_online\\_education](http://www.ted.com/talks/daphne_koller_what_we_re_learning_from_online_education)), accessed 2 May 2019), June 2012)

account from 1994, the influence of technological determinism is visible in this 2012 TED talk. A recurring message in Koller's talk is "mastery is easy to achieve with computers". Furthermore, issues of inclusion and flexibility—managed thanks to technology—are accounted for, with vignettes of different categories of students, for example, a student from "developing" countries (in this case India), a single mother of two and the father of a sick child who cannot leave the home. References to Africa as an underprivileged geopolitical space when it comes to educational possibilities are made several times during the presentation. Educational institutions considered top-ranked universities that freely make available content to the public are also highlighted during the 20-minute presentation. Many more courses (like MOOCs, Massive Online Open Courses) and a variety of platforms have recently emerged as the plethora of online educational content is increasingly made available on the internet. Such growth also brings with it a diversity in terms of pedagogical views, and hence methods used for sharing and assessing content in different courses. Such a presentation is illustrative of how technology—a quarter of a century after the *view of the future* provided in a Swedish ministerial report on distance education—continues to be considered a panacea of sorts. What is interesting is that both the report from the mid-1990s and Koller's more recent account fail to consider what causes the complexities and the constraints that are inseparable characteristics of individuals using technology.

## **5 Back to the Present and Looking Ahead: Concluding Remarks on Conceptual Challenges in the Study of Contemporary Learning Arenas**

The discussions backed by illustrative examples from across space and time in this chapter put the spotlight on the important role that digitalization is seen as playing in the creation of open, inclusive participation for all. Digitalization has shaped the practice and outreach of education since the advent of the internet, not least in relation to the inclusion of



marginalized groups in society for whom education was not a prioritized agenda. However, research also shows that digitalization continues to be treated uncritically vis-à-vis its role in education. Many innovative developmental projects in schools, as well as adult and tertiary education, are the outcome of individual efforts and are often delivered as ready-to-use packages created by private companies—these seldom emerge from organic pedagogical investments and developmental endeavors based on end-users' actual needs (Bagga-Gupta, Messina Dahlberg, & Winther, 2016).

As a counterpoint, Selwyn argues in favor of the adoption of an “avowedly critical and—above all—pessimistic perspective” (2011, p. 714) regarding the place of technology in education. Selwyn thus advances an approach that takes technology as not inherently likely to bring advancements in education, but rather as an approach that takes technology *as it is*: “educational technology scholarship should look beyond questions on how technology *could* and *should* be used and instead ask questions about how technology is actually being used in practice” (Selwyn, 2011, p. 715, emphasis in original). The chapters that make up this volume are intended to contribute to such scholarship. They all attempt to problematize the view of technology as educational panacea as part of a research tradition that sees technology as not being accepted and implemented quite so smoothly in the school arena (Cole & Derry, 2005; Cuban, 1986; Erixon, 2010; Säljö, 2010). While we have discussed this epistemological shift in our previous writings, our point here is that if learning in our technologically infused lives is ubiquitous and is contingent upon participation across social practices, there exists a need to re-think terminology vis-à-vis teaching and learning across social practices and arenas. Given the continua of digital–physical spaces, what challenges meet adults and children in positions of learners, teachers and also as scholars interested in learning in spaces marked as digital/virtual? If virtual sites for learning both attract and prevent participants, tools and practices from entering, one crucial issue for educational research(ers) is to unfold the logics of what we have earlier in this chapter framed in terms of the virtual classroom's *gravitational and centripetal forces*. Both forces are dependent on the same law of physics, and yet they give rise to very different outcomes. Similarly, what can enter a virtual learning site (and what can't) is contingent upon normative understandings of what should get in and out of (both physical and

virtual) learning spaces in terms of people, information, tools and ideas. This normative demarcation (or boundary), we argue, is negotiated in action and the omnipresent interpenetration of the virtual and the real makes these processes more complex and interesting than they have ever been. When does a practice in a legitimate position enter another practice? Who decides that, when and how?

In other words, conceptual, methodological and analytical challenges are entailed in the study of contemporary situated social action<sup>4</sup> where new conceptual challenges greet scholars interested in learning in contemporary arenas. Analytical engagement with people's social actions in sites of engagement that are explicitly marked by digital tools creates specific challenges related to both theorizing and ways of studying the ongoing nature of learning across the digital–physical continuum (see also Chap. 12, this volume). What, in other words, are the ways of *taming the wilds* (compare Ortega, [in press](#)) when studying learning as fluid processes that are always ongoing across physical/digital spaces?

Given that fundamental assumptions related to educational technology equate digitalization as proxy for flexibility and therefore also inclusion, the research frontline needs to have an analytical focus both on the link between digital technologies and their end-users and how this relationship unfolds and shapes social processes, including learning practices. The scholarship presented in this chapter and the rest of this volume aims to shed light on these important connections and contribute to the body of knowledge on the digitalization of spaces for learning.

## References

- Bagga-Gupta, S. (2013). The boundary-turn. Relocating language, identity and culture through the epistemological lenses of time, space and social interactions. In I. Hasnain, S. Bagga-Gupta, & S. Mohan (Eds.), *Alternative voices: (Re)searching language, culture & identity* (pp. 28–49). Newcastle-upon-Tyne: Cambridge Scholars Publishing.

---

<sup>4</sup>This is not to suggest that conceptual challenges were simpler before the advent of digitalization. Perhaps digitalization has made these challenges much more difficult to ignore.

- Bagga-Gupta, S. (2017a). Language and Identity Beyond the Mainstream. Democratic and Equity Issues For and By Whom, Where, When and Why. *Journal of the European Second Language Association*, 1(1), 102–112. <https://doi.org/10.22599/jesla.22>
- Bagga-Gupta, S. (2017b). *Languaging* and Isms of Reinforced Boundaries Across Settings: Multidisciplinary Ethnographical Explorations. In D. J. Rivers & K. Zotzmann (Eds.), *Volume 11 Series Language and Social Life. -Isms of Oppression in Language Education* (pp. 203–229). Berlin: Mouton de Gruyter.
- Bagga-Gupta, S. (2019a). Learning Languaging Matters. Contributions to a Turn-on-Turn Reflexivity. In S. Bagga-Gupta, A. Golden, L. Holm, H. P. Laursen, & A. Pitkänen-Huhta (Eds.), *Reconceptualizing Connections Between Language, Literacy and Learning*. Rotterdam: Springer.
- Bagga-Gupta, S. (2019b). Languaging Across Time and Space in Educational Contexts. *Language Studies and Deaf Studies. Deafness & Education International*, 21(2), 65–73. <https://doi.org/10.1080/14643154.2019.1594081>
- Bagga-Gupta, S. (in press). Identity Positioning and Languaging in Deaf-Hearing Worlds: Some Insights from Studies of Segregated and Mainstream Educational Settings. In I. Leigh & C. O'Brien (Eds.), *Deaf Identities. Exploring New Frontiers*. Oxford: Oxford University Press.
- Bagga-Gupta, S., Feilberg, J., & Hansen, A. L. (2017). Many-Ways-of-Being Across Sites. Identity as (Inter)Action. In S. Bagga-Gupta, A. L. Hansen, & J. Feilberg (Eds.), *Identity Revisited and Reimagined. Empirical and Theoretical Contributions on Embodied Communication Across Time and Space* (pp. 5–23). Rotterdam: Springer.
- Bagga-Gupta, S., & Messina Dahlberg, G. (2018). On the Quest to “Go Beyond” a Bounded View of Language. Research in the Intersections of the Educational Sciences, Language Studies and Deaf Studies Domains 1997–2018. *Deafness & Education International*, 21(2–3), 74–98.
- Bagga-Gupta, S., Messina Dahlberg, G., & Winther, Y. (2016). Disabling and Enabling Technologies for Learning in Higher Education for All: Issues and Challenges for Whom? *Informatics*, 3(4).
- Bagga-Gupta, S., & Rao, A. (2018). Languaging in Digital Global South-North Spaces in the Twenty-First Century: Media, Language and Identity in Political Discourse. *Bandung: Journal of the Global South*, 5(3), 1–34. Retrieved from <https://rdcu.be/NbDk>
- Bliss, J., & Säljö, R. (1999). The Human-Technological Dialectic. In J. Bliss & R. Säljö (Eds.), *Learning Sites: Social and Technological Resources for Learning*. Oxford: Pergamon.

- Blommaert, J. (2008). *The Sociolinguistics of Globalization*. Cambridge: Cambridge University Press.
- boyd, d. (2007). None of This Is Real. In J. Karaganis (Ed.), *Structures of Participation in Digital Culture* (pp. 132–157). New York: Social Science Research Council.
- Brinkmann, S. (2005). Human Kinds and Looping Effects in Psychology. Foucauldian and Hermeneutic Perspectives. *Theory and Psychology*, 15(6), 769–791.
- Castells, M. (2005). *The Network Society: From Knowledge to Policy*. In M. Castells & G. Cardoso (Eds.), *The Network Society: From Knowledge to Policy* (pp. 3–21). Washington, DC: John Hopkins Center for Transatlantic Relations.
- Cole, M., & Derry, J. (2005). We Have Met Technology and It Is Us. In R. J. Sternberg & D. D. Preiss (Eds.), *Intelligence and Technology. The Impact of Tools on the Nature and Development of Human Abilities* (pp. 209–227). Mahwah, NJ: Erlbaum.
- Cousin, G. (2005). Learning from Cyberspace. In R. Land & S. Bayne (Eds.), *Education in Cyberspace*. New York: Routledge.
- Cuban, L. (1986). *Teachers and Machines: The Classroom Use of Technology Since 1920*. New York: Teachers College Press.
- Douglas Fir Group. (2016). A Transdisciplinary Framework for SLA in a Multilingual World. *The Modern Language Journal*, 100(S1), 19–47.
- Edwards, R. (2012). (Im)Mobilities and (Dis)Locating Practices in Cyber-Education. In R. Brooks, A. Fuller, & J. Waters (Eds.), *Changing Spaces of Education. New Perspectives on the Nature of Learning* (pp. 2015–2218). London, UK: Routledge.
- Engeström, Y. (2007). From Communities of Practice to Mycorrhizae. In J. Hughes, N. Jewson, & L. Unwin (Eds.), *Communities of Practice: Critical Perspective*. London: Routledge.
- Erixon, P.-O. (2010). School Subject Paradigms and Teaching Practice in Primary and Lower Secondary Swedish Schools Influenced by ICT and Media. *Computers and Education*, 54, 1212–1221.
- Freire, P. (1972). *Pedagogy of the Oppressed*. New York: Penguin Books.
- Frye, N. (1957). *Anatomy of criticism. Four essays*. Princeton: Princeton University Press.
- Hacking, I. (1995). The Looping Effect of Human Kinds. In D. Sperber, D. Premack, & A. J. Premack (Eds.), *Causal Cognition: A Multidisciplinary Debate* (pp. 351–383). Oxford: Clarendon.

- Hampton, K. (2010). Internet Use and the Concentration of Disadvantage: Glocalization and the Urban Underclass. *American Behavioral Scientist*, 53(8), 1111–1132.
- Hutchins, E. (1995). *Cognition in the Wild*. Cambridge, MA: MIT Press.
- Ito, M. (2008). Introduction. In K. Varnelis (Ed.), *Networked Publics*. Cambridge, MA: MIT Press.
- Jackson, P. W. (1968). *Life in Classrooms*. New York: Holt, Rinehart and Winston.
- Lamy, M.-N., & Hampel, R. (2007). *Online Communication in Language Learning and Teaching*. New York: Palgrave Macmillan.
- Landri, P., & Neumann, E. (2014). Mobile Sociologies of Education. *European Educational Research Journal*, 13(1), 1–8.
- Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge, MA: Cambridge University Press.
- Leander, K., Philips, N. C., & Taylor, H. (2010). The Changing Social Spaces of Learning: Mapping New Mobilities. *Review of Research in Education*, 34, 329–394.
- Lindberg, Y. (2013). *De la Belle Époque à Second Life*. Paris: Publibook.
- Ludvigsen, S., Lund, A., Rasmussen, I., & Säljö, R. (2011). *Learning Across Sites. New Tools, Infrastructures and Practices*. London: Routledge.
- Mahfujur, Abulmoteleb, Juan, & Mahfujur. (2008). Retrieved from [https://www.academia.edu/23139617/Web\\_3.0\\_a\\_vision\\_for\\_bridging\\_the\\_gap\\_between\\_real\\_and\\_virtual](https://www.academia.edu/23139617/Web_3.0_a_vision_for_bridging_the_gap_between_real_and_virtual)
- Massey, D. (2004). *Space, Place and Gender*. Cambridge: Polity Press.
- Messina Dahlberg, G., & Bagga-Gupta, G. (2015). Learning on-the-Go in Institutional Telecollaboration. Anthropological Perspectives on the Boundaries of Digital Spaces. In E. Dixon & M. Thomas (Eds.), *Researching Language Learners Interaction Online: From Social Media to MOOCs* (Vol. 13). CALICO.
- Messina Dahlberg, G., & Bagga-Gupta, S. (2019). On the Quest to “Go Beyond” a Bounded View of Language. Research in the Intersections of the Educational Sciences, Language Studies and Deaf Studies Domains 1997–2018. *Deafness & Education International*, 21(2), 74–98. <https://doi.org/10.1080/14643154.2018.1561782>
- Ministry of Education. (1994). *Ny Informationsteknologi i Undervisningen*. Ds 1994:21. Stockholm: Fritzes.
- Nature. (2010). Editorial – *Learning in the Wild*, 464(7290), 813–814.
- Ortega, L. (in press). Foreword. In S. Bagga-Gupta, A. Golden, L. Holm, H. P. Laursen, & A. Pitkänen-Huhta (Eds.), *Reconceptualizing Connections Between Language, Literacy and Learning*. Rotterdam: Springer.

- Phillips, F., Yu, C., Hameed, T., & El Akhdary, M. A. (2017). The Knowledge Society's Origins and Current Trajectory. *International Journal of Innovation Studies*, 1(3), 175–191.
- Player-Koro, C., & Beach, D. (2014). 'Roll-Out Neoliberalism' Through One-to-One Laptop Investments in Swedish Schools. *IRPPS Monografie*, 75–84.
- Player-Koro, C., Bergviken Rensfeldt, A., & Selwyn, N. (2018). Selling Tech to Teachers: Education Trade Shows as Policy Events. *Journal of Education Policy*, 33(5), 682–703.
- Resnick, M. (1994). Learning About Life. *Artificial Life*, 1, 229–241.
- Rogers, Y., & Marshall, P. (2017). *Research in the Wild*. New York: Morgan & Claypool Publishers.
- Rogoff, B. (1990). *Apprenticeship in Thinking: Cognitive Development on Social Context*. New York: Oxford University Press.
- Säljö, R. (2010). Digital Tools and Challenges to Institutional Traditions of Learning: Technologies, Social Memory and the Performative Nature of Learning. *Journal of Computer Assisted Learning*, 26(1), 53–64. <https://doi.org/10.1111/j.1365-2729.2009.00341.x>
- Selwyn, N. (2011). Editorial: In Praise of Pessimism – The Need for Negativity in Educational Technology. *British Journal of Educational Research*, 42(2), 713–718.
- Selwyn, N., Nemorin, S., Bulfin, S., & Johnson, N. (2017). Left to Their Own Devices: The Everyday Realities of 'One-to-One' Classrooms. *Oxford Review of Education*, 43(3), 289–310.
- Thomas, S., Joseph, C., Laccetti, J., Mason, B., Mills, S., Perril, S., et al. (2007). Transliteracy: Crossing Divides. *First Monday*, 12(12). Retrieved from <http://www.ojphi.org/ojs/index.php/fm/article/view/2060/1908>
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.
- Wertsch, J. V. (1998). *Mind as Action*. Oxford: Oxford University Press.



# 2

## Inscriptions and Digitalization Initiatives Across Time in the Nation-State of Sweden: The Relevance of Shifts and Continuities in Policy Accounts for Teachers' Work

Lars Almén and Sangeeta Bagga-Gupta

### 1 Introduction

Changes in society are accelerating, and this increases the demands on the citizens to constantly renew and deepen their knowledge. When students enter working life, they shall be prepared to relearn, learn new things and learn more as a dimension of lifelong learning. The roadmap is characterized by knowledge searching and students' active ways of working. Information Technology (IT) is a tool to provide a better education and deeper knowledge. All students must be familiar with modern IT when

---

L. Almén (✉)

School of Education and Communication, Jönköping University,  
Jönköping, Sweden  
e-mail: [lars.almen@ju.se](mailto:lars.almen@ju.se)

S. Bagga-Gupta

School of Education and Communication, Jönköping University,  
Jönköping, Sweden

they leave school. The best way to reach this goal is that they have regularly used IT as a tool for their learning (The Government of Sweden, 1998).<sup>1</sup>

This quote, from the end of the last century, is taken from the Swedish governmental initiative ITiS, IT i Skolan (Sw: IT in School). The ITiS initiative was extensive. About 60 percent of the Swedish teachers were involved in it (Chaib, Chaib, & Ludvigsson, 2004). After one year with ITiS, the teachers said that they used information technology more than before (*ibid.*), but the long-term effects of this initiative are more diffuse. Today almost all Swedish secondary school students have access to a computer at home, and more recent estimates suggest that they surf the internet 39 minutes per day at school (OECD, 2015a). The most extensive use of Information and Communication Technology (henceforth ICT) in school is browsing the internet for information, an activity two-thirds of Swedish 15 year olds are reported to be engaged in at least once a week (OECD, 2015b). But only one of every five students are reported as using computers in mathematics (OECD, 2015a), which could be an indication of a lack of more advanced ICT usage in schools. In 2011, the Government of Sweden expressed concerns about the fact that computers in schools were primarily being used for writing, information searches and to some extent for presentations, but not for more advanced purposes (Government Offices of Sweden, 2011).

Twelve years after ITiS, the European Parliament<sup>2</sup> stated that all member states should

Mainstream eLearning in national policies for the modernisation of education and training, including in curricula, assessment of learning outcomes and the professional development of teachers and trainers. (European Commission, 2010, p. 27)

---

<sup>1</sup>Original Swedish text: "Förändringarna i samhället sker allt snabbare, vilket ökar medborgarnas behov av att ständigt förnya och fördjupa sina kunskaper. När eleverna går ut i arbetslivet skall de vara rustade för att lära om, lära nytt och lära mer för det livslånga lärandet. Vägen dit karakteriseras av ett kunskapssökande och elevaktivt arbetssätt. Informationsteknik (IT) är ett redskap att nå en förbättrad utbildning och fördjupade kunskaper. Alla elever måste vara förtrogn med modern IT när de lämnar skolan. Detta uppnås bäst genom att de har fått använda IT som ett verktyg för sin inläring". (our translation)

<sup>2</sup>Sweden is a member of the European Union (EU).



This European Commission document was an important starting point for the Swedish government's latest initiative to reform the school system with the aim of strengthening school students' digital competence.

The study presented in this chapter scrutinizes policy documents, or inscriptions as they are conceptualized in Actor-Network Theory (henceforth ANT), and that lay the foundation for the Swedish Digitalization Initiative (henceforth SDI). A point of departure is the assumption that important political decisions like SDI are not formed in a void but serve societal interests of some kind and are formed by political and ideological concerns. The role of technology in schools has always been a subject that has been debated. Thus, with SDI, the Government of Sweden has taken a stance in favor of digitalization of schools in Sweden. Following Roth and McGinn (1998), we are interested in exploring what driving forces shape an initiative like SDI, and which key political, ideological, moral and ethical goals the initiative is endowed with.

Critical Discourse Analysis (henceforth CDA), concerned with power relations (Scollon & Scollon, 2004), is used as a point of departure here. More specifically, a variant of CDA, Public Consultative Document Analysis (henceforth PCDA) (Scollon, 2008) has been deployed at an overarching level and Nexus Analysis (NA) (e.g. Scollon & Scollon, 2004) is used as an analytical lens. ANT considers humans as well as non-humans as actors in a network. Furthermore, policy documents are—within this framework—considered to be endowed with agency, and they can therefore be considered actors in line with ANT. A salient aim of the present study is to contribute to knowledge about connections across scales, temporal and spatial, large and small, that shape a comprehensive policy decision like SDI.

The next section elaborates further on the multilayered and overlapping tenets of the theoretical frameworks that this study builds upon. It also presents the methodological points of departure and the dataset we have used. The three themes that have emerged in the analysis are presented in Sect. 3. The final discussion section highlights the salient findings of this study.

## 2 Inscriptions, Linguaging, Agency: Nexus Analysis as an Analytical Lens and Inspiration for Methodological Framings

“The task of a sociocultural approach is to explicate the relationships between human *action*, on the one hand, and cultural, institutional, and historical contexts in which this action occurs, on the other” (Wertsch, 1998, p. 24, italics in original). From a sociocultural perspective, policy documents are mediational means, or cultural tools, that in concert with human beings perform a mediated action. Mediational means have affordances that can help an actor to solve a problem (Wertsch, 1998). Documents are examples of artifacts, mediational means that persist across time and space. Drawing upon Burke’s (1945) five key terms of dramatism, that is, act (what was done), scene (when or where was it done), agent (who did it), agency (how was it done) and purpose (why), Wertsch (1998) focuses on the dialectic between agent and instrumentality. This dialectic is summarized in the notion of mediated action. Thus, the digitalization initiative is, from a sociocultural perspective, a mediated action and the policy documents are mediational means. The latter represent different scales across time and space.

Furthermore, policy documents, like governmental commissions, curricula and EU regulations, constitute examples of *inscriptions* and are considered actors within the overlapping framings of ANT and sociocultural perspectives. Inscriptions, for example diagrams, pictures and documents, have a hegemonic dimension in that they are rhetorical and polemical artifacts that empower key actors (Latour, 1987). As products of human interaction, they are inseparable from social action in sociocultural perspectives and have agency (Bagga-Gupta, 2017). In the rest of this study, the term inscription will be reserved for policy documents considered as actors, while policy documents will be used for the artifacts.

NA, a branch of discourse analysis, is seen as being especially well suited for analyzing policies across different scales (Hult, 2015). While discourses can become fixed, *linguaging*, that is, “linguistic actions and activities in actual communication and thinking” (Linell, 2009, p. 274),

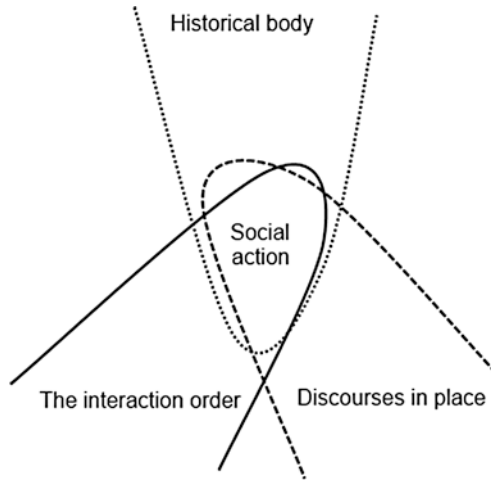
or the very doing of meaning-making, is fluid. The latter constitutes a key dimension of social interaction where different modal dimensions are significant. For instance, spoken language gets transformed when it is written down (Scollon & Scollon, 2004) and the performatory nature of communication is modality layered and complex (Gynne, 2016; Messina Dahlberg, 2015).

This section begins with a presentation of NA as an analytical lens for analyzing policy documents. A presentation of the methodological framings used in this study and the policy documents scrutinized are presented thereafter.

### **Circulating Discourses Across Time, Historical Bodies and the Fluidity of Social (Inter)Actions**

Taking NA as a point of departure, the analysis presented in Sect. 3 focuses on policy documents *as* social action. Social actions, the unit of analysis in NA, take place at the intersection of historical bodies, the interaction order and the discourses in place (Fig. 2.1). *The historical body*, a term borrowed from Kitaro Nishida (1958), takes into account the experiences of the participating social actors. *The interaction* order is the order in which (inter)action takes place. Inspired by Erving Goffman, NA explicates the interaction order as “any of the many possible social arrangements by which we form relationships” (Scollon & Scollon, 2004, p. 13). Relevant to the interaction order, or relations among actors, are norms of interaction in a specific setting, expectations about social roles/positions, central vs. peripheral participants and modalities. These features are relevant to textual worlds as well as face-to-face meetings. Hult (2015) suggests that the interaction order functions as a bridge between the historical body and the discourses in place, where the former is at the individual scale and the latter at the universal scale. *The discourses in place* are the discourses that circulate in the current scene (or at a specific point in time), or the current/previous action.

From the overlapping analytical framings used in this study, inscriptions can be considered *frozen action* in that they are actions that have taken place in the past.



**Fig. 2.1** Social action in the intersection between the historical body, the interaction order and the discourses in place. Source: Scollon and Scollon (2004, p. 20)

Frozen actions are usually higher-level actions which were performed by an individual or a group of people at an earlier time than the real-time moment of the interaction that is being analyzed. These actions are frozen in the material objects themselves and are therefore evident. (Norris, 2004, pp. 13–14; see also Pietikäinen, Lane, Salo, & Laihiala-Kankainen, 2011)

Classical NA is conducted in three steps:

- establishing the nexus of practice,
- navigating the nexus of practice, and
- changing the nexus of practice.

Establishing the nexus of practice includes identifying the social action and its crucial actors, observing the interaction order and determining significant cycles of discourse. The second step—navigating the nexus of practice—constitutes the most extensive phase of NA. Action can here be considered a moment in time and space where the interaction order and the discourses in place intersect. This means that actions have a historical

past that lead to a specific moment and a future that leads from it in trajectories of semiotic cycles.

Our analysis draws upon critical discourse analysis, with the aim of illuminating power dimensions of inscriptions. While Scollon suggests that PCDA “is oriented toward bringing discourse analysis in any relevant form into the process of the making of public policy” (2008, p. 7), he points to the need for organizing document analysis around five analytical features:

1. function of the document,
2. framing,
3. document design,
4. production/reception (writer/reader) positions, and
5. interdiscursivity.

Framing, or contextualizing, is the metacommunication of any document—a message of how to interpret the document. The linguistic form, design and modalities of the document can constitute dimensions of the framing. Framing tells us how to interpret the message, and can be conveyed by layout, but also linguistically (Scollon, 2008), that is, the nature of languaging. The tenets of NA differentiate between *mode* and *modality*, where the latter is reserved for the dimension of languaging, and the “central distinction in modality is between *realis* and *irrealis*” (Scollon, 2008, p. 132). *Realis* is something real, something that can be taken as certain, and *irrealis* is something unknown or unknowable. For instance, the verb “shall” is *realis*, and “should” is *irrealis*. This distinction implies that a bureaucratic language and an extensive usage of the verb “shall” characterizes a policy document with a high degree of agency. Different stances about future actions pertaining to knowledge and agency can be represented schematically (see Fig. 2.2). Thus, a document with high degree of agency is oracular and agentive. “We are certain X will happen, and we will do Y about the consequences of that” (Scollon, 2008, p. 137). Scollon (2008), furthermore, identifies three production positions and four reception positions. The three production positions are conceptualized in terms of (1) a principal, the person or organization responsible for the document, (2) an author, the person who created the words, and (3) the

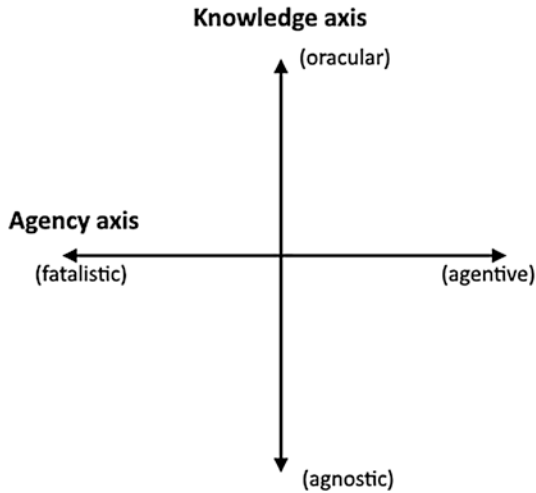


Fig. 2.2 The knowledge/agency graph. Source: After Scollon (2008, p. 134)

animator, the person or persons who shape the document as an object. The reception positions are constituted by (1) a principal, the person or persons responsible for reading and/or responding to the document, (2) an interpreter, the person or persons who contribute to the meaning of the document, (3) a handler, the agent who supplies the principal and the interpreter with the document, and (4) the bystander, that is, person or persons who can consume the document, but do not directly respond to it.

A further key concept used within NA is interdiscursivity. It is used to describe the blending of discourses in actual use, that is, one discourse is embedded in, or has an embedded relation to, another discourse. This means that a discourse can use another discourse to legitimize itself. For instance, a legislative discourse can blend a scientific discourse interdiscursively by using a scientific reference system and a bibliographic system to strengthen its arguments. Our analysis uses “capital ‘D’” discourses in contrast to “‘little-d’ discourse (language-in-use) [that] is melded integrally with non-language ‘stuff’ to enact specific identities and activities” (Gee, 1999, p. 7).

Given that the analyst takes an active part in the social action under scrutiny, it is inevitable that the research process influences the social

action. Therefore, the third and final step in NA is made up of changing the nexus of practice (Scollon & Scollon, 2004). However, given the frozen character of policy documents, this last step is not applicable to our study.

## Methodological Framings and Data

In establishing the nexus, the social issue focused on and the key social actors need to be identified. The scrutinized social issue in our study is concerned with SDI, and the first step in the analysis was related to identifying the key social actors. Both authors discussed the SDI and how the emergence of this central policy initiative could be understood. Given that SDI is a governmental initiative, searches were initially conducted on the web site of the Government of Sweden, and the web site of the Swedish National Agency of Education (Skolverket), which is the executive educational authority. Since SDI is an initiative taken by the Government of Sweden, it is itself a crucial social actor. The Swedish National Agency of Education is responsible for the development of curricula and syllabi in Sweden, and therefore it constitutes another social actor.

Scrutinizing the policy documents that constitute SDI highlighted that it was founded upon earlier documents. This means that there exists a need to read other documents in order to understand any given document. The document that gave rise to the digitalization initiative, and therefore the starting point of the analysis, was the “Commission to suggest national IT strategies for the educational system”<sup>3</sup> (The Government of Sweden, 2015). This document can be considered *a key incident* (e.g. Erickson, 1977), that is, a moment where noteworthy discourses intersect (Hult, 2015). It is an incident that, linked to other incidents, makes it possible to see the generic in the particular or the universal in the specific (Erickson, 1977). “Commission to suggest national IT strategies for the educational system” was the document that spurred the Swedish National Agency for Education to revise the curricula and syllabi in accordance with the vision of the Government

---

<sup>3</sup> Original Swedish title: “Uppdrag att föreslå nationella it-strategier för skolväsendet”. (our translation)

of Sweden. In that sense, it led to the development of new documents from The Swedish National Agency for Education, that in themselves were built upon the work presented in earlier documents (see Appendix 1). By tracing references backward, previous relevant policy documents were identified. These too were scrutinized, and if the document was considered a source that made an important contribution to SDI, it became part of the key group of documents that became included in our primary dataset. This primary dataset is presented in Appendix 1. This identification procedure highlights the circulating, n/ethnographic character of the research process. The search for connections and relations between policy documents is what Agar (2008) calls a holistic ethnographic perspective.

The key documents that were first identified and then further scrutinized (see Appendix 1) are presented chronologically, that is, based upon the dates that the documents were issued. The title presented is the original Swedish title, together with our English translation of the title, unless the document has an English language version available. The description gives a short presentation of the document. The provider is the authority responsible for the document. The function gives a short presentation of the purpose of the document. Since all the scrutinized documents are available online, the internet URL available during the analysis process is provided. Framing, document design, and interdiscursivity are dimensions of PCDA, and are scrutinized in the analysis and the discussion presented in Sects. 3 and 4.

As outlined above, navigating the nexus is a key analytical process in NA. The scrutinized documents are analyzed according to the scheme for a PCDA. The five analytical features of a document described earlier (see Sect. 2.1) constitute tools for our analysis, and the policy documents are scrutinized according to these features. While the function of the document and the production principal, that is, the provider, are accounted for in Appendix 1, the framing, document design, other production/reception positions and interdiscursivity constitute dimensions that we account for in Sect. 3.



### 3 The Nature of Shifts and Continuities

The analysis of the policy documents has included re-readings and our critical discussions against the backdrop of societal changes in Sweden. This process has given rise to three themes that are explicated in this section. One such theme is the chained nature of the policy documents, that is, one document is founded upon another across time. A second theme is the shift across time from a digital competence discourse to a programming discourse. The third and final theme that has emerged in the analysis is the degree of agency and how it expresses document design and different modes.

#### The Chained Nature of the Policy Documents

All the scrutinized documents refer to one or more earlier policy documents upon which they are founded. They are thus chained across time, but also across spatial scales (Fig. 2.3). The spatial scales are made up of the European Union, the nation-state of Sweden, and regional and local Swedish authorities and schools. The Digitalization Commission has a nation-wide agenda, but it also attempts to establish a regional digital agenda (The Digitalization Commission, 2014). Bureaucratic hierarchy

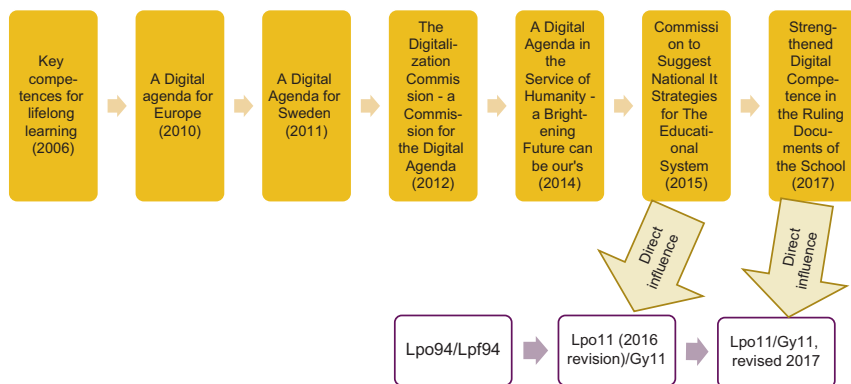


Fig. 2.3 The chained nature of policy documents across time and scales

in Sweden can be understood in terms of going from the government at the top to the individual teachers who are required to interpret the curricula and syllabi, that is, at the local scale. The temporal scales vary from within a year to several years, that is, what Scollon and Scollon (2004) call a solar biorhythm.

Since the analyzed documents are all based on other documents across time, navigating and establishing the nexus of practice is a circulating process (see e.g. Tapio, 2013). Due to this circulating process, other actors emerge during the analysis process. For instance, in 2006, the European Parliament identified digital literacy as one of eight key competences for lifelong learning, and as a direct consequence of this, the European Commission in 2010 published “A Digital Agenda for Europe” (European Commission, 2010). Sweden, as a member of the European Union (EU), is obliged to follow EU regulations and in 2011, the Government of Sweden published “IT in service of human being—a digital agenda for Sweden” (Government Offices of Sweden, 2011). The agenda from the European Commission is referred to in the Foreword of this Government of Sweden publication. “Commission directive. The Digitalization Commission—a commission for the digital agenda”<sup>4</sup> (Government Offices of Sweden, 2012) is also a direct outcome of the digital agenda for Sweden (Government Offices of Sweden, 2011). While the Digitalization Commission produced several reports, the most important one for SDI was “A digital agenda in the service of the human being—a brightening future can be ours”<sup>5</sup> (The Digitalization Commission, 2014). The suggestions made by the Digitalization Commission were transformed into governmental policy in “Commission to suggest national IT strategies for the educational system”<sup>6</sup> (The Government of Sweden, 2015). This commission led to the emergence of other policy documents at different scales, involving various actors, and led to revised curricula and syllabi produced by the Swedish National

---

<sup>4</sup>Original Swedish title: “Kommittédirektiv. Digitaliseringskommissionen—en kommission för den digitala agendan”. (our translation)

<sup>5</sup>Original Swedish title: “En digital agenda i människans tjänst—en ljusnande framtid kan bli vår”. (our translation)

<sup>6</sup>Original Swedish title: “Uppdrag att föreslå nationella it-strategier för skolväsendet”. (our translation)

Agency of Education. These revisions can also be considered links in another temporal chain of curricula.

Similarly, there are other chained documents. One curriculum or syllabus is founded on an older one, and in that sense, constitutes a chain of policy documents. But curricula and syllabi are also shaped by laws and regulations, stipulated by the Government of Sweden. School laws, school regulations, curricula and syllabi, thus, together constitute a *web of policy documents* that build upon specific “webs-of-understandings” (Bagga-Gupta, 2012; Bagga-Gupta & Messina Dahlberg, 2018): one influences the other across time. In other words, these document chains are intertwined and intersect one other.

A major policy change like SDI gives rise to changes in other chains involving other documents, which intersect with the policy document linkages. One such intersecting chain is constituted by “The Swedes and Internet”.<sup>7</sup> The Swedes and Internet is an annually conducted survey about the internet-related habits of citizens in the nation-state of Sweden. The principal producer of The Swedes and Internet is the Internet Foundation of Sweden (IIS<sup>8</sup>),<sup>9</sup> which, among other things, is the administrator of the Swedish .se domain. The first annual survey was conducted in 2000. These surveys are produced to be accessible for a broader public. They are mainly graphical presentations of the survey results, with charts and textual comments and explanations of the charts. The charts (with the exception of Findahl (2000)) are presented in full color and are integrated in the documents, that is, they are part of the overall layout and design of the annual reports. The surveys are available as booklets, and it is possible to order a hard copy even though they are freely accessible online. The typeface is large sans-serif.

From the first survey in 2000 to the survey in 2012, dedicated questions related to internet usage in school settings were absent. From the survey in 2013, questions on internet usage in schools are accounted for. The educational discourse blends with the digital competence discourse

---

<sup>7</sup> Original Swedish title: “Svenskarna och internet”. (our translation)

<sup>8</sup> Internetstiftelsen i Sverige, <https://www.iis.se>.

<sup>9</sup> Until 2014, the foundation was called .se. The surveys from 2000 to 2003 were conducted by the World Internet Institute.

in stating that Swedish schools for a long time have had problems with integrating the internet in school work, but that indications regarding an ongoing change can be noted (Findahl, 2013). The surveys of 2013 and 2017 constitute exceptions in that they discuss educational issues explicitly. The survey of 2017 accounts for the new curricula and syllabi in detail (Davidsson & Thoresson, 2017). The texts presented in the other survey reports are made up of an account and explanation of the charts.

## **Shift from Digital Competence Discourse to Programming Discourse**

The second theme that has emerged in the analysis of policy data relates to a shift in discourses across time. The analysis highlights two main digitalization discourses that circulate across time in the policy documents. In the earlier documents, a digital competence discourse dominates, while in the latter, a programming discourse emerges. Both the digital competence discourse and the programming discourses are blended interdiscursively with an economical discourse.

### **The Digital Competence Discourse**

The European Parliament framed digital competence in terms of the following:

Digital competence involves the confident and critical use of Information Society Technology (IST) for work, leisure and communication. It is underpinned by basic skills in ICT: the use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet. (European Parliament, 2006, p. 7)

According to the Government of Sweden (2015), digital competence is related to all participants in the educational system: students, teachers and headmasters. Furthermore, digital competence was seen as a means to dampen the effects of the global economic crisis in 2008, of decreasing unemployment and of meeting the demands of an aging population

(Government Offices of Sweden, 2012). This suggests that the digital competence discourse is blended interdiscursively with the economical discourse both at the European and the Swedish national levels. Digital competence is seen as a means for Europe and Sweden to gain competitive power globally, and a means to rebuild the economy after the economic crash of 2008. Digital competence is expressed in the Swedish context in the following terms: “every student shall, after they have completed compulsory school, be able to use modern technology as a tool for searching knowledge, communication, and learning” (The Government Offices of Sweden, 2011, p. 33). In a similar vein, the European Commission stresses that digital competence emanates from the individuals’ needs:

*The digital era should be about empowerment and emancipation; background or skills should not be a barrier to accessing this potential [—] the take-up gap [between those who use and those who don’t use the internet] is due to lack of user skills such as digital and media literacy, not only for employability but also for learning, creating, participating and being confident and discerning in the use of digital media. (European Commission, 2010, pp. 24–25, italics in original)*

Equality between women and men is another discourse that is blended interdiscursively with the digital competence discourse. It is hoped that a more digitalized school will see girls become more interested in technology, and that they will later on apply for technical education, and that boys, whose results are falling behind girls’ in Sweden, will become more interested in school and improve their grades (The Digitalization Commission, 2014).

A discourse about digital competence has been present in the Swedish curricula since 1994. The 1994 compulsory school curriculum included the following about information technology: “The school is responsible for ensuring that each pupil on completing compulsory school [—] can use information technology as a tool in the search for knowledge and learning”<sup>10</sup> (The Swedish National Agency for Education, 1994a, p. 10).

---

<sup>10</sup>Original Swedish text: “Skolan ansvarar för att varje elev efter genomgången grundskola [—] kan använda informationsteknik som ett verktyg för kunskapssökande och lärande”. (our translation)

The upper secondary school had no such explicit regulations in the 1990s. However, students at upper secondary levels had a mandatory basic ICT course in the curriculum. Formulations become slightly extended in the next national-level curriculum (2011): “The school is responsible for ensuring that each pupil on completing compulsory school [—] can use modern technology as a tool in the search for knowledge, communication, creativity and learning” (The Swedish National Agency for Education, 2016, p. 15f, the English language edition). In the second decade of the twenty-first century Swedish upper secondary schools are thus tasked with the responsibility so “that all individual students [—] can use books, library resources and modern technology as a tool in the search for knowledge, communication, creativity and learning” (The Swedish National Agency for Education, 2011, p. 8f, the English language edition). The earlier mandatory ICT course disappeared in the 2011 curriculum, which perhaps explains why the upper secondary school now includes such a formulation.

New governmental digitalization initiatives led to a thorough revision of the curricula in 2017. All parts of the Swedish school system—from pre-school to upper secondary level—are now responsible for digitalization, including the students’ digital competence. The revised curriculum for upper secondary school now states that “In an increasingly digitalized society the school shall also contribute to the students’ *digital competence*”<sup>11</sup> (The Government of Sweden, 2017c, p. 6, italics in original). Similarly, the curriculum for the compulsory school states that “all students shall be given the opportunity to develop their skills in using digital technology”<sup>12</sup> (The Government of Sweden, 2017a, p. 3).

For the compulsory school, the syllabi are a part of the curriculum. The upper secondary school syllabi for the *subjects common* to all upper secondary school programs—Swedish, English, Mathematics, Religion, Civics, Natural Science and Physical Education—are also included in the curriculum. Our study focuses particularly on the syllabi for mathematics since mathematics is most influenced by the digitalization initiative. The mathe-

---

<sup>11</sup> Original Swedish text: “I ett allt mer digitaliserat samhälle ska skolan också bidra till att utveckla elevernas *digitala kompetens*” (our translation, italics in original).

<sup>12</sup> Original Swedish text: “Alla elever ska ges möjlighet att utveckla sin förmåga att använda digital teknik”. (our translation)

matics syllabus for the compulsory school from 1994 highlighted that, “the school shall in its’ teaching in Mathematics strive so that the student [—] can with familiarity and judgement use the possibilities of the electronic calculator and the computer”<sup>13</sup> (The Swedish National Agency for Education, 1994b, p. 1). The syllabus for the upper secondary school in 1994 mentions computers explicitly, at the third (Mathematics C) of five levels: “After going through the course, the student shall [—] know how computer programs can be used as a support for studies of mathematic models in different applied contexts”<sup>14</sup> (The Swedish National Agency for Education, 1994c, p. 2f). In the next nationally revised curriculum (2011), the only mention of digital tools is in the syllabus for seventh to ninth grades: “Main methods for calculating numbers in fractions and decimals when making approximations, mental arithmetic and also calculations using written methods and digital technology” (The Swedish National Agency for Education, 2016, p. 63, the English language edition). Similarly, in the upper secondary school mathematics syllabus, digital tools are mentioned once: “The education in the course shall treat the following central content: [—] Strategies for mathematical problem solving, including usage of digital media and tools”<sup>15</sup> (The Swedish National Agency for Education, 2011, p. 92f).

## The Programming Discourse

A programming discourse emerges after the establishment of a digital competence discourse discussed above. The Government Offices (2011) is the first of the scrutinized Swedish documents that mention programming, or rather the profession of the programmer. Similar to the digital competence discourse, the programming discourse is blended interdiscursively with the economical discourse, wherein a programmer is discussed

---

<sup>13</sup>Original Swedish text: “Skolan skall i sin undervisning i matematik sträva efter att eleven [—] kan med förtrogenhet och omdöme utnyttja miniräknarens och datorns möjligheter”. (our translation)

<sup>14</sup>Original Swedish text: “Efter genomgången kurs skall eleven [—] känna till hur dataprogram kan utnyttjas som hjälpmedel vid studier av matematiska modeller i olika tillämpade sammanhang”. (our translation)

<sup>15</sup>Original Swedish text: “Undervisningen i kursen ska behandla följande centrala innehåll: [—] Strategier för matematisk problemlösning inklusive användning av digitala medier och verktyg”. (our translation)

as a desirable profession in both private and public sectors. At the European level, the Digitalization Commission (The Digitalization Commission, 2014) highlights two tracks: a digital competence track that most countries follow, and a track where some countries, notably Great Britain and Estonia, have introduced programming as a subject in compulsory schools (ibid.). Three rationales are presented for introducing programming: programming will help the students control their digital tools, programming will arouse the students' interest in technical issues and programming has the potential to increase the number of students who can enroll into technical educational streams (The Digitalization Commission, 2014). The Digitalization Commission suggests a mix for the Swedish educational system highlighting that the notion "digital competence" should be introduced in the curricula for both compulsory and upper secondary schools, and programming should be a part of already existing subjects, notably mathematics and technology. In the directive to the Swedish National Agency of Education, the Government of Sweden (The Government of Sweden, 2015) emphasizes programming as specific content in compulsory schools. In the latest revisions of the curricula (2017), a focus on programming is predominant, especially in the mathematics syllabi.

The analysis of the policy documents presented so far indicates that a programming discourse is present in the latest revisions of curricula and syllabi. When the Government of Sweden announced these latest changes in curricula and syllabi as a direct result of the digitalization initiative (The Government of Sweden, 2017d), the most prominent change was related to programming: "programming will be introduced as a distinct element in several different subjects in compulsory school, and primarily in the subjects of technology and mathematics"<sup>16</sup> (The Government of Sweden, 2017d, p. 1). In the 2017 revisions of the mathematics syllabi, a clear programming, digitalization discourse can be identified. In the syllabi for compulsory school, programming in various ways is a part of mathematics across all grades: students "shall be given opportunities to develop knowledge for using digital tools and programming to investi-

---

<sup>16</sup>Original Swedish text: "att programmering införs som ett tydligt inslag i flera olika ämnen i grundskolan, framförallt i teknik- och matematikämnen". (our translation)



gate problems and mathematical concepts, do calculations and to present and interpret data”<sup>17</sup> (The Swedish National Agency for Education, 2017a, p. 1). At the upper secondary school level, the intention is that programming will be a part of almost every mathematics course, especially as a tool for solving problems: “Strategies for mathematic problem solving includes modelling of different situations, with as well as without digital tools and programming”<sup>18</sup> (The Swedish National Agency for Education, 2017b, p. 13).

## Strength of Agency

The third theme that has emerged in the analysis of policy documents relates to the degree of agency and how it plays out in document design and different modes. Three dimensions of agency are explicated here: meaning potentials of language, of spatial layouts and of modes.

## Meaning Potentials of Language

The Government of Sweden (2015) and the Government Offices of Sweden (2012) are examples of two documents with a high degree of agency. In their languaging, they express a realis modality, with an extensive usage of the verb “shall”, and in terms of how knowledge and agency play out (see Fig. 2.2) they are oracular/agentive. Other documents with a high degree of agency are curricula and syllabi. Due to the nature of receivers, that is, teachers and school management, the language is less bureaucratic, but agency is expressed in the realis modality, with an extensive usage of the verb “shall”.

---

<sup>17</sup>Original Swedish text: “eleverna ges förutsättningar att utveckla förtrogenhet med grundläggande matematiska begrepp och metoder och deras användbarhet. Vidare ska eleverna genom undervisningen ges möjligheter att utveckla kunskaper i att använda digitala verktyg och programmering teknik för att kunna undersöka problemställningar och matematiska begrepp, göra beräkningar och för att presentera och tolka data”. (our translation)

<sup>18</sup>Original Swedish text: “Strategier för matematisk problemlösning inklusive användningmodellering av olika situationer, såväl med som utan digitala medier och verktyg och programmering”. (our translation)

The nature of languaging is somewhat different in inscriptions which display a lower degree of agency. Someone with a lower degree of agency is positioned toward the fatalistic end of the agency axis (Scollon, 2008), since s/he can't be certain that the suggestions will be realized. The Digitalization Commission builds its reports on extensive research and is positioned in the oracular end of the knowledge axis. But the commission does not have the agency to implement its suggestions and is therefore positioned on the fatalistic end on the agency axis (see Fig. 2.2). This is emphasized in the very title of the document, "A digital agenda in the service of the human being—a brightening future can be ours"<sup>19</sup> (The Digitalization Commission, 2014), where the fatalistic position is expressed with the irrealis modality verb *can*. The Digitalization Commission gives suggestions, which is a fatalistic stance, derived from the irrealis modality verb "to suggest". The report is addressed to the responsible minister, and the chairman of the Commission signs the dedication, which underlines the hierarchical relationship between the Digitalization Commission and the government. At the same time, The Digitalization Commission (2014) is a legislative document. In the bottom right corner, the logotype of the Government of Sweden is printed, together with the text "The governmental official reports. SOU 2014:13". The governmental official reports are considered law text in Sweden, and therefore have considerable degree of agency.

The Government of Sweden is the highest legislative authority in Sweden after the Parliament of Sweden, the Riksdag. But not all governmental documents have the same degree of agency. "IT in service of the human beings—a digital agenda for Sweden"<sup>20</sup> (Government Offices of Sweden, 2011) is a declaration of a will from the government and has a lower degree of agency. The language in the digital agenda is less bureaucratic, and the irrealis modality is used.

The objective for "A Digital Agenda for Europe" (European Commission, 2010) is to "chart a course to maximise the social and economic potential of ICT" (European Commission, 2010, p. 3), and the

---

<sup>19</sup>Original Swedish title: "En digital agenda i människans tjänst—en ljusnande framtid kan bli vår". (our translation)

<sup>20</sup>Original Swedish title: "It i människans tjänst—en digital agenda för Sverige". (our translation)

main focus is to provide proposals and guidelines; here the irrealis modality is used. Each problem area is concluded, highlighted with a frame and gray background color, with actions to be taken by the commission, and by the member states. The commissions' obligation are marked with the realis modal verb "will", and the member states' obligation are marked with the irrealis modal verb "should".

### Meaning Potentials in Spatial Layout

Policy documents that display a high degree of agency include the Government of Sweden (2015, 2017a, 2017b, 2017d) and the Government offices of Sweden (2012). They are enactments and commissions that other actors, that is, the Digitalization Commission or the Swedish National Agency for Education, are obliged to follow. The documents have a formal layout. They lack illustrations, except a logotype of the Government of Sweden. Bulleted lists that are common features in these policy documents are often summaries of the realis modality expressed in the policy documents, that is, what the recipient is obliged to do. The simple layout is used in other high-agency documents, like European Commission (2010) and the Swedish curricula and syllabi. The curricula are framed as books though, with ISBN numbers and include a cover page.

In contrast, the Digitalization Commission (2014) strengthens the impression of a report based on thorough research by an extensive usage of footnotes and illustrative graphs. "IT in service of the human being—a digital agenda for Sweden" (Government Offices of Sweden, 2011) is a governmental policy document with less agency than the enactments and commissions. This agenda is designed as a brochure and has a color image that covers the front page. The image shows three young people sitting in a summer shrouded park. One woman is talking on her cell phone and one man is sitting working on a laptop. A second woman is sitting next to him, watching the man work. In the bottom right corner is the logotype of the Government of Sweden; the latter frames the document as an official governmental document. Apart from the cover page, the "IT in service of the human being—a digital agenda for Sweden" has one single

illustration, a graphic presentation of the strategic areas for reaching the goals of the agenda. This is the work of an art director and is produced for print purposes.

## Meaning Potentials of Mode

Scollon (2008) uses the word mode as it is used in communication, “a semiotic configuration or code in which a meaning is expressed such as writing, speech, gesture, posture, gaze, painting, architecture, interior design, or urban design” (p. 131). In the policy documents, represented modes include written words, illustrations, tables and graphs. The Digitalization Commission (2014) contains written text, graphs and tables. European Commission (2010) contains full-color graphs and a flow chart. In the cover image of “IT in service of the human being—a digital agenda for Sweden” (Government Offices of Sweden, 2011), an emoticon, ;D, is inserted. The ;D emoticon is present on every page of the document. Emoticons represent a mode between spoken and written language. The preface is personally signed by the responsible minister.<sup>21</sup> The signature represents a new mode, the hand-written text, which together with the front page frames the document as more personal and publicly accessible. Scollon (2008) emphasizes another feature of the signature, in that it “tells us that this real-world, identifiable historical body took an action with his own hand for which he claims and accepts the responsibility within his official government authority” (p. 129).

The three overarching themes that emerge in the analysis indicate that the scrutinized documents are chained, that is, one document is linked with one or more others. Notable discourses that emerge are the digital competence discourse, the programming discourse and the economical discourse. The documents also represent different degrees of agency, which means that they can be considered actors, or inscriptions. Implications of these themes are discussed in the final section of this chapter.

---

<sup>21</sup> Anna-Karin Hatt.

## 4 Discussion and Reflections

Social actions take place in the intersection between the historical body, the interaction order and the discourses in place. Features of the historical body, or the individual scale, include beliefs about language, social status or position, skills and habits related to policymaking and/or implementation. The historical body “invokes the role of agency and the potential for individual influence on society” (Hult, 2017, p. 94). In the historical body, the actor’s place in relation to earlier generations is relevant. Inscriptions are actors in that they have agency and influence other actors, both human and non-human (e.g. other documents) (Latour, 1987). Inscriptions could thus be considered actors, with a historical body. The chained character of the inscriptions is a consequence of their historical bodies. Existing documents become a part of the nature of forthcoming documents, their roles and agency. Inscriptions have different social status and positions, manifested in their strength or degree of agency. Depending on their degree of agency, different inscriptions have different possibilities of evoking new inscriptions in the chain, in which the original inscriptions become a part of the historical bodies of the new inscriptions. In the interaction between human and non-human actors, inscriptions can become part of the historical body of human actors. Curricula and syllabi, for instance, shape teachers historical bodies in different ways.

Sociocultural framings highlight relevant features of the interaction order, or the relations among actors, and constitute the norms of the interactional setting, expectations about actors’ social roles or positions and central versus peripheral participants. In a frozen action, these features are inherent in that they are imprinted in previous social actions. Policy documents have a relation to other policy documents in the chain of documents, and there is an interaction order among the policy documents where inscriptions with a higher degree of agency can evoke new documents. Degree of agency is expressed both in layout and the nature of languaging. Inscriptions with a higher degree of agency have a more formal layout and a more bureaucratic language. Part of the interaction order displayed here can be understood in terms of modalities, where inscriptions with a lower degree of agency exhibit a larger variety of

modalities. In documents with a lower degree of agency, graphs, tables, flow charts and so on are more commonly present. These illustrations are in themselves inscriptions, with a rhetorical agenda (Latour, 1987). Inscriptions, for example policy documents, with a lower degree of agency use different modalities as arguments to convince the principal receiver to implement the given suggestions. One mode represented in the policy documents is the signature. Rhetorically the signature can be considered the sender's ethos, that is, the personal character used as an argument. Inscriptions with a lower degree of agency need stronger arguments in order to make their case. These arguments could be illustrations, graphs or tables, but they could also be a scientific discourse, where arguments are founded on external references, footnotes and bibliographies.

"The great amount of work of accumulating, collating, moving, and summarizing inscriptions contributes to their power and rhetorical force" (Roth & McGinn, 1998, p. 403). This could be taken as a paradoxical statement, since the results of our study highlight that policy documents with a higher degree of agency are often shorter than documents with a lower degree of agency. Documents with a high degree of agency also have fewer modes, that is, inscriptions-in-inscriptions. But policy documents, or inscriptions, with a high degree of agency have the power to evoke documents with a lower degree of agency. The principal producers of the policy documents have different degrees of agency, and their strength reflects the possibilities to produce high-degree-agency documents. In the multi-vocal dialogue between policy documents across time and space, some voices have more affordances than others. The Government of Sweden can produce high-degree-agency inscriptions, with the power to evoke a chain of documents from other actors. The Digitalization Commission produces inscriptions that have agency in that they can influence the government's decisions, but these inscriptions don't evoke new inscriptions. The Swedish National Agency for Education has a lower degree of agency than the Government of Sweden, but curricula and syllabi evoke new chains of documents when teachers interpret and implement them.

There are many discourses circulating in the policy documents. The results of the present study highlight that the most important discourses include the governmental discourse, the digital competence discourse,

the programming discourse and the economical discourse. A part of NA is to analyze which discourses are important and fore-grounded, that is, identify the discourses in place. The governmental discourse is common to all the other discourses as several policy documents are legislative in nature. In the policy documents that formed the digitalization initiative in Sweden, two discourses that emerge are important, the digital competence discourse and the programming discourse. Blended interdiscursively with both these discourses is a third though, an economical discourse. In European Commission (2010), the digital competence discourse is blended interdiscursively with an economical discourse: ICT is considered a mediating means to lift Europe from the economic crisis.

The crisis has wiped out years of economic and social progress and exposed structural weaknesses in Europe's economy [—] The objective of this Agenda is to chart a course to maximise the social and economic potential of ICT, most notably the internet, a vital medium of economic and societal activity. (European Commission, 2010, p. 3)

The Digitalization Commission stresses that

The background to the question of competence is considered appropriate in that most countries experience that the basic skills that schools have focused on so far are necessary, but not enough, to meet the extensive demands that are made in the current global economy, with continuously increasing competition.<sup>22</sup> (The Digitalization Commission, 2014, p. 139)

The Digitalization Commission (2014) is the first instance that mentions programming in the scrutinized policy documents. Government Offices of Sweden (2011) mentions the profession “programmer” twice: in a footnote and as a desirable profession in both private and public sectors. The programming competence thus is related to the economic life of the labor market. Economic liberalism could be seen as a political and

---

<sup>22</sup>Original Swedish text: “Bakgrunden till att kompetensfrågan anses aktuell är att de flesta länder uppfattar att de grundläggande kunskaperna som skolan hittills koncentrerat sig på är nödvändiga men inte tillräckliga för att möta de omfattande krav som ställs i dagens globala ekonomi med ständigt ökande konkurrens”. (our translation)

ideological driving force behind SDI. SDI thus becomes a mediational means for the market, especially the labor market. The supply of a skilled labor force and the demands of a Swedish labor force are supposed to increase with SDI. The interdiscursive blending of digital competence discourse and economical discourse has a long history. For instance, the first sentence in the official letter that presents the ITiS project highlights this relationship: “The Swedish society has gone through big changes, not least in the labor market”<sup>23</sup> (The Government of Sweden, 1998).

Morally and ethically, SDI could decrease the diversity in digitalization between schools in the nation-state of Sweden. In Sweden, the municipality is responsible for the school administration, and the schools are to a large extent financed by the local taxpayers who live in the municipality. This arrangement has resulted in a diversity between the Swedish schools regarding digitalization, something that the government-initiated Digitalization Commission also recognizes (The Digitalization Commission, 2013). But this is not an expressed driving force in the scrutinized policy documents. There is one important ethical/moral argument expressed in the policy documents: equality between women and men. Here digitalization is considered a mediational means to make girls more interested in technical education and to promote the school results of boys (e.g. The Digitalization Commission, 2014). Here the equality discourse is blended with the economical discourse though: “In an extension [girls increased interest in IT] can reduce the skewed gender distribution in the IT sector”<sup>24</sup> (The Digitalization Commission, 2014, p. 17). Equality is seen as a mediational means to increase the supply of skilled employers in the IT sector. In 1998, the digitalization of schools was considered a mediational means to compensate socioeconomically disadvantaged children, who didn’t have access to computers at home (The Government of Sweden, 1998). This argument isn’t raised in the subsequent documents that are part of our dataset.

In this study, NA and ANT constitute theoretical points of departure for scrutinizing policy documents across temporal and spatial scales. In

---

<sup>23</sup> Original Swedish text: “Det svenska samhället har genomgått stora förändringar inte minst på arbetsmarknaden”. (our translation)

<sup>24</sup> Original Swedish text: “I förlängningen kan [flickors ökade intresse för IT] bidra till att minska den skeva könsfördelningen inom it-branschen”. (our translation)



NA, the social action is the unit of analysis, and policy documents can be considered frozen (social) actions. A traditional NA concludes with a third step after establishing and navigating the nexus of practice: changing the nexus of practice. The rationale for this is that the nexus analyst always interacts, and therefore intervenes, with the nexus of practice. Considering the frozen character of the scrutinized documents, there is no interaction, or intervention, with the nexus of practice. They are what Latour (1987), with a synonym to inscriptions, calls *immutable mobiles*. They are mobile in the network, and influence other actors, but they are in themselves immutable. The frozen, or immutable, character of the policy documents also has implications for temporal scales. These tend to be longer. The semiotic processes related to the production of policy documents fall into what Scollon and Scollon (2004) call a solar biorhythm, with a duration of several years, which strengthens the rhetorical character of the policy documents. The analysis presented in this chapter has illuminated the relevance of shifts and continuities regarding the importance of digitalization in the work done by actors and institutions across time and scales.

## Abbreviations

ANT	Actor-Network Theory
CDA	Critical Discourse Analysis
ICT	Information and Communication Technology
ITiS	IT i Skolan (IT in School)
NA	Nexus Analysis
PCDA	Public Consultative Discourse Analysis
SDI	Swedish Digitalization Initiative

## Appendix 1

Table 2.1 Policy documents 1994–2016 that make up the dataset

1994, July	<ul style="list-style-type: none"> <li>• <i>Title:</i> Matematik, Lpf 94 (Mathematics, Lpf 94)</li> <li>• <i>Description:</i> Mathematics syllabus for upper secondary school</li> <li>• <i>Provider:</i> The Swedish National Agency for Education (Skolverket)</li> <li>• <i>Function:</i> Syllabus</li> <li>• <i>Document url:</i> <a href="http://ncm.gu.se/media/kursplaner/gym/kursplangymA-E94.pdf">http://ncm.gu.se/media/kursplaner/gym/kursplangymA-E94.pdf</a></li> </ul>
1994, July	<ul style="list-style-type: none"> <li>• <i>Title:</i> Matematik, Lpo 94 (Mathematics, Lpo 94)</li> <li>• <i>Description:</i> Mathematics syllabus for the compulsory school</li> <li>• <i>Provider:</i> The Swedish National Agency for Education (Skolverket)</li> <li>• <i>Function:</i> Syllabus</li> <li>• <i>Document url:</i> <a href="http://ncm.gu.se/media/kursplaner/grund/grund1994.pdf">http://ncm.gu.se/media/kursplaner/grund/grund1994.pdf</a></li> </ul>
2006	<ul style="list-style-type: none"> <li>• <i>Title:</i> Läroplan för de frivilliga skolformerna Lpf 94 (Curriculum for the non-compulsory school system Lpf 94)</li> <li>• <i>Description:</i> Curriculum for upper secondary school</li> <li>• <i>Provider:</i> Skolverket</li> <li>• <i>Function:</i> Curriculum</li> <li>• <i>Document url:</i> <a href="http://hdl.handle.net/2077/3115">http://hdl.handle.net/2077/3115</a></li> </ul>
2006	<ul style="list-style-type: none"> <li>• <i>Title:</i> Läroplan för det obligatoriska skolväsendet, förskoleklassen, och fritidshemmet Lpo 94 (Curriculum for the compulsory school, preschool class and the recreation centre Lpo 94)</li> <li>• <i>Description:</i> Curriculum for the compulsory school, preschool class and the recreation centre</li> <li>• <i>Provider:</i> The Swedish National Agency for Education (Skolverket)</li> <li>• <i>Function:</i> Curriculum</li> <li>• <i>Document url:</i> <a href="http://hdl.handle.net/2077/30848">http://hdl.handle.net/2077/30848</a></li> </ul>

(continued)

Table 2.1 (continued)

2006, December 30	<ul style="list-style-type: none"> <li>• <i>Title:</i> EUROPAPARLAMENTETS OCH RÅDETS REKOMMENDATION av den 18 december 2006 om nyckelkompetenser för livslångt lärande (RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 on key competences for lifelong learning)</li> <li>• <i>Description:</i> An identification and definition of eight key competences for lifelong learning</li> <li>• <i>Provider:</i> The European Parliament and the Council of the European Union</li> <li>• <i>Function:</i> Recommendation</li> <li>• <i>Document url:</i> <a href="http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006H0962&amp;from=SV">http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006H0962&amp;from=SV</a></li> </ul>
2010, May 19	<ul style="list-style-type: none"> <li>• <i>Title:</i> En digital agenda för Europa (A Digital Agenda for Europe)</li> <li>• <i>Description:</i> An agenda to deliver economic and social benefits from a digital single market based on fast and ultra fast internet and interoperable applications</li> <li>• <i>Provider:</i> The European Commission</li> <li>• <i>Function:</i> European Union Legislation</li> <li>• <i>Document url:</i> <a href="http://eur-lex.europa.eu/legal-content/SV/TXT/PDF/?uri=CELEX:52010DC0245&amp;from=EN">http://eur-lex.europa.eu/legal-content/SV/TXT/PDF/?uri=CELEX:52010DC0245&amp;from=EN</a></li> </ul>
2011	<ul style="list-style-type: none"> <li>• <i>Title:</i> Gymnasieskola 2011 (Gy11) (Upper Secondary School 2011 (Gy11))</li> <li>• <i>Description:</i> Curriculum for upper secondary school</li> <li>• <i>Provider:</i> The Swedish National Agency for Education (Skolverket)</li> <li>• <i>Function:</i> Curriculum</li> <li>• <i>Document url:</i> <a href="https://www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?_xurl_=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwtpubext%2Ftrycksak%2Fblob%2Fpdf2597.pdf%3Fk%3D2597">https://www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?_xurl_=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwtpubext%2Ftrycksak%2Fblob%2Fpdf2597.pdf%3Fk%3D2597</a></li> </ul>
2011, September 29	<ul style="list-style-type: none"> <li>• <i>Title:</i> It i människans tjänst—en digital agenda för Sverige (IT in human service—a digital agenda for Sweden)</li> <li>• <i>Description:</i> An agenda for taking advantage of the possibilities of digitalization. States that the Government of Sweden will establish a Digitalization Commission. This agenda is the Swedish answer to the digital agenda of Europe</li> <li>• <i>Provider:</i> The Government of Sweden</li> <li>• <i>Function:</i> Governmental decision</li> <li>• <i>Document url:</i> <a href="http://www.regeringen.se/49bbbc/contentassets/6136dab3982543bea4adc18420087a03/it-i-manniskans-tjanst%2D%2D-en-digital-agenda-for-sverige-n2011.12">http://www.regeringen.se/49bbbc/contentassets/6136dab3982543bea4adc18420087a03/it-i-manniskans-tjanst%2D%2D-en-digital-agenda-for-sverige-n2011.12</a></li> </ul>

(continued)

Table 2.1 (continued)

2012, June 7	<ul style="list-style-type: none"> <li>• <i>Title:</i> Digitaliseringskommissionen—en kommission för den digitala agendan (The digitalization commission—a commission for the digital agenda)</li> <li>• <i>Description:</i> A directive for the establishment and work of the Digitalization Commission</li> <li>• <i>Provider:</i> The Government of Sweden</li> <li>• <i>Function:</i> Directive for a commission</li> <li>• <i>Document url:</i> <a href="http://www.regeringen.se/49bba8/contentassets/538820854ece4bf2842e139f84b4b723/digitaliseringskommissionen%2D%2D-en-kommission-for-den-digitala-agendan-dir.-201261">http://www.regeringen.se/49bba8/contentassets/538820854ece4bf2842e139f84b4b723/digitaliseringskommissionen%2D%2D-en-kommission-for-den-digitala-agendan-dir.-201261</a></li> </ul>
2013, October 1	<ul style="list-style-type: none"> <li>• <i>Title:</i> Programmering är framtidens språk (Programming is the language of the future)</li> <li>• <i>Description:</i> An op-ed article published in Svenska Dagbladet, one of the biggest daily newspaper in Sweden. Arguments for the thesis that programming should be a school subject in compulsory school. Written by the director of a private upper secondary school</li> <li>• <i>Provider:</i> Christine Johnsson, director, IT-gymnasiet</li> <li>• <i>Function:</i> Op-ed article</li> <li>• <i>Document url:</i> <a href="https://www.svd.se/programmering-ar-framtidens-sprak">https://www.svd.se/programmering-ar-framtidens-sprak</a></li> <li>• <i>Title:</i> En digital agenda i människans tjänst—en ljusnande framtid kan bli vår (A digital agenda in the service of humanity—a brightening future can be ours)</li> <li>• <i>Description:</i> An interim report from the Digitalization Commission to the Government of Sweden. The commission accounts for its' work so far. Among other things, the commission argues that digitalization needs attention in school</li> <li>• <i>Provider:</i> The Digitalization Commission (Digitaliseringskommissionen)</li> <li>• <i>Function:</i> Interim report</li> <li>• <i>Document url:</i> <a href="http://www.regeringen.se/49bbaa/contentassets/99c1e965d6ff46b6a8f81e6b508c203a/en-digital-agenda-i-manniskans-tjanst%2D%2D-en-ljusnande-framtid-kan-bli-var-sou-201413-del-1-av-2">http://www.regeringen.se/49bbaa/contentassets/99c1e965d6ff46b6a8f81e6b508c203a/en-digital-agenda-i-manniskans-tjanst%2D%2D-en-ljusnande-framtid-kan-bli-var-sou-201413-del-1-av-2</a> (Part 1) <a href="http://www.regeringen.se/49bbaa/contentassets/99c1e965d6ff46b6a8f81e6b508c203a/en-digital-agenda-i-manniskans-tjanst%2D%2D-en-ljusnande-framtid-kan-bli-var-sou-201413-del-2-av-2">http://www.regeringen.se/49bbaa/contentassets/99c1e965d6ff46b6a8f81e6b508c203a/en-digital-agenda-i-manniskans-tjanst%2D%2D-en-ljusnande-framtid-kan-bli-var-sou-201413-del-2-av-2</a> (Part 2)</li> </ul>

(continued)

Table 2.1 (continued)

2015, September 24	<ul style="list-style-type: none"> <li>• <i>Title:</i> Uppdrag att föreslå nationella it-strategier för skolväsendet (Commission to suggest national IT strategies for the educational system)</li> <li>• <i>Description:</i> A commission from the Government of Sweden to the Swedish National Agency for Education to suggest national IT strategies for the educational system. Among other things, the Government gives the commission to elaborate new curricula and syllabi</li> <li>• <i>Provider:</i> The Government of Sweden</li> <li>• <i>Function:</i> Governmental Commission</li> <li>• <i>Document url:</i> <a href="http://www.regeringen.se/4a80e6/contentassets/a22b7decc51047a790f68d63c64920cb/uppdrag-till-skolverket-att-foresla-nationella-it-strategier-for-skolvaset.pdf">http://www.regeringen.se/4a80e6/contentassets/a22b7decc51047a790f68d63c64920cb/uppdrag-till-skolverket-att-foresla-nationella-it-strategier-for-skolvaset.pdf</a></li> </ul>
2016	<ul style="list-style-type: none"> <li>• <i>Title:</i> Läroplan för grundskolan, förskoleklassen och fritidshemmet 2011. (Lgr11) Reviderad 2016 (Curriculum for the compulsory school, preschool class and the recreation centre 2011. (Lgr11) Revised 2016)</li> <li>• <i>Description:</i> Curriculum for the compulsory school, preschool class and the recreation centre.</li> <li>• <i>Provider:</i> The Swedish National Agency for Education (Skolverket)</li> <li>• <i>Function:</i> Curriculum</li> <li>• <i>Document url:</i> <a href="https://www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?_xurl_=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Ftrycksak%2FBlubb%2Fpdf2575.pdf%3Fk%3D2575">https://www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?_xurl_=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Ftrycksak%2FBlubb%2Fpdf2575.pdf%3Fk%3D2575</a></li> </ul>
2016, June 15	<ul style="list-style-type: none"> <li>• <i>Title:</i> Redovisning av uppdraget om att föreslå nationella IT-strategier för skolväsendet—förändringar i läroplaner, ämnesplaner och examensmål (Accountance for the commission to suggest national IT strategies for the educational system—changes in curricula, syllabi and diploma objectives)</li> <li>• <i>Description:</i> An accountability from the Swedish National Agency for Education to the Government of Sweden. The accountability gives suggestions for new curricula and syllabi</li> <li>• <i>Provider:</i> The Swedish National Agency for Education (Skolverket)</li> <li>• <i>Function:</i> Account of governmental commission</li> <li>• <i>Document url:</i> <a href="https://www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?_xurl_=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Ftrycksak%2FBlubb%2Fpdf3668.pdf%3Fk%3D3668">https://www.skolverket.se/om-skolverket/publikationer/visa-enskild-publikation?_xurl_=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Ftrycksak%2FBlubb%2Fpdf3668.pdf%3Fk%3D3668</a></li> </ul>

(continued)

Table 2.1 (continued)

2016, June 15	<ul style="list-style-type: none"> <li>• <i>Title:</i> Bilaga 3: Läroplan för grundskolan, förskoleklassen och fritidshemmet. Skolverkets förslag till förändringar—Nationella it-strategier (U2015/04666/S) (Appendix 3: Curriculum for compulsory school, preschool class and recreation centre. Skolverket's suggestions for changes—National IT strategies (U2015/04666/S))</li> <li>• <i>Description:</i> Suggestions for changes in curricula and syllabi for compulsory school, preschool class and recreation centre</li> <li>• <i>Provider:</i> The Swedish National Agency for Education (Skolverket)</li> <li>• <i>Function:</i> Suggestion of new curriculum</li> <li>• <i>Document url:</i> <a href="https://www.skolverket.se/om-skolverket/publikationer/it-i-skolan?_xurl=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Fbilaga%2FBilob%2Fpdf539.pdf%3Fk%3D539">https://www.skolverket.se/om-skolverket/publikationer/it-i-skolan?_xurl=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Fbilaga%2FBilob%2Fpdf539.pdf%3Fk%3D539</a></li> </ul>
2016, June 15	<ul style="list-style-type: none"> <li>• <i>Title:</i> Bilaga 7: Läroplan för gymnasieskolan. Skolverkets förslag till förändringar—Nationella it-strategier (U2015/04666/S) (Appendix 7: Curriculum for upper secondary school. Skolverket's suggestions for changes—National IT strategies (U2015/04666/S))</li> <li>• <i>Description:</i> Suggestions for changes in curricula and syllabi for upper secondary school</li> <li>• <i>Provider:</i> The Swedish National Agency for Education (Skolverket)</li> <li>• <i>Function:</i> Suggestion of new curriculum</li> <li>• <i>Document url:</i> <a href="https://www.skolverket.se/om-skolverket/publikationer/it-i-skolan?_xurl=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Fbilaga%2FBilob%2Fpdf543.pdf%3Fk%3D543">https://www.skolverket.se/om-skolverket/publikationer/it-i-skolan?_xurl=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Fbilaga%2FBilob%2Fpdf543.pdf%3Fk%3D543</a></li> </ul>
2016, June 15	<ul style="list-style-type: none"> <li>• <i>Title:</i> Bilaga 12: Ämnesplan—matematik. Skolverkets förslag till förändringar—nationella it-strategier (U2015/04666/S) (Appendix 12: Subject plan—mathematics. Skolverket's suggestions for change—National IT strategies (U2015/04666/S))</li> <li>• <i>Description:</i> Suggestions for changes in the syllabi for mathematics</li> <li>• <i>Provider:</i> The Swedish National Agency for Education (Skolverket)</li> <li>• <i>Function:</i> Suggestion of new syllabus for mathematics</li> <li>• <i>Document url:</i> <a href="https://www.skolverket.se/om-skolverket/publikationer/it-i-skolan?_xurl=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Fbilaga%2FBilob%2Fpdf549.pdf%3Fk%3D549">https://www.skolverket.se/om-skolverket/publikationer/it-i-skolan?_xurl=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Fbilaga%2FBilob%2Fpdf549.pdf%3Fk%3D549</a></li> </ul>

## References

- Agar, M. H. (2008). *The Professional Stranger. An Informal Introduction to Ethnography* (2nd ed.). Bingley: Emerald Group.
- Bagga-Gupta, S. (2012). Challenging Understandings of Bilingualism in the Language Sciences from the Lens of Research that Focuses Social Practices. In E. Hjørne, G. van der Aalsvoort, & G. de Abreu (Eds.), *Learning, Social Interaction and Diversity: Exploring School Practices* (pp. 85–102). Rotterdam: Sense Publishers.
- Bagga-Gupta, S. (2017). Going Beyond Oral-Written-Signed-Irl-Virtual Divides. Theorizing Languageing from *Mind-as-Action* Perspectives. *Writing & Pedagogy*, 9(1), 49–75. <https://doi.org/10.1558/wap.27046>
- Bagga-Gupta, S., & Messina Dahlberg, G. (2018). Meaning-Making or Heterogeneity in the Areas of Language and Identity? The Case of Translanguaging and Nyanlända (Newly-Arrived) Across Time and Space. *International Journal of Multilingualism*, 1–28. <https://doi.org/10.1080/14790718.2018.1468446>
- Burke, K. (1945). *A Grammar of Motives*. New York: Prentice-Hall.
- Chaib, C., Chaib, M., & Ludvigsson, A. (2004). *Leva med ITiS. Nationell utvärdering av IT i Skolan*. Retrieved from DiVA website: <http://urn.kb.se/resolve?urn=urn%3Anbn%3Ase%3Ahj%3Adiva-654>
- Davidsson, P., & Thoresson, A. (2017). *Svenskarna och internet 2017. Undersökning om svenskarnas internetvanor*. Retrieved from [https://www.iis.se/docs/Svenskarna\\_och\\_internet\\_2017.pdf](https://www.iis.se/docs/Svenskarna_och_internet_2017.pdf)
- Erickson, F. (1977). Some Approaches to Inquiry in School-Community Ethnography. *Anthropology & Education Quarterly*, 8(2), 58–69.
- European Commission. (2010). *A Digital Agenda for Europe*. Brussels: European Commission. Retrieved from <http://eur-lex.europa.eu/legal-content/SV/TXT/PDF/?uri=CELEX:52010DC0245&from=EN#page=1&zoom=auto,-274,76>
- European Parliament. (2006). *Recommendation of the European Parliament and of the Council of 18 December 2006 on Key Competences for Lifelong Learning* (2006/962/EC). European Parliament.
- Findahl, O. (2000). *Svenskarna och Internet År 2000*. Retrieved from <https://www.iis.se/docs/SOI2000.pdf>
- Findahl, O. (2013). *Svenskarna och internet 2013*. Retrieved from <https://www.iis.se/docs/SOI2013.pdf>

- Gee, J. P. (1999). *An Introduction to Discourse Analysis. Theory and Method*. London and New York: Routledge.
- Government Offices of Sweden. (2011). *It i människans tjänst. En digital agenda för Sverige*. Retrieved from <http://www.regeringen.se/49bbbc/contentassets/6136dab3982543bea4adc18420087a03/it-i-manniskans-tjanst%2D%2D-en-digital-agenda-for-sverige-n2011.12>
- Government Offices of Sweden. (2012). *The Digitalization Commission – en kommission för den digitala agendan*. Stockholm. Retrieved from <http://www.regeringen.se/49bba8/contentassets/538820854ece4bf2842e139f84b4b723/The-Digitalization-Commission%2D%2D-en-kommission-for-den-digitala-agendan-dir.-201261>.
- Gynne, A. (2016). *Languaging and Social Positioning in Multilingual School Practices. Studies of Sweden Finnish Middle School Years*. Doctoral Dissertation. Västerås: Mälardalen University. Retrieved from <http://urn.kb.se/resolve?urn=urn:nbn:se:mdh:diva-31774>
- Hult, F. M. (2015). Making Policy Connections Across Scales Using Nexus Analysis. In F. M. Hult & D. Cassels Johnson (Eds.), *Research Methods in Language Policy and Planning: A Practical Guide* (1st ed.). Wiley.
- Hult, F. M. (2017). More than a Lingua Franca: Functions of English in a Globalised Educational Language Policy. *Language, Culture and Curriculum*, *In Press*. <https://doi.org/10.1080/07908318.2017.1321008>
- Latour, B. (1987). *Science in Action*. Cambridge, MA: Harvard University Press.
- Linell, P. (2009). *Rethinking Language, Mind, and World Dialogically. Interactional and Contextual Theories of Human Sense-Making*. Charlotte, NC: Information Age Publishing.
- Messina Dahlberg, G. (2015). *Languaging in Virtual Learning Sites. Studies of Online Encounters in the Language-Focused Classroom*. Doctoral Dissertation. Örebro: Örebro University. Retrieved from <http://urn.kb.se/resolve?urn=urn:nbn:se:du-20590>
- Nishida, K. (1958). *Intelligibility and the Philosophy of Nothingness. Three Philosophical Essays* (R. Schinzinger, Trans.). Honolulu: East-West Center Press.
- Norris, S. (2004). *Analyzing Multimodal Interaction. A Methodological Framework*. New York and London: Routledge.
- OECD. (2015a). *Students, Computers and Learning: Making the Connection: Making the Connection*. PISA, OECD Publishing. Retrieved from <https://doi.org/10.1787/9789264239555-en>



- OECD. (2015b). Students, Computers, Learning – ICT in Education. *OECD Education Statistics (Database)*. <https://doi.org/10.1787/6ceaedf7-en>
- Pietikäinen, S., Lane, P., Salo, H., & Laihiala-Kankainen, S. (2011). Frozen Actions in the Arctic Linguistic Landscape: A Nexus Analysis of Language Processes in Visual Space. *International Journal of Multilingualism*, 8(4), 277–298. <https://doi.org/10.1080/14790718.2011.555553>
- Roth, W.-M., & McGinn, M. K. (1998). >unDELETE science education:/lives/work/voices. *Journal of Research in Science Teaching*, 35(4), 399–421. [https://doi.org/10.1002/\(SICI\)1098-2736\(199804\)35:4<399::AID-TEA10>3.0.CO;2-5](https://doi.org/10.1002/(SICI)1098-2736(199804)35:4<399::AID-TEA10>3.0.CO;2-5)
- Scollon, R. (2008). *Analyzing Public Discourse. Discourse Analysis in the Making of Public Policy*. London and New York: Routledge.
- Scollon, R., & Scollon, S. W. (2004). *Nexus Analysis. Discourse and the Emerging Internet*. New York: Routledge.
- Tapio, E. (2013). *A Nexus Analysis of English in the Everyday Life of FinSL Signers: A Multimodal View on Interaction*. Jyväskylä: University of Oulo.
- The Digitalization Commission. (2013). *En digital agenda i människans tjänst – Sveriges digitala ekosystem, dess aktörer och drivkrafter*. Stockholm: Fritzes.
- The Digitalization Commission. (2014). *En digital agenda i människans tjänst – en ljusnande framtid kan bli vår*. Stockholm: Fritzes.
- The Government of Sweden. (1998). *Lärandets verktyg nationellt program för IT i skolan*. Stockholm: Sveriges Riksdag. Retrieved from [http://riksdagen.se/sv/dokument-lagar/dokument/skrivelse/larandets-verktyg-nationellt-program-for-it-i\\_GL03176](http://riksdagen.se/sv/dokument-lagar/dokument/skrivelse/larandets-verktyg-nationellt-program-for-it-i_GL03176)
- The Government of Sweden. (2015). *Uppdrag att föreslå nationella it-strategier för skolväsendet*. Stockholm.
- The Government of Sweden. (2017a). *Förordning om ändring i förordningen (SKOLFS 2010:37) om läroplan för grundskolan, förskoleklassen och fritidshemmet*. Stockholm. Retrieved from [https://www.skolverket.se/polopoly\\_fs/1.260517!/LaroplanGrundskolaForskoleklassFritidshem.pdf](https://www.skolverket.se/polopoly_fs/1.260517!/LaroplanGrundskolaForskoleklassFritidshem.pdf)
- The Government of Sweden. (2017b). *Förordning om ändring i förordningen (SKOLFS 2010:261) om ämnesplaner för de gymnasiegemensamma ämnena*. Stockholm. Retrieved from [https://www.skolverket.se/polopoly\\_fs/1.260522!/AmnesplanerGymnasiegemensammaAmnen.pdf](https://www.skolverket.se/polopoly_fs/1.260522!/AmnesplanerGymnasiegemensammaAmnen.pdf)
- The Government of Sweden. (2017c). *Förordning om ändring i förordningen (SKOLFS 2011:144) om läroplan för gymnasieskolan*. Stockholm. Retrieved from [https://www.skolverket.se/polopoly\\_fs/1.260521!/LaroplanGymnasieskolan.pdf](https://www.skolverket.se/polopoly_fs/1.260521!/LaroplanGymnasieskolan.pdf)

- The Government of Sweden. (2017d). *Stärkt digital kompetens i skolans styrdokument*. Retrieved from <http://www.regeringen.se/493c41/contentassets/acd9a3987a8e4619bd6ed95c26ada236/informationsmaterial-starkt-digital-kompetens-i-skolans-styrdokument.pdf>
- The Government Offices. (2011). *It i människans tjänst. En digital agenda för Sverige*. Retrieved from <http://www.regeringen.se/49bbbc/contentassets/6136dab3982543bea4adc18420087a03/it-i-manniskans-tjanst%2D%2D-en-digital-agenda-for-sverige-n2011.12>
- The Swedish National Agency for Education. (1994a). *Läroplan för det obligatoriska skolväsendet, förskoleklassen och fritidshemmet Lpo 94*. Stockholm: Fritzes.
- The Swedish National Agency for Education. (1994b). *Matematik*. Stockholm: Fritzes.
- The Swedish National Agency for Education. (1994c). *Upper Secondary School Mathematics Curriculum*.
- The Swedish National Agency for Education. (2011). *Läroplan, examensmål och gymnasiegemensamma ämnen för gymnasieskola 2011*. Stockholm: Fritzes.
- The Swedish National Agency for Education. (2016). *Läroplan för grundskolan, förskoleklassen och fritidshemmet 2011. Reviderad 2016*. Stockholm: Fritzes.
- The Swedish National Agency for Education. (2017a). *Matematik, Lpo 11, revision 1 september 2017*.
- The Swedish National Agency for Education. (2017b). *Matematik, Lpf 11, revision 1 september 2017*.
- Wertsch, J. V. (1998). *Mind as Action*. New York: Oxford University Press.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.





# 3

## Authenticity of Language Practices in Virtual Learning Sites

Jonathan R. White

### 1 Introduction

English has become an international language and is one of the primary means for communication between individuals from different cultural backgrounds. However, people still have mixed attitudes about its status. Some see it as positive that there is a single lingua franca for international communication, while others see the specific choice of English as furthering colonialism and oppression (cf. for example Phillipson, 2013).

In relation to language practices in education, there is a continuing debate on authenticity. What is the most authentic language to learn and teach? In the context of English internationally, this often boils down to the choice between British and American English, especially given the over-abundance of teaching materials focusing on these varieties. However, much research focuses on a more pluralistic view of norms in English, such as the research by proponents of the World Englishes and English as a lingua franca views, for example. Also, net-based learning

---

J. R. White (✉)

Department of English, Dalarna University, Falun, Sweden

e-mail: [jwh@du.se](mailto:jwh@du.se)

environments have been argued to afford for more interaction especially among minorities and those less willing to interact face-to-face. It is argued in this chapter that another affordance of virtual learning sites is that there is a corresponding freer attitude towards norms which can be created through interaction between language users, and there is not the same focus on static, mostly written, norms from Inner Circle countries. The term *virtual learning sites* is used in this chapter to refer to purely net-based learning sites. Contexts where campus students use online learning management systems like Blackboard or Fronter are not included. The learning, and especially the interaction, needs to take place purely through net-based means.

Research on norms often approaches the issue through attitude research, but I have used a mixed-method approach to compare students' reported attitudes with actual language practices. This mixed method is productive since we can thereby see any discrepancies between the two. Since attitudes to English are so diverse, my intention is to look at the situation within Europe where there may not be the same associations between English and colonialism as there are in an African or Asian context. Results will be presented from a survey of attitudes to English varieties among university students on net-based language courses in Sweden. This is complemented by data coming from textchats produced by these students in a net-based education context. Before presenting the survey and its results, some background on the status of English in the world and in Europe will first be discussed.

## 2 Background

### Authenticity in Language Pedagogy

The debate on authenticity in relation to language learning has raged over many decades, and many different aspects have been taken up. Buendgens-Kosten (2013) refers to cultural, linguistic or functional authenticity in language teaching, and my focus lies on the first two. *Cultural* authenticity stems from materials and norms which have their origins within the

target culture, while *linguistic* authenticity means that a text is seen as “natural”, which basically means a text which a native speaker might produce. We can see that these definitions encode conservative views that the Inner Circle native varieties have the highest status.

However, as Pennycook (2007) has argued, there is a global spread now to authenticity in English language teaching, and local norms are seen as more and more relevant for learners in specific cultural contexts. For example, Alsagoff (2014) notes that, in Singapore, a local identity as speakers of Singapore English (Singlish) takes precedence over their identity as global English learners. Erling (2007), in her survey of German learners, reports that they did not want to learn native speaker norms in English as that would be a betrayal of their selves as native speakers of German. These views can be linked to the theory of L2 self (Dörnyei & Ushioda, 2009), in that these learners are positioning themselves with respect to norms in the language they are learning. They can choose to assert their identity as non-native speakers of English, as evidenced in the Erling study, or as speakers of non-Inner Circle varieties, as seen in Alsagoff's work.

When seen as an identity issue, Creese, Blackledge, and Takhi (2014) describe authenticity as being negotiated for each specific discourse situation; so maybe in one context, it is native speakers who are authentic, whereas in another, it is non-native speakers. In a similar vein, Hung and Chen (2007) argue for a distinction between *context authenticity*, where language is authentic in a particular environment, and for *process authenticity*, which refers to the process of identity formation where authenticity is a more fluid, negotiated object. Lowe and Pinner (2016, p. 34) also describe authenticity as being created through interaction and interpretation, and Pinner (2014, 2016) sees it as a continuum, where there are no absolute values.

Li (2010) has noted that the Internet is leading to changes in perceptions of norms in English, in that standard written norms are not seen as relevant in such contexts (cf. also Stockwell, 2013), which is why students taking net-based classes were the focus of the survey reported herein. Since Crystal (2001), it has become commonplace to write about a *netspeak*, a register of English specific to net-based communication with its own norms of linguistic practice. These norms include markers of

informality such as the widespread use of contracted forms and elliptical structures, and a move away from standard written language spelling conventions through processes like clipping and homophone respelling (cf. Werry, 1996; White, 2015, 2017, 2018). Netspeak can, in fact, be seen as authentic in a net-based environment, although whether this is true for a virtual learning site is a question to be taken up later.

We have, therefore, a complex view of authenticity. The traditional perspective that authentic means native speaker written norms and language use seems to be changing in favour of a more fluid, contextually based view where the local context is most important for deciding authenticity. Also, informal language norms can be authentic in particular discourse contexts, such as net-based communication. Research on the status of local varieties of English will be taken up in the next sub-section.

## English as a Lingua Franca and World Englishes

In research, there are a number of main perspectives on the targets for learners of English that go against the native-only focus with respect to norms. One is the English as a lingua franca (ELF) view of researchers like Seidlhofer (2004) and Jenkins (2002, 2007); another is the World Englishes (WE) view of Kachru (1985); and a third is English as an International Language of McKay (2002), for example, which to some extent combines the former two approaches.

Kachru's (1985) classic work identified three categories of Englishes: the native speaker Inner Circle; the Outer Circle, where English is used as an official language; and finally the Expanding Circle, where English is a second or foreign language without official status. In general, we can say that the World Englishes paradigm has been instrumental in promoting the view that non-native varieties of English are legitimate targets for second-language learners.

Modiano (2009) describes the difference between ELF and EIL as that, in the latter, the focus is on the use of English in multicultural communication forums with a mix of both native and non-native speakers. The aim is the identification of core linguistic features for communication. ELF focuses, on the other hand, on the pragmatics of communication

between non-native speakers only. As Modiano (2003) puts it, ELF is based on an ability for non-native speakers to adapt to different communicative situations with other non-native speakers. Jenkins (2002, 2007) has proposed a core of pronunciation features for English pronunciation syllabi based on her work on intelligibility in ELF discourse; and work in pragmatics and syntax has tried to identify similar features that could form the basis of ELF pedagogical materials (cf. Seidlhofer, Breiteneder, & Pitzl, 2006).

Saraceni (2008, p. 25) has noted three different uses of the term ELF. One is that it is functional, that is, it refers to the English used in interactions between second-language users who do not share a common first language; second, it can refer to local varieties of English emerging in the Expanding Circle; and finally, it can refer to a specific variety emerging from interactions between second language users (e.g. a Euro-English for interactions among speakers of European language). Saraceni himself advocates a functional perspective as opposed to ELF as an emergent variety (a view also held by House, 2014). Cogo (2008), in reply to Saraceni, argues for both a functional and a formal definition of ELF. Specific forms are negotiated and accommodated in interactions between second-language users of English, and therefore, function and form follow from one another in a continuous circle of linguistic change, possibly leading to the development of a stable variety.

However, the debate on whether there is an accepted ELF variety is inconclusive. As already noted, Jenkins (2002) has presented a core of pronunciation features for ELF which can form the basis of a pronunciation curriculum. Regarding grammatical norms, Mollin (2006, 2007) studied her own corpus of Euro-English and concluded that there were few specifically non-native features that united speakers; rather, there were mostly standard native features and some individual variations. For example, one of the features Seidlhofer (2004) suggested as a potential feature of a Euro-English variety is the loss of the *-s* agreement marker with third person singular subjects. Out of 2700 instances of such subjects in Mollin's corpus, the *-s* marker was only missing in 16 cases. Contrary to Mollin's work, Seidlhofer et al. (2006) argue on the basis of case studies of the use of *-s* agreement and pragmatic miscommunication in ELF discourse that there is evidence of Euro-English norms emerging.

Regarding the *-s* agreement marker specifically, zero marking was found in 29 out of 141 possible contexts (20.57%, cf. Seidlhofer et al., 2006, p. 14). A total of 22 out of 41 speakers did not follow standard agreement marking at some point. As they note, there is evidence of the transfer of L1 features into English, especially lexical. It is unclear, though, whether this is becoming a standardised norm in an ELF variety.

As well as distinctive grammatical features, Mollin (2007, p. 173) notes a number of different criteria that can be used to identify if a variety has been formed (cf. also Prodromou, 2007). They include official recognition, and the use of the “variety” in education, the media and administration. While it is certainly the case that English as a whole is extensively used in administration and education in the European Union, it is doubtful on the basis of Mollin’s analysis that ELF and Euro-English have achieved the kind of official recognition that would suggest they have the status of new varieties. As a result, she concluded that there was no strong evidence for ELF as a new variety of English. Rather, it should be classified instead as a functional variety—being used for communication with and among second-language users of English. Of course, her work is more than ten years old as of the time of writing, and this status may have changed over the years.

The crucial point from WE, ELF and EIL research is that non-native varieties of English are as good a target for learners as native ones. However, attitudes among learners and teachers very often lag behind the research-based debate, as noted by Groom (2012). Finally in this background, attitudes to English, specifically in Europe, are discussed.

## English in Europe

In Europe, just as in Asia and Africa, issues to do with proficiency and hegemony are very common when discussing the role of English. Hilgendorf (2007) discusses the linguistic place of English in Germany, and notes the contradictory situation that Germans feel the need to speak English with English native speakers despite any difficulties they have with the language. This often results in them going against best



communicative practice by choosing to communicate in English, as English native speakers are frequently highly proficient in German.

A feeling of being limited by poor English proficiency was expressed among the French workers surveyed in Deneire (2008). There was, in contrast, a greater willingness to fight for the right to use French, as witnessed by a number of legal cases cited where workers sued companies which tried to impose the use of English. For Polish users of English, Kasztalska (2014) expresses similar attitudes, namely that English is an asset to learn, but this has strong consequences for their native language. Many see it that Polish has been weakened by the influence of English (cf. also similar opinions reported for Lithuanian in Ruzaitė, 2017).

Bolton and Meierkord (2013) surveyed perceptions of English use in Sweden, and found that, for many, written English is not a productive skill. Swedish is by far the dominant language for migrants to Sweden, and especially in everyday life contexts. English is used as a lingua franca when Swedish proficiency is lacking. For most Swedes, English skills are largely receptive thanks to mass media and social media. However, an important point to note about the English part of the national curriculum in Sweden is that no specific variety is assumed; rather, a communicative competence, as well as a knowledge of how English is used in different contexts, is the focus, which mirrors the framing of ELF (cf. Hult, 2017).

Modiano (2003) notes that Swedish learners of English adopt a mixture of British and American English norms, for spelling in particular but also syntax. Loanwords from English are rife in Swedish, but their spelling is adapted to Swedish spelling norms, for example, *mail* becomes *mejl*, with the same pronunciation. Modiano notes that, similar to other learners, Swedes transfer L1 syntactic patterns onto their L2 English, which indicates tendency to promote native linguistic standards on the L2 English. One such example, among many, is the use of preposition phrases after anticipatory *it*, as in *it is common with much snow in winter*.

While a move from a native-speaker focus towards a non-native-speaker one when it comes to norms of English may be desirable, it is more controversial whether the focus should be on non-native-speaker norms wholly. Groom (2012) has seen in her teaching practice that learners and teachers had negative attitudes towards ELF; therefore, she

surveyed users of English in Europe and asked them about their goals for learning English. She found that there was strong resistance to the idea of learning a European ELF only. However, her informants did not want to speak a pure native variety either, preferring to mix native and non-native features to ensure intelligibility. When played recordings of the same text read by native and non-native speakers, the learners still rated the native version higher and judged them to be more intelligible. An important feature of Groom's survey was that she focused on users of English, and this is the method followed in the survey presented below.

Teachers were surveyed by Young and Walsh (2010), who found a large majority who assumed that one of the native (Inner Circle) varieties was the variety they were going to teach in the future. They were asked about ELF, and thought it was an interesting concept, but that it was not useful for the classroom. It was described in interviews as "ok for ordering drinks on holiday", but not for conducting business (Young & Walsh, 2010, p. 133). Phillipson (2008) argues that ELF as a concept might come with very negative baggage, for example, being associated too much with the native varieties, or the complete opposite, that ELF is a kind of pidgin English in its most negative sense.

Zeiss (2010) carried out a similar survey to that in Groom (2012). Her informants saw it as an asset to learn English and that it did not devalue their native languages (in contrast to the attitudes from Polish speakers noted above by Kasztalska, 2014). They were tolerant of others speaking English with a non-native accent and non-standard grammar, but were not so tolerant of their own non-native pronunciation and non-standard grammar, preferring to have close to native proficiency themselves (cf. also Jenkins, 2007).

We have seen many different views of English and its status in Europe, and we can reasonably conclude that the status of English is as unclear in Europe as it is in Africa or Asia.

### 3 Methodology

With the above background in mind, it was decided to focus on the following issues when developing the questionnaire part of the study:

- What are the informants' reported attitudes to English varieties?
- What type of English do the informants report is of most use to them?
- Do the informants report that there is value in learning such a variety as "English as a Lingua Franca"?
- Who do the informants report that they go to for advice about English, native or non-native speakers?
- How appropriate do the informants report that it is to use ELF with native and non-native speakers of English?

Groom's (2012) questionnaire was adapted to go into more detail into the use of ELF, and in particular into the use of ELF with either native or non-native users of English, as the context of its use was of interest but was not developed by Groom. It was also decided to add a test of informants' attitudes to features argued to be characteristic of ELF, but these results will not be reported here. The questionnaire was piloted on a smaller group of students, and this resulted in the wording being changed on questions to do with ELF, since they reported that more explanation was needed for what this term referred to.

All students with a non-English background studying English on net-based courses at a Swedish university were contacted and asked to fill in the questionnaire, which is included in the Appendix. The university is mid-sized and is located in the centre of Sweden. It has around 13,000 students, two-thirds of whom study on net-based courses. The survey was opened from October to December of 2015. The informants were informed about the project, and told they could withdraw from the study at any time. The questionnaire was created through Google Forms, and so anonymity could be guaranteed since it was not possible to determine which individual had given which set of answers.

To complement this survey, and to determine the actual language practices of such students, textchat data from an introductory course to English Linguistics were also analysed to identify their attitudes to the usage of a particular feature of netspeak, the *reduced form* (White, 2015, 2018). This will be explained in more detail in Sect. 5.

It was not an aim to achieve equal numbers from different countries in the survey results, as it depends so much on the student intake. In terms of the informants' native languages, 37 of the 60 informants who

completed the survey (61.67%) reported that they were native speakers of Swedish (sometimes bilingually together with a language other than English). Twenty had a different European language only as their native language (33.33%), and three reported having non-European native languages. Given the difficulty in getting an even sample of speakers of different native languages, no attempt was made to identify any differences in attitudes based on native language.

Let us now turn to the results of the survey, starting with the informants' view of the importance of the English language.

## 4 Results from the Questionnaire

### The Importance of English

The first main set of questions in the survey dealt with how important English was in different parts of the informants' lives: their careers, personal relationships and so on. The results are summarised in Table 3.1 (the percentages refer to the relative frequency within each aspect of life):

An average of 48.67% considered that English is Vitaly important in their lives across all areas, and a further 34.67% considered it to be Quite important. A total of 96.67% considered that English was Vitaly or Quite important for their Career, and 95% considered the same for Education. The mean was calculated for these figures—scoring 4 for Vitaly important, 3 for Quite important, 2 for Not very important and 1 for Completely unimportant. The means for Career and Education were 3.68 and 3.70, respectively, meaning that the majority of informants chose Vitaly important. A very common trend in education in Europe is that more and more courses are offered through English only (as the following article from BBC News from 14 January 2016 attests, <http://www.bbc.com/news/business-35282235>), so the informants are acknowledging this fact in ascribing English such a high status. As already mentioned above, education is seen as the domain of English, and in particular of standard English. These results back up the strong linguistic capital still associated with English in a globalised world (Park & Wee, 2012).

Table 3.1 The importance of English

	Career	Education	Status in society	Personal relationships	Hobbies and pastimes	Average
Vitally important	43 (71.67%)	46 (76.67%)	16 (26.67%)	20 (33.33%)	21 (35%)	29.2 (48.67%)
Quite important	15 (25%)	11 (18.33%)	32 (53.33%)	21 (35%)	25 (41.67%)	20.8 (34.67%)
Not very important	2 (3.33%)	2 (3.33%)	11 (18.33%)	15 (25%)	13 (21.67%)	8.6 (14.33%)
Completely unimportant	0	1 (1.67%)	1 (1.67%)	4 (6.67%)	1 (1.67%)	1.4 (2.33%)
Mean scores	3.68	3.70	3.05	2.95	3.10	

For their Status in society, informants rated English highly, but this stuck out as having more choosing Quite important than Vitaly important (32 vs. 16, or 53.33 vs. 26.67%). The mean here was 3.05, showing that it is ranked as Quite important. Knowledge of English is an inherently individual matter, quite possibly strongly linked to individual identity (although this was not investigated), but it seems that knowledge of English is an individual rather than a society-level issue for these students. This does suggest that English does not have such a strong connection to particular societies, indicating that ELF may be more linked to performance in interaction (cf. Saraceni, 2008 and House, 2014).

The results for Hobbies and pastimes, and Personal relationships are the least strong, with close to one-third choosing Not very important or Completely unimportant. The means were 3.10 and 2.95, respectively, showing a similar level to Status in society. Naturally, it depends on individual informants whether English is relevant for relationships and hobbies. An anonymous reviewer questioned why media consumption was not included, but the intention was to capture how much the informants used English, rather than passively consumed it. Maybe the production of media, such as web content, could have been included, but this will have to be the subject of a further study. In a study of extramural English, that is, contact with English outside school time, Sundqvist and Sylvén (2014) report that 10–11-year-olds in Sweden had much contact with English, nearly as much as they had with Swedish in fact, and that those informants who played digital games had a greater motivation to learn and use English. There were still issues with how confident they were to use their English, as the stereotype that Swedes are highly proficient users of English is often not matched by the reality (pp. 13–14). My results do, to some extent, back up Sundqvist and Sylvén's finding about extramural English, with nearly 77% in my survey reporting that English was Vitaly or Quite important for Hobbies and pastimes.

## What Standards of English?

Next, we have questions dealing with standards in English. Informants were asked whether they aimed to be near-native in their proficiency, and

19 reported that they aimed for native-like proficiency because they would mainly be speaking with native speakers (31.67%). Thirty-six reported that they also aimed for native-like proficiency, but that would mainly be speaking with other non-native speakers (60%). This is a higher result than Zeiss (2010, pp. 102–103) reported, as her informants Agreed or Agreed strongly that they aimed for near-native proficiency at a frequency of 82% (in my survey, the combined result was 91.67%). This demonstrates that the drive for nativeness is still very strong among second-language users of English, despite discussions in academic literature about the suitability of non-native varieties. As alluded to in Zeiss' discussion of the issue, this may have to do with the academic programme of the students. The informants here were students on English courses, and so may have stronger attitudes to, and pre-conceptions about, proficiency and standards (this is something a follow-up interview may have revealed).

When also asked who they turned to for advice about their English, 14 informants answered that they would go to native speakers only (23.33%), nine that they would go to other non-native speakers only (15%), but a majority of 37 (61.67%) reported that they would go to both native and non-native speakers. This does support what is reported in some literature that non-native users often see other proficient non-native users as better role models than native speakers (cf. Zeiss, 2010 and Sung, 2013, 2016). The option of going to a role model such as a highly proficient non-native teacher was not included, but may well be a reason for the strong preference for both native and non-native speaking helpers.

Some general questions were asked about students' attitudes to English as a lingua franca. In the questions, the concept of ELF was presented, that is, it is a reduced variety used for communication between speakers who do not have English as a native language. It must be admitted that it is not ideal to introduce the concept of ELF just in the survey itself, as this may have been the first time the informants had heard of the term. Thus, they could not give a reasoned assessment of the choice of ELF vs native variety. This is a clear limitation of the method chosen. The survey should be administered in conjunction with introducing the concept of ELF in a course environment.

The first question concerned whether the informants thought ELF should be taught in schools as opposed to a native variety, and the results can be seen in Fig. 3.1:

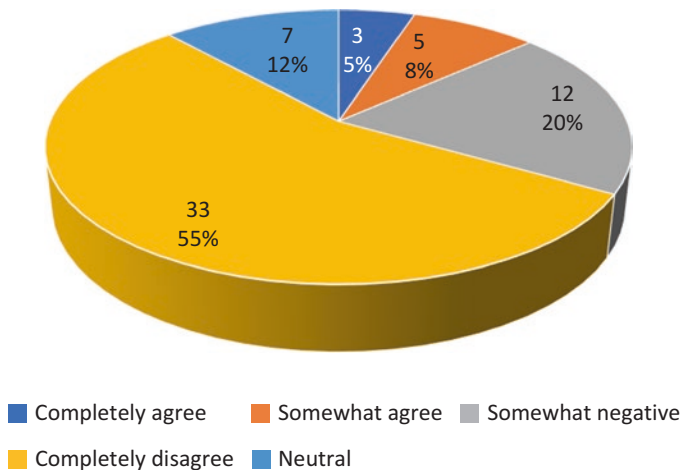
We see that the majority were negative towards this idea (45, or 75%, chose either Somewhat negative or Completely disagree). This was slightly less than Groom's (2012, p. 52) result, with 80% there choosing Disagree or Strongly disagree in her survey.

The next question concerned whether informants would prefer to learn ELF rather than a native variety, with the results depicted in Fig. 3.2:

The results were even stronger here, with 82% negative towards the idea, which was the same result as in Groom (2012, p. 53).

The final question concerned whether the informants would like to be identified as speakers of ELF, and the results can be seen in Fig. 3.3:

A total of 70% were negative towards this idea, with over 18% neutral. This is a higher percentage than in Groom (2012, p. 53). For her, 56% were negative, with 34% neutral. It is very clear that ELF is still not fully acceptable as an appropriate target for learners. As a supplementary question the author sent by email to the informants, it was asked whether ELF ought to be used as a complement to a native variety of English, and a big majority of respondents were positive to this idea: 50 expressed a



**Fig. 3.1** Should ELF be taught rather than a native variety in schools?



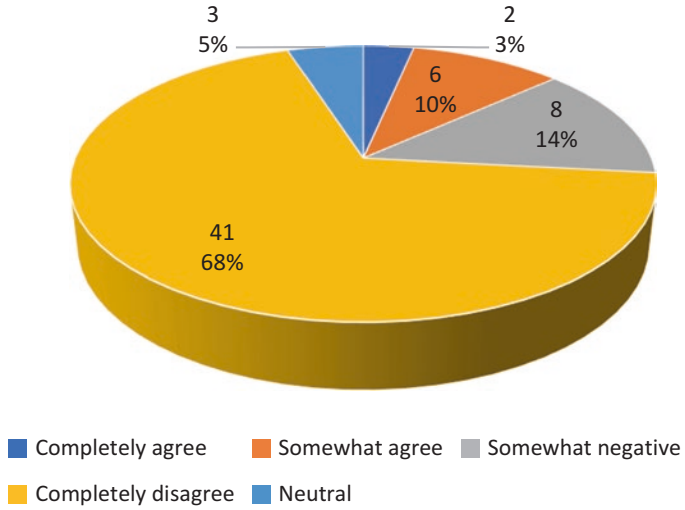


Fig. 3.2 I would prefer to learn ELF rather than a native variety

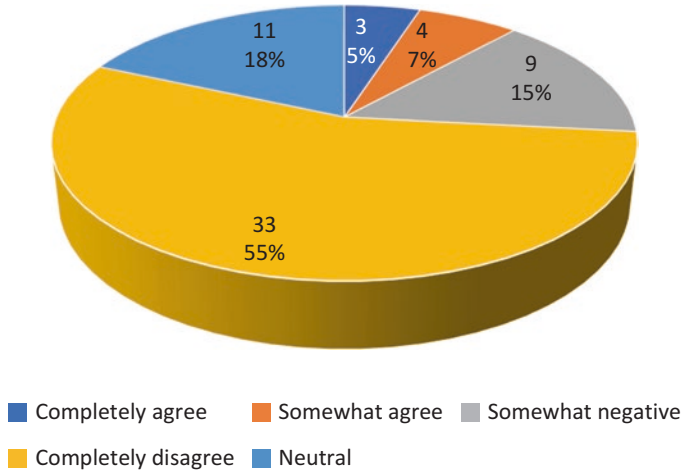


Fig. 3.3 I would like to be identified as a speaker of ELF

positive attitude, with two against and the rest neutral. Thus, we can surmise that the informants still view ELF as another register of English to be learned alongside a standard (maybe native Inner Circle) English variety, for example. In general, we can conclude that very few are neutral regarding the type of English they want to learn or be identified as. This is to be expected if language is so intrinsically tied up with personal identity.

Next, the appropriateness of using ELF with native and non-native speakers in different situations was investigated (Table 3.2):

For native speakers, the Classroom stood out as the environment where ELF should not be used, with half of informants choosing Not appropriate. The mean was lowest at 1.92 (less than the level of Ok, but would not do so myself). Work also had a very low mean of 2.05. The most appropriate situations were Socially and Online, with means of 2.63 and 2.68, respectively. Other situations were given a mean of 2.60, just under the previous categories. For all situations except in the Classroom, around half of informants indicated it was ok to use ELF, but that they would not do so themselves. Thus, most still have high proficiency demands on themselves, but are more accepting of non-native performance by others (cf. Jenkins, 2007 and Zeiss, 2010). We thus see a contrast between classroom and online domains. What will be the situation when they are combined on a virtual learning site is the main issue in the second part of the analysis in Sect. 5 below.

The results for the use of ELF with non-native speakers are as follows (Table 3.3):

Again, the Classroom is the least appropriate environment for using ELF with a mean of 2.17. Work was also low at 2.32. Although the results were slightly lower, still nearly half indicated it was ok to use ELF, but they would not do so themselves. The remaining means were 2.70 for Socially; 2.80 for Other situations; and 2.85 for Online.

Comparing the two tables in terms of their averages, it was less appropriate to use ELF with a native than a non-native speaker. More informants felt overall that it was Completely appropriate or Appropriate to use ELF with non-native than with native speakers (47.33% vs. 38.33%). The level indicating that it was ok but they would not do so themselves was around 40% for both categories, confirming Zeiss' result that learners

Table 3.2 Appropriateness of ELF with native speakers

	Work	Classroom	Socially	Online	Other situations	Average
Completely appropriate	7 (11.67%)	9 (15%)	14 (23.33%)	14 (23.33%)	11 (18.33%)	11 (18.33%)
Appropriate	8 (13.33%)	7 (11.67%)	15 (25%)	14 (23.33%)	16 (26.67%)	12 (20%)
Ok, but would not do so myself	26 (43.33%)	14 (23.33%)	26 (43.33%)	31 (51.67%)	31 (51.67%)	25.6 (42.67%)
Not appropriate at all	19 (31.67%)	30 (50%)	5	1	2	11.4 (19%)
Mean scores	2.05	1.92	2.63	2.68	2.60	

Table 3.3 Appropriateness of ELF with non-native speakers

	Work	Classroom	Socially	Online	Other situations	Average
Completely appropriate	10 (16.67%)	12 (20%)	14 (23.33%)	15 (25%)	13 (21.67%)	12.8 (21.33%)
Appropriate	10 (16.67%)	7 (11.67%)	18 (30%)	21 (35%)	22 (36.67%)	15.6 (26%)
Ok, but would not do so myself	29 (48.33%)	20 (33.33%)	24 (40%)	24 (40%)	25 (41.67%)	24.4 (40.67%)
Not appropriate at all	11 (18.33%)	21 (35%)	4 (6.67%)	0	0	7.2 (12%)
Mean scores	2.32	2.17	2.70	2.85	2.80	

of English tend to be more accepting of non-standard language use with others than with themselves.

The results of this survey suggest that the informants see ELF as a performance variety which they want to learn together with other varieties like native Inner Circle varieties (even though the attitude still prevails that native-speaker varieties are the ones learners aim for). However, their view of education language, in particular, is conservative, with the classroom reported as the major domain where standard language needs to be used, especially with native speakers. We will now look at evidence for informants' actual linguistic practices in virtual learning sites, which comes from textchat data.

## 5 Norms in Virtual Learning Sites

The data analysed in this part comes from textchat discussions among students on a net-based MA in English Linguistics. The first course on the programme is our focus, an introduction to core linguistic and socio-linguistic topics. The students divided themselves into pre-seminar groups which then met online without the teachers present. These pre-seminar discussions dealt with the theoretical and analytical material, and identified questions that the groups wanted to focus on in the seminars with the teachers. These students are particularly interesting to study in that at the time this was the first net-based course they had taken. They also self-reported that they did not have much experience of computer-mediated communication (CMC) in English. Thus, it can be assumed that they would not have been greatly aware of norms of computer-mediated communication in English (cf. the more detailed presentation of this data source in White, 2015, and other work).

The specific norm analysed here is the *reduced form*, where the orthographic forms and/or informality of expressions is reduced. So, instead of writing *information*, students can write *info*; and instead of *yes*, they can write *yeah*, which creates an informal language (cf. White, 2015, 2018 for a discussion of the different reduction processes in the same dataset). Reduced forms are a stereotypical norm of netspeak, as mentioned in the background.

Informants' attitudes have already been reported that education is the domain of standard language, although the online domain is different. Still, for students with the background mentioned above, we can hypothesise that they will tend towards standard language norms, and in particular will not produce many of the stereotypical features of netspeak like reduced forms. However, this was manifestly not the case, and there were many examples of reduction. One such typical example is the following:

### Extract 1

---

Teacher 3	Would you all perhaps agree that sometimes you want to read
says:	about the news,
Student 19	sure
says:	
Teacher 3	and sometimes you want to read about celebrities,
says:	
[... five contributions missing ...]	
Teacher 3	and you know where to go, which paper to buy, to get this
says:	information?
Student 20	subjects can vary
says:	
Student 19	yes
says:	
Student 20	yes
says:	
Student 14	<b>yeah</b> of course
says:	
Student 15	right
says:	
Student 18	I have some favourite newspapers
says:	
Student 17	<b>U</b> mean Vietnamese newspapers?
says:	

---

[Cohort 1, Language and the Media seminar, Autumn and Winter groups]

We see illustrated in Extract 1 the varied language used by these students, from the standard *yes* and *you*, to the reduced *yeah* and *u*. This entails that the students have a free view of what sort of language is appropriate to use on virtual learning sites, and the combination of their reported attitudes to language in the classroom and online is in fact confirmed. This sug-

gests that it is an affordance of virtual learning sites that students can use less formal language than they might otherwise use in face-to-face contexts.

Considering reduced forms specifically now, since the students were inexperienced in CMC, we can further hypothesise that they would follow the norms practised by more experienced users. Specifically, the teachers were all native speakers of English (British, Northern Irish and American), and were experienced CMC users; thus, it would be natural for students to follow their CMC linguistic practices. Indeed, we do see that teachers' norms for reduction are followed by students, as in Extract 2:

### Extract 2

---

Teacher 1	ok q3 of japanese, Any suggestions?
says:	
Student 2	When do we have to hand in Worksheet, Teacher 1?
says:	
Student 3	about r and R?
says:	
[... four contributions missing ...]	
Student 13	In 3 of japanese. Only 1 example so difficult to find the rule
says:	
Student 3	I have
says:	
Student 9	n appears word- finally in Japannese
says:	
[... two contributions missing ...]	
Student 3	because /n/ is the only final coda in japanese syllable
says:	
Student 1	because the only consonant at the end of the word is n in this
says:	case. the word gomw ended in m so we
Student 1	need to add w there
says:	
Student 2	So, Do we hand in in fronter or to you in April?
says:	
Teacher 1	ok Student 13, yes, there is only on example. Student 1 and
says:	Student 3 have the answer
Student 1	is that right Teacher 1?
says:	
Student 4	Q3 mostly bases on nasal souds, Student 3
says:	
[Cohort 1, Phonology seminar, Spring/Summer groups]	

---

Teacher 1 uses the reduced form *q* for *question*, and this practice is repeated by Student 4 at the end of the extract. However, it is attested in the data more often that the students create their own norms through interaction with one another. The following is an example where a teacher's use of a reduced form is not followed:

### Extract 3

---

Teacher 1 says:	Can someone add winter?? T Hoa?
Student 14	what about other?
says:	
Student 16	yes. Hoa
says:	
Student 15	What about other members of Winter, have they been online
says:	yet
Student 15	we can not see any of them
says:	
Teacher 1 says:	yes wait
Student 17	Hoa, you should add all the winter members.
says:	
Student 19	what "cow" means ? Student 15 ?
says:	
Student 20	Hoa should add their skype address first so that we can start
says:	now
Student 14	To Student 15's ques, I think we should correct e instead of o
says:	
Student 17	Teacher 1 just asked you to do so, Hoa.
says:	

---

[Cohort 1, Phonology seminar, Autumn/Winter group]

Here, Teacher 2 uses a reduction of Student 14's name, *T Hoa*, but the other students do not follow this practice, but use the full form. This reflects the more formal nature of communication in learning environments, where naming practices are very important for face. Thus, such practices indicate the more standardised and conventional side of classroom discourse (whether online or not).

We find more extracts where the leaders of the different pre-seminar groups are the ones the others follow in their use of particular reduced forms. For example, we can cite the following:



## Extract 4

---

Student 21 says:	hello
Student 21 says:	do <b>u</b> see us online
Student 26 says:	hi
Student 25 says:	have a good time
Student 22 says:	Hi all
Student 22 says:	yes!
Teacher 2 says:	hello
Student 24 says:	hi
Student 22 says:	Hi teacher
Teacher 2 says:	how are you all?
Student 25 says:	fine thanks, and <b>u</b> ?

[Cohort 1, Morphology seminar, Winter group]

---

In this case, the use of *u* is what concerns us. The group leader, Student 21, uses the form in the second contribution to the chat, and this is picked up later by Student 25.

Other students can be “leaders” in the choice of norms, especially those who are experienced in textchat, and are seen by the group as authorities of CMC (cf. the local definition of authenticity practices discussed in the background):

## Extract 5

---

Student 2 says:	hello <b>Jonathan</b>
Student 3 says:	hi, everybody
Teacher 2 says:	hello, how are you all?
Student 2 says:	Thanks
Student 4 says:	Hi <b>teacher</b> , you have worked so hard today, haven't you?
	[... five contributions missing ...]
Student 1 says:	you seem to be very busy. Mind your health, <b>teacher</b>
	[... eight contributions missing ...]
Student 2 says:	<b>Jo</b> , Have you received my mail yet?

[Cohort 1, Syntax seminar, Spring group]

---

In this extract, we can further consider the naming practices students adopt towards teachers, specifically this author. Student 2 uses my given name, whereas Student 4 and the group leader, Student 1, use the generic title *teacher*, which is common among Vietnamese students. This practice

changes for Student 2 when she changes to the reduced form *Jo*. This gets adopted by Students 5 and 3 later in this chat. Thus, Student 2's practices are seen to be authentic by the others in this pre-seminar group. This is another clear affordance of virtual learning sites, that cultural practices such as naming can be changed, and highly informal forms can be used to an authority figure like a teacher without losing face (cf. also Author, 2016, who discusses this issue).

What we see here from this latter data is that users of English have a more fluid view of norms than is reported in the survey. They can develop their own norms through interaction which are different from those of their native-speaker teachers, and also linguistic practices that go against those of their native cultures. This suggests very strongly that, even though they may believe that native norms are the best to learn, in actual practice they do develop their own norms in interaction with others.

## 6 Conclusions

The survey carried out revealed that second-language users of English are still quite conservative in their attitudes to native varieties, although they do see other second-language users as good role models. ELF is not an alternative, but rather a complement, to native varieties, indicating that the informants see a repertoire of different types of English as the most useful to them. The textchat data indicates, on the other hand, that they are open about using linguistic practices to develop their own communicative norms. Thus, while they may see native Inner Circle varieties as having the highest status, they are clearly willing to develop their own linguistic practices which are different from those of their Inner Circle teachers.

These results support what Zeiss (2010) and Groom (2012) have seen in their surveys, and indicate there is still some way to go for ELF to become acceptable as a full alternative to native varieties. Whether this is a consequence of the hegemony of the native-speaker varieties promoted through teaching materials is not something that can be answered, but certainly the use of ELF is something that needs to be promoted in order for these results to be changed in the future.

We can clearly conclude that virtual learning sites, despite their being in the Education domain where students reported in the survey that native norms were most appropriate, are environments where local norms can be developed. This is a strong affordance of such sites and is something that instructors can exploit in their teaching. Authenticity is an issue that deserves greater discussion, I believe, and the mis-match between student attitudes and actual practices is of vital importance to discuss for instructors and learners alike.

In terms of future research in this field, accents and their perceptions can be discussed in more detail, and different syntactic features can be investigated, and corpus studies of ELF discourse will help reveal such potential features. Interviews with participants will be a natural follow-up which can reveal some deeper attitudes and reasons for these attitudes. The comparison of attitudes and actual practices certainly needs to be further investigated. Only one student group was analysed for this work, and it naturally needs to be said that their practices may be down to individual variation, and that other communities of learners may not behave in the same way. Hopefully, authenticity is an area where research and practice in teaching can complement one another in order to create a more balanced perception of English language practices among learners and users, and that interactive practices in virtual learning sites are just as authentic uses of language as more standard written language.

# Appendix: The Questionnaire

Attitudes to English

Page 1 of 4

## Attitudes to English

\*Obligatorisk

1. What are your native languages? \*

---

2. What other languages do you speak? \*

---

3. How important is English for your...? \*

*Markera endast en oval per rad.*

	vitally important	quite important	not very important	completely unimportant
career	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
status in society	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
personal relationships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
hobbies and pastimes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. How often do you speak English with the following...? \*

*Markera endast en oval per rad.*

	our main language	sometimes	rarely	not applicable
family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
teachers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
strangers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
work colleagues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Who do you go to for advice about your English proficiency? \*

*Markera endast en oval.*

- native speakers  
 non-native speakers  
 both

6. **In general, do you aim to develop a near-native speaker level of proficiency in English? \***

*Markera endast en oval.*

- yes, because I will mainly speak with native speakers
- yes, but I will mainly speak with non-native speakers
- no

7. **What kinds of English accents do you find easiest to understand? \***

*Markera endast en oval per rad.*

	No problem	Generally fine	Some problems	Do not understand at all	No experience of the accent
British	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
American	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indian/Pakistani/Bangladeshi	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chinese/Japanese/Thai/Vietnamese	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Australian/New Zealand	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
South African	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irish/Scottish/Welsh	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. **Please describe in your own words what kind of English you want to use \***

.....

9. **A simplified form of English is sometimes used for communication between those who do not have a common first language. This is called English as a Lingua Franca. It often has no verb agreement "she say", and no articles "I bought book over there". Do you agree or disagree with the following statements about this kind of English? \***

*Markera endast en oval per rad.*

	completely agree	somewhat agree	neutral	somewhat negative	completely disagree
English as a Lingua Franca should be taught in schools rather than a native variety of English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would prefer to learn English as a Lingua Franca instead of a native variety of English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to be identified as a speaker of English as a Lingua Franca	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. **Is it appropriate to speak English as a Lingua Franca with native speakers in the following situations? \***

*Markera endast en oval per rad.*

	completely appropriate	appropriate	ok, but I would not do so myself	not appropriate at all
work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
classroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
socially	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
other situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. **Is it appropriate to speak English as a Lingua Franca with non-native speakers in the following situations? \***

*Markera endast en oval per rad.*

	completely appropriate	appropriate	ok, but I would not do so myself	not appropriate at all
work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
classroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
socially	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
online	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
other situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. **Please rate the following sentences which are non-standard English in terms of how good they are \***

*Markera endast en oval per rad.*

	completely ok	fine	fine, but I would not use it myself	completely bad	do not understand the sentence
She look very sad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I saw the book who	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want on the table	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I saw the book what	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want on the table	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I bought many books yesterday. Red one was expensive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You saw her, isn't it?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We have got many advices from our teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We gonna leave soon	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I worked here since 1990	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am born in 1990	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
We might could leave soon	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## References

- Alsagoff, L. (2014). Singlish and Hybridity: The Dialogic of Outer-circle Teacher Identities. In R. Rudby & L. Alsagoff (Eds.), *The Global-local Interface and Hybridity* (pp. 265–281). Bristol: Multilingual Matters.
- Bolton, K., & Meierkord, C. (2013). English in Contemporary Sweden: Perceptions, Policies, and Narrated Practices. *Journal of Sociolinguistics*, 17(1), 93–117.
- Buendgens-Kosten, J. (2013). Authenticity in CALL: Three Domains of ‘Realness’. *ReCALL*, 25(2), 272–285.
- Cogo, A. (2008). English as a Lingua Franca: Form Follows Function. *English Today*, 24(3), 58–61.
- Creese, A., Blackledge, A., & Takhi, J. T. (2014). The Ideal ‘Native Speaker’ Teacher: Negotiating Authenticity and Legitimacy in the Language Classroom. *The Modern Language Journal*, 98(4), 937–951.
- Crystal, D. (2001). *Language and the Internet*. Cambridge, UK: Cambridge University Press.
- Deneire, M. (2008). English in the French Workplace: Realism and Anxieties. *World Englishes*, 27(2), 181–195.
- Dörnyei, Z., & Ushioda, E. (Eds.). (2009). *Motivation, Language Identity and the L2 Self*. Bristol: Multilingual Matters.
- Erling, E. J. (2007). Local Identities, Global Connections: Affinities to English Among Students at the Freie Universität Berlin. *World Englishes*, 26(2), 111–130.
- Groom, C. (2012). Non-native Attitudes Towards Teaching English as a Lingua Franca in Europe. *English Today*, 28(1), 50–57.
- Hilgendorf, S. (2007). English in Germany: Contact, Spread and Attitudes. *World Englishes*, 26(2), 131–148.
- House, J. (2014). English as a Global Lingua Franca: A Threat to Multilingual Communication and Translation? *Language Teaching*, 47(3), 363–376.
- Hult, F. (2017). More than a Lingua Franca: Functions of English in a Globalised Educational Language Policy. *Language, Culture and Curriculum*, 30(3), 265–282.
- Hung, D., & Chen, D.-T. V. (2007). Context-process Authenticity in Learning: Implications for Identity Enculturation and Boundary Crossing. *Education Technology Research and Development*, 55, 147–167.
- Jenkins, J. (2002). A Sociolinguistically Based, Empirically Researched Pronunciation Syllabus for English as an International Language. *Applied Linguistics*, 23(1), 83–103.

- Jenkins, J. (2007). *English as a Lingua Franca: Attitude and Identity*. Oxford: Oxford University Press.
- Kachru, B. B. (1985). Standards, Codification and Sociolinguistic Realism: The English Language in the Outer Circle. In R. Quirk & H. Widdowson (Eds.), *English in the World: Teaching and Learning the Language and Literatures* (pp. 11–30). Cambridge: Cambridge University Press.
- Kaszalska, A. (2014). English in Contemporary Poland. *World Englishes*, 33(2), 242–262.
- Li, D. C. S. (2010). When Does an Unconventional form Become an Innovation? In A. Kirkpatrick (Ed.), *The Routledge Handbook on World Englishes* (pp. 617–633). Oxford: Routledge.
- Lowe, R. J., & Pinner, R. S. (2016). Finding the Connections Between Native-speakerism and Authenticity. *Applied Linguistics Review*, 7(1), 27–52.
- McKay, S. (2002). *Teaching English as an International Language*. Oxford: Oxford University Press.
- Modiano, M. (2003). Euro-English: A Swedish Perspective. *English Today*, 19(2), 35–41.
- Modiano, M. (2009). *Language Learning in the Multicultural Classroom: English in a European and Global Perspective*. Lund: Studentlitteratur.
- Mollin, S. (2006). English as a Lingua Franca: A New Variety in the New Expanding Circle? *Nordic Journal of English Studies*, 5(2), 41–57.
- Mollin, S. (2007). New Variety or Learner English? Criteria for Variety Status and the Case of Euro-English. *English World-Wide*, 28(2), 167–185.
- Park, J. S.-Y., & Wee, L. (2012). *Markets of English: Linguistic Capital and Language Policy in a Globalizing World*. New York: Routledge.
- Pennycook, A. (2007). *Global Englishes and Transcultural Flows*. New York: Routledge.
- Phillipson, R. (2008). Lingua Franca or Lingua Frankensteinia? English in European Integration and Globalisation. *World Englishes*, 27(2), 250–267.
- Phillipson, R. (2013). TESOL Expertise in the Empire of English. *TESOL in Context*, 22(2), 5–16.
- Pinner, R. S. (2014). The Authenticity Continuum: Towards a Definition Incorporating International Voices. *English Today*, 30(4), 22–27.
- Pinner, R. S. (2016). *Reconceptualising Authenticity for English as a Global Language*. Bristol: Multilingual Matters.
- Prodromou, L. (2007). Is ELF a Variety of English? *English Today*, 23(2), 47–53.
- Ruzaite, J. (2017). Diversity of Attitudes to English in Non-professional Public Discourse: A Focus on Lithuania. *English Today*, 33(3), 15–24.



- Saraceni, M. (2008). English as a Lingua Franca: Between Form and Function. *English Today*, 24(2), 20–26.
- Seidlhofer, B. (2004). Research Perspectives on Teaching English as a Lingua Franca. *Annual Review of Applied Linguistics*, 24, 209–239.
- Seidlhofer, B., Breiteneder, A., & Pitzl, M.-L. (2006). English as a Lingua Franca in Europe: Challenges for Applied Linguistics. *Annual Review of Applied Linguistics*, 26, 3–34.
- Stockwell, G. (2013). Technology and Motivation in English-language Teaching and Learning. In E. Ushioda (Ed.), *International Perspectives on Motivation: Language Learning and Professional Challenges* (pp. 156–175). New York: Palgrave Macmillan.
- Sundqvist, P., & Sylvén, L. S. (2014). Language-related Computer Use: Focus on Young L2 English Learners in Sweden. *ReCALL*, 26(1), 3–20.
- Sung, C. C. M. (2013). ‘I would like to sound like Heidi Klum’: What Do Non-native Speakers Say About Who They Want to Sound Like? *English Today*, 29(2), 17–21.
- Sung, C. C. M. (2016). Does Accent Matter? Investigating the Relationship Between Accent and Identity in English as a Lingua Franca Communication. *System*, 60, 55–65.
- Werry, C. (1996). Linguistic and Interactional Features of Internet Relay Chat. In S. Herring (Ed.), *Computer-mediated Communication: Linguistic, Social and Cross-cultural Perspectives* (pp. 47–64). Amsterdam: John Benjamins.
- White, J. R. (2015). Processes and Variations in Language Economisation. *Ampersand*, 2, 72–82. <https://doi.org/10.1016/j.amper.2015.06.001>
- White, J. R. (2016). Local Norms in CALL Language Practice. *International Journal of Computer-Assisted Language Learning and Technology*, 6(1), 40–54. <https://doi.org/10.4018/IJCALLT.2016010103>
- White, J. R. (2017). *Exploration of Textual Interactions in CALL Learning Communities: Emerging Research and Opportunities*. Hershey, PA: IGI Global.
- White, J. R. (2018). Individual Variation in Reduction Processes in L2 English Academic Textchat. *Ampersand*, 5, 18–28. <https://doi.org/10.1016/j.amper.2018.03.001>
- Young, T. J., & Walsh, S. (2010). Which English? Whose English? An Investigation of ‘non-native’ Teachers’ Beliefs About Target Varieties. *Language, Culture and Curriculum*, 23(2), 123–137.
- Zeiss, N. (2010). *English as a European Lingua Franca: Changing Attitudes in an Inter-connected World*. Verlag Dr. Müller.

# Part II

## Genre Framings



# 4

## Wikipedia's Falling Stars. Arguments for Demotion When Articles Lose Their Status as Featured Articles

Maria Mattus

### 1 Introduction

Since the Age of Enlightenment, there have been dreams of a united humanity, building on knowledge, education and participation (Sanderhoff, 2014). The online, user-generated wiki-encyclopaedia Wikipedia represents the closest we have come to that dream. Despite not being produced by experts—at least not in a traditional sense, being collaboratively produced by the site's users—some of Wikipedia's articles have reached a quite impressive level.

After Giles' (2005) pioneering study, Wikipedia has received recognition for presenting articles whose accuracy is comparable with articles in the expert-produced Encyclopædia Britannica. However, a more recent study of articles on history by Samoilenko et al. (2018) shows that Wikipedia and Britannica have different approaches; both provide extensive information about conflicts and wars, but Wikipedia's articles focus

---

M. Mattus (✉)

School of Education and Communication, Jönköping University,  
Jönköping, Sweden

e-mail: [maria.mattus@ju.se](mailto:maria.mattus@ju.se)

on well-known events, while Britannica's emphasize underlying cultural and religious tensions.

Wikipedia describes its high-quality articles as being well written, comprehensive, well researched, neutral and stable, and based on modern, credible and authoritative sources. Articles considered to be among the very best are awarded with "Featured Article" (FA) status, and to inform readers of their high quality, FAs are marked with a small star (Wikipedia: Utmärkta artiklar, 2015, 2018; Wikipedia: Featured Article Criteria, 2015, 2018).

Wikipedia is described as a success story, but in line with the wiki concept, articles can always be subject to new edits and will never be finished products. Even if more edits ought to improve articles' quality over time, not all corrections are successful; an article might be considered excellent at one point, but not at all that good later. Articles that are no longer considered to meet the FA criteria may be downgraded and lose their star—hence the title "Wikipedia's Falling Stars".

The promotion process receives far more research attention than the demotion process (Jullien, 2013); consequently, the intention of this study is to create an understanding of why some FAs have lost their featured status. The study is based on arguments presented by Wikipedia users in passages from downgraded articles' *talk pages* (also called *discussion pages*). The material comes from the Swedish version of Wikipedia, one of the world's largest (based on number of articles) language versions (List of Wikipedias, 2015, 2018).

## 2 Wikipedia as a Site for Virtual Learning

Even if the contributors do not necessarily perceive Wikipedia as a learning space, this Web-based platform may be considered an open site for virtual learning, on which users get knowledge either from self-directed informal learning situations or from incidental learning experiences. Engagement is voluntary, and according to a large global survey made by Glott, Schmidt, and Ghosh (2010), dominating motives behind people's engagement are to share knowledge and correct faults; this may indicate that there are educational ambitions involved.

As an online, collaborative knowledge system, Wikipedia has gradually developed from “being a collaborative project experimenting with the online production of encyclopedic knowledge, to being a professionally run, volunteer-based, nonprofit organization whose goal is the online production of an encyclopedia” (van Dijck, 2013, p. 132). The nonprofit, non-market business model is closely linked with the volunteer-based peer-review production, and no users can financially profit from the encyclopaedia; what they can gain is recognition and sometimes administrator status. van Dijck also mentions the hierarchical system of distributing user power and functions that Wikipedia has developed over the years; even if the system is criticized for being bureaucratic, it facilitates and channels the collaboration between a large variety of users.

In a reflective article, after Ramsden's (2003, following Marton & Säljö, 1984/2005, Marton, 1988) framework of approaches to learning, Mattus (2014b) discusses how contributors may approach Wikipedia from either a holistic or an atomistic perspective. Imagine that the creation of Wikipedia is like the construction of a cathedral, where two workers are performing the same assignment, but one is building an amazing cathedral, while the other is carrying bricks. Described in the Wikipedian context, one contributor is creating the world's largest encyclopaedia, while the other is editing a text. The great vision that every piece of knowledge is part of a global and infinitely developable compilation of human knowledge might be a guiding star for some, but too much for others to envision.

Further, depending on what the task represents to the individual, the construction of meaning may rest on a wider understanding (deep) of the task or on a delimited, more sign-related level (surface). The *deep approach* assumes an intention to organize and structure the content into a coherent whole, such that previous knowledge becomes related to new knowledge, while the *surface approach* refers to the fact that unrelated parts, like facts and concepts, receive attention and become unreflectively linked to each other. Ramsden (2003, p. 45) explains, in reverse order, that it “is about learning just the unrelated facts versus learning the facts in relation to the concepts”.

Ramsden (2003, Marton & Säljö, 1984/2005, Marton, 1988) refers to students' learning from assignments in an academic context, but on

Wikipedia the tasks are chosen by the users themselves; they have the freedom to do whatever they want at the same time as they are monitored by a critical mass of users with varying competences, approaches, visions and so on. The collaborative character of Wikipedia complicates the situation through its ongoing dialectical processes, for instance, in negotiations on how reality is to be defined or on interpreting encyclopaedic relevance. As explained by Hoff-Clausen (2011), each statement can be subject to the intervention of others; experts are not privileged, because authority must be gained through convincing arguments and contributions.

### 3 “A Little Knowledge Is a Dangerous Thing”

Wikipedia’s aim is to present representations of knowledge, and not, like traditional encyclopaedias, to encapsulate the current state of accepted knowledge itself (Bruns, 2008). Wikipedia both defines itself and looks like an encyclopaedia, but as an encyclopaedic wiki, it is a postmodern phenomenon in which conflicting truths and definitions are competing in a never-ending process (Mattus, 2009). Hoff-Clausen (2011) refers to the encyclopaedic genre as a regulator for the discourse, showing what content should or should not be appropriate on Wikipedia. Apart from the article text, there are many other text genres, and the discourse on knowledge presentation is principally made visible in the extensive meta-communication, for instance, on the articles’ talk pages. In the case of Wikipedia, Hoff-Clausen (2011) suggests that the encyclopaedic genre is prescriptive rather than descriptive, since it works as a frame. Wikipedia’s imitation of the encyclopaedic form is an instant recognition factor, but, as a downside, it may also connote trustworthiness.

Some contributors, who lack expertise and knowledge, may unknowingly add incorrect information or remove correct information; others show no concern for the truth and intentionally deceive or mislead readers. Keen (2008, pp. 39–40) refers to the adage “a little knowledge is a dangerous thing”, and Fallis (2008) adds that inaccurate information can

be caused by edits containing misinformation, disinformation or even “bullshit”. From a more philosophical perspective, with reference to three problematic aspects of non-natural information, Søre (2016) conceptualizes the notions of *information*, *misinformation* and *disinformation*, with information being intentionally non-misleading, misinformation being unintentionally misleading, and disinformation being intentionally misleading.

Some contributors are proud of being amateurs, while others consider themselves experts (Keen, 2008). In a survey by Glott et al. (2010), Wikipedia's contributors were asked about their expertise in the thematic fields they contribute to. More than 70 per cent of the respondents answered that they had some kind of expertise, referred to as either general subject matter expertise, formal expertise and/or work expertise. The highest share of expertise was found in the technical thematic fields. Of course, the definitions of *expert* and *expertise* differ, for instance, depending on the context, and alongside the debate about experts versus amateurs, there have been discussions about specialists versus generalists (van Dijck, 2013).

On the Swedish Wikipedia, about 0.02 per cent of the articles are FAs (compared to about 0.1 per cent on the English version). Articles marked with a star icon should serve as good examples, or templates, to help contributors improve other articles (Wikipedia: Statistik över utvalda artiklar, 2018; Wikipedia: Featured Article Statistics, 2018).

## 4 The Demotion Process

Articles that no longer are considered to meet the FA criteria should be improved or downgraded. The demotion process looks very much like the promotion process. To either gain or lose FA status, an article first must be nominated by a user. The nominator should be familiar with the subject matter as well as the standards for FAs, and give reasons to support the nomination. This initial act serves as an invitation for other users to discuss the article's strengths and weaknesses. Wikipedia encourages its users to approach the articles critically with the intention to improve their quality. Then, registered users (with usernames) are able to vote for

or against the promotion or demotion; votes against the main proposal must be accompanied by a motivation. After a period, usually two or three weeks, a decision, based on the outcome of the voting, is taken. The process is transparent and can be monitored on the article's talk page. However, discussions on a metalevel about article quality also take part in other forums, like *Bybrunnen* [the Village Pump] and *Deltagarportalen* [the Community portal]. In principle, the procedure is quite similar in most language versions (Wikipedia: Artikelnomineringar, 2015; Wikipedia: Featured Article Candidates, 2015).

There are studies concerning FA criteria and the promotion process, but when it comes to former FAs that have lost their status, there is a gap. Jullien (2013) made a review of literature analysing Wikipedia, and obviously, the demotion aspect is missing. Another review, made by Mesgari, Okoli, Mehdi, Årup Nilsen, and Lanamäki (2015), of peer-reviewed publications of Wikipedia content, focuses on quality aspects; many studies are done on FAs, because they are assumed to have high quality, but no studies about FAs that have lost their status are mentioned.

However, as part of a broader study, Ransbotham and Kane (2011) examined both the promotion and demotion processes of 100 articles on Wikipedia, and found that the most common reasons for demotion were that the information was considered outdated or irrelevant, or that newly added information detracted from the overall presentation. Jones (2008) compared the revision histories of five Featured Article Candidates (FAC group) with the revision histories of five articles that did not pass the nomination process (non-FAC group), but did not find any conclusive differences between the two groups. The failure in the non-FAC group might be caused by “a lack of thorough stylistic revision” (Jones, 2008, p. 282). In the non-FAC group, poor writing quality was mentioned on all the articles' talk pages. This group also exhibited a greater lack of surface polish than the articles in the FAC group.

Based on the lifecycles of high- and low-quality articles, Wöhner and Peters (2009) compared articles that have been listed as Featured Article Candidates (FAC, also as Good Article Candidates) with articles listed for deletion. They found some significant differences between the groups. Low-quality articles (articles for deletion) were principally edited early in their existence; later, only minor additions and corrections were made.



High-quality articles (FAC), on the other hand, caught the interest of the Wikipedia community at some point and underwent a stage of intensive editing that greatly improved their quality.

Wöhner and Peters (2009), investigating German Wikipedia, saw that FAs showed increased intensity of editing after their promotion; in contrast, a study by Mattus (2014a), on Swedish Wikipedia, suggests that articles stabilize after promotion.

Aspects of possible article deterioration on Wikipedia have hardly been studied at all. Except for Ransbotham and Kane (2011), the studies above are principally based on quantitative data from articles' revision history and page view statistics.

## 5 Analytical Framework

Every article on Wikipedia is provided with a talk page where users can make comments and coordinate their work. As explained by Myers (2010, p. 145), talk pages “show how people argue, how they interpret the principles underlying Wikipedia, how they treat each other, and what they think the project is about”. The rhetorical devices used in editorial debates include “arguments by analogy, authority, cause and effect, classification, and attacks on the opponent” (Myers, 2010, p. 146). The latter, also called *argumentum ad hominem*, refers to attacking a person's character rather than the argument per se. Wikipedia presents some guiding principles, such as Neutral Point of View (NPOV), No Original Research (NOR), Verifiability, and Be Bold. The principle of NPOV has caused the most discussion because, as Myers puts it, knowledge is always presented from a certain stance. van Dijck (2013, p. 143) points to a consequence of the principle, namely that NPOV “shapes the meaning of neutrality as the ‘average opinion’ or ‘shared interpretation’”. Further, van Dijck (2013, p. 140) suggests: “To avoid bias, entries have to be based on facts and facts about opinions, but not on opinions”. With reference to the principle of NOR, Bruns (2008, p. 114) emphasizes that Wikipedia's aim is to collect “currently prevalent representations of knowledge about the world”, not to produce knowledge. The principle of verifiability requires that every statement is possible to verify this principle should

exert pressure in such a way that all sources are critically approached. Be Bold is based on the idea that “it is better to say something roughly accurate, and have somebody else improve it, than to say nothing at all” (Myers, 2010, p. 150). According to Myers, this principle was meant to encourage open debate, but when used aggressively, it sometimes causes back-and-forth edit wars in which some are unwilling to accept changes to their edits.

The principles above are guidelines to explain the encyclopaedia’s quality standards; these standards are maintained through the mechanics of Wikipedia’s content management system and enforced through the regime of socialized user control (van Dijck, 2013).

Before presenting the users’ arguments for demotion of FAs, some theoretical aspects of the concept of argumentation will be addressed. An *argument* can be defined as a *claim* supported by *proof*, while a *statement* is an unsubstantiated utterance. The claim and proof must be interrelated in such way that one piece of information substantiates the other (Gabrielsen & Juul Christiansen, 2012). For instance, in the talk-page passages, a nominator may have stated that an article deserves demotion because it lacks references to external sources.

In his model, Toulmin (2003) describes the structure of arguments in terms of the concepts *claims*, *data* or *grounds*, and *warrants*. Any statement that answers the question “What does the sender want the receiver to agree on?” is considered a *claim*; the question “What concrete information could make the receiver convinced?” refers to the *data* or *grounds* that support the claim and explain the grounds it is based on—like *proof*. Finally, the *warrant* can make the receiver accept the argument from a fundamental notion or idea by referring to bridges that are often implicit and can justify that the data substantiates the claim (Bergström & Boréus, 2013; Gabrielsen & Juul Christiansen, 2012; Hart, 1997; Hegelund, 2007; Hellspong, 2013). In terms of the example above, the warrant that links the proof with the claim might be a reference to Wikipedia’s criteria for FAs, which state that the article’s content should be verified and based on credible sources.

Arguments are divided into *pro et contra*—for and against. Argumentation analysis can be descriptive, reinforcing the argumentation by presenting ideas and expressions; partly prescriptive, judging

whether certain criteria, like factuality and rationality, have been met; or used to determine the strength of the argument (Bergström & Boréus, 2013; Hellspong, 2013).

A descriptive argumentation analysis might be complemented with rhetorical aspects. When trying to influence people, the construction and use of arguments is vital, and three central concepts from rhetoric are of particular interest here: *logos*, *ethos* and *pathos*. The appeal of logos is used when the sender persuades through arguments based on the case itself, the appeal of ethos when the sender strengthens his/her case by presenting himself/herself in a good light, and the appeal of pathos when the sender affects the receivers emotionally. Aspects related to logos are especially relevant in connection with argumentation analysis (Bergström & Boréus, 2013; Gabrielsen & Juul Christiansen, 2012).

The rhetorical genre, seen in the passages on the talk pages, could be understood as a kind of *genus judiciale*, meaning that the audience has to take a stance for or against something, in this case the demotion proposal. This genre has its origins in legal processes, such as speeches of accusation or defence (Renberg, 2007).

In this study, the aim is to identify different arguments that are seen in the material. Pro arguments support the demotion—the nominator's suggestion to remove the article's FA status—while contra arguments are opposed to demotion. This study mostly deals with pro arguments, because all the articles included are under consideration for demotion and will be downgraded. However, in some cases, the users do not fully agree with the nominator's proposal, and for that reason some contra arguments will be examined as well.

Here, the pro arguments, or in Toulmin's terms, the data or grounds, that back up a user's claim, will be presented in six categories. These are arguments related to (1) verifiability and sources, (2) linguistic aspects, (3) structure, (4) coverage, (5) current relevance, and (6) credibility. These categories are not completely mutually exclusive. A seventh category concerns arguments against demotion—contra arguments.

## 6 Material: Passages from Downgraded Articles' Talk Pages

The material comes from downgraded articles' talk pages. The Swedish Wikipedia presents a list of articles that previously have been FAs, in Swedish *utmärkta artiklar*, but that later lost that status (Wikipedia: Tidigare utvalda artiklar, 2015). At the end of May 2015, the list contained 60 articles; three years later, about 20 more articles had been added to the list (Wikipedia: Tidigare utvalda artiklar, 2015, 2018). The material consists of passages from these 60 articles' talk pages—passages in which it is possible to follow the process, from nomination to decision, to see, for instance, justifications and arguments for and against demotion. The study aims to investigate the users' arguments for demotion—to ascertain why, according to the users, these articles should lose their status as FAs. Methodologically, the approach is principally qualitative, but some quantitative elements are also included to describe the users' engagement. The analysis is text-based, inspired by argumentation theory as well as rhetoric, with a focus on reasons and arguments expressed by the users in the talk-page passages dealing with the demotion.

In the following text, the users are not anonymized; they are mentioned by their self-selected registered user names. Even though user names usually do not correspond to people's real names, they might be recognizable by others in the Wikipedia community. (Some users present themselves quite thoroughly on their personal user page.) Wikipedia's transparency and openness have been the guiding principle.

## 7 Results: Users' Engagement and Arguments

Before presenting the arguments from the articles' talk pages, I provide a quantitatively oriented overview of the nominators' and voters' engagement in the demotion process.

Each of the 60 former FAs on the list was suggested for demotion by a single user, but some of the users have nominated several articles. In total,

there are 21 nominators, six of which (*Kigsz*, *Sjunnesson*, *Tanzania*, *GhostRider*, *Ace90* and *Grillo*) have nominated more than one article.

Four of the nominators, *Sjunnesson*, *Kigsz*, *Tanzania* and *Ace90*, are also among the nine most active voters; the top three are *Sjunnesson* with 22 votes, *Ronny W/WeRon* with 17 votes and *Lixer* with 16 votes. This indicates that a small group of individuals dominates the demotion processes.

The total number of votes was 334; of these 291 (87 per cent) supported the demotion while 43 were against. Among the latter, three votes (less than 1 per cent) wanted the articles to retain their FA status, while 40 votes (12 per cent) wanted to label them as *Good Articles* instead—in the second-best category. On average, the articles received 5.7 votes (minimum 3 and maximum 12 votes). It is worth noting though that the material does not include any articles that were nominated for demotion but kept their FA status.

The data, or grounds, that back up the users' claims will now be presented in the six categories dealing with pro arguments, followed by the seventh category, with contra arguments. The arguments come from talk pages on the Swedish Wikipedia; therefore, the quotations, as well as some of the entries, have been translated into English. As mentioned earlier, pro arguments support the suggestion to revoke the article's FA status, while contra arguments argue for preserving it.

Nominators who suggest articles for demotion have to give reasons why the article's FA status should be revoked. As an example, the user *GhostRider*, who nominated the article *Bysantinska riket* [The Byzantine Empire] for demotion, argues: "The article should be provided with more sources and be made longer". This should be seen as an invitation for other users to critically discuss the article's quality.

## Category 1: Arguments Related to Verifiability and Sources

In most of the talk-page passages, the arguments for demotion concern the use or lack of sources, and reasons like the one in the example above are often seen. The user *Kristrnjov*, writing on the article *Arsenal FC's* talk

page, claims that it is “Entirely lacking in sources”. The articles titled *Digerdöden* [The Black Death], *Dwight D. Eisenhower*, *James Stewart*, *Joseph McCarthy*, *Kiowa*, *Lettlands historia* [The History of Latvia], *Motorväg* [Motorway], *Ojibwa*, *Pan American World Airways*, *Richard III av* [of] *England*, *Rosornas krig* [The War of the Roses] and *Ulrika kyrka* [Ulrika church] are considered to lack, or only have very few, sources. Other articles are in need of references to more well-known, better-established and/or more recent sources to verify factual claims. For instance, regarding the article *Christofer Columbus* [Christopher Columbus], user *Ace90* stresses that “sources from the 1800s do not satisfy the credible sources requirement”, and user *Nasko* criticizes the use of a 38-year-old book as the only Swedish source in the article *Allmänna relativitetsteorin* [The theory of general relativity].

Especially in the articles *Friedrich Nietzsche*, *Karl XII* [Charles XII of Sweden] and *William Ewart Gladstone*, the older Swedish encyclopaedia *Nordisk Familjebok* is criticized for being old-fashioned and outdated. (The second edition was called the *Owl Edition*; now the copyright has expired, and the entire encyclopaedia is available on the internet.) However, “when the owl has flown away”, the user *Augustus* would like to see the article *Karl XII* [Charles XII of Sweden] once again be nominated to be an FA.

The users mention concepts like *sources*, *references* and *notes/footnotes*, as well as *external links*, *literature*, *web sources* and *book sources*. Some of these concepts are used synonymously or in a rather confusing way. According to user *Nothingman*, the article *Björnön* just contains “literature” but does not have any sources.

Many articles are criticized for not having enough footnotes or sources, but, as expressed by the user *Tetraedycal Tetraedycal*, “if the footnotes outweigh the article’s actual verifiability, they easily become just meaningless credibility talismans”.

## Category 2: Arguments Related to Linguistic Aspects

This category deals with linguistic arguments, like the use of inappropriate language or imprecise vocabulary. The language in the article *11*

*september-attackerna* [The September 11 attacks] is considered to be of poor quality, as described by user *Ace90*: “the text is choppy with short paragraphs and unconnected sentences”.

The user *Fenrir* seems critical of the use of vocabulary like *rioter*, *rebel* and *enemy*, explaining that, in the article *Antiochos III*, the meaning is neither neutral nor obvious. *Fenrir* also refers to vague expressions, for instance, “an incredibly great sum of money”, and further thinks that some value-laden expressions should be removed from the article *Antoine Watteau*. Other aspects of language use that are mentioned can be the presence of loaded words, as well as exaggerations or nonsensical statements. According to the user *Islander*, the article *Per Albin Hansson* contains some redundancies.

The language can also be misleading, and user *Hyperboré* notices that the formulation “On a typical day in March 1929, stock values rose by 50 per cent”, in the article *Pan American World Airways*, would make the reader believe that this happened every day during the month.

The language could be seen as inappropriate for an encyclopaedia. User *Ace90* finds the humoristic tone in some parts of the article *Satsen om oändligt många apor* [The infinite monkey theorem] to be unsuitable. According to user *Dieselmotorvagnar*, the article *Bruce Springsteen* contains a description of one of his albums as “an intimate and warm recording with a club feeling”, a formulation that reads rather “like an advertisement”. Other examples of undesirable language use, observed by user *Tanzania*, are quotations in archaic Swedish usage in the article *Ulrika kyrka* [Ulrika church]. On the talk pages for the article *Allmänna relativitetsteorin* [The theory of general relativity], the user *Nasko* states that “the language in the reference list is un-encyclopaedic”. The text in the article *Kalle Anka* [Donald Duck] is described as “sloppy or facetious”, and therefore unsuitable for Wikipedia; likewise, the article *Pan American World Airways* is criticized for being “poor, sloppy, and amateurish”. Among the criticisms directed against the article *Dmitrij Sjostakovitj*, the user *Tetraedycal Tetraedycal* mentions its “extreme use of parentheses”.

### Category 3: Arguments Related to Structure

This category deals with arguments related to the structure, balance and organization; for instance, the nominator *Sjunnesson* claims that the article *Lettlands historia* [History of Latvia] is unbalanced, with a disproportionately brief introduction. User *Magnus242* criticizes the article *Kärnvapen* [Nuclear weapons] for being unbalanced; the article is said to be one-sided, mostly focusing on the effects of nuclear weapons. While giving only a rudimentary description of the construction of nuclear weapons, it appears to neglect aspects like nuclear armament and nuclear proliferation. According to user *Essin*, the article *Motorväg* [Motorway] is Sweden-centric, with some sections even reflecting the writers' own personal experiences.

### Category 4: Arguments Related to Length and Coverage

The arguments in this category have to do with aspects of article length and coverage. The articles *11 september-attackerna* [The September 11 attacks] and *Allmänna relativitetsteorin* [The theory of general relativity] are both criticized for not being comprehensive enough. Concerning the article *Digerdöden* [The Black Death], user *Yger* claims that it is too short “for such a famous phenomenon”; a similar argument is presented by user *Fenix*, arguing that the article *Spindlar* [Spiders] is too short “because of the general nature of the topic”. Criticism regarding article length may also be framed in relation to the genre, for example, that the article *James Stewart* is too thin to be an FA biography, according to *GhostRider*.

Some Swedish articles are based on translations from other language versions, mostly the English one. Biographical articles, for instance about English kings and American politicians, are often translations, and do not necessarily reflect the quality of the original English article. Swedish articles are compared to the corresponding longer articles in English, like when user *Ghostrider* claims that the article *Bysantinska riket* [The Byzantine Empire] should be expanded. The articles *Köningsbergs sju broar* [The seven bridges of Königsberg] and *Dmitrij Sjostakovitj* have also



been compared with their more comprehensive counterparts in the English Wikipedia. The French version of *Snövit och de sju dvärgarna* [Snow White and the Seven Dwarfs] is claimed by user *dnm* to be seven times as large (measured in bytes) as the Swedish one.

The Swedish article *Edvard I av [of] England* was translated in 2005 from an English article that did not have any references at all, according to user *Pralin*. “It was good in Wikipedia’s childhood”, but seems very short today. Likewise, the user *Historiker* does not regard the article *Richard III av [of] England* to be comprehensive enough.

Even though the article *Opera* has been awarded FA status, it is criticized for containing sections that are still in a quite rudimentary stage of development.

When it comes to the article *Västra Vrams kyrka* [Västra Vram church], user *Tanzania* calls attention to the fact that “it sweeps across four-hundred years of history in two sentences”. Referring to the same article, user *Ion-5* stresses that high-quality articles do not have to be especially long; the same user points to the article *Kiowa*, in which the story ends in the 1800s, with nothing being written about this tribe of Native Americans after that.

## Category 5: Arguments Related to Current Relevance

This category deals with arguments that touch upon the fact that new or updated information or research findings have not been incorporated into the article. Concerning the article *Joseph McCarthy*, user *GhostRider* states: “The article is not up-to-date and should not have FA status any longer”. Another article, that has not been updated recently, is *Motorväg* [Motorway], in which the new speed limits in Sweden are not mentioned. The article *Darfurkonflikten* [The War in Darfur] has not been updated for several years, according to user *Paracel63*.

One recurring argument concerns the changing requirements for being granted FA status. There are several examples where the FA criteria are perceived as becoming stricter over time, not the least the requirement of verifiability. On the article *William Ewart Gladstone's* talk page, user *Nicke L* expresses the belief that “this article should no longer have the status of

FA, considering today's demands for sources". User *Pralin* believes that the article *Bysantinska riket* [The Byzantine Empire] "would not have been made a FA today". Some articles should obviously never have been FAs at all, and concerning the article *Allmänna relativitetsteorin* [The theory of general relativity], user *RE* admits that "the award came a little too hastily".

Older sources are treated differently. Old literature can still be useful, but some literature is perceived as completely outdated. Concerning the article *William Ewart Gladstone*, user *Fredrico* seems sceptical about whether articles published in the Swedish encyclopaedia *Nordisk Familjebok* a century ago still are valuable and can function as references, pointing out that we look upon historical contexts differently now.

When only a few individuals possess subject knowledge, sustaining the quality of an article may be dependent on their commitment. User *Grundin* points to the difficulty of verifying facts in the article *Indisk konst* [Indian art] after its most prominent contributor stopped editing it.

## Category 6: Arguments Related to Credibility

These arguments have to do with inaccuracies, factual errors and other circumstances that influence the readers' impression of the article's quality. In some cases, the articles are alleged to lack stringency, like the article *Per Albin Hansson*, which seems to be full of inconsistencies, according to user *Islander*.

One technical problem that may affect credibility is the presence of *dead links* (also called *link rot*)—links that no longer work or exist. This problem is mentioned by user *Paracel63* on the talk pages to the article *Darfurkonflikten* [The War in Darfur]. Similarly, links that go to other websites than those intended negatively influence the assessment; concerning the article *Pan American World Airways*, user *Hyperboré* observes that one of the links goes to an American retail company instead of to the French airline.

## Category 7: Arguments Against Demotion—Contra Arguments

Arguments that oppose the nominators' reasoning for demotion often pass unchallenged. This finding is not surprising, since all the articles in the study did end up being downgraded. Users involved in the process mostly agree with the nominator; usually they express their support and may also add something that strengthens the nominator's arguments. However, in the case of three articles, *Karl XII* [Charles XII of Sweden], *Motorväg* [Motorway] and *Ronald Reagan*, some users argue against the nominator, requesting that the articles should remain as FAs. Concerning the article *Motorväg*, user *Petter* claims to “have absolutely no objection to the language”, and regarding the article *Ronald Reagan*, user *Oljehuset AB Avd.2* states that “it was good in 2009, but now it is excellent”.

Sometimes it is suggested that articles should be made *Good Articles* instead of FAs. The main reason seems to be that these articles are quite well-written, like the articles *Christofer Columbus* [Christopher Columbus] and *Etanol* [Ethanol]. According to user *Ion-5*, it is important that the label Good Article should not be regarded as a consolation prize.

## 8 Rhetorical Aspects

In rhetorical terms, most of the arguments in this genre could be referred to as instances of *logos*, since they appeal to facts of the case itself. However, there are some expressions of *ethos*, boosting the sender's legitimacy by demonstrating his/her knowledge and competence. To appear credible, the sender presents him/herself in a way that can be perceived as competent and modest. On the talk page of the article *Antiochos III*, user *Sjunnesson* declares: “Yes, I have a three-year university degree, but not in history, if that matters”. User *Nasko* shows some humility, albeit with a somewhat ironic undertone, when admitting “Unfortunately I am only familiar with the special theory of relativity and cannot add very much to the article” with reference to the article *Allmänna relativitetsteorin* [The theory of general relativity]. Another example, referring to the article

*Playstation Portable*, is when user *Poxnar* wants to be modest but at the same time indicates some expert knowledge (in response to whether it is clear which game console that is the fastest): “I’m no expert on processors, but you can see from the table [of technical specifications] which game console is the fastest”.

The tone on the articles’ talk pages can be described as quite respectful and supportive. Even if the users disagree in substance, they are not emotionally involved and do not use the appeal of pathos to persuade. In discussions, the users do not address each other directly; instead they use the third person, for instance, “I agree/disagree with user *X* who says...” or talk about “the article writer”. There are no examples of *argumentum ad hominem*; criticism is directed towards the article texts or users’ statements, never against the writer per se.

## 9 Conclusions

In this study of downgraded articles on the Swedish Wikipedia, the most prevalent arguments for demotion concern lack of references and verifiability. This may partly be explained by the fact that the requirements were less strict earlier. Articles that were considered to have high quality in Wikipedia’s childhood—it was launched in 2001—would not be seen as all that good today. In this study, 80 per cent of the articles were awarded their FA status in 2007 or earlier. Before being demoted, the articles had kept their FA status for, on average, four and a half years. It is noteworthy though that articles without sufficient quality could pass as FAs for years, especially since FAs usually attract more users, with increased editing intensity as a result, according to Wöhner and Peters (2009). On the other hand, Mattus (2014a) has seen that FAs rather become stabilized after getting the award. The editing intensity is not necessarily consistent with how the users behave, and further editing does not automatically improve, or even preserve, an article’s quality.

It is important to bear in mind that, in the present study, the assessment of article quality is principally done by a small group of users who act as representatives of the Wikipedia community. Some of them have been appointed as administrators, with additional technical privileges,

because of their trustworthiness, perceptiveness and long-term activity. However, the articles cover a wide range of thematic fields, and it is hardly possible to be familiar with all these topics; this would explain why the arguments tend to be based on general criticism and statements of principle. To quite a considerable extent, the arguments concern aspects associated with language use, article length, number of references and dead links. For this kind of criticism, no extensive subject knowledge is needed.

The study also indicates that there are risks associated with translation. The meaning can change when a text is transferred from one context to another. Translation is not just about language proficiency; it is also, for instance, about mastering professional jargon, such as medical, legal or technical terms, as well as concepts related to special interests.

Many of the arguments for downgrading FAs are related to quantity rather than quality. In accordance with Ramsden's (2003) model, learning experiences are dependent on what the task—in this case the assessment of quality—represents to the individual. Simply put, Ramsden (2003, p. 45) explains the approaches to learning: “surface is [...] about quantity without quality; deep is about quality and quantity”. Regarding the topics covered by the articles in this study, a quick overview shows that articles about historical persons, places and events, as well as some Swedish churches, are most prominent, followed by articles about performers and politicians. When attention is unreflectively drawn to unrelated facts and concepts, the surface approach to learning would fit in. Unlike when you approach the task with a deeper understanding, the user does not search for coherence and wholeness in a way that enables the use of previous knowledge.

In a comparative study of history articles, Samoilenko et al. (2018) suggest that Wikipedia is more detail oriented, while Britannica offers coherent explanations based on underlying tensions. Obviously, the mixed crowd approach a topic differently than experts—with their different understandings of how to use their knowledge.

The above results also correspond to some of Jones' (2008) findings, that the articles in the non-FAC group exhibited a greater lack of surface polish. The findings are partly consistent with research by Ransbotham and Kane (2011), who suggest that the most common reasons for demotion were that dated, irrelevant or deviant information was added to the

article; however, these arguments were not discussed in the light of a constantly changing environment. In this study, the results suggest that the users seem to be quite aware of the changing requirements, not least regarding factual verification.

Relying on the encyclopaedic genre and principles for academic writing, the criteria for article quality in Wikipedia have evolved and become more articulated. But, as seen in the study, the number of references is easier to criticize than the quality and accuracy of sources. Many users have some experience of higher education (Glott et al., 2010), but holding up academic standards as an ideal is not the same thing as applying them in practice.

The academic world has its peer-review process, in which experienced researchers assess other researchers' work. Discussing Wikipedia, van Dijck, 2013 points to the volunteer-based peer-production system, together with sociotechnical management systems, as guaranteeing the ultimate cohesion of encyclopaedic content produced by multidisciplinary teams. Consequently, Wikipedia takes advantage of its crowd, or rather the resources available to the crowd, and, according to van Dijck, its success lies partly in its "crowd management".

This user-driven approach for assessing articles has its weaknesses, however, for instance that the interest in evaluation is quite low among users. On German Wikipedia, Wöhner and Peters (2009) found that only 3000 articles out of 650,000 altogether were evaluated, and further, that the highly dynamic nature of Wikipedia's content quickly makes evaluations obsolete. In this study, the articles that are downgraded principally relate to topics that capture public interest today, but why have these old FAs caught the attention of the small group of nominators, when others have been overlooked?

Relatively few users are involved in the nomination and decision-making processes. Who are these individuals, what skills do they possess and what interests do they represent? Self-appointed evaluators such as them have taken on a great responsibility for upholding Wikipedia's encyclopaedic quality; should we be grateful to them for doing this, or worried about the authority they attribute to themselves? Furthermore, what visions do they have, and what does the task represent to them? Are

they building the cathedral or carrying bricks? In accordance with the wiki concept, this cathedral will never be completed.

Because of Wikipedia's unfinished character, the quality of articles will fluctuate over time, and there will always be a substantial span between the extremes—between articles in a rudimentary state and articles that are well developed. A star on an article may indicate quality, but if an FA just has a polished surface, there is no one to blame. As suggested by Hoff-Clausen (2011), Wikipedia can be referred to as a virtual user-developed rhetorical actor without any responsibility. Wikipedia's lack of authority, or its imagined authority, makes the reader, that is, the user of the encyclopaedia, balance between being too gullible or too cynical.

Not long ago, an encyclopaedia was expected to be reliable because it was written by experts, but in fact the concept "encyclopaedia" just refers to a way of organizing information. Perhaps because of wishful thinking, or out of pure convenience, Wikipedia has become the quintessential form of an encyclopaedia in the digital age.

## References

- Bergström, B., & Boréus, K. (2013). *Textens mening och makt* [The Meaning and Power of Text]. Lund, Sweden: Studentlitteratur.
- Bruns, A. (2008). *Blogs, Wikipedia, Second Life and Beyond. From Production to Prodosage*. New York: Peter Lang.
- van Dijck, J. (2013). *The Culture of Connectivity. A Critical History of Social Media*. New York: Oxford University Press.
- Fallis, D. (2008). Toward an Epistemology of Wikipedia. *Journal of American Society for Information Science and Technology*, 59(10), 1662–1674.
- Gabrielsen, J., & Juul Christiansen, T. (2012). *The Power of Speech*. Copenhagen, Denmark: Hans Reitzel.
- Giles, J. (2005). Internet Encyclopaedias Go Head to Head. *Nature*, 428, 900–901.
- Glott, R., Schmidt, R., & Ghosh, P. (2010). *Wikipedia Survey – Overview of Results*. United Nations University MERIT, Collaborative Creativity Group. Retrieved February 22, 2016, from [http://www.ris.org/uploadi/editor/1305050082Wikipedia\\_Overview\\_15March2010-FINAL.pdf](http://www.ris.org/uploadi/editor/1305050082Wikipedia_Overview_15March2010-FINAL.pdf)

- Hart, R. P. (1997). *Modern Rhetorical Criticism*. Needham Heights, MA: Simon & Schuster Company.
- Hegelund, S. (2007). *Akademisk argumentation* [Academic Argumentation]. Malmö, Sweden: Liber.
- Hellspong, L. (2013). *Argumentationens retorik* [Argumentation Rhetoric]. Lund, Sweden: Studentlitteratur.
- Hoff-Clausen, E. (2011). *Online ethos. Webretorik i politiske kampanjer, blogs og wikis* [Online Ethos. Web Rhetoric in Political Campaigns, Blogs and Wikis]. Fredriksberg, Denmark: Samfundslitteratur.
- Jones, J. (2008). Patterns of Revision in Online Writing: A Study of Wikipedia's Featured Articles. *Written Communication*, 25(2), 262–289.
- Jullien, N. (2013). What We Know About Wikipedia. A Review of the Literature Analysing the Project(s). *HAL Archives-Ouvertes*. Retrieved August 24, 2017, from <https://hal.archives-ouvertes.fr/hal-00857208>
- Keen, A. (2008). *The Cult of the Amateur*. New York: Doubleday.
- List of Wikipedias*. (2015, June 3/2018, October 3). In *Wikimedia*. Retrieved from [https://meta.wikimedia.org/w/index.php?title=List\\_of\\_Wikipedias&oldid=12374616](https://meta.wikimedia.org/w/index.php?title=List_of_Wikipedias&oldid=12374616), [https://meta.wikimedia.org/w/index.php?title=List\\_of\\_Wikipedias&oldid=18442772](https://meta.wikimedia.org/w/index.php?title=List_of_Wikipedias&oldid=18442772)
- Marton, F. (1988). Describing and Improving Learning. In R. R. Schmeck (Ed.), *Learning Strategies and Learning Styles*. New York: Plenum.
- Marton, F., & Säljö, R. (1984/2005). Approaches to Learning. In F. Marton, D. Hounsell, & N. Entwistle (Eds.), *The Experience of Learning* (pp. 39–58). Edinburgh: Scottish Academic Press.
- Mattus, M. (2009). Wikipedia – Free and Reliable? Aspects of a Collaboratively Shaped Encyclopaedia. *Nordicom Review*, 30(1), 155–171.
- Mattus, M. (2014a). The Anyone-Can-Edit-Syndrome. Intercreation Stories of Three Featured Articles on Wikipedia. In H. Hornmoen & K. Skare Orgeret (Eds.) *Defending Democracy. Nordic and Global Diversities in Media and Journalism*. *Nordicom Review*, 35, 189–203.
- Mattus, M. (2014b). Wikipedia som lärkontext – ett resonemang om hur engagemanget i wikiproduktionen bidrar till det livslånga lärandet [Wikipedia as a Learning Context – Reflections on How Engagement in Wiki Production May Contribute to Lifelong Learning]. *Utbildning & lärande [Education & Learning]*, 8(1), 30–44.
- Mesgari, M., Okoli, C., Mehdi, M., Årup Nilsen, F., & Lanamäki, A. (2015). “The Sum of All Human Knowledge”: A Systematic Review of Scholarly



- Research on the Content of Wikipedia. *Journal of the Association for Information Science and Technology*, 66(2), 219–245.
- Myers, G. (2010). *The Discourse of Blogs and Wikis*. London: Continuum.
- Ramsden, P. (2003). *Learning to Teach in Higher Education*. London and New York: RoutledgeFalmer.
- Ransbotham, S., & Kane, G. C. (2011). Membership Turnover and Collaboration Success in Online Communities: Explaining Rises and Falls from Grace in Wikipedia. *MIS Quarterly*, 35(3), 613–627.
- Renberg, B. (2007). *Retorikanalys* [Rhetorical Analysis]. Lund, Sweden: Studentlitteratur.
- Samoilenko, A., Lemmerich, F., Zens, M., Jadidi, M., Génois, M., & Strohmaier, M. (2018). *(Don't) Mention the War: A Comparison of Wikipedia and Britannica Articles on National Histories*. Proceedings of the 2018 World Wide Web Conference, 843–852. Retrieved September 26, 2018, from <https://dl.acm.org/citation.cfm?id=3186132>
- Sanderhoff, M. (2014). This Belongs to You. In M. Sanderhoff (Ed.), *Sharing and Caring. Openness in the Cultural Heritage Sector*. Copenhagen, Denmark: Statens Museum for Kunst.
- Søe, S. O. (2016). *The Urge to Detect, the Need to Clarify: Gricean Perspectives on Information, Misinformation and Disinformation*. Copenhagen, Denmark: University of Copenhagen, Faculty of Humanities.
- Toulmin, S. (2003). *Uses of Argument*. Cambridge: Cambridge University Press.
- Wikipedia: Artikelnominering [Wikipedia: Featured Article Candidates]. (2015, May 30). In *Wikipedia*. Retrieved from <https://sv.wikipedia.org/w/index.php?title=Wikipedia:Artikelnominering&oldid=30035727>
- Wikipedia: Featured Article Candidates. (2015, June 16). In *Wikipedia*. Retrieved from [https://en.wikipedia.org/w/index.php?title=Wikipedia:Featured\\_article\\_candidates&oldid=667230332](https://en.wikipedia.org/w/index.php?title=Wikipedia:Featured_article_candidates&oldid=667230332)
- Wikipedia: Featured Article Criteria. (2015, October 29). In *Wikipedia*. Retrieved from [https://en.wikipedia.org/w/index.php?title=Wikipedia:Featured\\_article\\_criteria&oldid=688091514](https://en.wikipedia.org/w/index.php?title=Wikipedia:Featured_article_criteria&oldid=688091514)
- Wikipedia: Featured Article Criteria. (2018, September 17). In *Wikipedia*. Retrieved from [https://en.wikipedia.org/w/index.php?title=Wikipedia:Featured\\_article\\_criteria&oldid=859913960](https://en.wikipedia.org/w/index.php?title=Wikipedia:Featured_article_criteria&oldid=859913960)
- Wikipedia: Featured Article Statistics. (2018, August 1). Retrieved from [https://en.wikipedia.org/w/index.php?title=Wikipedia:Featured\\_article\\_statistics&oldid=852955473](https://en.wikipedia.org/w/index.php?title=Wikipedia:Featured_article_statistics&oldid=852955473)

- Wikipedia: Statistik över utvalda artiklar [Wikipedia: Featured Article Statistics]. (2018, October 3). In *Wikipedia*. Retrieved from [https://sv.wikipedia.org/w/index.php?title=Wikipedia:Statistik\\_%C3%B6ver\\_utvalda\\_artiklar&oldid=43522075](https://sv.wikipedia.org/w/index.php?title=Wikipedia:Statistik_%C3%B6ver_utvalda_artiklar&oldid=43522075)
- Wikipedia: Tidigare utvalda artiklar [Wikipedia: Former Featured Articles]. (2015, March 23). In *Wikipedia*. Retrieved from [https://sv.wikipedia.org/w/index.php?title=Wikipedia:Tidigare\\_utvalda\\_artiklar&oldid=29696684](https://sv.wikipedia.org/w/index.php?title=Wikipedia:Tidigare_utvalda_artiklar&oldid=29696684)
- Wikipedia: Tidigare utvalda artiklar [Wikipedia: Former Featured Articles]. (2018, September 24). In *Wikipedia*. Retrieved from [https://sv.wikipedia.org/w/index.php?title=Wikipedia:Tidigare\\_utvalda\\_artiklar&oldid=43615408](https://sv.wikipedia.org/w/index.php?title=Wikipedia:Tidigare_utvalda_artiklar&oldid=43615408)
- Wikipedia: Utmärkta artiklar [Wikipedia: Featured Articles]. (2015, May 30). In *Wikipedia*. Retrieved from [https://sv.wikipedia.org/w/index.php?title=Wikipedia:Utm%C3%A4rkte\\_artiklar&oldid=30035734](https://sv.wikipedia.org/w/index.php?title=Wikipedia:Utm%C3%A4rkte_artiklar&oldid=30035734)
- Wikipedia: Utmärkta artiklar [Wikipedia: Featured Articles]. (2018, September 23). In *Wikipedia*. Retrieved from [https://sv.wikipedia.org/w/index.php?title=Wikipedia:Utm%C3%A4rkte\\_artiklar&oldid=43611174](https://sv.wikipedia.org/w/index.php?title=Wikipedia:Utm%C3%A4rkte_artiklar&oldid=43611174)
- Wöhner, T., & Peters, R. (2009). *Assessing the Quality of Wikipedia Articles with Lifecycle Based Metrics*. In *Proceedings of the 5th International Symposium on Wikis and Open Collaboration (WikiSym '09)*. Orlando.



# 5

## The Story Event “The Beauty and the Beast” in Second Life: Literature Studies and the (Non-)Adoption of Virtual Worlds

Ylva Lindberg

### 1 Introduction

This study aims at exploring the digital three-dimensional virtual world, Second Life (SL), and its potential for learning in a specific discipline, in this case literature studies. The goal is to understand how virtual worlds contribute to understanding literary competences and how they transform conceptions of literature, and of skills needed for accessing literary content. In addition, since the density in technology varieties and definitional terms in today’s media landscape has allowed for a relative confusion concerning what a virtual world is, the field of exploration calls for an extended contextualization. Therefore, this study also serves the purpose to situate virtual worlds in current learning technology landscapes. In this expanding area in educational research, terms and notions are constantly emerging, tending to concur with each other to name either the technology itself, or the representations produced through technological devices, such as virtual worlds.

---

Y. Lindberg (✉)

School of Education and Communication, Jönköping University,

Jönköping, Sweden

e-mail: [ylva.lindberg@ju.se](mailto:ylva.lindberg@ju.se)

More specifically, this study attempts to answer the question how virtual worlds can support literary competences for the twenty-first century, where the media density transforms ways-of-being-with-words (Bagga-Gupta, 2014), as well as ways of reading and making meaning across languaging modalities. Reading, understanding, and interpreting literary fiction in multimodal genres, such as film and comics, are common areas in connection to literary studies. However, how are established literary competences (Culler, 1980; Todorov, 1971), such as understanding the function of a *récit*, characters, milieus, as well as a narrative voice and an author, conceived of and learnt in digital virtual worlds, where events often are produced and consumed—“written” and “read”—simultaneously? Furthermore, how do participants in these worlds perceive the dichotomy fictional—real, in comparison to the literary work where the demarcation line between the terms tend to be less fluid?

The initial parts of this chapter define and contextualize virtual worlds in education and in relation to literature, which is followed by the third section addressing aspects that prevent virtual worlds from being widely used as teaching and learning tools. The fourth section critically reviews research on learning and the specific virtual world, SL. The fifth section presents an explorative and empirical study inside SL that addresses issues of literary learning. This part of the chapter is followed by a discussion of central questions regarding hinders and affordances of the tool in literature learning.

## 2 The Context of Literature and Learning with Virtual Worlds

Experiences with language and literature teaching and learning in virtual worlds, such as SL, are quite well documented in research (Mikropoulos & Natsis, 2011; Wang & Burton, 2013). For example, the Virtual Round Table Web Conference is held annually in a virtual environment, and at several occasions in SL, with the aim to present frontline language learning in and with digital technology. This study is oriented towards literature learning, a subject closely connected to language, but far less explored

in virtual environments in comparison to foreign-language learning, even though digital literary genres are increasing in number and sophistication, for example, through *interactive fiction* and game worlds (Rettberg, 2019). Literature learning with digital tools calls for an understanding not only of (1) the digital tools *per se*, but also of (2) what is produced in terms of literary material in digital environments and with digital tools, and of (3) how the digital literary material is connected to past and present analogue–digital literary material. Even though literary studies have their own intrinsic premises, these three aspects are equally relevant for language studies and can potentially be applied to other subjects explored through the lenses of transformations of learning in and with digital resources.

The first aspect addresses the need for an understanding of the materiality and features of the digital tool intended for learning purposes. Concerning virtual worlds, this aspect represents a consistent challenge because of the linguistic confusion surrounding the subject. Acronyms, such as MUVE (multi-user virtual environment), VLR (virtual learning reality), VLE (virtual learning environment), and MMO(RP)G (massively multiplayer online (role-playing) game), have accumulated with the digital shift and are often used as synonyms, risking a reduction of conceptual clarity in scholarly work on virtual worlds. On a fundamental level, virtual worlds are computer-based environments that have existed and been inhabited by users since the beginning of the 1980s. A major feature differentiating a virtual world from other virtual environments consists of the prominent representation of geographical space. This is confirmed by Girvan’s (2018) attempt to define virtual worlds through an analysis of recurrent overlapping appellations in the field. She concludes that virtual worlds are:

Shared, simulated spaces which are inhabited and shaped by their inhabitants who are represented as avatars. These avatars mediate our experience of this space as we move, interact with objects and interact with others, with whom we construct a shared understanding of the world at that time.

Space is also an important feature of fiction in different genres, from the novel to the film. Regarding virtual worlds, spatial representations have

progressively been improved and transformed through innovations in digital technology made available on the market. Today, they are distributed in three dimensions and can, through sophisticated virtual reality (VR) systems, display graphics similar to spaces in the real world. In addition, virtual worlds can be distributed both offline and online, just as they can be more, or less, open to users. For example, the graphic quality of the virtual interface is most often best rendered in pre-designed virtual worlds for MMOGs (massively multiplayer online games), where there is a paying wall for participation, such as the ARPG (action roll-playing game) *Destiny* (2014), *Sea of Thieves* (2018) and *Monster Hunter* (2018). Free online virtual worlds, such as SL, do not need to strive for graphic perfection to the same extent, since the goal of these worlds more often is the collaborative and/or individual construction of the world, not game-based itineraries with preconceived environments proper to videogames. Players have a more limited agency to modify and take part in the growth of the in-world contents in videogames in comparison to online participative virtual worlds. It is not surprising that digital virtual worlds have become an extremely lucrative and growing market (see, for example, statistics from [Newzoo.com](http://Newzoo.com)), since imaginary worlds have fascinated people throughout history, especially literary history. As educational technology, though, virtual worlds have not gained consistent ground in comparison to the widespread use among everyday digital users.

However, in recent research on digital environments and learning (Database ERIC: 2016–2018),<sup>1</sup> digital tools and resources are often put afore in different learning contexts and disciplines as important support for designing efficient teaching. On an overall level, the research field informs about how digital resources can be of help to (1) reach learning goals, for example through new pedagogical designs, (2) support collaboration, for example through problem solving in and with digital environments, (3) adapt the teaching to different “learning styles”, for example by blending digital and analogue contexts, (4) bring in situations and material from outside the classroom, (5) support “authentic learning”, for example by facilitating practical assignments in digital environments, (6)

---

<sup>1</sup>The search words used in the time span were “attitude or opinions or beliefs”, “Virtual Learning Environments”.

enhance learners’ autonomy, and (7) change attitudes and beliefs concerning digital tools.

Despite the fact that the themes identify critical issues for learning with digital tools, technology implementation tends to become the dominating goal in research on learning and digital resources (Lim, Zhao, Tondeur, Chai, & Tsai, 2013). The holistic perspective, where transformations of communicative practices, as well as of subject-specific content, are studied in relation to each other and to the learning, is often pushed to the background. Despite the tendency to promote new technology, research on technology affordances also bears witness to difficulties in improving the above-mentioned themes by available technology. The obstacles encountered can partly be found in the process of technology adoption. As shown in Chap. 2 (this volume), implementation of technology is processed in decisional structures and chains, at the end of which teachers are the practical implementors and users in cooperation with their students. In order to understand the teacher perspective, and to anchor the study in a teaching context, the following two parts will address thresholds for integrating virtual worlds in learning.

### 3 The (Non-)Adoption of Virtual-World Technology in Education

The *adoption model of innovators-early adopters-early majority-late majority-laggards* developed by Rogers (2003), with the aim to understand the predicaments among distinct groups for approaching and integrating technology, has been recycled and further elaborated by several researchers (Kopaničová & Klepochová, 2016; Penjor & Zander, 2016; Terry & Cheney, 2016). The criteria for this model are of interest for the present study, since some of them store information about hindering the (non-)use of virtual worlds in educational settings:

- A. Relative advantage: The individual considers the current practice and to what degree the innovation would provide advantage. [...]
- B. Compatibility: Degree of accordance with the existing values, past experiences, and requirements of potential users. [...]

- C. Complexity: Degree of difficulty in understanding or using the innovation. The more effort and considerable time it requires, the more unlikely it is that users may adopt it.
- D. Trialability: The perceived possibility to experiment and test the innovation on a limited basis to allow users to understand the benefits of it. [...]
- E. Observability: Degree of visibility to others of results of an innovation. This allows users to observe results and disseminate them to others. [...]

(Criteria developed in Penjor & Zander, 2016)

Even though advantages (A) of virtual worlds in education are identifiable in theory, such as new possibilities for collaboration and scaling up and scaling down categories of learning content, for example a molecule in chemistry, the identification of the practical benefits of this type of educational technology may be less obvious. Virtual worlds are time-consuming, since advanced skills to manage the functions, just as insights into the social structures, are required. Hence, benefits like quality enhancement and viability are seldom immediate. Moreover, virtual worlds are digital products challenging established norms, values, and teaching traditions, since virtual spaces create their own rules and codes. Therefore, virtual worlds demand a certain amount of knowledge, engagement, and creativity in order to find out how these tools are compatible with a specific teaching module (B). The reluctance to integrate virtual worlds in education can possibly have its roots in the very product of hybrid digital technology connecting several digital media in one. This feature can be perceived as ambiguous, provocative, and threatening, since it is not only challenging our world view and values, but also concurring with real-worldly activities. In addition, virtual worlds contain a range of advanced functions and possibilities for multimodal creation, communication, and interaction. Thus, the complexity can be perceived as an insurmountable threshold for potential educational users (C).

However, the study on technology adoption conducted by Penjor and Zander (2016) makes clear that it is problematic to dress a general model for adoption for teachers in VLEs. The curve between *innovators* and *laggards* is not necessarily the same in different educational settings.



According to these authors, the local organizational and social structures in educational institutions are divergent and offer different conditions for implementation. Nevertheless, the developed critical criteria in the *adoption model* can be valuable tools when considering how to use virtual worlds in education.

Since the professional environment and schedule of teachers seldom offer enough time to reflect on and test a technology’s entire potential for specific learning (Darling-Hammond et al., 2010; McCune, 2018), this study will draw on the last criteria in the *adoption model* (see above Penjor & Zander, 2016), that is, trialability (D) and observability (E). These criteria seem to be the most challenging ones regarding virtual-world technology, because of the time required to test possibilities, as well as to reflect on and observe in-world useful didactic potentials, for example what is produced in terms of literary material in the digital environment, and how the digital literary material is connected to past and present analogue literary material, as well as to conceptualizations of literary competences.

## 4 Second Life and Virtual Worlds as “Promising” Learning Tools

Since the digital shift in the 1990s, online virtual worlds have been addressed in research as “promising tools” for learning because of their unique technological features, such as “ways they record, manage, represent and communicate data and information” (Mikropoulos & Natsis, 2011). Other complementary characteristics associated with virtual worlds are the transformation of “knowledge’s nature” and access to knowledge (Pellas & Kazanidis, 2014), as well as favourable conditions for collaborative learning, innovation, and creativity (Gregory & Wood, 2018). Spatial and three-dimensional features that Girvan (2018) puts afore as fundamental for virtual world technology are noticeably absent in these discussions, despite several attempts to explore affordances with virtual three-dimensional spaces for teaching and learning (see f. ex. Angel Rueda, Valdés Godínes, & Rudman, 2018; Tokel & Isler, 2015).

However, the various examples of pedagogical designs carried out in the virtual world SL are relatively well documented, which forms one of the reasons why Gregory and Wood (2018) consider that this technology for learning has attained a stage of maturity. The authors state that virtual worlds, SL in particular, have at present gone through all phases of Gartner's hype cycle: (1) Technology trigger, (2) Peak of inflated expectations, (3) Slope of enlightenment, and have finally reached the (4) Plateau of productivity. Concerning SL, which is Gregory and Wood's (2018) main object of study, it is difficult to deny that the launch of this world in 2003 was a "technology trigger" that made people and scholars dream about literal emigration waves to digitized spaces, just as the founder of SL, Philip Rosedale, did (see Castronova, 2007; Cline, 2005; Meadows, 2008). The discovery of lucrative aspects of SL, especially the attention paid to the fortune gathered by Anshe Chung, the first virtual millionaire, contributed massively to the "peak of inflated expectations".

The hype that surrounded SL in 2007 has since then evaporated quite dramatically. Nevertheless, among the virtual worlds that have been launched during the last decades, SL is one of the most persistent (Dickey, 2011), which is not necessarily a proof of attainment of the "plateau of productivity", as suggested by Gregory and Wood (2018). In fact, the hype cycle as a theoretical framing is not entirely convincing, since it is supported by (1) recent research, which adopts an uncritical view of the hype cycle, and (2) research from the 1990s, which addresses technology changes in a broad sense without connecting them to specific technological inventions, contrary to the intention with the Gartner hype cycle. In addition, the information scientist Jorge Aranda pulled the hype cycle model to pieces in two simple observations already in 2006 (Aranda, 2006): first, because it implies a guarantee for success over time for every technological invention without considering the risk of failure; second, because technological inventions can very well be successful right away, without passing through stages of hype, inflated expectations, and disappointment. Spotify is one obvious example of technology with immediate success (for further insight into hype cycle research, see f. ex. Debehayir & Steinert, 2016; van Lente, Spitters, & Peine, 2013). Nevertheless, the hype cycle contributes with a model of representation of a technology's

development and anchorage in society over time, which appears as one important aspect to consider in digitalization and implementation processes in education.

As the literature reviews on virtual worlds and learning carried out by Wang and Burton (2013), and Mikropoulos and Natsis (2011) have shown, the engagement with existing virtual worlds in education is challenging, principally because the instructional design and the virtual worlds do not match each other. These challenges have in several studies in the reviews been described as obstacles to surmount, which could possibly be an indication that virtual worlds are not so mature and productive for learning as some scholars suggest. Nevertheless, in these nascent learning practices, few online virtual worlds have been so solicited for educational purposes as SL (Creelman, Petrakou, & Richardson, 2008; Dickey, 2011; Gregory & Wood, 2018; Lindberg, 2013; Wankel & Kingsley, 2009). Still, an observation of the charts of the number of visitors in SL in April 2018 confirms the limited usage and attraction of SL (<http://dwellonit.taterunino.net/sl-statistical-charts/>). The statistics show that the number of visitors never peaks beyond 55,000 avatars present in SL at the same time. These are modest numbers, in comparison to other online virtual worlds with strict gaming purposes, where the presence can easily reach triple that number. Thus, the scholarly interest in SL as a learning space does not seem to correspond to a usage in practice.

Despite the higher number of visitors in commercial game worlds, in comparison to SL, we can assume that gamers discover, explore, and abandon commercial gaming worlds in a more consumerist way than SL users, since game worlds often have an expiry date, when it is time to move on to the newest or to the most recently launched game world. Altogether, if people with access to digital devices and internet comprise an infinitely small part of the global population, of which even less people are present in virtual worlds, this category of technology remains at the stage of a “promising tool”. In this context, it is difficult to maintain that a virtual world like SL as an educational resource is consolidated and manifested among teachers and students, as Gregory and Wood (2018) tend to do. Nevertheless, valuable experiences by teachers and scholars concerning language learning through virtual worlds are accumulating

(Gregory & Wood, 2018; Mikropoulos & Natsis, 2011; Terry & Cheney, 2016; Wang & Burton, 2013).

Few of these studies address fundamental changes that progressively, but inevitably, occur through the presence in and of virtual worlds. How do virtual worlds change our conception of literature and literary competences, as well as creativity and communication between people? For example, the comprehension of fictional worlds in relation to the real world is an important part of contemporary literature didactics and literary theory (Bell & Ryan, 2019). The relationships between virtual, fictional, and real worlds call for scrutinization and problematization, in order to gain insight into how literature potentially could be learnt in and with virtual worlds. These interrogations are approached in the following analysis of the literary theme “Amor and Eros” in SL, where one extracted sequence of interaction and communication will be the object of study.

## 5 The Literary Theme of Amor and Eros in a Real-Fictional-Virtual Continuum

The sequence that has been collected in SL builds on observations and reports over the years, on (1) literature on SL, (2) literature in SL, as well as on (3) literary museums, cafés and book clubs, book releases in SL (see f. ex. William Gibson presenting his book *Spook Country* in SL in 2007), (4) theatres and performances in SL, such as *A Midsummer Night's Dream*, and (5) reproduced literary worlds and events inside SL (see f. ex. *Battlestar Galactica* and *Gulliver's travels*). I, Researcher (in analogy with *I, Robot*, Asimov ([1950] 2001), and *I, Avatar*, Meadows, 2008), have positioned myself as the slow *Innovator* and *Early adopter* in this context, eager to investigate and discover potential materials for literature didactics designated for educational settings, but at an idle speed that has allowed for a seizing of moments and thereby for discovering “triable” elements (see the criteria in the *adoption model*, section three). Through the analysis of one found “triable” element, this chapter will share potentials for literature learning in the digital age, that the reader can “observe” and evaluate (see the criteria in the *adoption model*, section

three), be inspired by, and, eventually, try and observe in a real-virtual-life situation.

The chosen sequence in SL is connected to a common literary theme, that is, Amor and Eros, as a means of delimiting the study and connect the data to a specific subject content often used in literature didactics in school (Lindberg, 2016). As Belsey (1994) shows in her work, literary history is dominated by the theme of love in its different shapes, from Sappho to Stephanie Meyer’s vampire series, via mythical lovers such as Orfeus and Eurydice, Paris and Helena, Tristan and Isolde, Lancelot and Guinevere, Abélard and Héloïse, Jane Eyre and Rochester, Anna Karenina and Vronskij, just to mention a few. Refsum (2016) contributes with further elucidation of the love theme in contemporary literature, specifically in Scandinavia, from the twenty-first century. The rich representation of love in literature indicates that the conception of love is both constructed and learnt from storytelling, just as literature offers different codes for languages of love and opportunities to observe how the theme of love unfolds in different fictional settings and relationships. This study focuses on heterosexual love since this is a dominant norm in society, though communication and interaction in virtual spaces are liable to criticism of this norm.

Just as the love theme has been explored in literary studies, real-life amorous behaviours have been focussed in research, which reflects a cross-disciplinary scholarly interest in conceptions of love and how it is constructed. Sociologist Niklas Luhmann (1998) develops how intimate and amorous feelings have been codified in many ways in society throughout history, an evolution which is presented as principally due to societal shifts. The digitalized era has brought about the latest shift concerning intimate relationships and flirtation (Turkle, 2015, 2017 [2011]). In this regard, Ben-Ze’ev (2004) picks up the thread where Luhmann stops his report on society’s love codes, just before the digital shift, and presents changed behaviours regarding intimate relations in the nascent net-based everyday-life communication. He writes that: “Falling in love and out of love, flirting, cheating, even having sex on-line have all become part of modern way of living and loving” (Ben-Ze’ev, 2004: foreword). Apparently, digital media and communication generate new ways of experiencing and perceiving love, since the mediation of languages of

love are transformed (see also Freeman, Bardzell, Bardzell, & Herring, 2015; Johansson & Lindberg, *forthcoming*). These different theoretical outlooks on love suggest that mediation is a central feature for the concept and understanding of love. History also teaches us that mediated love is nothing new and can be traced back to traditional practices of love letters (Ahearn, 2001).

Regarding the changes in mediated love, some informants in Boellstorff's (2008) ethnographic study on avatars in SL perceive the virtual love as more real, since one gets to know the real person before reacting on the physical appearance. On the contrary, the informants in Turkle's study (2015) express pessimism concerning love online and put afore that a deep and sustainable relation is more difficult to achieve in a media-dense context. Konstam (2015) confirms that technology enables young adults to "be less committed and planful in relationships" (55). She points to "blurred lines between dating, friendship, sexual, and romantic behaviors" (55). These studies show that humans are learning how to be social with digital tools, and in digital contexts, as well as to marry digital dimensions to analogue ones. Identity, language, and culture are exposed aspects in this process, as well as these are the capital that the individual must invest and risk, in order to fully embrace the analogue–digital continua. Literature is an eloquent product of these aspects in transformation, and, consequently, literature itself is extending and changing its frontiers. The virtual world of SL hosts the literary theme of "Amor and Eros", and positions relational events in the continuum between online love relationships and fiction. The constructed fictional world and the ongoing interaction between avatars, behind which humans are hiding, represent the main features for creating, simultaneously, links to the real world and links to the literary world.

As a result of digital communicative practices impacting the thematic literature and storytelling associated with Amor and Eros, several written stories inspired by love in SL have materialized in real books, such as Alain Monniers' novel *Notre seconde vie* (2007), in which avatars are flirting and falling in love with each other, or the avatar author Dalian Hansen's novel *ANIMA. A novel about Second Life* (2007), where amorous attraction is represented as existing in and out of the virtual world. In addition, through authentic dialogues, the documentary love story about

the avatars Per and Qin (Olsen & Qin, 2011) retells how an intimate relationship is formed in SL between the two protagonists. Drawn from real experiences and events in the virtual world SL, these stories have been fictionalized through technics of retelling in specific genres, and formatted in the artefact of a book, which points to the remaining symbolic status of “bookish” literature (Brillenburger Würth, Driscoll, & Pressman, 2018; Pressman, 2009). In the following, an excerpt from ongoing communication and interaction in SL will be retold through the documentation of text and images, in order to capture the literary dimensions activated in moments when avatars are involved with the world, seemingly without an explicit learning purpose.

## Entering the Theme Amor and Eros in Second Life

Everything that “goes on” in SL can be observed as ephemeral stories that start and stop in a constant flow embedded in the virtual space, where fiction and reality sometimes blur into one. This modality-rich virtual world can be perceived through image, sound, and text, but also through the different themes, or genres, that the space is divided into on the destination guide website (<https://secondlife.com/destinations>). The exploration of literary competence and the literary theme Amor and Eros in SL is inspired by current ethnographic methodology for digital environments (see Jong, 2016, for a brief overview of the area), more specifically the steps between planning, entry, and data collection, as formulated by Kozinets (2010), as well as the role of the researcher as an individual experiencing and embodying, in a unique way, the surrounding virtual world (Hine, 2015).

For this study, the theme “romance” has been selected out of 15 categories from which it was possible to choose destinations in year 2015, when the study was carried out (on 8 June 2018, there were 47 categories to choose destinations from). During the moment when the study was in progress, the “romance” category was hiding two sub-themes: “wedding” and “romantic spots”. The latter sub-theme collected 35 locations (to be compared with the current 93), of which the most popular places were taken into consideration for further observation. In order to ensure an

observation ground with regular communication and interaction between avatars, the selection of the most visited and appreciated places under the category “romance” was carried out in two steps. In the first step, the nine places that had been liked by more than 50 users on the destination guide website were visited a Monday afternoon and a Friday afternoon in the same week, in order to explore which ones were the most visited (Table 5.1). The location Intimate Romance Garden scored highest in the test, with 15 avatars present at both times of the week, and with the most obvious presence Friday late afternoon, with 20 avatars at the location. It is interesting to observe that three years after the study, this location is no longer available in SL, along with three other locations collected in 2015. However, five of the most popular romantic places at the time of the study are still listed on the destination guide website (Table 1, titles in boldface). These changes point to the rapid transformations of the virtual space in comparison to the analogue-real, which appears more stable since elements do not usually vanish instantly, and transformations are often carrying traces from the past.

The exploration of Intimate Romance Garden required that “I, Researcher”, was visible and interacted with other avatars (Boellstorff, 2008; Hine, 2015). In order to verify a constant presence at the chosen location, and to get acquainted with the activities there, I visited Intimate Romance Garden every day during a week for longer sessions of one to two hours. This procedure permitted me to confirm that the location was visited on a regular basis, and to get in contact with three informants and speak to them about their motives to be in SL, and particularly to visit

**Table 5.1** The nine romantic locations liked by more than 50 users on SL’s destination guide website

- 
- Intimate Romance Garden 60 likes
  - **Foxxies Piano and Jazz Ballroom** 60 likes
  - **Isle of View** 55 likes
  - **Dubai Jazz My Way** 485 likes
  - Two moon Paradise 664 likes
  - Ajax and Katie’s Romance Garden 71 likes
  - **Leroy** 189 likes
  - Dream Scene 55 likes
  - **Garden of Greenburg** 52 likes
-



Intimate Romance Garden. When observing my own behaviour and reactions in the virtual world, I realized that I was drawn to some avatars and avoided others. Like in real life, it is difficult to explain why the feeling of appeal or repel arises between individuals, but the method to follow my intuition when contacting avatars resulted in three encounters and conversations about love in SL. The informants were aware of my role as a researcher and accepted that I used their stories and snapshots of their appearances in SL for the current study.

**Informant 1**, with the assumed name Dave in this study, was five years and four months in SL when I met him. Dave had had several love affairs in SL, and once he had been in love for real. The story had been hurtful for Dave, since his avatar partner left him for someone else. His work with surveillance at a company made him spend a considerable amount of time at a computer desk, where he could easily access SL.

**Informant 2**, with the assumed name Belinda in this study, was one year and nine months in SL when I first met her. She had not had any amorous relationships in SL. She went to Intimate Romance Garden for friendship, exchanging of ideas, and for learning about human nature. Belinda was married in real life (RL), and in her profile documentation one could read several quotations about love from eclectic origins, for example, Bertrand Russell, Bob Marley, and Irish proverbs. She observed that men talked more easily about their inner self in the virtual context than in real life.

**Informant 3**, Addi, chose to reveal his real virtual name and his virtual profile picture. He spoke very frankly about his innermost dream, that was to live a real love story in SL. Addi was searching for his perfect match in this digital context and dreamt about travelling around everywhere in the virtual world with his beloved one. He was in search of someone to trust and someone that could be faithful to him.

These contributions point to some reasons among avatars to engage with the theme Amor and Eros in the virtual space SL. With different approaches, the informants are looking for an experience of the abstract concept of love that the immediate reality cannot easily provide. The virtual space can offer other types of encounters, since it contributes with broader interfaces towards other individuals. In addition, the screen with its functions and tools offers alternative ways of language and commu-

nication, which can cater for new forms of intimacy. The informants had identified the benefits of the virtual space for their goals, and therefore immigrated part-time to this environment. The interviewed avatars' stories also bear witness to the experience of reality in virtual space through their emotional engagement with the world. This is valuable information in the run-up to the following passage where a collected sequence will be analysed through the literary features activated.

### **“The Beauty and the Beast”: A Story Event in Second Life**

The data that reconstitute a communicative and interactive event in SL have been gathered through the in-world “snapshot” function in the place Intimate Romance Garden. The avatars' names are changed in the representation of the event, and no research has been carried out to find out who they are, neither in virtual nor in real life. The place Intimate Romance Garden was codified for romance, considering the hearts floating around in the air, the scenic landscapes (see Belsey (1994) for the signification of nature for romance), and the written messages, such as “Love is blind, but can see through the heart”, “love is giving someone the possibility to hurt, but trusting them not to”. The environment was constructed around a main place for social gatherings, where it was possible to mingle with other avatars. In the surroundings, several spots were constructed for more intimate face-to-face encounters (Fig. 5.1). The “milieu” is a part of the stories generated in the virtual world, and the importance conveyed to it depends on the narrative structure of the specific story.

In the sequence extracted from one visit to Intimate Romance Garden, “I, Researcher” is present at the central spot, observing avatars' activities. Suddenly, a wolf-like avatar appears in front of me. Let us call it “the Beast” (Fig. 5.2). The Beast speaks its own language and enounces the following in the public chat window: “[07:14]<sup>2</sup> V^vV^V HoWILLzZz V^vV^V”. I have the feeling that the Beast is addressing me, but I do not

---

<sup>2</sup>The square brackets show the exact time for the avatars' pronounced lines in the public text chat.



**Fig. 5.1** An intimate spot in a romantic place in Second Life

know how to react (Fig. 5.2). While watching and waiting, a blond female avatar with a black mask covering her eyes (Miss M) enters the scene (Fig. 5.3). She says in the public chat: “[07:17] u again!”. The event is followed by the appearance of a dark male avatar (Mr V), equally wearing a mask. Mr V positions himself close to the Beast and warns: “[07:17] be careful monster she is dangerous :)” (Fig. 5.3). The situation is generating a dialogue between several avatars. The Beast is the object of communication but does not utter anything:

Excerpt from the dialogue “The Beauty and the Beast”

[07:19] Miss M: nned to take my whip too

[07:19] Mr V: you are strong monster

[07:20] Mr V: but she is stronger

[07:21] Mr V: your teeth are scary :))



Fig. 5.2 “A wolf-like avatar appears in front of me”

- [07:21] Miss M: all are watching...no one helping me  
 [07:23] Lady X: give him kiss and he become a prince :)  
 [07:23] Miss M: i have my prince already  
 [07:25] Mr V: get your hands off her :)  
 [07:25] Miss M: he is in love...with me...the monster  
 [07:26] Mr V: with her  
 [07:26] Mr V: be csreful minster  
 [07:26] Mr V: monster  
 [07:27] Miss M: ok lets go....  
 [07:27] Mr V: let's go...

## Analysis of Three Literary Features

The lived, documented, and told story of “The Beauty and the Beast” offers new perspectives on common literary features, such as the central



Fig. 5.3 “While waiting and watching, Miss M and Mr V enter the scene”

theme, the genre, the characters, and the author. In the following, these aspects are discussed from a point of view of how literary competences call for re-conceptualizations when in contact with events in digitally mediated virtual worlds.

### Literary Intertexts

The communicating and interacting avatars in the scene mix several myths of love (Fig. 5.1). The couple Miss M–Mr V calls the wolf-like avatar the “monster”. The moment when Miss M realizes that “he is in love...with me...the monster” is a decisive turn, which transforms the event and unfolds associations to the story *The Beauty and the Beast*. Suddenly, the wolf-like avatar is not only a monster, it is also the cursed protagonist in the famous story, who will remain a Beast if he does not

find a woman who loves him truly. At [7:23] another avatar, Lady X, steps in and joins the conversation. She suggests that Miss M should give the Beast a kiss so that he can be transformed into a prince. The fairy tale about the princess and the frog is in this moment intervening with the event. This literary dimension is however expediently aborted by Miss M, who declares that she already has her prince. From the context, it is possible to draw the conclusion the Miss M and Miss V are a couple. Both avatars wear the same kind of mask, and they are acting in accord. In addition, at one point during the event, Miss M needs her whip, which she is not only declaring in the chat window, but also shows concretely on the screen. These details connote to the BDSM culture, which has been interpreted and popularized through the literary trilogy *Fifty shades* (2011–2015) by E. L. James, as well as through its recent film adaptation. In turn, these novels recall De Sade and eighteenth-century erotic and sadomasochistic literature. In this way, the event is playfully improvised towards a hybrid romantic intrigue. The interacting avatars are more, or less, consciously making use of their cultural and literary baggage related to the theme of Amor and Eros, in order to shape their own story.

## Genre Conventions

The ongoing event is watched by several avatars standing around the scene, which contributes to the impression that the improvised communication and interaction is transformed into a piece of performance, a drama, and a play. This aspect is reinforced by the modality-rich event, where bodily movements, gestures, and positionings function as complementary meaning-making layers to the presented texted dialogue. The dialogue generated in the public text chat becomes the written improvised play, and the situated utterances receive their full sense through the visual course of events in the digital space. In addition, the chain of events could very well be a Machinima-film<sup>3</sup> if an avatar present at the perfor-

---

<sup>3</sup>Machinima is a notion merging the two words: *machine* and *cinema*. It is the term used for animated films realized in different three-dimensional virtual worlds. For further reading on the subject, see Lowood (2008).



mance records the ongoing activities. It is not possible, though, to verify in real time if a recording of the event is carried out.

The event of “The Beauty and the Beast” can be interpreted as a story, in the sense that the participants are creating an improvisation and a play through their communication and interaction. Therefore, the sequence is an in-world fiction, in contrast with other courses of events that are lived and experienced in more literal ways. Mr V’s systematically repeated smileys after his utterances further reinforce the fictional aspect, since they seem to indicate that the communication and interaction between the involved avatars should be experienced on a second degree. In addition, the participants watch the course of events and the dialogue from their screen, which offers a similar experience to cinema. In parallel, some of the participants are living the event as a real-life experience, the intensity of which the avatars can regulate through the in-world functions. For example, the screen view can be adapted either to an experience from a point situated at the avatar’s eye level, or to an overview, where the avatar sees him/herself moving around in the virtual space. The former caters for an enhanced reality experience and the latter offers a more distanced experience, which underscores the fictional and virtual aspects. These contradictory features motivate a categorization of the sequence as a “story event”, that is a story invented, lived, and told in real time, where the participating avatars are the authors as well as the characters. In this ambiguous context between story and event, genre and medium get interwoven. The medium is not only mediating; on the contrary, it entirely becomes a part of languaging practices forming the transferred information (Meyrowitz, 1985). In this case, the virtual world as a medium allows for a bridging to more traditional media, such as theatre and film, as well as for a formatting in a specific genre, in this case, a drama or a play. “I, Researcher” has received the story event from different mediating sources; through the virtual world itself, that is, the milieu, the public chat forum, that is, the dialogue, and the avatars with their moves and postures, that is, the characters. Instant messaging and the voice function are complementary mediation instances that did not come into play from my screen view, although storing the inherent potential to contribute to the chaining and juxtaposition of ongoing discourses in the construction of the story event.

## Character Construction

In a modality-rich, media-dense, and performative virtual world, where the participants create events that can be perceived as stories, it becomes less obvious what defines a story, and which fundamental pieces that are necessary for a course of events to be considered a story. Ryan (2001, 2006, [2012] 2014) has studied narratology in digital media extensively, and states that:

[A story] is defined as a mental image formed by four types of constituents: (1) a spatial constituent consisting of a world (the setting) populated by individuated existents (characters and objects); (2) a temporal constituent, by which this world undergoes significant changes caused by non-habitual events; (3) a mental constituent, specifying that events must involve intelligent agents who have a mental life and react emotionally to the states of the world (or the mental states of other agents); (4) a formal and pragmatic constituent, advocating closure and a meaningful message. (Ryan [2012] 2014, p. 17)

The first constituent (1) is the spatial environment, which requires words, in order to get materialized in a literary text. In this case, it is built up as a visual place, Intimate Romance Garden, in the virtual world SL, and signals the theme of the activities at this specific spot. The second constituent (2) comprises the very event in time. Even though the interruption in Intimate Romance Garden of “the Beast” did not change the virtual world considerably, it represents an unusual event that affected other avatars present in the place at that time. Both constituents, obviously, can be expressed through other modes than words, which partly contradicts Ryan’s ([2012] 2014) claim that these are closely connected to linguistic expressions.

However, the third constituent (3) seems, on the contrary, in need of linguistic support to be comprehensively expressed. This constituent translates that characters/avatars involved in the story event need to react intellectually and/or emotionally in relation to what is happening, and/or to other characters. This can partly be achieved through gestures and facial expressions, but the exactitude is reached through the verbal lan-



guage. In the sequence from the story event “The Beauty and the Beast”, Miss M reacts aggressively on the appearance of the Beast (“u again!”) and announces that she needs her whip. Mr V reacts by taking the role of the defender of Miss M (“get your hands off her”). Lady X, in her turn, reacts to the romanticism in the situation when she encourages Miss M to give the Beast a kiss (“kiss him...”).

The fourth constituent (4) comprises a closure, during which the participants (and the audience) understand that the story event is coming to its end. In the story event “The Beauty and the Beast”, the end arrives abruptly at the moment when Miss M gives the following exhortation: “ok lets go...”. It is not clear, though, if this invitation to leave only addresses her partner Mr V or all avatars present. In either case, this verbal utterance is decisive for the creation of an end, but, in line with Ryan’s ([2012] 2014) analysis, the end can as well have been realized through alternative means and modes, in this case, the visual withdrawal of Mr V and Miss M.

According to Ryan’s model, the fourth constituent (4) also should offer the possibility for an interpretation of a message. The reported sequence from the story event “The Beauty and the Beast” allows for an observation of the message of “fidelity in love”, since Miss M chooses not to kiss the Beast, and declares that she already has a prince, that is, assumingly, Mr V. It is also possible to interpret the message as “threatened love”, since the Beast apparently becomes a threat to the couple Miss M–Mr V. The “impossible love” and “the transformational power of love” are other thematic possibilities that the story event “The Beauty and the Beast” activates. The moment Miss M announces “he is in love...with me...the monster”, the story event balances between two possibilities: either Miss M chooses the monster or she remains with her partner Mr V. This *peripeteia* is annihilated and no transformation is taking place. Miss M decides to continue as before, with her partner Mr V. This is probably one reason for the abrupt end. The alternative would have been a love imbroglio requiring a more consistent temporal engagement with the story event, and, probably, a more immersive and sustainable experience.

The story event and the characters, their roles and functions are constructed through collaboration between avatars. Interesting enough, all

avatars do not make the same impact and do not enjoy the same power on the story. There is a plot leader, represented by Miss M, who takes the role of the protagonist as well as that of the author, as she is the one who decides over the *peripeteia* and how the story should end. Miss M declines Lady X's suggestion to kiss the Beast, which would have turned the story into an interesting triangle drama, and it is Miss M who decides when the story has come to an end through the exhortation: "ok lets go". If the Beast takes the role of the trigger of the story event, it remains passive and silent throughout the plot. This avatar is the motive for the story event and has a considerable power to change the course of events but chooses not to.

The aspect of event, rather than a story, is underscored by the backgrounding of narrative perspectives and narrative voices (see Lindberg, 2018), which are at the core of text-based literature. These aspects are only activated through the retelling of the story event by the "I, Researcher". Still, the story event does not have an outside author, but is driven by the avatar-characters themselves, with their identities and communicative actions. Within the narratology field there is a rich nomenclature to identify intrigue and narrative perspectives. Even perception and mental activity within characters are included in the terminology. Nevertheless, tools are lacking for describing how the narrative subject is constructed through interaction and communication. This dimension can very well be elucidated through the study of ongoing story events in virtual worlds.

The analysis of the sequence "The Beauty and the Beast" displays several literary features that argue for a story, and more specifically a type of love story that could be categorized as flirtation and *marivaudage* (Legrain, 2012). The basic constituents of a story are in place and characters have their own roles to play, as trigger, defender, and plot leader. Nevertheless, the story has no author and no personal narrative voice or perspective. The plot is constructed as an improvisation in real time through an instant collaboration between avatars who are living the story as an event in their virtual lives. In this story event, both classic and popular literary content come into play and shape underlying messages in the ongoing communication and interaction. Real, virtual, and fictional dimensions are merging, which is uncovered and illustrated by the "I, Researcher's"

documentation or retelling of the story event. Through this procedure, literary material created in and with virtual worlds is unfolded, showing the function and role of fundamental features in literary *récits*.

## 6 Literary Learning as Embedded and Embodied Knowledge

This study is an attempt to take stock of hindrances and affordances for virtual worlds to become a learning tool for literature didactics, and, as well, to focus on “trialability” and “observability” (see the *adaptation model* in section three) in the virtual world, SL. An explorative approach to the tool itself and to its content has allowed for identifying “triable” elements for literature didactics, such as the usage of ongoing story events in virtual worlds. One story event has been analysed and herein offered for “observability” by interested educators. In this case, an excerpt from ongoing communication and interaction in a place associated with the theme of romance and love in SL has been the object of a literary analysis. The sequence called “The Beauty and the Beast” in the study offers insights into how communication and interaction between avatars recycle elements drawn from classic and popular literary fiction, as well as of transformed conceptions of literary features, such as genre, plot, and characters.

The results unfold how several fundamental elements in stories are constructed in a virtual world and how these relate to traditional text-based or cinematographic storytelling. For example, in literature as well as in virtual worlds, real and familiar places, as well as famous places, such as Paris or London, are often used to create the setting of a story (Ryan, 2001). In SL, the place and space are more explicitly thematic, addressing the activities going on there, such as “romance”. The characters are not invented by an author, as in traditional literature. On the contrary, their function and identity are continuously constructed through utterances, reactions to, and interactions with other characters involved in the story event. Nevertheless, in this example of co-production of characters, one character takes the lead, the plot-leader, as an equivalent to the author.

Finally, the study of “The Beauty and the Beast” reveals how genres come into play through several media instances and shape the story event. In this case, theatre as a traditional medium, and the play and the performance as genres and art forms are activated and altered through the usage of technology.

The story event shows the importance of engagement with the virtual space, which the avatars make use of for deploying literature in action. However, in the virtual world, the dichotomy fictional—real is challenged, since the avatars are living through the event. The plot of “The Beauty and the Beast” is real for those involved, even though one avatar signals through emojis that the dramatic emotions involved must not be taken at face value—it is invented in the moment, an improvised story, or a “prank”, as some participants might say. The facilities offered in-world to document such an event in parallel with its occurrence permit a retelling of the story, leaving room for the identification of fiction, literary elements, and the discovery of how literary features function. The collaborative and communicative context in virtual spaces underscores that something real goes on between participants, which can be seen as a hinder for observing literary elements embedded in the world and in the interaction. Nevertheless, the joint activities of doing and documenting story events form a way to embody literary understanding, knowledge, and skills, which potentially can be transferred to the learning of other genres and modes, such as screenplay writing, filmmaking, and literary analysis. A virtual story event also forms a means to critically discuss literary terminology in order to go beyond instrumental applications of terms on text-based fiction.

In addition, the use of virtual worlds in literature studies has the potential to address and problematize the continuum real-virtual-fictional. The interviews with avatars in Intimate Romance Garden offer insights into how real love stories and intimate relations are made and unmade in the virtual space, just as there are events experienced on a second degree, more closely linked to fiction. In this way, virtual worlds are recipients of reality, as well as of fiction, and seem to constitute a complementary dimension to ways of perceiving, using, and doing literature. Avatars involved in virtual worlds are carrying cultural and linguistic experiences from one world to another; between the virtual, the real, and the fictional, contributing to the blurring of borders between these dimensions.

It is undeniable, though, that from an educational point of view, the sequence “The Beauty and the Beast” unfolds in an unframed setting, detached from instructional design, learning outcomes, and assessment. The avatars are doing a story through which they seem to be learning literature in an unaware way. Unaware learning is, in this case, to be in contact with a subject content without knowing it, and without anticipating what could be assessed and/or drawn from that experience. The purposelessness of the activity and the aspect of playfulness allow for the creative production of the story event.

Furthermore, the social context demands participation and immersion to a degree that the avatar is free to control. The course of events depends solely on the engagement and creative interaction among avatars. Therefore, this is an uncomfortable zone where anything can happen, which can be interpreted as a denial of tested and proved methods for teaching and learning that educational contexts most often proclaim. Still, the learning in these processes has a potential to become aware, if the event is documented and recalled through story(re)telling and analysis. However, guidance and conscious associations to a specific field and subject are needed to establish what categories of knowledge and skills that have been experienced and/or acquired during the event. In this regard, the results from “The Beauty and the Beast” suggest renewed approaches to literary knowledge and ways of acquiring literary and linguistic skills.

In the era of pre-digitalization, literacy, that is, reading and writing, was a basic practical skill for knowledge acquisition. Today, as I argue in Lindberg (2013), literacy is an instable notion, not to be seized in absolute terms, rather in the intersection between *savoir* and a *savoir-faire* in constant motion. The notion of literacy depends on the technology at hand and the knowledge base the user chooses to link to the used technology. With this perspective, the concept of literacy requires to be constantly explored in situated practices and in connection to a specific field and specific technology practices. Ever-changing and accumulating technology and media landscapes call for new skills to be managed in the production of knowledge. As a consequence, the notion of knowledge is progressively distancing itself from solely theoretical insights, embracing the doing *in situ*. The increased use of digital devices in humans’ every-day life and

communications tends towards a merging of the *savoir* and the *savoir-faire*. Knowledge in a specific field is just as much the management of tools that give access to and produce the knowledge intended for learning. Literature studies experience a turn concerning these matters, since digital tools, as well as communication and interaction in virtual spaces, seemingly alter what literature can be, and how it can be produced and learnt.

The current hinders for adopting virtual worlds as a learning tool for literature studies can, thus, be summarized as follows:

- The embodied interaction becomes a hinder for seeing literature.
- The unframed settings and the unaware learning challenge traditionally defined educational designs.
- The notion of reality and the dichotomy real—fiction are challenged through the layers of virtual reality and story events created and lived in these spaces.
- The space is unlimited and goes far beyond the classroom walls, challenging ideas of control of movement and interaction in educational settings.

Considering these hinders, the “plateau of productivity” for virtual worlds, such as SL, in literature learning does not yet seem attainable. The presence of young people in virtual worlds is nevertheless increasing, and the technology continuously refined. An integration of virtual worlds in literature didactics implies a revised notion of literary knowledge and skills, which would offer a more prominent place to the doing of literature, but also to critical thinking, and to skills and knowledges transferable to other areas.

## References

- Ahearn, L. M. (2001). *Invitations to Love: Literacy, Love Letters, and Social Change in Nepal*. Ann Arbor: University of Michigan Press.
- Angel Rueda, C. J., Valdés Godínes, J. C., & Rudman, P. D. (2018). Categorizing the Educational Affordances of 3-Dimensional Immersive Digital

- Environments. *Journal of Information Technology Education: Innovations in Practice*, 17(2018).
- Aranda, J. (2006, October 22). Retrieved May 10, 2019, from <https://catenary.wordpress.com/2006/10/22/cheap-shots-at-the-gartner-hype-curve/>
- Asimov, I. ([1950] 2001). *I, Robot*. London: Voyager.
- Bagga-Gupta, S. (2014). Linguaging: Ways-of-Being-with-Words Across Disciplinary Boundaries and Empirical Sites. In H. Paulasto, H. Riionheimo, L. Meriläinen, & M. Kok (Eds.), *Language Contacts at the Crossroads of Disciplines* (pp. 89–130). Newcastle-upon-Tyne, UK: Cambridge Scholars Publishing.
- Bell, A., & Ryan, M.-L. (2019). *Possible Worlds Theory and Contemporary Narratology*. University of Nebraska Press.
- Belsey, C. (1994). *Desire: Love Stories in Western Culture*. Oxford: Blackwell.
- Ben-Ze’ev, A. (2004). *Love Online: Emotions on the Internet*. New York: Cambridge University Press.
- Boellstorff, T. (2008). *Coming of Age in Second Life: An Anthropologist Explores the Virtually Human*. Princeton: Princeton University Press.
- Brillenburg Wurth, K., Driscoll, K. & Pressman, J. (red.) (2018). *Book Presence in a Digital Age*. New York, NY: Bloomsbury Academic.
- Castronova, E. (2007). *Exodus to the Virtual World: How Online Fun Is Changing Reality*. New York: Palgrave Macmillan.
- Cline, M. S. (2005). *Power, Madness and Immortality: The Future of Virtual Reality*. University Village Press.
- Creelman, A., Petrakou, A., & Richardson, D. (2008). *Teaching and Learning in Second Life – Experience from the Kamimo Project*. London, UK: Incisive Media.
- Culler, J. (1980). Literary Competence. In J. P. Tompkins (Ed.), *Reader-Response Criticism: From Formalism to Post-Structuralism* (pp. 101–117). Baltimore: Johns Hopkins University Press.
- Darling-Hammond, L., Wei, R. C., Andree, A., & Stanford Center for Opportunity Policy in Education (SCOPE). (2010). *How High-Achieving Countries Develop Great Teachers. Research Brief*. Stanford Center for Opportunity Policy in Education.
- Debehayir, O., & Steinert, M. (2016). The Hype Cycle Model: A Review and Future Directions. *Technological Forecasting and Social Change*, 108(July), 28–41.
- Dickey, M. D. (2011). The Pragmatics of Virtual Worlds for K-12 Educators: Investigating the Affordances and Constraints of “Active Worlds” and “Second Life” with K-12 In-Service Teachers. *Educational Technology Research and Development*, 59(1), 1–20.

- Freeman, G., Bardzell, J., Bardzell, S., & Herring, S. G. (2015). Simulating Marriage: Gender Roles and Emerging Intimacy in an Online Game/Proc. In *CSCW'2015*. New York: ACM.
- Girvan, C. (2018). What Is a Virtual World? Definition and Classification. *Educational Technology Research and Development*, 66(5), 1087–1100.
- Gregory, S., & Wood, D. (Eds.). (2018). *Authentic Virtual World Education: Facilitating Cultural Engagement and Creativity*. Singapore City: Springer.
- Hine, C. (2015). *Ethnography for the Internet: Embedded, Embodied and Everyday*. London: Bloomsbury Academic.
- Johansson, S., & Lindberg, Y. (forthcoming). Cyberculture. In A. Lock, C. Sinha, & N. Gontier (Eds.), *Oxford Handbook on Human Symbolic Evolution*. Oxford: Oxford University Press.
- Jong, S. T. (2016). Netnographic Research on Online Communities and Culture. In M. Chou (Ed.), *Proceedings of The Australian Sociological Association Conference* (pp. 151–160). The Australian Catholic University, Fitzroy, Melbourne, 28 November–1 December 2016.
- Konstam, V. (2015). *Emerging and Young Adulthood: Multiple Perspectives, Diverse Narratives* (2nd ed.). Cham: Springer.
- Kopaničová, J., & Klepochová, D. (2016). Consumers in New Millennium: Attitudes Towards Adoption of New Technologies in Purchasing Process. *Studia Commercialia Bratislavensia*, 9(33).
- Kozinets, R. (2010). *Netnography. Doing Ethnographic Research Online*. London EC1Y: SAGE Publications Ltd.
- Legrain, S. (2012). Marivaudage et redondances: Un style dramatique entre langage-action et métalangage. *Poétique*, 170(2), 177–193. <https://doi.org/10.3917/poeti.170.0177>
- Lim, C.-P., Zhao, Y., Tondeur, J., Chai, C.-S., & Tsai, C.-C. (2013). Bridging the Gap: Technology Trends and Use of Technology in Schools. *Educational Technology & Society*, 16(2), 59–68.
- Lindberg, Y. (2013). *De la Belle époque à Second Life*. EPU (Cyper).
- Lindberg, Y. (2016). Framtida berättelser på gymnasiet. Kärleksintrigen som interaktiv berättelse i Second Life. In H. Höglund & R. Heilä-Ylikallio (Eds.), *Framtida berättelser. Perspektiv på nordisk modersmålsdidaktisk forskning och praktik* (pp. 85–101). Åbo Akademi, Pedagogik och välfärdsstudier, Rapport 39/2016.
- Lindberg, Y. (2018). L'im)mobilité de l'œuvre de Melchior Mbonimpa et l'esquive de la *world literature*. *Nordic Journal of Francophone Studies/Revue nordique des études francophones*, 1(1), 62–76. <https://doi.org/10.16993/rnef.6>



- Lowood, H. (2008). High-Performance Play: The Making of Machinima. *Journal of Media Practice*, 7(1), 25–42. <https://doi.org/10.1386/jmpr.7.1.25/1>.
- Luhmann, N. (1998). *Love as Passion: The Codification of Intimacy*. Stanford, CA: Stanford University Press.
- McCune, V. (2018). Experienced Academics' Pedagogical Development in Higher Education: Time, Technologies, and Conversations. *Oxford Review of Education*, 44(3), 307–321.
- Meadows, M. S. (2008). *I, Avatar: The Culture and Consequences of Having a Second Life*. Indianapolis, IN: New Rider.
- Meyrowitz, J. (1985). *No Sense of Place: The Impact of Electronic Media on Social Behavior*. New York: Oxford University Press.
- Mikropoulos, T. A., & Natsis, A. (2011). Educational Virtual Environments: A Ten-Year Review of Empirical Research (1999–2009). *Computers & Education*, 56(3), 769–780.
- Olsen, P. R. T., & Qin, L. G. (2011). *Second Life Love. Dialogues of a Singaporean Woman and a Swedish Man*. Olsen & Qin.
- Pellas, N., & Kazanidis, I. (2014). Online and Hybrid University-Level Courses with the Utilization of Second Life: Investigating the Factors that Predict Student Choice in Second Life Supported Online and Hybrid University-Level Courses. *Computers in Human Behavior*, 40(Nov), 31–43.
- Penjor, S., & Zander, P.-O. (2016). Predicting Virtual Learning Environment Adoption: A Case Study. *Turkish Online Journal of Educational Technology – TOJET*, 15(1), 69–81.
- Pressman, J. (2009). The Aesthetic of Bookishness in Twenty-First-Century Literature. *Bookishness: The New Fate of Reading in the Digital Age*, XLVIII(4), Fall.
- Refsum, C. (2016). *Kjærlighet som religion: lidenskap og lengsel i film og litteratur på 2000-tallet*. Oslo: Universitetsforlaget.
- Rettberg, S. (2019). *Electronic Literature*. Cambridge, UK: Polity Press.
- Rogers, E. M. (2003). *Diffusion of Innovations* (5th ed.). New York: Free Press.
- Ryan, M.-L. (2001). *Narrative as Virtual Reality: Immersion and Interactivity in Literature and Electronic Media*. Baltimore: Johns Hopkins University Press.
- Ryan, M.-L. (2006). *Avatars of Story*. Minneapolis, MI: University of Minnesota Press.
- Ryan, M.-L. (2012, Revised Version 2014). Narration in Various Media. *The Living Handbook of Narratology*. Retrieved June 14, 2019, from <https://www.lhn.uni-hamburg.de/node/53.html>
- Terry, K., & Cheney, A. (Eds.). (2016). *Utilizing Virtual and Personal Learning Environments for Optimal Learning*. Hershey, PA: IGI Global.

- Todorov, T. (1971). *Poétique de la prose*. Paris: Seuil.
- Tokel, S. T., & Isler, V. (2015). Acceptance of Virtual Worlds as Learning Space. *Innovations in Education and Teaching International*, 52(3), 254–264.
- Turkle, S. (2015). *Reclaiming Conversation: The Power of Talk in a Digital Age*. New York: Penguin Press.
- Turkle, S. (2017). *Alone Together – Why We Expect More from Technology and Less from Each Other*. Ingram Publisher Services Us.
- van Lente, H., Spitters, C., & Peine, A. (2013). Comparing Technological Hype Cycles: Towards a Theory. *Technological Forecasting and Social Change*, 80(8), 1615–1628.
- Wang, F., & Burton, J. K. (2013). “Second Life” in Education: A Review of Publications from Its Launch to 2011. *British Journal of Educational Technology*, 44(3), 357–371.
- Wankel, C., & Kingsley, J. (Eds.). (2009). *Higher Education in Virtual Worlds. Teaching and Learning in Second Life*. Bradford: Emerald Group Publishing.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter’s Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the chapter’s Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.





# 6

## Text Universe: A Pedagogical Strategy to Teach Literary Classics

Anette Svensson and Stefan Lundström

### 1 Introduction

Fictional stories as told through various media forms, such as films, novels, TV-series, graphic novels, computer games, poems, short stories, theatre performances, music and lyrics, are easily accessed today much due to the Internet. As a result, there is an increased awareness of the circulation of fictional stories in old and new media, and young people are seen as mass consumers of these texts (The Swedish Media Council, 2017). Young people in Sweden, and probably in many other countries around the world, spend much time using fictional texts in a recreational context, particularly through audio–visual media forms, such as TV-series, films, and computer games (Lundström & Svensson, 2017; Svensson,

---

A. Svensson (✉)

School of Education and Communication, Jönköping University, Jönköping, Sweden

e-mail: [anette.svensson@ju.se](mailto:anette.svensson@ju.se)

S. Lundström

Department of Arts, Communication and Education, Luleå University of Technology, Luleå, Sweden

© The Author(s) 2019

S. Bagga-Gupta et al. (eds.), *Virtual Sites as Learning Spaces*,  
[https://doi.org/10.1007/978-3-030-26929-6\\_6](https://doi.org/10.1007/978-3-030-26929-6_6)

2014). In an educational context, however, students spend time using stories through the media forms typographic fictional texts, such as novels and short stories, and film (Svensson, 2014). There is thus a discrepancy between the text and media forms through which young people experience stories in a recreational and an educational context.

In a study focussing on which text and media forms teachers at upper secondary level in Sweden use when teaching literature, the results show that the participating teachers predominantly use typographic texts, such as novels and extracts from novels and occasionally film. The study further shows that the participating teachers find it particularly difficult to teach the classics mostly because the students find them difficult to read (Svensson, 2015). Hence, it is relevant to study ways to teach the classics, and this study focuses on using text universes as means to teach literary classics across analogue and digital media spaces. Using Italo Calvino's numerous definitions of a classic, *Pride and Prejudice* can be seen as a classic "work which constantly generates a pulviscular cloud of critical discourse around it, but which always shakes the particles off" (Calvino, 1999, p. 6). In this chapter, *Pride and Prejudice* will be approached as a classical novel based on its ability to stand the test of time and its universal appeal by readers and critics alike.

This study aims to analyse one particular text universe, the *Pride and Prejudice*-universe, in order to explore what different pieces of the text universe add to this particular universe as well as how they contribute to the understanding of the source text, Jane Austen's novel, with a specific focus on teaching the classics. In order to fulfil this aim, this study is based on the following question:

- What pedagogical possibilities for critical engagement with the novel *Pride and Prejudice* do various re-presentations facilitate?

## 2 *Pride and Prejudice* as Text Universe

It is a truth universally acknowledged that far from all people who come into contact with Jane Austen's story *Pride and Prejudice* do so by reading her novel. Instead, it is likely that they see an adaptation, such as Joe Wright's film from 2005 or Simon Langton's TV-series from 1995. It is

also likely that they read a variation novel, such as Seth Grahame-Smith's *Pride and Prejudice and Zombies* (2009), P. D. James' *Death Comes to Pemberley* (2011) or Jo Baker's *Longbourn* (2013), watch an adaptation of a variation novel, such as Jerusha Hess' *Austenland* (2013) or Sharon Maguire's *Bridget Jones's Diary* (2001), read *Pride and Prejudice* fan fiction, watch *Pride and Prejudice* fan films, play a *Pride and Prejudice* computer game or participate in a *Pride and Prejudice* cosplay. There are thus several possibilities to become familiar with *Pride and Prejudice* apart from reading Austen's novel. All these re-presentations of Austen's story contribute to the increasing popularity of the *storyworld* and to the fact that Austen's novel *Pride and Prejudice* is more popular than ever 200 years after its publication.

Marie-Laure Ryan and Jan-Noël Thon (2014, p. 19) relate the notion of storyworld to “*represented worlds* [that function] as sites of creative activity in which cultures elaborate their collective social imaginary”. Thus, storyworld signals a turn within narratology, from the formal approach of classical narratology to a phenomenological approach focusing on the act of imagination required by the reader (Ryan, 2014). How the storyworld is represented through emplotment, selection, organisation and construal becomes an important question in studies of the use of fictional texts, since these aspects are determined by the reader (Colm Hogan, 2014). Since storyworlds depend on evolving transmedial systems and are both digital and analogue, media conscious strategies of narrative representation are changing. According to Frank Zipfel (2014), a central perspective in this research field is to examine and discuss what the smallest common denominator of stories across media is. This denominator must include concepts of the non-real (fictional worlds), games of make-believe and institutional practices.

In this chapter, we consider the possible virtual learning sites of storyworlds, in particular the storyworld of *Pride and Prejudice*. However, the concept of *text universe* is used to demarcate a realisation of this storyworld across and within media. When (parts of) *the same storyworld* is transferred to various text and media forms, the various *re-presentations* form a text universe. Additionally, text universe includes the practice of text *use*, for example, setting boundaries of what media forms to use, which texts to use and how to use them. This theoretical function will, however, not be studied further in this chapter. The use in and of a text

universe is thus dependent on previous knowledge and on continuous learning, while the arena of learning is virtual, that is, it is abstract and not pre-defined.

There are numerous examples of stories that make use of the *Pride and Prejudice* storyworld across and within media, and thus constitute the *Pride and Prejudice* text universe. Hence, a text universe consists of a source text and numerous re-presentations of various shapes and forms. Every story offers infinite possibilities to be expanded through, for example, prequels and sequels, as well as through web pages and merchandise. Every medium adds a unique contribution by developing the story further, Henry Jenkins (2007) claims. These contributions problematise the hierarchical relationship that traditionally has existed between the source text and the various re-presentations, such as films, TV-series and fan fiction. Because the participants in a text universe have various first encounters with the storyworld (one might have Austen's novel while another might have Langton's TV-series as their first encounter), the various texts might be seen as holding a more equal position in the text universe.

In order to work with such a large and diverse text universe, the various re-presentations can be divided into three different categories; *remakes*, where the story is made again—a repetition of the same story but in new and/or different fashion (which might be achieved through the transfer of the story to a new medium, an adaptation), *makeovers*, where the story is made anew—an alteration of the story to fit a new audience (through, for example, variation novels and fan fiction), and *factions*, where (parts of) the fictional story is made non-fictional or made to appear as real (examples of this category are Facebook pages, Twitter accounts, merchandise, buildings and locations). Since this study focuses on literary studies, only the first two categories will be dealt with in this chapter.

In *Textual Poachers: Television Fans and Participatory Cultures*, Jenkins (1992, p. 1) offers an ethnographic account of “media fandom”, where fans embrace “not a single text or even a single genre but many texts – American and British dramatic series, Hollywood genre films, comic books, Japanese animation, [and] popular fiction (particularly science fiction, fantasy, and mystery)”. As he takes a closer look at fan fiction, fan film and fan music, Jenkins sheds light on fan production in relation to popular culture and emphasises that it is created not only in relation to a

source text, but also that it is created in relation to other fans. This combination of being a producer as well as a consumer is nowadays often referred to as being a prosumer. Discussing fan fiction in particular, Jenkins (1992, p. 156) describes fans' treatment of the source text as "stretching its boundaries to incorporate their concerns, [and] remolding its characters to better suit their desires". In addition, he gives ten categories that are often used when creating a fan production of a television series, that are also suitable to use when analysing a text universe, in particular makeovers where writers or producers aim to alter the source text in order to create a new story with another perspective or purpose. Out of Jenkins' ten categories, this chapter will bring up examples of expanding the timeline (by creating prequels or sequels), refocalisation (e.g. making a minor character of the source text the main character in the new story), genre shifting (re-creating the story in a new genre), cross-over (combining characters from different narratives), character dislocation (relocating characters from the source text in new situations or with new names) and eroticisation (exploring the erotic side of a character by, for example, pairing up two characters who are not a couple in the source text) (Jenkins, 1992, pp. 162–177).

According to Arthur N. Applebee (1996), school education has a long history of neglecting needs and desires of individuals in favour of teaching traditions as *knowledge-out-of-context*, for example the classics as a sequential catalogue of "true visions" instead of alternative perspectives of the world. This results in an education that does not develop tools to make new interpretations, to analyse new situations or to muster evidence of new opinions. These are skills of *knowledge-in-action*, generated through dialogue where the conversation is more than just finding the "correct" interpretation of the text. The adherence to preceding conversations is the nature of tradition, but since traditions are dynamic and changing, they should also be oriented towards the present and the future as students remake them as their own through conversations in a broad sense. This socially negotiated knowledge-in-action involves readers and writers as well as speakers and listeners, Applebee claims. Since the media landscape is changing with digitalisation processes, the conversations taking place around tradition tend to change too, at least outside school. The arena where the conversations take place is very much virtual and hard to

define. Digitalisation has affected media, but more significant to a *text universe* is the mix of, on the one hand, digital and analogue, and on the other hand, the physical and the virtual. Thus, the learning ambition in relation to these sites needs to consider the dissolving boundaries between mediations rather than focus on digital or non-digital spaces, which often tends to be the situation when mediated traditions are discussed in relation to school.

In this chapter, the fan activities Jenkins (1992, 2006) describes will be discussed as ways of creating knowledge-in-action through participating in a text universe. As various re-presentations of *Pride and Prejudice* offer new perspectives of a tradition, they become parts of a conversational domain that includes voices of the past as well as the present. Through knowledge-in-action, people enter significant traditions of discourse, which constitute the matrix out of which they make sense of the world. When they gain control of the tools and the discourses in which they are embedded, in this case the *Pride and Prejudice* text universe as a virtual learning space, people learn how to act and how to mean (Applebee, 1996; Halliday, 1977), that is, to be significant contributors to traditions.

Thus, this study contributes to and moves between the research fields, literary studies, media studies, and educational science. Based on Michael Halliday, Francis M. Hult (2010) shows how complex studies about education and learning benefit from a *transdisciplinary* approach. As an alternative to constrains of the different traditions in an *interdisciplinary* perspective, the point of departure in transdisciplinary studies is problem-oriented, where themes, not content or an object, are distinguished. A theme should be understood as “a way of looking at things and asking questions about them” (Halliday, 2007, p. 358). The problems identified should lead to action-oriented research issues. In the present study, the problem-oriented approach concerns how participants in a text universe use re-presentations of a cultural heritage in different media, and activity refers to which pedagogical possibilities text universes facilitate to stimulate knowledge-in-action in formal education. This approach highlights the relationship between *how to mean* and *how to learn*, which are core themes in education, according to Halliday (2007).

Since transdisciplinary research is not connected to particular fields of research, the problem-oriented approach must be understood as a



dialectical process that is salient to both the researcher and the educational practice. This process also includes choosing theories that create focus points as guidance among the insignificant number of possible questions to ask (Hult, 2010). To illustrate one way in which a text universe is a conversational domain where different voices are used in relation to tradition, this chapter will use intersectionality as an analytical framework (Harris & Leonardo, 2018). According to Paulina de los Reyes and Diana Mulinari (2005), this perspective challenges hegemonic linguistic and cultural constructions and boundaries by showing how social identity is an intersection of, for example, class, gender, age, religion and sexuality. This perspective can also be applied to institutionalised cultural productions, where cultural heritage and reading the classics belong.

As a theoretical perspective, intersectionality connects power to the individual's ability to navigate and act as a subject within the framework of complex social structures, institutional practices and prevailing ideologies (Tefera, Powers & Fischman, 2018). Hence, this perspective also includes a critical approach to traditions of knowledge. When the subject is historicised, for example, in the tradition of a literary canon, the possibility to interpret and act in economic relations, dominant ideologies and the organisation of society is anchored. An intersectional perspective forces people to deconstruct discourses and see counterexamples, for example, to visualise something other than a white, heterosexual, middle class man as the norm. Thus, those who are made invisible become visible (de los Reyes & Mulinari, 2005).

Gender, sexuality, class, race/ethnicity, dis/ability and so on must be contextualised in historically specific and spatially situated social processes (Harris & Leonardo, 2018). Through polyphonic and subaltern voices, the text universe, as will be shown below, presents counter-discourses to the historical space of the source text *Pride and Prejudice*. Thus, the possibility of formulating questions relating to different themes of the novel is re-conquered, which is crucial *to mean* in a tradition. The text universe serves as a collective act in a space that must be understood epistemologically rather than physically. It is the whole, not the individual parts, in this geopolitical space that dissolves binary oppositions, such as man/woman and under class/upper class. The use of texts in this way

to challenge discourses in an educational situation creates opportunities for students to become agents of change in order to expand socio-political boundaries. As a subject, the student meets the educational project, where text universes can become virtual learning sites for teaching through a democratic ambition (cf. Butler, 2018; Harris & Leonardo, 2018).

In a learning perspective, these may be grand goals, but being part of traditions is nevertheless what school is all about. Quality in education is not only relying on the teaching material used, but above all in the conversations that take place. The *Pride and Prejudice* text universe, among others, implies that reading the classics is still a vivid activity, but for many people it is as knowledge-in-action through re-presentations rather than as a canonised knowledge-out-of-context. To be able to understand and discuss how knowledge-in-action can be developed in the learning site of a text universe, it is necessary to first analyse an example, in this case *Pride and Prejudice*. The analyses of remakes and makeovers make it clear how the text universe provides scope for subaltered voices within the intersectional framework, thus becoming a virtual learning site for knowledge-in-action. In the final section, these analyses are discussed in relation to pedagogical possibilities for critical engagement that the various re-presentations facilitate.

### 3 *Pride and Prejudice* Remakes

Remakes retell the same story, but in a different fashion, often through another medium, or in a newer version. This section focuses on visual remakes in the form of films and TV-series. Visual remakes, such as the films *Pride and Prejudice* by Robert Z. Leonard (1940) and *Pride & Prejudice* by Joe Wright (2005), and the TV-series, Cyril Coke's (1980) *Pride and Prejudice, or First Impressions* and Simon Langton's (1995) *Pride and Prejudice*, are adaptations of Austen's work and are rather faithful interpretations of her storyworld. However, most visual remakes are collaborative works where many interpretations come together. The screen writers, producers, directors and actors have their own interpretations not only of Austen's story, but also of previous remakes. In addition,

viewers already familiar with the storyworld add their own interpretations when watching a remake. The fact that remakes are new interpretations might be one reason why they are fascinating to viewers who are already familiar with Austen's storyworld, since it is a way to see how someone else experiences the storyworld. In addition, they maintain or regain an interest in Austen's novel, which can be seen in the fact that when Langton's TV-series *Pride and Prejudice* was broadcast in 1995, many viewers (re)turned to the novel, but also to earlier remakes, to makeovers, such as fan fiction, and to faction, such as visiting the sites where Langton's *Pride and Prejudice* was shot (cf. Pucci & Thompson, 2003), thereby taking part of a text universe as a conversational domain. However, remakes do not only reach Austen-fans, but also newcomers to the storyworld, providing a first encounter with *Pride and Prejudice*. Thus, remakes contribute to the expansion of the text universe as well as to the increase in participants in the universe.

Remakes often demonstrate a desire to provide an interpretation of a story. Hence, they invite comparison to the conversational domain. With every new remake of *Pride and Prejudice*, there are critical debates in mass media as well as in the public space, which also contribute to the expansion of the text universe. These debates often focus on included or excluded elements as they compare the new text with the source text—often Austen's novel (e.g. the inclusion of the swimming scene in Langton's TV-series). Thus, different interpretations offer different perspectives, creating a dialogic tradition within the text universe. One consequence of remaking the story is that *Pride and Prejudice*-enthusiasts may come into contact with Austen's literary production through remakes rather than through the novel, and thus have other "originals". The text that is a person's first meeting with the story becomes his or her original, that is, a point of departure for further comparison with other texts in the universe including *the* original—the source text. Instead of treating one text, often the source text, as the original to which all other texts are compared and thus focus on what is absent or what is different, which suggests a hierarchical view of texts that characterises knowledge-out-of-context; the use of a text universe creates a learning site that encourages a focus on what the various texts contribute with not only to the source text, but also to the text universe.

Langton's TV-series from 1995, on the one hand, is a faithful adaptation of Austen's novel, but there are some alterations to the story which offer insight into Mr Darcy's feelings and actions. One such example is the fencing scene, where Mr Darcy clearly thinks about Lizzy while he determinedly exclaims: "I shall conquer this" (Davies & Langton, 1995, Ep. 4: 35:14). Another example is the addition of Mr Darcy's search for Lydia and Mr Wickham in London, as well as the visual addition of Lydia's wedding in London (Davies & Langton, 1995, Ep. 5: 42:24, Ep. 6: 04:46). Both these examples place Mr Darcy in a more favourable light and contribute to a more sympathetic view of him. The most famous contribution, however, is Mr Darcy taking a swim on his way to Pemberley resulting in him wearing a wet shirt when he encounters Elizabeth at Pemberley. This scene is further used in other stories about *Pride and Prejudice*, as for example, when Bridget Jones re-watches this scene several times in *Bridget Jones' Diary* or when Miss Price asks Mr Darcy to step into the water wearing a white shirt in *Lost in Austen*. The effect of adding this scene to the story is that it makes Mr Darcy appear vulnerable not only to Lizzy, but also to the watchers of the series, thus presenting an alternate voice on power relations connected to gender roles that is not present in the source text.

Wright's movie from 2005, on the other hand, also contributes with more insight into Mr Darcy and Mr Bingley, although most characters are rather exaggerated. Mr Bingley, for example, is portrayed as a very nervous man, which can be seen in the audience's first view of him at the dance where he is introduced to Miss Bennet. When they discuss the library at Netherfield, his response is: "Yes, it fills me with guilt. I'm not very good at reading, preferring the out of doors. I mean, I can read, of course, and not that you can't read out of doors, of course" (Chasin & Wright, 2005, 08:18), which clearly gives an impression of a character who is not only nervous, but also rather silly. The almost caricaturised characters contribute to a simplified storyworld which might be perceived as an easier, or at least different, way to access the cultural heritage.

These remakes are constructed for an audience at the end of the twentieth century, and are thus in various ways translated to this new audience, at the same time as they remain faithful to the source text (cf. Foster Stovel, 2011). As such, they become parts of an ongoing conversation

about a certain cultural tradition where the remake is simultaneously situated in the past and in the present. The effects of the added scenes in Langton's text is a more explicit sympathetic portrayal of the male characters, making them, in particular Mr Darcy, appear as kind and vulnerable. The effects of the caricaturised characters in Wright's text is a simplification of the characters that are not explicitly described in the source text. Hence, these remakes fill in certain gaps in the source text and do not leave as much room for the watchers' interpretations as the source text does. Additionally, *Pride and Prejudice* is a novel written by a woman about women, however, these two remakes, created by men, though they still portray women, include an enhanced, and in some examples a more nuanced, presence of the male characters, thus opening up for a conversation of masculinity and power in a diachronic perspective. When the storyworld is transferred across media, for example, a novel adapted into a film, the transmedial process contributes to the softening of boundaries of various media forms and therefore also encourages discussions about challenges and advantages of various text and media forms. In addition, they draw on the user's prior knowledge of storyworlds as well as of various media forms. Hence, these storyworlds can be seen as virtual spaces that encourage learning and, at the same time, encourage the use of critical perspectives.

#### 4 *Pride and Prejudice* Makeovers

There are many different kinds of makeovers that contribute to the *Pride and Prejudice* text universe, for example, fan fiction, variation novels and games. Fan fiction relates to texts of various length and quality, that are written by fans and based on texts (printed, visual or other) that they admire. Fan fiction writers use an already existing narrative world or characters when they create their own interpretations, alterations or continuations of the source texts and produce their texts online, often in specific communities, so-called fandoms, where they participate anonymously using pseudonyms. "Fan fiction can be seen", Jenkins (2007, n. pag) claims, "as an unauthorized expansion of these media franchises into new directions which reflect the reader's desire to 'fill in the gaps' they

have discovered in the commercially produced material". Among the ways to expand a media franchise are: to rewrite the story from a new perspective (refocalisation), to continue the story (expand the timeline), to re-create the story in a new genre (genre shifting) or to alter the heterosexual pairings (eroticisation) in the source texts into new heterosexual constellations or more frequently into homosexual pairings called slash (male) and femslash (female) (Pugh, 2005, pp. 91, 109). In a way, fan fiction writers can be seen as critical readers of the source text in that they may emphasise what they see as its weaknesses: "Dissatisfaction with the source text is", as Catherine Tosenberger claims, a "compelling motivation to write fanfiction" (2008, p. 204). Thus, they expand the text universe, creating new possible storyworlds to the virtual site, as they experiment with genres, emplotment and the construal of a socially shared imaginary. Ebony Elizabeth Thomas and Amy Stornaiuolo (2016, p. 314) argue that "the social conditions of digital media may be inviting young people to transform the meaning-making process through collective and creative restorying practices". The function of fan fiction as a learning site has been researched in relation to language learning (Sauro, 2014) and in relation to literary studies with a particular focus on story (Olin-Scheller, 2010).

One example of *Pride and Prejudice* fan fiction is the story "Impression" by Duchessof Whimsy (2012–2014, n.pag, original emphases), which is described as a "modern retell of **Pride** and **Prejudice** set in High School". Hence, this story is an example of character dislocation according to the categories of fan production constructed by Jenkins. The story takes place during Elizabeth and her twin sister's senior year at high school and focuses on their encounter with and relationship to two new guys who have just moved into the neighbourhood: "Will lives on Pemberley Street and Carter on Netherfield Street" (n.pag). Already from the start, power relations are in focus when the apparent class differences between the boys and the girls who have lived their whole lives "on Longbourn Street" (n.pag) are emphasised. Upon hearing where the two newcomers live, Elisabeth "rolled [her] eyes and smiled, but [she] was impressed. Those streets had the biggest, fanciest and most expensive houses in Clarkson" (n.pag). Even though the plot follows Austen's plot, the dislocation of characters and setting to a high school context not only emphasises

aspects of class differences, but also contributes to a story that is relatable to young people who might recognise the characters' actions and sympathise with the main character in particular who explains: "I just feel so terrible about my teenage moodiness and crappy attitude" (n.pag). Hence, the story is not only translated to a twenty-first-century audience, but also to a teenage audience, which suggests that it is more accessible to teenagers today than Austen's novel. This translation to a new target audience is an example of how the text universe as a virtual learning site creates opportunities for knowledge-in-action, that is, for the modern user of *Pride and Prejudice* to become part of a tradition. In "Impression", the intersection of gender, class and age is highlighted by the translation of the story to a modern setting, thereby re-conquering the possibility to formulate questions about power relations of today and yesterday in earlier settings of Austen's story. The fanfiction by DuchessofWhimsy offers a critical perspective on Austen's novel, thus itself becoming a contribution to an ongoing conversation about tradition and cultural heritage, which is central in knowledge-in-action.

In another example of *Pride and Prejudice* fan fiction, an example of genre shifting according to Jenkins' categories, MachiavellianOrange (2005, n.pag) makes a point about his or her poem being a fan fiction, which can be seen in the disclaimer: "This story is based on characters and information written and owned by Jane Austen in her novel, *Pride and Prejudice*, and various other publishers. No money is being made by this fic". One key element of fan fiction is that it is written by amateur writers—*by fans for fans*. Additionally, "First Impressions, a poem" by MachiavellianOrange (2005, n.pag) appears to be written by a school student, since there is an author's note that says: "In case you happen to be an English teacher named Mrs. D, this is being posted by the same person who originally wrote that paper. Any problems? E-mail me". "The practice of domesticating language-learning practices from the digital wilds for the formal classroom is a final strand that has begun to be explored in research", as Sauro (2017, p. 140) points out. However, as can be seen by the following example of fan fiction, the use of fan fiction as a school-based task could also be used for literary-learning practices focusing on the analysis processes that the students do when creating a

re-presentation of the story (cf. Sauro & Sundmark, 2016), in particular when transferring the story into a new genre, such as a novel into a poem.

The poem by MachiavellianOrange follows Austen's story by picking out some key elements from the novel, and by doing so shows that the writer is familiar with the story and has conducted an interpretation of Mr Darcy and Elizabeth in relation to the novel's title focussing on the concepts "pride" and "prejudice" as well as the relationship between them. While "He stood tall and proud/In the center of a crowd", Elizabeth's despise of him is shown as "She found him quite disagreeable in his dealings/And could not muster any cordial feelings/Her prejudice was formed in her mind/And, as always, judgments can blind" (MachiavellianOrange, 2005, n.pag). However, the author explains that "Though the pair had decided on the character of the other/A story wouldn't be a story without some twist or another" (n.pag). Hence, they fall for each other and, as MachiavellianOrange (2005, n.pag) reflects, "A first impression can be misleading/Often times it prevents succeeding/Love can conquer all". One main effect of shifting the genre to a poem is that the story is very highly condensed, and only the key parts of the plot have been selected in the creation of the poem. This requires control of the tools and the discourses in which both genres are embedded. It is not clear whether MachiavellianOrange obtained these tools through education or not, but it is a clear example of a situation where teaching could help developing an already existing literary-learning practice based on the classics, in the way Shannon Sauro and Björn Sundmark (2016) point out.

Variation novels share features with fan fiction and can also be categorised using Jenkins' ten categories for fan cultures, but are created by writers on a professional level and are published predominantly in print media, mostly novels. Thus, they tell a variation of the source text, using the same medium as they are part of the conversational domain and the text universe. There are several publications of stories that alter or continue Austen's *Pride and Prejudice*. A quick browse through any bookstore reveals that there are numerous texts that relate to Austen's novel in some way. These variation novels could be written *by* fans, but they are clearly



written *for* fans, since they are aimed at readers who are familiar with Austen's storyworld in some way.<sup>1</sup>

One of the best-known variation novels, one that expands the timeline if one uses Jenkins' categories of fan production, of *Pride and Prejudice* is Emma Tennant's *Pemberley: Or Pride and Prejudice Continued* (1993). It picks up the story one year after Austen's story ends, and, especially in the case of Mr Bennet, disregards the epilogue in Austen's novel. While Tennant's style and plot are frequently compared to Austen's narrative style and story in a positive way (see, for example, Gaisford, 1993; Yee, 1997), the inclusion of Mr Bennet's death in Tennant's novel changes the story's credibility as a logic sequel. The effect of including Mr Bennet's death is a significantly increased focus on power hierarchies based on gender. Mr Bennet's estate, Longbourn, is entailed and cannot be inherited by his daughters, which places Mrs Bennet and her unmarried daughters in a problematic situation when Mr Bennet's cousin, who is the lawful heir, threatens to take over the estate. Hence, Tennant illuminates gender-based, and indirectly class-based, inheritance structures that were present during the time in which *Pride and Prejudice* is set and in extension, it focuses on gender-based hierarchies that are still part of today's societies (cf. Thomas & Stornaiuolo, 2016).

Another major diversion from Austen's novel is the main character's lack of self-confidence. On the one hand, Austen's Elizabeth is portrayed as a strong and confident woman who needs to learn not to judge people as quickly and as harshly as she usually does, and whose strength clearly matches Mr Darcy's, which can be seen in her report to Colonel Fitzwilliam: "Your cousin will give you a very pretty notion of me, and teach you not to believe a word I say [...] for it is provoking me to retaliate, and such things may come out as will shock your relations to hear" (Austen, 2003, p. 136). Tennant's Elizabeth, on the other hand, is highly emotional, nervous and unable to match her husband in confidence and strength: "Elizabeth was sadly aware that she followed him as the rest did, as a subject might in hope of an audience with a rarely glimpsed king" (Tennant, 1993, p. 130). This lack of self-confidence stems from the

---

<sup>1</sup> Some of these variation novels have been analysed in "Pleasure and Profit: Re-presentations of Jane Austen's Ever-Expanding Universe" (Svensson, 2013, pp. 203–220).

pressure Elizabeth experiences of producing an heir. Meeting one expectation, that is, finding a suitable husband, which is the main goal in Austen's novel, immediately initiates the pressure to fulfil another: "It is a truth universally acknowledged, that a married man in possession of a good fortune must be in want of a son and heir" (Tennant, 1993, p. 3). As Tennant's introductory sentence clearly mirrors Austen's, it is clear that no matter how successful a woman is, she is always controlled by social conventions, again emphasising the construction of gender and class. In that respect, Tennant can be seen to continue Austen's tradition which clearly, though in a very subtle way, criticises hierarchic social conventions and the ensuing restraints placed on women. Much like the remakes analysed above, Tennant's makeover shows an even more apparent critical perspective through alternate voices when historicising the reader in a tradition created by Austen.

Another well-known, and more recent, variation novel that also can be categorised as expanding the timeline of Austen's *Pride and Prejudice* is *Death Comes to Pemberley*. Written by the famous crime story writer P.D. James (2011), it is hardly a surprise that this makeover is also a case of genre shifting as it shifts the genre from romance to crime story. James' story expands the timeline by picking up six years after Austen's story, and Elizabeth and Mr Darcy are married, living at Pemberley with their two sons. Like most crime stories, James' story involves a murder that takes place on the grounds of Pemberley and the suspect is the infamous Mr Wickham whose troublesome past contributes to his conviction of the murder even though there is no motive. James' story is also an example of moral realignment, since Mr Wickham is portrayed more positively, while Colonel Fitzwilliam, who lies to Mr Darcy, is portrayed in a more negative light.

Besides expanding the timeline and shifting the genre, *Death Comes to Pemberley* can also be categorised as a cross-over, as it includes elements and characters from other Austen novels. Not only is it revealed that Mr Wickham's "last employment had been with a baronet, Sir Walter Elliot" (James, 2011, p. 261), but also that "Mr and Mrs Knightley of Donwell Abbey are the most important couple in Highbury" (James, 2011, p. 296), and that one of Mrs Goddard's boarders, "Miss Harriet Smith, married a local farmer, Robert Martin, and is very happily settled" (James,

2011, p. 296). These intertextual cross-over references to *Persuasion* and *Emma* respectively appear to be amusing gems for the Austen-fans rather than of any particular relevance to the story, since they are mentioned only in passing. In addition, James' novel incorporates the staff and servants at Pemberley, thus clearly emphasising and strengthening the theme of class differences that is present in Austen's novel.

In James' *Death Comes to Pemberley*, Mary Bennet, though not part of the main story, is portrayed as leading a quiet and happy life as the wife of Reverend Theodore Hopkins, where she demanded "that she should have a book room of her own in which she could read in peace", thus "converting the one good spare bedroom for her sole use" which made "it impossible for them to invite their relations to stay" (James, 2011, p. 12). Besides the clear allusion to Woolf's treatise, James takes care to give Mary a positive future where she refuses to be mistreated by her family, thus she provides an altered portrayal of the educated woman. Another story that more particularly focuses on Mary Bennet is written by another best-selling author, Colleen McCollough (2009), whose *The Independence of Miss Mary Bennet*, also can be categorised as expanding the timeline as it is set 20 years after Austen's story. However, the story is predominantly a refocalisation, since Mary Bennet is the central character. In this story, she is portrayed as a strong and well-educated woman who fights for her right to conduct research and write about social injustices. Instead of being ridiculed as in Austen's story, she ends up in a successful position even though she needs to go through several tough trials. This refocalisation can be seen as a critical reading of Austen's story, in particular regarding the representation of women, where the daughter who spends time reading and studying rather than trying to find a suitable husband is ridiculed. Thus, James and McCollough, both using refocalisation as means, become significant voices in the tradition by offering a counterview to the educated man as norm.

A makeover that can also be categorised as genre shifting is the variation novel *Pride and Prejudice and Zombies: The Classic Regency Romance – now with Ultraviolet Zombie Mayhem* (2009) by Seth Grahame-Smith, which can be categorised as a mash-up between *Pride and Prejudice* and

various works of zombie fiction.<sup>2</sup> As such, it combines western and non-western elements, as it is set in a British context but contains elements of Caribbean zombies and Japanese ninjas, making questions of ethnicity visible. The Bennet sisters are portrayed as powerful fighters highly trained in the martial arts, defending their friends and neighbours from zombies: “Mr. Darcy watched Elizabeth and her sisters work their way outward, beheading zombie after zombie as they went” (Grahame-Smith, 2009, p. 14). Grahame-Smith’s story is thus a fantasy novel with a thrilling plot and physical characters as Elizabeth and her sisters, as well as Mr Darcy and Lady Catherine fight with their bodies instead of words. In Grahame-Smith’s variation novel, Elizabeth and Mr Darcy are portrayed as more equal than in Austen’s novel, much due to Elizabeth being a zombie fighter. Hence, in this novel, the main female characters are portrayed as rather powerful and they have an important societal mission that goes beyond finding a suitable match. This, in turn, can be seen as a way to question gender roles not only in Austen’s novel and contemporary society, but also in fictional stories released today, where the physical man is the norm. However, giving voice to the physical woman, it becomes clear how social identity must be seen as an intersection of many aspects, where questions of power relations are important to conquer.

Jo Baker’s *Longbourn* (2013) is a refocalisation according to Jenkins’ categories of fan production. In this story, the servants of the Bennet family estate are placed in the centre of the story. Set parallel to Austen’s story, the major events of the source text are hinted at in Baker’s story, though from the perspective of the everyday life of the servants at Longbourn. When, for example, Elizabeth is walking to Pemberley to tend to her ill sister in Austen’s story, she ends up with “dirty stockings” (Austen, 2003, p. 28), which Mrs Hurst soon makes fun of as she exclaims: “Yes, and her petticoat; I hope you saw her petticoat, six inches deep in mud” (Austen, 2003, p. 30). However, in Baker’s (2013, p. 83) story, “Sarah could not help but think that those stockings would be perfectly ruined, and that petticoat would never be the same again, no matter how long she soaked it”. There are, thus, connections to Austen’s story throughout Baker’s

---

<sup>2</sup>The novel is credited to both Seth Grahame-Smith and Jane Austen, but we will hereafter refer to Grahame-Smith as the writer.

story so that any *Pride and Prejudice*-fan might follow Austen's plot, though from a more practical side. Hence, Baker's story gives voice to a working group of people that are not represented in Austen's novel, and can thus be seen as a way to criticise aspects of the class-based society that is portrayed in *Pride and Prejudice* as well as the exclusive group of people and limited part of society that are present in the source text. In a way similar to how fans "inscribe diversity into existence via participatory tools and social networks" (Thomas & Stornaiuolo, 2016, p. 314), Baker responds to Austen's story not only by giving voice to the voiceless working class, but also by portraying the upper class through the perspective of the working class.

Another story that focuses on relationships related to the *Pride and Prejudice* story is Anne Herendeen's (2010) *Pride/Prejudice*, which, as the title suggests through the slash sign (/), can be categorised as an eroticisation which focuses on Elizabeth Bennet's and Mr Darcy's homoerotic relationships. Hence, since slash (masculine same-sex relationships) and femslash (female same-sex relationships) are common categories in fan fiction, this novel's connection to fan fiction is emphasised. Because homoerotic relationships are not present in Austen's novel, Herendeen's variation novel can be seen to criticise the normative view of heterosexual relationships and the absence of voice and space they are given in fictional texts at the time when *Pride and Prejudice* is set, at the same time as *Pride/Prejudice* draws attention to these issues in contemporary stories and society. "Heteronormative reading practices dominate in our culture" as Tosenberger (2008, p. 202) claims, which can be seen in that "heterosexuality can be assumed while homosexuality must be proved" (Jones, 2002, p. 81). Hence, writing back from a homosexual perspective can be seen as a form of showing resistance to heteronormativity.

Homosexuality is also brought up in the makeover TV-series *Lost in Austen*, in which Amanda Price, who lives in twenty-first-century London and loves reading Austen's *Pride and Prejudice*, finds a portal in her bathroom through which Elizabeth Bennet from the novel Amanda is reading enters, and Amanda ends up in the Bennet house taking part in the fictional story, hence placing this story in the category of character dislocation. This meta-textual experience uses themes of romance and escapism to illustrate the clash between the early 1800s and the 2000s. Placing an

outsider, though one with insider knowledge, inside Austen's story, as well as placing one of her characters in present-day London, offers critical perspectives of both societies. While present-day London is a hectic place where there is little time for romance, it is a place and time where women are more powerful and have social functions besides finding a suitable husband. Having spent time in the London of today, Elizabeth reflects upon the fact that "Dr Rosenberg is a lady. Yes, the world is greatly changed" (Andrews & Zeff, 2008, Ep. 4: 21:11). Thus, past as well as present gender differences are illuminated through this character exchange. Actions that might seem as confusing to the audience as they do to Amanda are explained by placing a contemporary woman inside a 200-year-old fictional storyworld. As a result, the story is translated and made accessible to the twenty-first century audience, while it also visualises the issues of social hierarchies and identities in the tradition of the classical text.

Besides the character dislocation and clear meta-textual elements of the story, where Amanda struggles to make the characters follow Austen's plot, *Lost in Austen*, like Herendeen's *Pride/Prejudice*, contains elements of eroticisation. In an attempt to prevent Mr Bingley from falling in love with her, since she knows that he is supposed to end up with Jane, Amanda explains: "I am drawn to other women" (Andrews & Zeff, 2008, Ep. 2: 02:16), thus bringing up the theme of homosexuality. When Miss Bingley later explains: "I shall get my paws on Darcy and I shall marry him, because it is correct and necessary. It is expected by everyone including God, but physical society of men is something I never sought. I shall endure it with Darcy, because endurance is the speciality of our sex, but the poetry of Sappho is the only music that shall ever touch my heart" (Andrews & Zeff, 2008, Ep. 3: 40:00–40:28), the absence of homosexuality is not only brought up, but also explained to some extent. Since it was not considered correct behaviour at the time during which Austen's novel is set, homosexuality had to be denied and silenced, made invisible from an intersectional perspective, not only in society, but also in the fictional texts of the time. These examples of portraying homosexual characters can be seen as examples of what Thomas and Stornaiuolo (2016, p. 321) term queerbending, that is, "bending characters to make them more diverse" in relation to various aspects such as race and gender.

When the storyworld is transferred within media, for example variation novels, it can be used as a way to develop new interpretations, to analyse new situations or to muster evidence of new opinions, thereby formulating questions previously unasked. Hence, they contribute to strengthening socially negotiated knowledge-in-action.

## 5 Text Universes as Virtual Sites for Learning How to Mean

This chapter explores what the various texts that make up the *Pride and Prejudice* text universe contribute with to the understanding of the source text, Jane Austen's novel, as it questions if and how a text universe functions as a way to teach the classics. By analysing numerous examples of remakes and makeovers through an intersectional framework, we have shown that the various re-presentations can be seen as critical readings of the source text. Especially makeovers, such as fan fiction and variation novels, focus on what is absent in the source text, for example, homosexuality or the working class. Fandoms, in particular, "offer a space where individuals can investigate the possibilities of their gender identities" (Duffett, 2013, p. 196). Moreover, makeovers also criticise societal norms and hierarchies, such as gender roles, where women are not allowed to inherit property and their goal in life is to find a suitable husband, and heteronormative roles, where every relationship that is portrayed is heterosexual, by adding aspects of diversity through providing voice and space to people who are absent or marginalised in the source text as well as in the society in which it is set. Thus, the different text producers become agents of societal change in relation to tradition as they, through re-presentations, select and organise content, create new plots and perspectives, re-write and expand the storyworld, and thus become part of the text universe.

Remakes and makeovers of *Pride and Prejudice* are examples of how the storyworld functions as a conversational domain and places questions that are currently relevant in focus when participants, readers, writers, listeners, speakers and so on, continuously bring new perspectives to the

tradition. Since the storyworld as a domain, and thereby the tradition, depend on the participants' contributions, it can be seen as a learning site where interaction matters, or where participants learn to mean, as Halliday (1977) puts it. Since informal learning sites of today are shaped by different forms of cultural expressions, such as digital media and virtual social spaces, the prosumer is challenged to make decisions not only of what stories to be part of, but also of what kind of interactions to make. The borderless collective social imaginary is thus a significant virtual learning site for knowledge-in-action.

Taking a closer look at the *Pride and Prejudice* text universe, it is clear that the various re-presentations provide different perspectives to the canonised source text that is part of a cultural heritage and is often taught in schools. By focussing on the storyworld rather than the source text, students could place the classic in a context that is not only historically relevant, but also offers changing topics of conversation as the process of virtual learning enters culturally significant domains where the answers are not pre-determined. As engagement with new texts sheds light on texts that have been discussed before, knowledge will transform from *out-of-context* to *in-action*. According to Applebee (1996), this is a necessary transformation to make education relevant. It is also in line with school curricula in many countries, which have begun to acknowledge subaltern voices and contributions of individuals from a variety of alternative traditions. However, this requires a teaching perspective where knowledge and learning are, at least partly, transformed from the actual to the virtual, or from the pre-defined knowledge to the possibilities of formulating the questions *in* education and in relation to the students as agents of change, which is not in line with curricula of the twenty-first century in many countries.

As shown in the text analyses, there are numerous perspectives of the *Pride and Prejudice* storyworld, which create many possible conversational domains with relevance to critical perspectives on social identity. In a text universe, these domains are shaped by technology. When Austen's novel is remade into a film or TV-series, the 200-year-old novel is translated to an audience of the late twentieth century. One way in which this translation is noticeable is in a more explicit portrayal of the characters, where gaps and ellipses in the source text are filled in in the remakes.



Another way can be seen in the increased focus on the male characters by either portraying them as rather silly, as in the case of Mr Bingley in Wright's film, or as showing vulnerability, as in the case of Mr Darcy in Langton's TV-series. As a result, these re-presentations of Austen's novel might be perceived as more accessible, and perhaps more relevant, to the audience of the late twentieth century, not only because they are familiar with the film medium, but also because the contents of the stories are transformed to address a contemporary audience. Technology, especially digital media, also makes it possible to be a producer of content in the text universe. It is still unclear how cross-media and cross-textuality affect peoples' thinking (cf. Hayles, 2012), but there are signs that in a text universe, the user considers the mediation secondary to the content (Lundström & Olin-Scheller, 2014). "Multimodality", as Rick Iedema (2003, p. 39) argues, "is about recognizing that language is not at all at the centre of all communication". As a result of multimodality, resemiotisation "is about how meaning making shifts from context to context, from practice to practice, or from one stage of a practice to the next" (Iedema, 2003, p. 41). A storyworld that is considered a virtual learning site will therefore not be defined by the limitations of certain media, but is instead open to a creative use of many existing media, digital as well as analogue. As shown by the analysed examples, this blurring of media boundaries is already a fact for informal virtual learning sites, but it is still struggling to make ground in the curricula of formal education in most countries where traditions in and of disciplines are strong.

Variations of the plot and genre shifting in makeovers, which can be seen in James' *Death Comes to Pemberley* and Grahame-Smith's *Pride and Prejudice and Zombies*, are clearly oriented towards a historical tradition as well as to the present reader. That is also the case with most fan fiction published online, for example "First Impressions, a poem". Even though most of these texts could be read without any knowledge of *Pride and Prejudice*, it is as a conversational domain about Austen's story that they receive their full meaning. In this domain, critical readers and writers use skills and tools to analyse and produce variations and, through their texts, meet in dialogues where voices of the past meet voices of the present. The participants of the text universe thus enter a significant tradition of discourse concerning Austen's novel not only as readers of established values,

but as interpreters of, and meaningful voices in, tradition. It seems that participating in the *Pride and Prejudice* text universe primarily relates to informal learning. However, formal education could offer a pedagogical possibility to develop skills and tools for deconstructing historical discourses, and for reconstructing the tradition, by teaching the classics with a critical perspective. In this way, a text universe could represent the way to learn how to mean (Halliday, 2007).

New perspectives of characters, milieus, social conventions and so on are based on critical readings of a tradition that includes Austen's novel. The re-presentations of the story are part of an ongoing conversation concerning changing societal values, which can be seen, for example in Herendeen's *Pride/Prejudice* and Zeff's *Lost in Austen*, where the theme of homosexuality is added. Tradition is thus used to visualise and create contemporality through the act of historicising. This could also be a starting point for teaching a classic with the democratic ambition of developing knowledge-in-action. As the analyses have shown, stories consumed and created as part of the *Pride and Prejudice* text universe encourage readers (and writers, producers, etc.) to interpret new situations as well as to muster evidence of new opinions, thus becoming agents of change. The various re-presentations also create opportunities to discuss intertextuality and links between texts, as for example in McCollough's *The Independence of Miss Mary Bennet*, and to analyse how genre and media conventions affect texts, which is particularly noticeable in Zeff's *Lost in Austen*. These activities are not only for students with prior knowledge or fans who can establish credibility as Austen experts, but also for those students who are becoming part of the tradition. Knowledge-in-action in a virtual learning site is socially oriented, and significance depends on all participants, not only "experts". All students must learn how to mean through traditions, where classic literature offers a possibility to develop knowledge-in-action rather than knowledge-out-of-context.

As mentioned in the background of this chapter, Applebee (1996) claims that quality in education can be found in the conversations that take place, rather than in the material used. Using Jane Austen's novel *Pride and Prejudice* does not guarantee an effective learning situation. However, as discussed in this chapter, using the *Pride and Prejudice* storyworld as a virtual learning site does increase the possibilities for students

to partake in dynamic conversations and traditions, thus developing knowledge-in-action.

## References

- Andrews, G. (Writer), & Zeff, D. (Director). (2008). *Lost in Austen* [Television Series]. UK: Mammoth Screen.
- Applebee, A. N. (1996). *Curriculum as Conversation. Transforming Traditions of Teaching and Learning*. Chicago: University of Chicago Press.
- Austen, J. (2003). *Pride and Prejudice*. London: Penguin Books.
- Baker, J. (2013). *Longbourn*. London: Doubleday.
- Butler, T. T. (2018). Black Girl Cartography: Black Girlhood and Place-Making in Education Research. *Review of Research in Education*, 42(1), 28–45.
- Calvino, I. (1999). *Why Read the Classics?* New York: Pantheon Books.
- Chasin, L. (Producer), & Wright, J. (Director). (2005). *Pride & Prejudice* [Motion Picture]. UK: Focus Features/Universal Pictures.
- Colm Hogan, P. (2014). Emplotting a Storyworld in Drama: Selection, Time, and Construal in the Discourse of Hamlet. In M.-L. Ryan & J.-N. Thon (Eds.), *Storyworlds Across Media. Towards a Media-Conscious Narratology* (pp. 50–66). Lincoln: University of Nebraska Press.
- Davies, A. (Writer), & Langton, S. (Director). (1995). *Pride and Prejudice* [Television Series]. UK: BBC.
- DuchessofWhimsy. (2012–2014). *Impression*. Retrieved March 31, 2019, from <http://www.fanfiction.net>
- Duffett, M. (2013). *Understanding Fandom: An Introduction to the Study of Media Fan Culture*. New York: Bloomsbury.
- Fernandez, R. (Producer), & Hess, J. (Director). (2013). *Austenland* [Motion Picture]. UK: Fickle Fish Films.
- Fielding, H. (1996). *Bridget Jones's Diary: A Novel*. London: Picador.
- Fielding, H. (Producer), & Maguire, S. (Director). (2001). *Bridget Jones's Diary*. The US: Miramax.
- Foster Stovel, N. (2011). From Page to Screen: Emma Thompson's Film Adaptation of *Sense and Sensibility*. *Persuasions Online* 32(1). Retrieved March 31, 2019, from <http://www.jasna.org>
- Gaisford, S. (1993). They Lived, Not Very Happily, Ever After: 'Pemberley' – Emma Tennant. Review of *Pemberley: or Pride and Prejudice Continued* by

- Emma Tennant. Retrieved March 31, 2019, from <http://www.independent.co.uk>
- Grahame-Smith, S., & Austen, J. (2009). *Pride and Prejudice and Zombies: The Classic Regency Romance – Now with Ultraviolent Zombie Mayhem*. Philadelphia: Quirk Books.
- Halliday, M. (1977). *Learning How to Mean*. New York: Seminar Press.
- Halliday, M. (2007). On the Concept of 'Educational Linguistics'. In J. J. Webster (Ed.), *The Collected Works of M.A.K. Halliday, Volume 9: Language and Education* (pp. 354–367). London: Continuum.
- Harris, A., & Leonardo, Z. (2018). Intersectionality, Race-Gender Subordination, and Education. *Review of Research in Education*, 42(1), 1–27.
- Hayles, K. (2012). *How We Think. Digital Media and Contemporary Technogenesis*. Chicago: University of Chicago Press.
- Herendeen, A. (2010). *Pride/Prejudice*. New York: HarperCollins Publishers.
- Hult, F. M. (2010). Theme-Based Research in the Transdisciplinary Field of Educational Linguistics. In F. M. Hult (Ed.), *Directions and Prospects for Educational Linguistics* (pp. 19–32). New York: Springer.
- Iedema, R. (2003). Multimodality, Resemiotization: Extending the Analysis of Discourse as Multi-Semiotic Practice. *Visual Communication*, 2, 29–57.
- James, P. D. (2011). *Death Comes to Pemberley*. London: Faber and Faber Ltd.
- Jenkins, H. (1992). *Textual Poachers: Television Fans & Participatory Cultures*. New York: Routledge.
- Jenkins, H. (2006). *Convergence Culture. Where Old and New Media Collide*. New York: New York University Press.
- Jenkins, H. (2007, March 21). *Transmedia Storytelling 101* [Web Log Post]. Retrieved from [http://henryjenkins.org/blog/2007/03/transmedia\\_storytelling\\_101.html](http://henryjenkins.org/blog/2007/03/transmedia_storytelling_101.html)
- Jones, S. G. (2002). The Sex Lives of Cult Television Characters. *Screen*, 41(1), 79–90.
- de los Reyes, P., & Mulinari, D. (2005). *Intersektionalitet. Kritiska reflektioner över (o)jämlighetens landskap*. Stockholm: Liber.
- Lundström, S., & Olin-Scheller, C. (2014). Playing Fiction. The Use of Semiotic Resources in Role Play. *Education Inquiry*, 5(1), 149–166.
- Lundström, S., & Svensson, A. (2017). Fiktio och lärande i skolan och på fritiden. *Forskning om undervisning och lärande*, 17(2), 30–51.
- MachiavellianOrange. (2005). *First Impressions, a Poem*. Retrieved March 31, 2019, from <http://www.fanfiction.net>

- McCullough, C. (2009). *The Independence of Miss Mary Bennet*. New York: Pocket Books.
- Olin-Scheller, C. (2010). *Författande Fans*. Lund: Studentlitteratur.
- Pucci, S. R., & Thompson, J. (2003). Introduction. The Jane Austen Phenomenon: Remaking the Past at the Millennium. In S. R. Pucci & J. Thompson (Eds.), *Jane Austen and Co. Remaking the Past in Contemporary Culture* (pp. 1–10). Albany: State University of New York Press.
- Pugh, S. (2005). *The Democratic Genre: Fan Fiction in a Literary Context*. Seren: Bridgend.
- Ryan, M.-L. (2014). Story/Worlds/Media: Tuning the Instruments of a Media-Conscious Narratology. In M.-L. Ryan & J.-N. Thon (Eds.), *Storyworlds Across Media. Towards a Media-Conscious Narratology* (pp. 25–49). Lincoln: University of Nebraska Press.
- Ryan, M.-L., & Thon, J.-N. (2014). Storyworlds Across Media: Introduction. In M.-L. Ryan & J.-N. Thon (Eds.), *Storyworlds Across Media. Towards a Media-Conscious Narratology* (pp. 1–21). Lincoln: University of Nebraska Press.
- Sauro, S. (2014). Lessons from the Fandom: Technology-Mediated Tasks for Language Learning. In M. Gonzáles-Lloret & L. Ortega (Eds.), *Technology-Mediated TBLT. Researching Technology and Tasks* (pp. 239–261). Amsterdam: John Benjamins Publishing Company.
- Sauro, S. (2017). Online Fan Practices and CALL. *CALICO Journal*, 34(2), 131–146.
- Sauro, S., & Sundmark, B. (2016). Report from Middle Earth: Fan Fiction Tasks in the EFL Classroom. *ELT Journal*, 70(4), 414–423.
- Svensson, A. (2013). Pleasure and Profit: Re-Presentations of Jane Austen’s Ever-Expanding Universe. In L. Raw & R. Dryden (Eds.), *The Global Jane Austen: Pleasure, Passion and Possessiveness in the Jane Austen Community* (pp. 203–220). New York: Palgrave Macmillan.
- Svensson, A. (2014). The Media Habits of Young People in Sweden: Using Fictional Texts in a School and a Recreational Context. *Education Inquiry*, 5(3), 337–357.
- Svensson, A. (2015). “New Technologies” and “Old Values”: The Function of Various Text and Media Forms in Literary Studies. *Educare*, 2015(1), 117–138.
- Tefera, A. A., Powers, J. M., & Fischman, G. E. (2018). Intersectionality in Education: A Conceptual Aspiration and Research Imperative. *Review of Research in Education*, 42(1), vii–xvii.

- Tennant, E. (1993). *Pemberley: Or Pride and Prejudice Continued*. New York: St. Martin's Press.
- The Swedish Media Council. (2017). *Ungar & Medier*. Stockholm: Medierådet.
- Thomas, E. E., & Stornaiuolo, A. (2016). Restorying the Self: Bending Toward Textual Justice. *Harvard Educational Review*, 86(3), 313–338.
- Tosenberger, C. (2008). “Oh My God, the Fan Fiction!”: Dumbledore's Outing and the Online Harry Potter Fandom. *Children's Literature Association Quarterly*, 33(2), 200–206.
- Weldon, F. (Writer), & Coke, C. (Director). (1980). *Pride and Prejudice, or First Impressions* [Television Series]. UK: BBC.
- Yee, D. (1997). Pemberley: A Sequel to Pride and Prejudice and Presumption: An Entertainment. Review of *Pemberley: Pride and Prejudice Continued* by Emma Tennant. Retrieved March 31, 2019, from <http://www.danny-reviews.com>
- Zipfel, F. (2014). Fiction Across Media: Toward a Transmedial Concept of Fictionality. In M.-L. Ryan & J.-N. Thon (Eds.), *Storyworlds Across Media. Towards a Media-Conscious Narratology* (pp. 103–125). Lincoln: University of Nebraska Press.



# 7

## Wikipedia as a Virtual Learning Site and a Multilingual Languageing Site

Sverker Johansson and Ylva Lindberg

Wikipedia is an online user-generated free encyclopedia, the largest and most popular general reference work of any kind. It is the fifth-most visited of all websites, behind behemoths like Google and Facebook, but ahead of others like Twitter and Instagram (Alexa, 2018), and it is the only non-profit site in the top 20. It has more than 40 million articles in more than 300 different languages and has half a billion unique visitors every month.

For many people, especially outside formal learning contexts, Wikipedia will serve as the first learning site when they seek knowledge—it is typically the first search engine hit on any general topic (Marchiori & Vieno, 2018). It is also a site of intense languaging in and across numerous languages, currently available in approximately 300 different languages (Wikimedia, 2018a), with tight cross-connections and collaboration

---

S. Johansson (✉)  
Dalarna University, Falun, Sweden  
e-mail: [sja@du.se](mailto:sja@du.se)

Y. Lindberg  
School of Education and Communication, Jönköping University,  
Jönköping, Sweden

between language versions. In many of these languages, Wikipedia is the only encyclopedia of any kind available.

A substantial body of scholarly research on Wikipedia has emerged since its foundation, as reviewed in, for example Okoli, Mehdi, Mesgari, Nielsen, and Lanamäki (2012) and Wikipedia (2018a). Much of the research concerns Wikipedia accuracy (e.g. Giles, 2005) and bias (e.g. Greenstein & Zhu, 2018) as an encyclopedia, but there are also many studies of both Wikipedia writers (e.g. Xu & Li, 2015) and readers from different perspectives. Wikipedia is also used as a tool and data source in corpus linguistics and other fields (e.g. this chapter).

The first part of this chapter will be about the culture of the Wikipedia community, and about what shapes the social interactions on Wikipedia.

The second part will be about the process of article creation and growth on Wikipedia, in particular the interaction between direct human editing and bot editing. A substantial fraction of all Wikipedia articles is created and edited by software bots.

The third part, finally, will be a comparative study of argumentation structure on different language versions of Wikipedia. The structure, openness and global scope of Wikipedia makes it feasible to extract large parallel corpora of argumentative writing from many different cultures, debating many different topics. The first stage of the project is a quantitative study of Wikipedia arguments, comparing the volume of debate surrounding the same 1000 articles on 40 different language versions of Wikipedia. With this data, argumentation is compared between languages.

The results will contribute to our knowledge about how digital literacy is related to traditional literacy and how teachers can meet new demands on writing practices, by integrating social media (Baron, 2010; Erixon, 2012).

## 1 Community and Culture of Wikipedia

Most visitors to Wikipedia use the site as nothing more than a reference work, a place to find information on almost any topic. They do not interact with anybody while they are there, and do not form a community within Wikipedia.



At the same time, Wikipedia is also the home of a sizeable and active cybercommunity. The people who edit Wikipedia, who make Wikipedia into what it is, do interact, and do form a cyberculture, with its own norms and patterns of behavior. Community interactions take place mainly within the Wikipedia website. Everybody knows about the millions of encyclopedia articles, but there are also a similar number of Wikipedia pages dedicated to discussions within the community. The communication within Wikipedia is all text-based and asynchronous, but users who desire “live” communication may occasionally meet also in online chat rooms or even in physical venues.

Identity on Wikipedia can take all of the forms discussed in Lessig (2006): users can be anonymous or not, and can be connected with a physical person or not (cf. Johansson & Lindberg, *forthcoming*). The cultural norm is for a physical person to have a single persistent Wikipedia identity, but the identity or characteristics of the physical person need not be disclosed online. Disclosing another user’s physical identity is regarded as a serious infraction.

The Wikipedia community is quite large, but it is difficult to put a firm number on its size; many people contribute anonymously without registering and many registered identities are dormant and unused. There are currently some 77 million registered identities (“users”) on Wikipedia (Wikimedia, 2018a) but most of them are only sporadically active; less than one in a thousand do more than a handful of edits in any given month (Wikimedia, 2018b). There is a large passive majority and a small number of very active users (Oberhaus, 2017), making the distribution of community activity highly skewed. The most active users are all bots, which do around 25% of all Wikipedia editing—just the top five bots have done more than 100 million edits between them (Wikimedia, 2018c).<sup>1</sup> But the bots do not form a culture; they typically do not interact with each other. Instead, the core culture builders of Wikipedia are the modest-sized core of highly active human users, numbering some tens of thousands in total. These core users are also responsible for the bulk of the content that is most frequently read (Priedhorsky et al., 2007). This

---

<sup>1</sup> Disclosure: The first author of this chapter is the creator of one of the most active Wikipedia bots, and is also an active participant in the Wikipedia community in other ways.

group of people shapes the reference information that the rest of the world relies on (Matei & Britt, 2017). A cause for concern may be that active Wikipedia editors are not representative of the population as a whole, being overwhelmingly male (Wikipedia, 2011). Single well-educated people with no children are also overrepresented (Hill & Shaw, 2013).

The editors of each separate language version of Wikipedia form separate sub-communities with a fair degree of autonomy, and culture may differ between languages. The core values are broadly shared and are largely stable over time (Heaberlin & DeDeo, 2016), but norms and patterns may differ considerably between languages. Many language sub-communities are carried by just a handful of people, too few to form much of a culture of their own, but major languages may have hundreds of people active. The largest community by far, with some thousands of active users, is the English-language one; most of the others are much smaller.

The communities of Wikipedia are largely self-governed. The formal entity behind Wikipedia, the Wikimedia Foundation, mainly attends to technical issues and external relations and does not interfere with encyclopedia contents, which are left to the community of volunteers. The volunteers organize their communities as they see fit, and the community can be regarded as an adhocracy (Bennis, 1968; Matei & Britt, 2017), an ad hoc form of organization with an informal but nevertheless hierarchical power structure, allowing for flexibility and mobility within the organization. Wikipedia is open for everybody to edit and contribute, with all users in principle having equal say on content issues—but in reality, some users are much more equal than others. There is a fairly strong, if informal, hierarchy in the community. The hierarchy is largely meritocratic—high status grows from a long track record of constructive contributions to the encyclopedia, and to the community.

But even Wikipedia cannot be governed totally without formal powers. It is sometimes necessary to ban destructive users or delete unsuitable articles. These powers are granted to a small number of users, based on elections within the community. The people elected to these positions are typically those who are already high up in the informal hierarchy; outsiders need not apply.

## 2 Creation and Growth of Wikipedia Contents

The vision of the Wikipedia project is “Imagine a world in which every single human being can freely share in the sum of all knowledge” (Wikimedia, 2018d). Gathering and presenting the sum of all knowledge in a format accessible to every human being is a Sisyphean task, vastly beyond the reach of any plausible centralized organization. Wikipedia relies instead on the “wisdom of crowds” (Surowiecki, 2004), with encyclopedic knowledge being self-organized by the joint efforts of thousands of people without central control.

The Global Brain (Heylighen, [forthcoming](#)) refers to the potential for global self-organization of cognitive processes across cyberspace, leading to a collective intelligence. Wikipedia may be regarded as an early manifestation of the knowledge-organizing aspect of the global brain. This self-organization has created an encyclopedia that is an order of magnitude larger than anything published before, while maintaining an accuracy comparable to that of traditional encyclopedias (e.g. Giles, 2005).

Anybody and anything can write a Wikipedia article about anything—but anybody else can change what has been written, or even call for its deletion. Wikipedia articles are thus written in a social process with negotiations and heated arguments on dedicated discussion pages, one for each Wikipedia article. As Myers (2010) observes, English-language Wikipedians employ traditional means to support their arguments, but also Wikipedia-specific argumentative criteria, such as Neutral Point of View, No Original Research, and Verifiability. These criteria refer to cultural norms that have emerged within the Wikipedia community, which are arguably vital for maintaining the credibility of Wikipedia as an encyclopedia and source of knowledge.

Wikipedia is most obviously a large collection of articles on various topics. This is the only kind of content that most users notice. But behind the articles themselves is also a substantial body of other kinds of web pages that form an infrastructure maintaining Wikipedia as a viable encyclopedia. Articles are organized in categories, and the system of categories makes up an index of Wikipedia articles, making it easy to browse through

different articles on related topics, as well as to identify gaps where an article is missing. Categories, just like articles, can be created and edited by anybody.

There is also a special section of Wikipedia articles that are about the Wikipedia project itself. Many of the cultural norms mentioned above are written here, as well as project pages and various administrative pages (Wikipedia, 2018a, 2018b are two examples). Much of the social life and culture-building of the Wikipedia community takes place in this section.

For every Wikipedia page of every kind, there is a corresponding discussion page, where the contents of that page can be discussed and negotiated. These discussions can sometimes be voluminous, especially on controversial topics, sometimes much larger than the actual article. When viewing any Wikipedia page on a computer, the discussion page can be found in a separate tab at the top of the article. On English Wikipedia, the discussion tab is labeled “Talk”; other language versions will have a tab saying the equivalent in that language. When viewing Wikipedia on a mobile device, the discussion page is instead accessed through a button at the bottom of the page.<sup>2</sup> These discussion pages will be the focus of the next section.

An article or any other Wikipedia page can be created by anybody. If you want to create a new Wikipedia article about something that is missing in Wikipedia, you just type the article name into the search box in Wikipedia; if the article does not exist already, you will be given the option to create the article. An empty edit box will open, and article text can be typed and subsequently saved. A new article is created!

But the life expectancy of a random new article is very short. The Wikipedia community enforces rather strict standards for what kinds of topics are acceptable for articles. The main rule concerns what is called notability—is the topic sufficiently prominent, distinct, and well-known to deserve an article? Prominence must be verifiable through independent reliable sources. If the topic of a new article is not notable enough, the article will be promptly deleted. Typical cases of rapid deletion involve somebody creating an article about themselves, their small business, or

---

<sup>2</sup> Only visible to registered users.

their hobby band. This notability filtering is performed by the elected users mentioned in the previous section.

What is regarded as notable is itself subject to negotiation within the Wikipedia community, and may change over time. Standards of notability are determined separately on each language version of Wikipedia, but there are some common patterns. The general rule is that you cannot use Wikipedia to make something famous, it must be famous enough already; specifically, the topic must be covered by independent sources. This means that a company can never become notable through its own website and its own social media outlets; it must have attracted enough attention from business journalists to be mentioned in non-promotional texts. Standards of notability tend to be rigorous for topics that somebody may have a self-interest in promoting (businesses, artists, politicians ...) and laxer for topics that do not directly profit anybody (nature, science, geography, history...).

As noted, notability standards vary somewhat between Wikipedia languages. Which topics actually have articles written varies between languages, and is strongly affected by cultural differences (Gloor et al., 2015; Persson, 2011). Unsurprisingly, most Wikipedia languages have good coverage of topics within their own cultural sphere—all the kings of Sweden have articles on Swedish-language Wikipedia—but sparser coverage of culturally distant topics.

If an article survives this initial notability screening, text can be added by anybody, both the original author and anybody else. The original author has no special rights; there are strong cultural norms against any possessiveness (Wikipedia, 2018b). The article topic likewise has no special rights, which is a source of conflict with both people and companies who dislike what is written on Wikipedia about them. Public relations firms that try to “improve” Wikipedia coverage of their clients are a frequent but discouraged presence on Wikipedia, and the topic of paid editing was hotly debated recently, ending with a policy document (Wikipedia, 2018c). At the same time, advice to companies on how to manage their Wikipedia presence is published in seemingly reputable scientific journals (e.g. Kaplan & Haenlein, 2014).

Articles typically grow in both size and quality over time, though the pattern of growth may vary substantially between articles. Some articles

on marginally notable topics may remain largely unchanged for years, whereas other articles grow rapidly. Zhang, Ren, and Kraut (2018) identify three typical growth patterns which they label “fast riser”, “incremental grower”, and “late bloomer”, with fairly self-explanatory names.

In total, about 1.7 billion edits have been saved on all Wikipedia versions, in 50 million different articles. This is about three edits per second, on average around the clock since the project was launched in 2001. Of these edits, about 75% are made directly by human editors, and 25% are made by autonomous software bots, editing without direct human supervision (Wikimedia, 2018c). Bots are used for a wide variety of tasks on Wikipedia; almost any task that can be automated has a bot doing it. Typical uses include making the same small fix in many similar articles, for example changing the spelling of a common name, changing links to an external source that has moved, or moving a large group of articles from one category to another. Among bot tasks requiring a bit more intelligence is the identification and linking of matching articles in different language versions, or adding suitable illustrations to articles. Bots are also used to detect and clean up vandalism. But bots typically do not add new text to existing articles; that is a task more suitable for human editors.

Creating new articles from scratch, however, is an important bot activity. Each article should contain a basic skeleton structure which is highly standardized—a brief introductory sentence telling what the article is about, an infobox to the right with basic facts about the topic, links to related topics, categorization, and links to the same article in other languages. This skeleton is easier to handle for bots than for humans, and bots do create huge numbers of articles on certain types of topics. In total, about one-third of all Wikipedia articles were originally created by bots (16.2 million out of 49.1 million total; Wikimedia, 2018e). But this global average of one-third is unevenly spread across languages—each language version decides independently whether to allow bots to create articles or not, and some have allowed it on a massive scale and others not at all. Most of the 16.2 million bot-created articles are concentrated in a handful of languages—just Cebuano, Swedish, Dutch, Waray-Waray, and Vietnamese account for 11.4 million of the total, and more than half of all languages have a negligible number (Wikimedia, 2018e). Bot article creation is also highly skewed between bots—a few hundred bots have

created articles, but the single most productive one has authored more articles than all the others together.

But bot article creation is not suitable or even feasible for all conceivable article topics. Suitable topics have the following characteristics:

- Large number of similar units, each of which is notable enough to have its own article.
- Each unit can be described with a set of standardized basic facts, the same set for all units.
- Basic facts, preferably language-independent (numbers, coordinates, scientific names, ...).
- Open data bases exist that make the basic facts available in a standardized format.

Topics that have these characteristics include species of plants and animals, geographical features (towns, mountains, ...), languages, chemical elements, astronomical objects, authors, and many others. The bulk of the existing bot-created articles is either about species or about geography.

The growth of artificial intelligence may open up new possibilities in the future. The Wikipedia movement is actively gathering structured information in a language-independent central repository (Wikidata), and is looking into the possibility of creating article text on the fly from repository information, whenever somebody searches for a non-existent article (Kaffee, 2016); a simple version is already being tested (MediaWiki, 2018).

### 3 Argumentation Patterns in Different Wikipedia Languages

This is a quantitative study of argumentation patterns on Wikipedia discussion pages in 40 different languages. Two questions are addressed here:

- Which languages have similar argumentation patterns?
- Which words are overrepresented in argumentative discussion texts, as compared with encyclopedic article texts on the same topics?

## 4 Methods and Data

The corpus used is based on a list of the 1000 most important articles that every encyclopedia should have (Wikimedia, 2013a). This list is the result of a consensus reached among Wikipedia editors. The articles in the list are organized into nine different topics: language and literature; biography; philosophy and psychology; religion; social sciences; science; technology; arts and recreation; and history and geography.

Languages were hand-selected from a machine-generated table of how well different Wikipedia languages cover the 1000-article list (Wikimedia, 2013b). All the 40 languages selected have better than 97% coverage. Among all the languages with adequate coverage, 40 languages were hand-picked based on language size and on diversity—cultural, geographical, and linguistic (Table 7.1). The final analysis was done on a subset of 966 articles present in all 40 languages.

All the 38,000+ articles (966 articles from each of the 40 languages) were accessed during the same 24-hour period (April 24–25, 2015), together with the corresponding discussion pages (including archived discussions, if any). Quantitative features were extracted from the texts using software written by the first author of this chapter. The following features were used in the analysis:

- Article size (in bytes). This is a fairly good measure of text content in articles, but does cause some bias when comparing languages using different orthographies and writing systems. In Latin scripts, the number of bytes corresponds well enough to the number of letters, but in, for example, Chinese, one character may be counted as two or more bytes.
- Discussion size (in bytes). Same measure as article size applied to discussion pages.
- Article age (number of days elapsed since article was created).
- Number of unique participants in discussion. Counted as the number of different user signatures found on a discussion page.
- Average post size (in bytes). How many bytes of text are found between consecutive signatures?
- Density of links:
  - Internal links within Wikipedia system;
  - External hyperlinks to other websites.



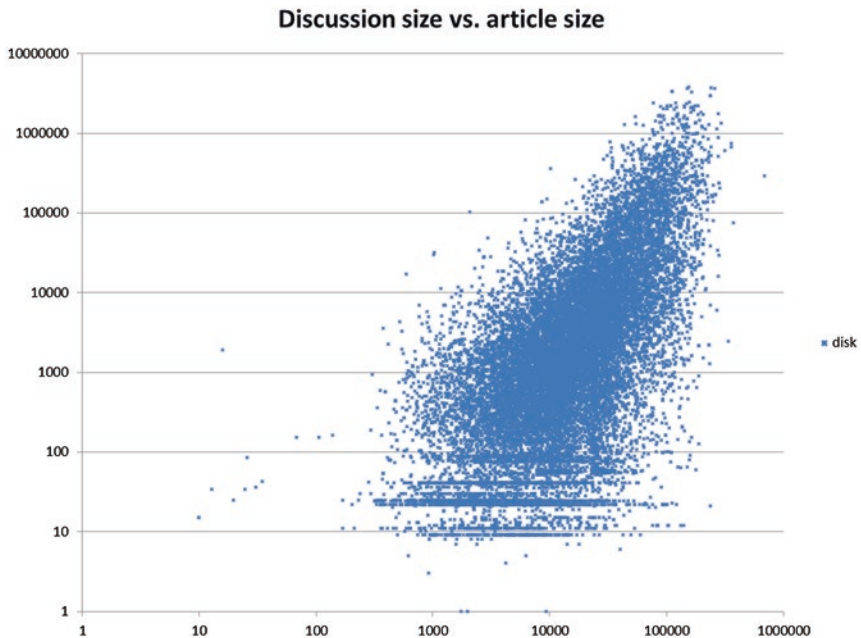
Table 7.1 Languages used in the analysis

Language	Family	Region
Arabic	Semitic	Western Asia, North Africa
Bahasa Indonesia	Austronesian	Southeast Asia
Belarusian	Slavic	Eastern Europe
Bosnian	Slavic	Eastern Europe
Bulgarian	Slavic	Eastern Europe
Catalan	Romance	Western Europe
Chinese	Sino-Tibetan	East Asia
Croatian	Slavic	Eastern Europe
Czech	Slavic	Eastern Europe
Danish	Germanic	Western Europe
Dutch	Germanic	Western Europe
English	Germanic	Western Europe
Esperanto	(artificial)	–
Estonian	Uralic	Eastern Europe
Finnish	Uralic	Western Europe
French	Romance	Western Europe
German	Germanic	Western Europe
Hebrew	Semitic	Western Asia
Hungarian	Uralic	Eastern Europe
Italian	Romance	Western Europe
Japanese	(isolate)	East Asia
Korean	(isolate)	East Asia
Latin	Romance	(Western Europe)
Latvian	Baltic	Eastern Europe
Malay	Austronesian	Southeast Asia
Malayalam	Dravidian	South Asia
Norwegian (bokmål)	Germanic	Western Europe
Persian	Indo-Iranian	Western Asia
Polish	Slavic	Eastern Europe
Russian	Slavic	Eastern Europe
Serbian	Slavic	Eastern Europe
Spanish	Romance	Western Europe, Latin America
Swedish	Germanic	Western Europe
Tamil	Dravidian	South Asia
Thai	Kra-Dai	Southeast Asia
Turkish	Turkic	Western Asia
Ukrainian	Slavic	Eastern Europe
Urdu	Indo-Iranian	South Asia
Waray-Waray	Austronesian	Southeast Asia
Vietnamese	Austroasiatic	Southeast Asia

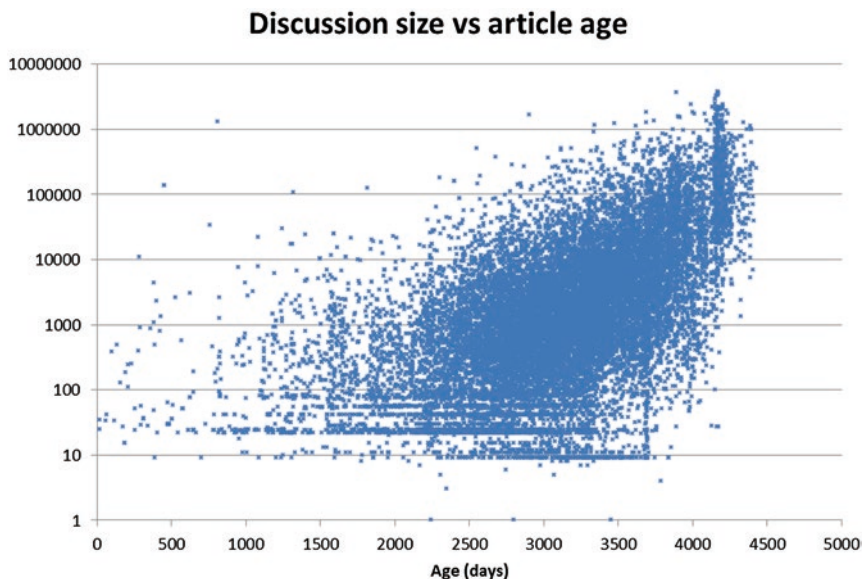
- Word statistics—frequency of all words, counted separately for articles and discussion pages. Each graphical form is counted separately. This part of the analysis is limited to languages in which words are separated by spaces (i.e. not e.g. Chinese).

It is found that all the discussion features were dependent on article size and age. This is a confound in the language analysis, as the articles in major European languages, especially English, are systematically larger and older than the articles in other languages.

In Fig. 7.1, the relation between articles size and discussion size is shown. It is obvious that there is a strong correlation. Discussion size grows approximately quadratically with article size.



**Fig. 7.1** Discussion size versus article size, pooled data from all languages. Each data point corresponds to a single article with associated discussion page. The horizontal axis shows article size in bytes and the vertical axis discussion size. Note logarithmic scale on both axes



**Fig. 7.2** Discussion size versus article age, pooled data from all languages. Each data point corresponds to a single article with associated discussion page. The horizontal axis shows article age in days and the vertical axis discussion size. Note logarithmic scale on vertical axis

Figure 7.2 shows the relation between discussion size and article age. Again, the correlation is obvious, but this time the growth is exponential instead.

The discussion size for each article is corrected for article size and age before the language analysis, so that the discussion size is divided by the average discussion size for all articles in the same size-age-bin.

In order to visualize which languages have similar discussion patterns, a language tree is constructed with a simple neighbor-joining algorithm (Saitou & Nei, 1987). All discussion parameters are log-normalized to zero average and unit variance before tree building.

In order to check the robustness and consistency of language-specific discussion patterns, the article sample was split in two parts, with roughly 500 articles in each. The two samples from each language were then treated as two different languages in the analysis

(“Swedish1” and “Swedish2”, etc.). If the patterns are robust, the two samples for each language should consistently cluster together in the language tree.

In the word analysis, word frequencies were compared between discussion pages and articles in the same language. For each word in each language, the statistical significance of any frequency difference between discussion and article was calculated, and a list of the most significant differences was generated.

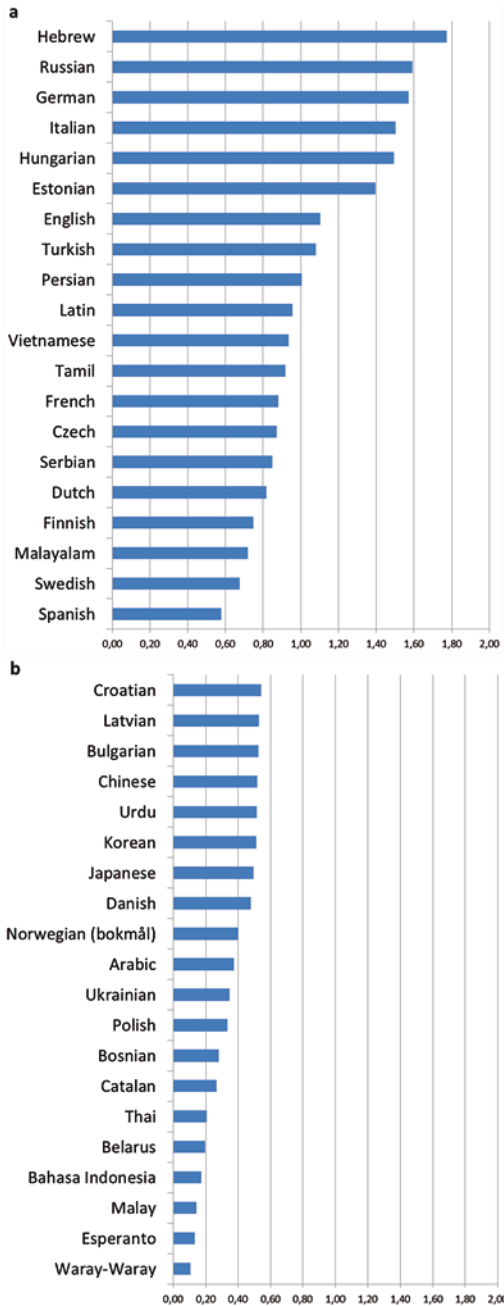
## 5 Results

Normalized discussion size differs substantially between languages; the users of Hebrew are 15 times more talkative than the users of Waray-Waray. In Fig. 7.3a, b, the 40 languages are ordered by discussion size (corrected for article size and age).

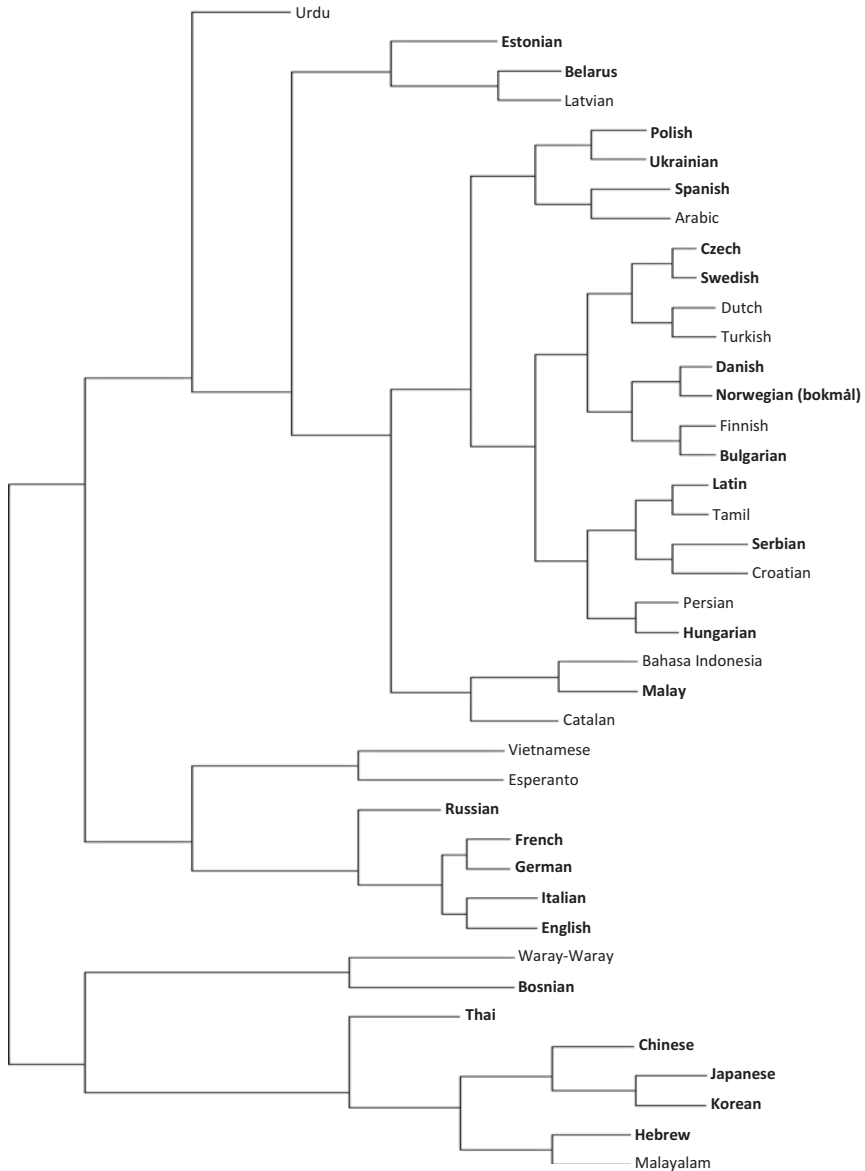
There are some hints of patterns in Fig. 7.3. The top of the list is dominated by European languages, seven of the top ten are European, whereas there are more Asian languages at the bottom of the list. But it is difficult to draw any firm conclusions from this parameter alone.

The language tree in Fig. 7.4 also shows some patterns. This tree is based on the joint similarity between languages across all discussion parameters, not just discussion size. In the split-sample analysis, some but not all languages behaved in a consistent manner, with the two halves of the same language clustering together; these languages are marked in bold in Fig. 7.4.

In the lower part of Fig. 7.4, there are a few clusters that are fairly robust and that make sense culturally. There is one cluster near the bottom with East Asian languages (Chinese, Japanese, Korean), surrounded mainly by other Asian languages (Thai, Waray-Waray, Malayalam). Above it is a cluster with major European languages (Russian, French, German, Italian, English). In the center there is a large cluster containing mostly minor European languages, stretching from Czech to Hungarian in the figure, but this cluster contains also languages that are



**Fig. 7.3** Languages ordered by normalized discussion size (on horizontal axis: 1=global average). (a) Top half of the list. (b) Bottom half of the list



**Fig. 7.4** Tree built through neighbor-joining of languages according to the distance between their normalized discussion parameters. Language names in **bold** are consistently placed when the article sample is split in half; the placement of non-bold languages should be treated with caution

culturally distant from Europe, such as Tamil and Persian. Near the top of the tree is what might be labeled a Baltic cluster, with Estonian, Latvian, and Belarus, three languages spoken in areas that largely share a common history, even though the languages are not closely related linguistically.

There are also smaller groupings that join languages that are culturally close. Having Danish and Norwegian together is unsurprising, as are the groupings of Serbian with Croatian and Malay with Indonesian. In all three cases, these languages are mutually understandable and are regarded as separate languages mainly for political reasons. But other groupings are more surprising. Why does Swedish cluster with Czech, rather than with its cultural siblings Danish and Norwegian? Dutch/Turkish, Latin/Tamil, and Hebrew/Malayalam are other language pairs in the tree with no obvious commonalities.

Selected results from the word frequency analysis are shown in Table 7.2 on the next page. The 12 words that are most significantly overrepresented in argumentative discussion page text, compared with the corresponding article texts, are shown for each of 12 selected languages.

Some patterns in the list are trivial, for example the presence of words meaning “article” in the various languages—the discussions are about articles and have frequent reason to refer to articles, whereas self-reference to “article” is naturally rare in the main article texts.

Other differences are more interesting, such as the much higher frequency of negations in the discussions. Article texts typically just describe what is, not what isn't, leading to a dearth of negations in the article genre. Discussion pages, in contrast, contain a fair fraction of exchanges of the type: “Is!”, “Is not!”, “Is too!”, and so on, leading to a high frequency of negations.

The use of pronouns is also significantly different between genres, with especially first- and second-person forms being much more frequent in discussion pages. This is also perhaps unsurprising, as there is rarely any reason to refer to either me or you in article texts.

**Table 7.2** Words that are overrepresented in discussions compared with articles, in selected languages. Frequent word types are color-coded, with negations shown in blue, first-person forms in yellow, and second-person forms in peach

Swedish	Catalan	Danish	German	English	Esperanto	Spanish	Finnish	French	Indonesian	Korean	Arab
det	no	er	ich	you	mi	que	kello	pas	saya	있습니다	و
inte	que	jeg	nicht	article	ne	no	ei	je	artikel	와	لا
jag	l'article	ikke	Artikel	it	estas	es	etä	que	tidak	제가	ان
att	y	det	ja	not	pri	articulo	ole	en	Indonesia	일	ان
om	si	at	ist	this	artikolo	lo	on	en	ada	합니다	المقالة
är	he	du	mir	that	ke	me	se	ce	itu	금	المقل
artikeln	article	så	mal	is	vi	si	voisi	vous	saja	것	الله
du	Colom	artiklen	hier	think	sed	pero	olisi	l'article	bukan	토	هنا
så	ho	om	es	we	ĉu	eso	sen	à	istilah	월	تعلم
man	hi	skal	habe	should	ni	hay	artikkeli	c'est	sudah	것은	الى
här	lo	har	man	your	oni	creo	artikkelin	de	kalau	목	هو
ju	em	artikel	du	don't	Esperanto	porque	nyt	me	karena	없습니다	ما



## 6 Conclusions

Wikipedia is interesting to study from many perspectives, and its huge influence as a learning site makes it important to explore and understand in depth. This knowledge source is not fixed, but dynamic, and in constant movement, though, regulated by a global community of Wikipedians. In addition, sub-cultures in different languages are operating according to locally set rules, for example, regarding which articles are notable, and to which extent bots are permitted in article construction. Some rules are not negotiable, such as Neutral Point of View, No Original Research, and Verifiability, but also the fundamental policy of non-possessiveness. Wikipedia is one rare digital forum where individual owner and authorship is annulled. Recognition is not acquired through fame, but rather through participative contributions to a range of articles and Wikipedia activities. Thus, the Wikipedia structure represents a frame of creative freedom and constraints, where participants engaged with the project strive toward collaborative knowledge construction based on “objectivity” and “facts”. Ongoing intrusive human practices show that these fundamental pillars constantly are threatened and in need of defense by the cybercommunity active on this social forum. Insights into languaging practices on Wikipedia offer an overview of the interplay between critical and digital literacy competences, as well as linguistic skills acquired, in order to fully take part in digitally and humanly generated processes of consistent knowledge building with access for all.

A portion of the world population gets a large fraction of their information from Wikipedia. The modest-sized community that produces Wikipedia texts thus has an influence far beyond its numbers, and the structure, culture, processes, and composition of the community are relevant to understand what information will be presented, and who the initiator is of the distributed information. For example, English-language articles are circulating worldwide to a much larger extent than articles in peripheral languages. Just as knowledge construction and language use on Wikipedia reflect cultural hegemonies on a global level, Wikipedia is also a congenial tool to diffuse knowledge about languages and cultures from global peripheries. The forum allows for and often requires inter-

connectedness and communication between and across languages and cultures that seldom meet in other publishing landscapes, for example the book market.

Just as Wikipedia has the potential to be a forceful tool in language and literacy learning, it is an important data source, and can as well be used for research, as a multilingual corpus, with easily accessible quasi-parallel texts in a very wide selection of languages. In this chapter results from a comparison of the argumentative genre between languages have been presented. Discussion pages and Wikipedia articles are largely written by the same authors with the same tools in the same context, and comparing the two thus removes many confounding factors, leaving only the genre difference between discussions and articles. The choice of words in argumentative texts shows similarities between languages, but macro-patterns of argumentation differ. The clusters of languages presented in the results indicate surprising connections between languages that culturally are conceived of as remote from one another. These findings need in-depth qualitative studies, in order to further understand the meaning of the connections, and to explore how Wikipedia languaging practices can be seen as a counterforce to monolingual and monocultural norms in the world.

## References

- Alexa. (2018). The top 500 sites on the web. Retrieved March 21, 2018, from <https://www.alexa.com/topsites>
- Baron, S. (2010). *Always On*. Oxford: Oxford University Press.
- Bennis, W. (1968). *The Temporary Society*. New York: Harper & Row.
- Erixon, P.-O. (2012). Svenskämnet i ett nytt medieekologiskt sammanhang. In G. Skar & M. Tengberg (Eds.), *Svenskämnet i går, i dag, i morgon* (pp. 178–193). Stockholm: Svenskläraryörelingen/Natur & Kultur.
- Giles, J. (2005). Internet Encyclopaedias Go Head To Head. *Nature*, 438(7070), 900–901.
- Gloor, P. A., de Boer, P., Lo, W., Wagner, S., Nemoto, K., & Fuehres, H. (2015). Cultural Anthropology Through the Lens of Wikipedia – A Comparison of Historical Leadership Networks in the English, Chinese, Japanese, and German Wikipedia. In *Proceedings COINs15*. Retrieved from <https://arxiv.org/ftp/arxiv/papers/1502/1502.05256.pdf>

- Greenstein, S., & Zhu, F. (2018). Do Experts or Crowd-based Models Produce More Bias? Evidence from Encyclopaedia Britannica and Wikipedia. *MIS Quarterly*, 42, 945–959. Retrieved from <https://www.hbs.edu/faculty/Pages/item.aspx?num=52723>
- Heaberlin, B., & DeDeo, S. (2016). The Evolution of Wikipedia's Norm Network. *Future Internet*, 8, 14. <https://doi.org/10.3390/fi8020014>
- Heylighen, F. (forthcoming). The Global Brain: Extending Symbolic Cognition Across a Planetary ICT Network. In A. Lock, C. Sinha, & N. Gontier (Eds.), *Oxford Handbook on Human Symbolic Evolution*. Oxford: Oxford University Press.
- Hill, B. M., & Shaw, A. (2013). The Wikipedia Gender Gap Revisited: Characterizing Survey Response Bias with Propensity Score Estimation. *PLoS One*, 8(6), e65782. Retrieved October 29, 2018, from <https://doi.org/10.1371/journal.pone.0065782>
- Johansson, S., & Lindberg, Y. (forthcoming). Cyberculture. In A. Lock, C. Sinha, & N. Gontier (Eds.), *Oxford Handbook on Human Symbolic Evolution*. Oxford: Oxford University Press.
- Kaffee, L.-A. (2016). *Generating Article Placeholders from Wikidata for Wikipedia: Increasing Access to Free and Open Knowledge*. B.Sc. Thesis, HTW Berlin – University of Applied Sciences. Retrieved from [https://upload.wikimedia.org/wikipedia/commons/9/99/Generating\\_Article\\_Placeholders\\_from\\_Wikidata\\_for\\_Wikipedia\\_-\\_Increasing\\_Access\\_to\\_Free\\_and\\_Open\\_Knowledge.pdf](https://upload.wikimedia.org/wikipedia/commons/9/99/Generating_Article_Placeholders_from_Wikidata_for_Wikipedia_-_Increasing_Access_to_Free_and_Open_Knowledge.pdf)
- Kaplan, A., & Haenlein, M. (2014). Collaborative Projects (Social Media Application): About Wikipedia, the Free Encyclopedia. *Business Horizons*, 57, 617–626.
- Lessig, L. (2006). *Code 2.0: Code and Other Laws of Cyberspace*. New York: Basic Books.
- Marchiori, M., & Vieno, E. B. (2018). *The Battle for Information: Exposing Wikipedia*. 2018 IEEE 16th Int. Conf. on Dependable, Automatic & Secure Comp. Retrieved from <https://ieeexplore.ieee.org/document/8512003>
- Matei, S. A., & Britt, B. C. (2017). *Structural Differentiation in Social Media – Adhocracy, Entropy, and the “1 % Effect”*. Berlin: Springer International.
- MediaWiki. (2018). *Extension: ArticlePlaceholder*. Retrieved March 31, 2019, from <https://www.mediawiki.org/wiki/Extension:ArticlePlaceholder>
- Myers, G. (2010). *The Discourse of Blogs and Wikis*. London: Continuum.
- Oberhaus, D. (2017). *Nearly All of Wikipedia Is Written by Just 1 Percent of Its Editors*. Retrieved October 15, 2018, from [https://motherboard.vice.com/en\\_us/article/7x47bb/wikipedia-editors-elite-diversity-foundation](https://motherboard.vice.com/en_us/article/7x47bb/wikipedia-editors-elite-diversity-foundation)

- Okoli, C., Mehdi, M., Mesgari, M., Nielsen, F. Å., & Lanamäki, A. (2012). *The People's Encyclopedia Under the Gaze of the Sages: A Systematic Review of Scholarly Research on Wikipedia*. Retrieved from SSRN <https://ssrn.com/abstract=2021326> or <https://doi.org/10.2139/ssrn.2021326>
- Persson, R. S. (2011). Ability Climates in Europe as Socially Represented Notability. *High Ability Studies*, 22(1), 79–101. <https://doi.org/10.1080/13598139.2011.576086>
- Priedhorsky, R., Chen, J., Lam, S. (Tony), Panciera, K., Terveen, L., & Austin, S. (2007). Creating, Destroying, and Restoring Value in Wikipedia. In *Proceedings of the 2007 International ACM Conference on Supporting Group Work. Conference on Supporting Group Work* (pp. 259–268). ACM Press. <https://doi.org/10.1145/1316624.1316663>.
- Saitou, N., & Nei, M. (1987). The Neighbor-joining Method: A New Method for Reconstructing Phylogenetic Trees. *Molecular Biology and Evolution*, 4(4, July), 406–425.
- Surowiecki, J. (2004). *The Wisdom of Crowds*. New York: Anchor Books.
- Wikimedia. (2013a). *List of Articles Every Wikipedia Should Have*. Retrieved January 30, 2013, from [https://meta.wikimedia.org/w/index.php?title=List\\_of\\_articles\\_every\\_Wikipedia\\_should\\_have&oldid=5154330](https://meta.wikimedia.org/w/index.php?title=List_of_articles_every_Wikipedia_should_have&oldid=5154330)
- Wikimedia. (2013b). *List of Wikipedias by Sample of Articles*. Retrieved January 30, 2013, from [https://meta.wikimedia.org/w/index.php?title=List\\_of\\_Wikipedias\\_by\\_sample\\_of\\_articles&oldid=4972742](https://meta.wikimedia.org/w/index.php?title=List_of_Wikipedias_by_sample_of_articles&oldid=4972742)
- Wikimedia. (2018a). *List of Wikipedias*. Retrieved October 15, 2018, from [https://meta.wikimedia.org/wiki/List\\_of\\_Wikipedias](https://meta.wikimedia.org/wiki/List_of_Wikipedias)
- Wikimedia. (2018b). *Wikipedia Statistics – Active Wikipedians*. Retrieved October 15, 2018, from <https://stats.wikimedia.org/EN/TablesWikipediansEditsGt5.htm>
- Wikimedia. (2018c). *Wikipedia Statistics – Bot Editing Activity*. Retrieved October 15, 2018, from <https://stats.wikimedia.org/EN/BotActivityMatrixEdits.htm>
- Wikimedia. (2018d). *Wikimedia Foundation Vision*. Retrieved October 15, 2018, from <https://wikimediafoundation.org/about/vision/>
- Wikimedia. (2018e). *Wikipedia Statistics – Bot Article Creations*. Retrieved January 1, 2019, from <https://stats.wikimedia.org/EN/BotActivityMatrixCreates.htm>
- Wikipedia. (2011). *Wikipedia Editors Study*. Retrieved April 13, 2019, from [https://upload.wikimedia.org/wikipedia/commons/7/76/Editor\\_Survey\\_Report\\_-\\_April\\_2011.pdf](https://upload.wikimedia.org/wikipedia/commons/7/76/Editor_Survey_Report_-_April_2011.pdf)

- Wikipedia. (2018a). *Wikipedia: Academic Studies of Wikipedia*. Retrieved December 21, 2018, from [https://en.wikipedia.org/wiki/Wikipedia:Academic\\_studies\\_of\\_Wikipedia](https://en.wikipedia.org/wiki/Wikipedia:Academic_studies_of_Wikipedia)
- Wikipedia. (2018b). *Wikipedia: Ownership of Content*. Retrieved December 30, 2018, from [https://en.wikipedia.org/w/index.php?title=Wikipedia:Ownership\\_of\\_content&oldid=875873290](https://en.wikipedia.org/w/index.php?title=Wikipedia:Ownership_of_content&oldid=875873290)
- Wikipedia. (2018c). *Wikipedia: Paid-contribution Disclosure*. Retrieved December 30, 2018, from [https://en.wikipedia.org/w/index.php?title=Wikipedia:Paid-contribution\\_disclosure&oldid=858438932](https://en.wikipedia.org/w/index.php?title=Wikipedia:Paid-contribution_disclosure&oldid=858438932)
- Xu, B., & Li, D. (2015). An Empirical Study of the Motivation for Content Contribution and Community Participation in Wikipedia. *Information & Management*, 52, 275–286.
- Zhang, H., Ren, Y., & Kraut, R. E. (2018). Mining and Predicting Temporal Patterns in the Quality Evolution of Wikipedia Articles. *Academy of Management Proceedings*, 2018(1). <https://doi.org/10.5465/AMBPP.2018.13746abstract>

# Part III

## Identity and Learning Framings



# 8

## “Oh It Was a Woman! Had I Known I Would Have Reacted Otherwise!”: Developing Digital Methods to Switch Identity-Related Properties in Order to Reveal Linguistic Stereotyping

Mattias Lindvall-Östling, Mats Deutschmann,  
and Anders Steinvall

### 1 Introduction and Background

#### Introduction

Ever since John Money, Hampson, and Hampson (1955) introduced the concept of “gender roles”, that is, the idea that behaviours, activities and attributes that a given society considers appropriate for men and women are socially constructed rather than biologically determined, the notion of masculine and feminine behaviour as dichotomous and pre-determined

---

M. Lindvall-Östling (✉) • M. Deutschmann  
School of Humanities, Education and Social Sciences, Örebro University,  
Örebro, Sweden  
e-mail: [Mattias.Ostling@oru.se](mailto:Mattias.Ostling@oru.se); [Mats.deutschmann@oru.se](mailto:Mats.deutschmann@oru.se)

A. Steinvall  
Department of Language Studies, Umeå University, Umeå, Sweden  
e-mail: [Anders.steinvall@umu.se](mailto:Anders.steinvall@umu.se)

has been under intense sociological scrutiny (Butler, 1990; Messerschmidt, 2009; Pecis, 2016; Risman, 2009; Wallenberg & Thanem, 2016; West & Zimmerman, 1987). For example, in their seminal article “Doing Gender”, West and Zimmerman (1987) argue that gender roles are being shaped continually in all everyday interactions. In this process, individuals are continually assessed according to socially accepted conceptions of what appropriate male and female behaviour may be, but there is room for resistance and norms are not constant. Today, rather than being seen as a dichotomy, gender is increasingly being considered along a continuum, where, in addition to hegemonic masculinity and hegemonic femininity representing what is culturally normative (Connell, 1987, 2005), there is increased acceptance that there is an array of subordinate gender identities that do not conform to hegemonic gender constructions. In spite of this progress, it would be naive to assume that normative hegemonic views of gender roles have lost their power of influence. While we as researchers clearly distance ourselves from the idea that gender norms should determine who we are, we also recognise that centuries of gender construction based on a hegemonic dichotomy have left their mark. Accordingly, we would argue that most people’s perception of others, whether they are aware of it or not, is strongly influenced by hegemonic gender stereotypes. It is not until awareness of these mechanisms is raised that we can begin to break free from the hegemonic straightjacket, and this, we would argue, is an important educational mission.

Decades of research in social psychology has shown that we draw on pre-existing attitudes and stereotypical beliefs when forming initial impressions of others, and that these stereotypes have a deep impact on how we perceive the people we meet (Higgins & Bargh, 1987; Macrae & Bodenhausen, 2001). More important for this chapter is the research that shows that these stereotype-based categorisations also affect how we interpret and process speech (Hay, Warren, & Drager, 2006; Johnson, Strand, & D’Imperio, 1999; Niedzielski, 1999) and that language affects how individuals are judged in relation to, for example, intellect and empathy (Cavallaro & Ng, 2009; Fuertes, Gottdiener, Martin, Gilbert, & Giles, 2012).

Sociolinguistic research (e.g. Bucholtz & Hall, 2005, p. 607) suggests that identity can be viewed as “an intersubjectively achieved social and



cultural phenomenon” and is as such identifiable in discourse. This opens up for the theoretical position that social identity, as expressed through language for example, is something that is renegotiated during every meeting between humans (see Crawford, 1995). Stereotyping based on various social categories, such as gender, age, social class, ethnicity, sexuality or regional affiliation, serves to simplify how we perceive and process information about individuals and builds up expectations on how they are supposed to act, and language is at the heart of such mechanisms (see Talbot, 2003, p. 468). Thus, there is a conflict between the complex and dynamic negotiation of identity construction and the routine-like way we judge others. Accordingly, awareness of mechanisms of linguistic stereotyping and identity is of crucial importance in education, especially in the training of groups who will be working with people in their future profession, groups such as teachers, police, psychologists, nurses. Courses addressing these issues can fall in the trap of reinforcing old or introducing new stereotypes in focusing on, for example, statistical gender differences.

We argue that students, instead, need deeper insights into how they themselves are affected by such processes. The goal of the project RAVE (Raising Awareness through Virtual Experiencing) is to develop experiential pedagogic approaches aimed at raising sociolinguistic language awareness about conceived identity-related phenomena in language. More specifically, our ambition is to develop innovative methods for raising subjects’ awareness of their own linguistic stereotyping, biases and prejudices, and to systematically explore the efficiency of these methods. The RAVE framework is based on traditional matched-guise methodology from sociolinguistics but uses new digital manipulation techniques for the guise-flipping. Here digital technology has opened up new possibilities for the manipulation of identity variables such as gender—the voice quality of a recording can be manipulated to sound like a man or a woman, for example. In this way, we can illustrate how we as listeners react differently to a speaker and what is being said depending on the perceived identity of the speaker. This insight can then be used as a starting point for self-reflection and awareness-raising activities. The primary focus of this chapter is to share our experiences so far in the development

of methods for raising awareness about gender and language issues conducted within this project.

## Structure of the Chapter

In the section “[Methodological Background](#)”, we provide an overview of the theoretical and methodological frameworks that have informed RAVE. We also give a brief account of early experiments that inspired the project (section “[Early Experiments](#)”) and finally, in section “[RAVE—The Overall Model](#)”, we illustrate the overall methodological model we use. The aim of Sect. 2 is to give a chronological account of different aspects of our methods development to date. In section “[Overall Development Design](#)” we give an overview of the overall Action Research process we apply in the project. Section “[Identifying Focus](#)” discusses some of the theoretical basis for our choices. In section “[Planning, Building, Testing and Modifying the Cases](#)” we describe aspects related to various processes in the construction of our “cases”, the contextually adapted matched-guise experiment designs that we use in classroom contexts. Sections “[Delivery—Packaging](#)”, “[Ethical Issues of the Project](#)”, “[Reliability of Data—Obtaining Baselines and Dismissing Unwanted Variables](#)”, “[Debriefing](#)”, and “[How to Identify and Measure Awareness Raising](#)” deal with other important aspects of our method development such as digital packaging (Delivery—Packaging), ethical issues (Ethical Issues of the Project), securing reliable data (Reliability of Data—Obtaining Baselines and Dismissing Unwanted Variables), the framework for the classroom discussions that follow the experiments (Debriefing) and the challenges involved in measuring whether awareness raising has taken place or not (How to Identify and Measure Awareness Raising). Finally, in Sect. 3, we summarise our findings and also look ahead.

## Methodological Background

People often use stereotypical preconceptions ascribed to certain social groups when they attribute characteristics and traits to individuals, and in the defining of social belonging, aspects of speech, such as voice qual-

ity, dialect, and word choice, are major triggers (Johnson, 2000; Lippi-Green, 1997). Such stereotype-based categorisations are deeply embedded in our social makeup and affect how we interpret and process speech and language (Hay et al., 2006; Johnson et al., 1999; Niedzielski, 1999). Even if there is substantial documented knowledge about this phenomenon, we would argue that there is limited awareness among most of us about how these structures affect our own judgments and actions. This state of affairs motivates a shift of research focus from identifying linguistic dissimilarities between different social groupings, to exploring *beliefs* about the language behaviour of different social groupings and how these beliefs in turn affect our interpretations of "reality".

The systematic enquiries into linguistic stereotyping began roughly half a century ago with Lambert et al. They proposed that even brief samples of speech varieties (e.g. accent, intonation, and minority language) associated with a certain social group can affect how an individual is judged on traits related to behaviour, personality, social status and character (Bradac, Cargile, & Hallett, 2001; Lambert, Hodgson, Gardner, & Fillenbaum, 1960). In order to test this hypothesis, the so-called matched-guise technique was developed. In a matched-guise set-up, the same text (normally spoken) is produced in two or more variants, where the manipulated variable is the perceived identity of the speaker as manifested through language—social or regional accent, for example. In the original set-ups, one bilingual or polyglot actor or actress would be used to produce different variants of a spoken text. The text was then played to respondents and the reactions elicited by each of the linguistic guises were compared. The method thus served to show how a speaker's accent, speech patterns, intonation, etc. can serve as markers which respondents' evaluation of speaker's behaviour, personality, social status and character. In short, the experiment revealed how stereotypical language attitudes are used to evaluate speakers. The matched-guise test is still widely used today in social psychology, sociolinguistics, business research and medicine (Buchstaller, 2006; Cargile, 1997; Carson, Drummond, & Newton, 2004). One major critique of the method, however, has been that it is almost impossible to produce two texts where the only variable that differs is the accent, even when the same actor or actress is used. Speed, intonation, or pitch can have a significant impact on how something is

perceived (Tsalikis, DeShields, & LaTour, 1991). Also, if the same actor or actress is used, it is almost impossible to manipulate gender in a convincing manner, a fact that has excluded this social variable from matched-guise set-ups to date.

## Early Experiments

The methods used under RAVE were initially inspired by experiments we conducted in virtual worlds, more specifically Second Life, where we were working with various pedagogical language learning projects at the time. The introduction plug-in software “MorphVOX pro” meant that you could alter your voice quality at the click of a button from, say, female to male and you could thus move around in the virtual world in a guise of the opposite sex. The idea of using this affordance for pedagogical purposes, in courses that dealt with issues of language and gender, was born. Over the period of one year, we experimented with various models based loosely on matched-guise designs in our language classes. These initial experiments highlighted challenges related to ethical issues, as well as the design of the learning activities so that focus was kept on what we wanted to illustrate. Ensuring reliability of the data and technical aspects related to voice-morphing were added difficulties that we became aware of.

Our current methods are inspired by classical matched-guise set-ups but instead of using different actors or actresses, we use digital software to manipulate the same recording in different ways. Using digital manipulations of recordings does not only allow us to eliminate influencing variables such as speed or intonation, but it also enables us to perform matched-guise tests with focus on gender without using two actors or actresses. We can thus filter out a great deal of noise from the data.

## RAVE—The Overall Model

Using digital manipulation, the RAVE project seeks to explore and develop pedagogical methods for revealing sociolinguistic stereotyping among respondents with regard to identity-related properties such as

gender in order to foster a problematised view of language and stereotyping. The overall principles behind the methodological model discussed in this chapter are relatively simple (see Fig. 8.1 for an overview).

Based on a scripted dialogue between two virtual characters, let us say “Kim” and “Robin”, in which each character can be assigned presumed stereotypical properties, we produce a recorded dialogue—a “case”. Updating traditional matched-guise techniques with digital methods, we produce two property manipulated versions of the dialogue based on one singular recording. Thus, in one version, “Kim” may sound like a man, while the other recording has been manipulated for pitch and timbre so that “Kim” sounds like a woman. That there is a link between the perception of a voice as male or female and the trigger of stereotype inferences has been demonstrated in controlled studies. Ko, Judd, and Blair (2006) and Ko, Judd, and Stapel (2009), for example, could show that the perception of a voice as male or female functioned as an overall between-category source for gender stereotyping. Moreover, their research illustrated that voice quality itself (in terms of degree of femininity or masculinity) had some minor effects on within-category judgments when the gender identity of the person was known, but this did not match the overall effects of the gender perception of voices as male or female.

After detailing respondents’ background data on aspects such as gender and age in a pre-survey, they then listen to one of the two versions of the texts. Note that at this stage the respondents are unaware of the real purpose of the experiment and of the fact that there are two versions of the case. In an immediate post-exposure survey, the test subjects are asked to respond to questions related to linguistic behaviour and character traits of the interlocutors in the dialogue.

After analysis of the responses the class is then reassembled, and the design and real purpose of the case is revealed. Students can now see for themselves how the responses of the two groups differ. Our ambition here is to create what we call an “aha-moment”, that is, the realisation that we are all subconsciously affected by stereotyping in our interpretation of the social world around us. This subsequently constitutes the starting point for seminar discussions (a debriefing session). In using the students’ own results as a starting point for the debriefing, discussions of stereotypical categorisation acquire an additional and immediate urgency.

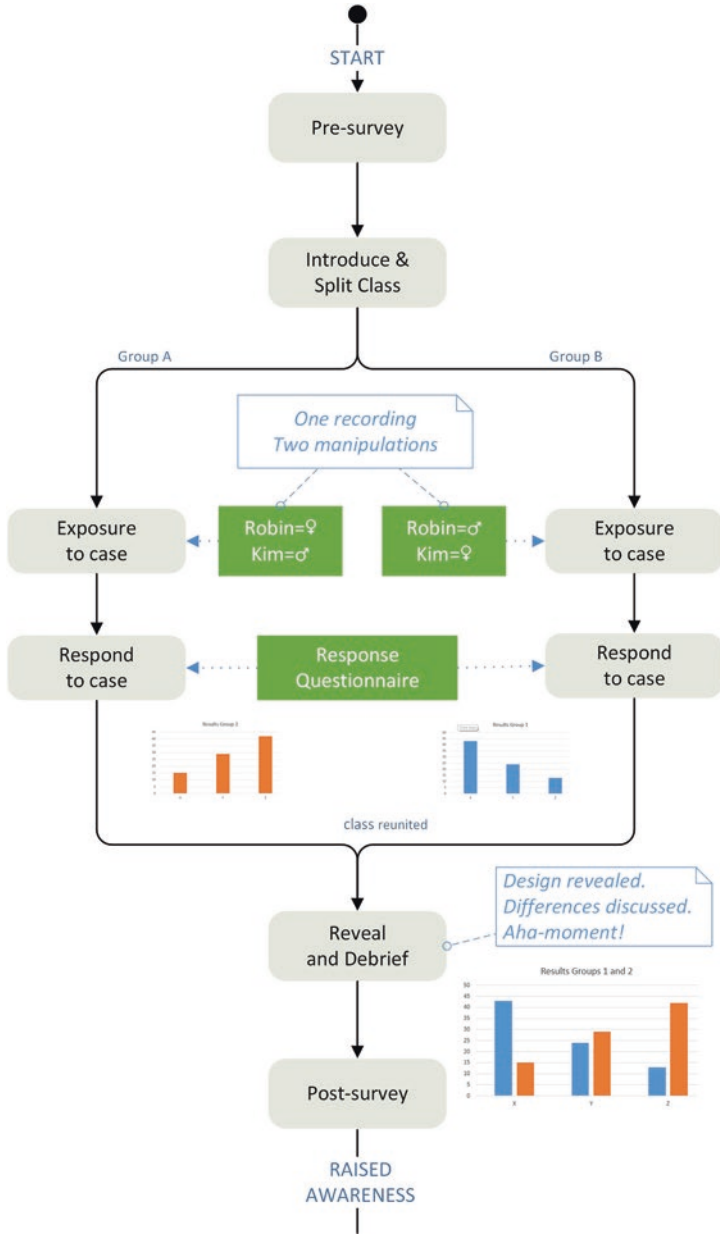


Fig. 8.1 Overview of the matched-guise set-up used in RAVE

After all, the results are based on their own judgments of what is essentially the same dialogue, where the only manipulated variable is the perceived gender of the speaker, as triggered by voice quality. Note that we confirm the gender perception of the voices as either male or female in the post-survey after the group reflection. As Chavez, Ferris, and Gibson (2011) have demonstrated, group reflection and careful use of probing questions make debriefing sessions like these into significant learning opportunities, and evaluations demonstrate that students value this experience positively. A post-survey provides feedback on the participants' experience and measures whether awareness raising has taken place employing qualitative and quantitative methods.

## 2 Method Development

### Overall Development Design

Essentially our methods' development is based on an Action Research process whereby we work collaboratively as a research team with various stages of the process. These stages include identifying a focus based on previous research, planning, building, pre-testing and evaluating various constituents of the overall method, implementing the matched-guise simulation, and finally gathering and evaluating data in order to gain a basis for informed changes to the next cycle of the process in the method development (see Fig. 8.2).

The overall ambition is to create learning experiences that lead to maximum insights into how stereotyping affects our interpretation of language events, such as dialogues, debates, and statements, that surround us. Below we will give an account of some these processes so far in the project. These include identifying a focus, the production, framing and digital packaging of the cases, ensuring reliability of the data, the debriefing phase and measuring whether awareness raising has taken place or not. It should be noted that our account is restricted to the part of the project that deals with matched-guise experiments involving gender only.

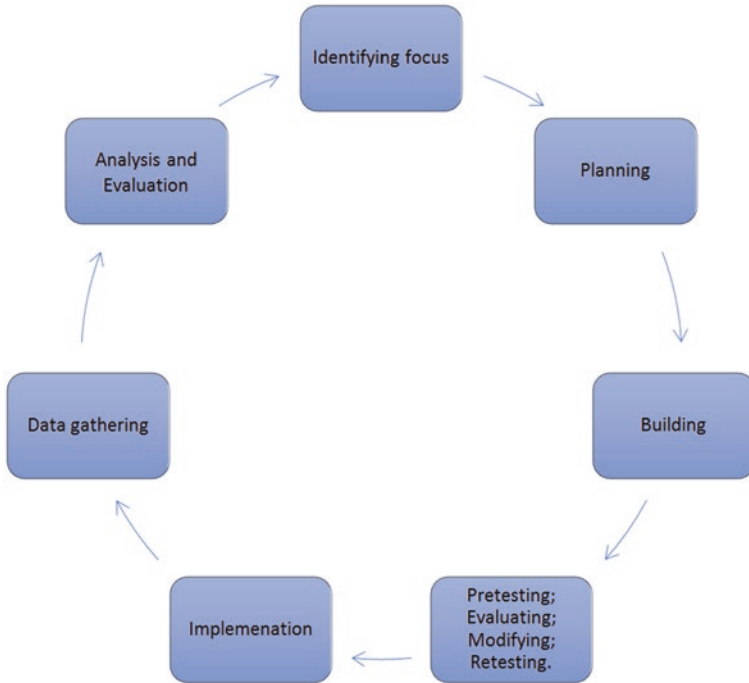


Fig. 8.2 Cycles in methods development

## Identifying a Focus

The purpose of our method is to raise awareness of how stereotypical gender expectations affect our interpretation of linguistic behaviour, and it has thus been essential to identify a focus on exactly which stereotypical features we are interested in and want to expose. In so doing, we have used the general concepts *hegemonic masculinity* (Connell, 1987, 2005) and *hegemonic femininity* (Connell & Messerschmidt, 2005; Pyke & Johnson, 2003; Schippers, 2007) as starting points. According to Connell, hegemonic masculinity is the image of masculinity which is, or at least has been, culturally normative and something everyone must relate themselves to. The characteristics and behaviours of hegemonic masculinity include: competitiveness, stoicism, courage, toughness, risk-taking, adventure and thrill-seeking, violence and aggression, as well as achievement and success



(Donaldson, 1993). Important to note, however, is the fact that although hegemonic masculinity is the "ideal", it is not necessarily the most common form of masculinity. While hegemonic femininity and hegemonic masculinity are similar in the sense that both are dominant gender constructions, they are dissimilar as hegemonic femininity does not hold dominance over masculinity. Schippers defines hegemonic femininity as "the characteristics defined as womanly that establish and legitimate a hierarchical and complementary relationship to hegemonic masculinity" (Schippers, 2007, p. 94). It is characterised by traits such as submissiveness, cooperativeness, and meekness. Again this is an idealised image of femininity and there are many examples of so-called pariah femininities that embody characteristics of hegemonic masculinity (aggression, competitiveness and authority) (Schippers, 2007). In summary, gender is a continuum rather than a dichotomy. For our purposes, we would argue, however, that gender stereotypes are based on the hegemonic models of masculinity and femininity. So how do these gendered models translate into stereotypic views on gender and language behaviour?

Although voices have been raised in favour of a "gender similarities" approach to sociolinguistic research, that is, supporting the hypothesis that holds that men and women are more alike than they are different in their language behaviour (Hyde, 2005), much research into gender and language to date has been informed by a "gender difference" approach (Gilligan, 1982). Accordingly, considerable effort has been expended to find gender differences rather than similarities in language behaviour. According to Kaiser, Haller, Schmitz, and Nitsch (2009), this approach inevitably leads to the detection of differences rather than similarities. For example, according to sociolinguists such as Cheshire and Trudgill (1998, p. 3), women and men have a statistical preference for different conversational styles. Women have a tendency to communicate in a manner that supports other speakers and signals solidarity, whereas men, on the other hand, use a number of conversational strategies that can be described as a competitive style, stressing their own individuality and emphasising the hierarchical relationships that they enter into with other people. Thus, according to Coates (2004, p. 126), when men converse they tend to seek power while women's style is based on support. We would argue, however, that while some data shows that men's language is competitive, and wom-

en's collaborative, we must also recognise that other data shows the opposite. In other words, individuals, both men and women, can use more than one speech style. Nevertheless, we would argue that the two speech styles "competitive" and "collaborative" are firmly gendered in the minds of many students.

These two speech styles described by Cheshire and Trudgill, and various others (see Coates, 2004; Holmes, 1995; Sunderland, 2006; Tannen, 1990, for example), are characterised by some key linguistic features. For the collaborative speech style, these include politeness and signalling interest in the other speaker through minimal responses, taking limited floor space and inviting the conversational partner into conversation, not asserting one's opinion, for example by signalling mitigation using hedging (*I think...*, *it might be...*, *probably...*), and complimenting the other speaker. Competitive speech features include taking a lot of conversational space, being forceful in the assertion of one's opinions, and contradicting and interrupting the other speaker. Important to note is that we are not claiming that these conversational styles actually are typically masculine or feminine behaviours, although much research effort has been devoted to trying to assert this. Rather we hypothesise that these claims, especially as formulated in textbooks, run the risk of inadvertently shaping stereotypical expectations on how men and women behave (or should behave) in conversations. There is thus a danger that research not only serves to confirm stereotypes but also runs the risk of legitimising them.

Linguistic features identified as typical for competitive and collaborative styles were the starting point for the building of our cases. They constituted the key areas of focus in the construction of our case conversations, and they were also the features we wanted to draw the students' attention to in the response questionnaires and in the debriefing sessions. This is of course deliberate, and we would argue that we cannot expose students to their own stereotypes without evoking them.

## **Planning, Building, Testing and Modifying the Cases**

The planning of the cases has been guided by certain principles. First, it has been important to create cases that lead to large and reproducible dif-

ferences in response patterns between the two respondent sub-groups. Without this, the debriefing may not result in an “aha-moment”, and impact of the awareness raising design may be compromised. Second, it has been important that we create cases that we can justify and contextualise in believable (but actually false) learning contexts so that students do not suspect the real purpose of the experiment prior to the debriefing. Third, it has been essential that the students do not suspect that the recordings are manipulated, at least not as far as the gender identities of the speakers are concerned. Finally, it has been important to our design that the cases are of optimal length—long enough to accommodate the linguistic features we want to highlight and to give the respondents a chance to form an informed impression of the speakers, but not so long that respondents risk losing interest and focus.

### **Initial Attempts**

In the first run of the methods-testing cycle, we opted to work with dialogue. Many of the stereotypical features we wanted to highlight could only be illustrated in a dialogue or multilogue. We also decided to create a conversation that was unbalanced in terms of styles. One speaker, Robin (note the gender-neutral nature of the names), was primarily collaborative in his or her conversational behaviour, while the other (Terry) was more competitive. The conversational topic was language and gender, and the conversation was supposed to represent an authentic recording of a discussion between two researchers. Our plan was to contextualise this as input for future discussions in sociolinguistics classes. Accordingly, the students were told that they would be asked questions on language pragmatic features in the conversation after they had listened to it (a topic also dealt with in the sociolinguistics class). We then worked in several language features that were typical for competitive and collaborative styles in the script of the conversation. For example, quantitatively the conversation was dominated by “Terry” who occupied 66% of the floor space. Terry also produced 86% of the interruptions and used forceful language, contradicting Robin on several occasions using several expletives. Robin, on the other hand, occupied far less floor space and was generally a better

listener, producing 81% of the supportive moves. Robin was also less assertive producing 64% of the hedges.

When we recorded the conversation, we used the same actor for both characters and then altered this voice to sound either more masculine, or more feminine depending on which version we were producing. Each supposed speaker in the conversation (Terry and Robin) was recorded on separate tracks and then MorphVOX pro software was used to manipulate the voices, thereby producing two versions of the original recording (see Table 8.1).

In this way, we produced one version that answered to hegemonic norm values (competitive male and submissive or collaborative female) and one version which represented alternative behaviours (competitive female and submissive or collaborative male).

The voice qualities of the manipulated voices, however, proved unsatisfactory when quality checked with colleagues. So, we decided to “camouflage” the shortcomings. Rather than saying that the recording was done in a face-to-face context, we reduced the sound quality further and claimed that it was a skype recording of poor quality. This reduced the negative reactions to the recording in the pre-quality checks significantly.

Our hypothesis at this stage was that respondents would react strongly to the behaviours of the alternative version (see Table 8.1) noticing features that did not match hegemonic norms. In the response questionnaire, we listed various linguistic features and asked the respondents to decide what proportion of these was produced by Terry (competitive) and Robin (collaborative). We also included a number of statements on traits and asked respondents to agree or disagree with these (5 point Likert scale where 1 was disagree completely).

When testing this model on our respondents (24 teacher trainees) we learnt several important lessons: first, the results from the response ques-

**Table 8.1** Versions first case trial

Original	Version 1: Hegemonic norm	Version 2: Alternative norm
“Terry” (competitive)— Actor A	Lowered pitch = Terry male	Raised pitch = Terry female
“Robin” (collaborative)— Actor A	Raised pitch = Robin female	Lowered pitch = Robin male

tionnaires did not support our hypothesis—respondents did not take note of language behaviour that contradicted their stereotypical expectations. In fact, the opposite was the case. Respondents seemed to notice and overestimate behaviour that confirmed the stereotypical hegemonic discourse. Some of these tendencies are illustrated in Table 8.2.

As illustrated in the examples listed in Table 8.2, competitive hegemonic masculine language behaviour, such as taking space and interrupting, was overestimated by respondents who listened to the male guise of Terry (the competitive speaker), while language behaviour associated with collaborative style (hegemonic feminine), such as hedging and supportive listening, was underestimated. In addition, Robin was deemed as more sympathetic when speaking in the female guise than in the male guise, while Terry was seen as less sympathetic when speaking as a male guise. In short, it seemed that respondents noticed what they were looking for. Note, however, that the differences above were not large enough to be statistically significant given the limited number of respondents.

Second, we had serious problems with “believability”. Post-surveys revealed that some students had suspected that the voices had been manipulated for gender. One student even suspected that it was the same speaker who had produced both voices. In addition, many respondents questioned the authenticity of the recording. This was not a satisfactory result.

Third, the set-up was deemed too complex. Estimating proportional use of different features was simply too difficult, and many respondents

**Table 8.2** Real and estimated impressions of some aspects of Terry’s (competitive speaker) conversational behaviour

Tendency	Floor space	Interruptions	Hedging	Supportive moves
Proportion of Terry (competitive speaker) in the actual recording	66%	86%	34%	19%
Estimates of group who listened to the male version of Terry	75%(+)	92%(+)	22%(-)	17%(-)
Estimates of group who listened to the female version of Terry	63%(-)	76%(-)	40%(+)	30%(+)

claimed that they just had guessed at random. They were not convinced that the results represented a real measure of their impressions. This had a negative impact on the “aha-effect” we were after. Similarly, asking students to focus on both speakers in the conversation was deemed to be distracting and confusing. In addition, the conversation was too long. Many respondents claimed that they could not maintain close focus for six minutes.

### **Further Trials—Modifications Based on Initial Lessons**

The first trials of the method revealed a number of weaknesses and uncertainties in our design:

1. In our trials respondents seemed to especially notice features which confirm their stereotypical preconceptions. In other words, typically masculine behaviour was more noticeable when the respondents thought they were listening to a male speaker and vice versa. Was this tendency strengthened by the nature of the conversation (unbalanced)? This was something we wanted to explore further.
2. We needed to work on the “believability” of the cases. The quality of the voice morphing had to be improved and the feeling of authenticity had to be improved.
3. The case design had to be simplified to make it more focused on the aspects we wanted to highlight.
4. We needed many more respondents to confirm that the differences we saw in fact were “real” differences.

In order to see if the nature of the script affected responses, we decided to test different script structures. We produced two balanced dialogues—one where both speakers adhered to a more collaborative style and one where both were more competitive. The two speakers in the dialogues occupied equal floor space and used similar numbers of linguistic features typical for collaborative or competitive speech styles.

Furthermore, the quality of the voice morphing and the believability of the case needed improvement. In the new production we systemati-

cally tested different voices to see how they responded to the morphing. It turned out that some voices were much better suited than others producing more believable, less artificial sounding recordings. We produced test recordings, morphing 12 different voices, and we sent these out to 25 peers asking them whether (1) the recordings sounded natural and (2) whether they sounded convincing as male or female voices. Based on these responses, we chose the voices (actors or actresses) that were evaluated most positively. When producing the recordings, we also decided to use different software for the voice manipulations. They were first recorded using Avid Pro Tools HD 12.0.0 and then edited in the same software. Pitch shifting was processed manually with X-Form (Rendered Only) using Elastic Audio properties in Pro Tools.

The idea of contextualising the cases as authentic recordings was abandoned. Instead, we decided to present them as reproductions or representations of genuine conversations. This, we deemed, would not affect what we were testing but eliminated the risk of students reacting to the fact that the conversations may not have sounded entirely natural and thereby suspecting that something was afoot.

In order to simplify the cases, the conversations were shortened (from six to four minutes), and respondents were asked to focus on one of the speakers in the conversation only. Moreover, the response questionnaires were simplified to include simple statements on a more limited number of dimensions, five related to speech style and two related to characteristics or personality, which the respondents could rate on a seven-point Likert scale ranging from 1 (disagree completely) to 7 (agree completely).

In order to increase the number of respondents, we decided to run the experiment in several classes (four in all). To test if there were any "real" differences among the response groups, we also tested the recordings with respondents we "bought" from SurveyMonkey. SurveyMonkey found random respondents from the UK (Sweden was not an option here) with an age limit of 45 aiming for a 50/50 split between males and females. This group comprised 101 individuals in all, 48 males and 53 females. In all, we tested 170 respondents, a number which was deemed to be large enough to statistically confirm any differences in responses.

The results from these trials were encouraging. There were significant differences between how the guises were rated when it came to floor space

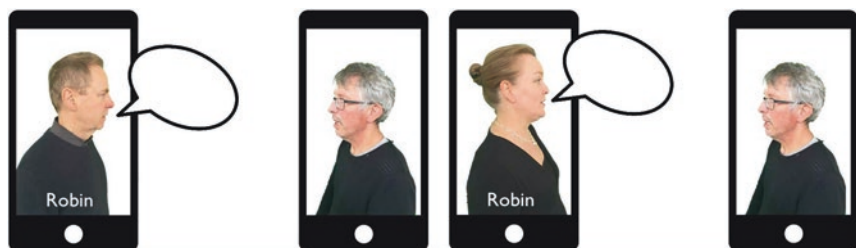
and contradictions. Interruptions approached significance. The competitive speech variables (interruptions, floor space, contradictions and forcefulness) correlated with each other, as did the collaborative (taking little floor space, signalling interest and sympathy). Using various multivariate analyses (MANCOVA, ANOVA, and ANCOVA. MANOVA) that took aspects such as the gender of the respondents into account (see section on Reliability of Data), we were able to confirm statistical differences between how the guises were rated. The female guises were rated higher on the collaborative variables and the male guises were rated higher on the competitive speech variables. These effects were particularly evident in the balanced, collaborative dialogue. We have been able to reproduce these results in subsequent trials, and the hypothesis that respondents notice behaviour that matches their stereotypical expectations and ignore behaviour that does not seem to hold. This adds to the credibility of the whole set-up, thereby increasing the impact of the “aha-moment” in the debriefing.

## Delivery—Packaging

One aspect not dealt with above is the delivery and packaging of the cases. In the early attempts, we worked with text and oral instructions, separate sound packages, survey link entry points, etc. in learning management systems that the students had access to. This model proved to be “messy” in that it was not self-evident in which order and how things had to be done. We continually had to instruct respondents and differences in instructions could in turn affect the behaviour of the respondents.

We thus started exploring models for standardising the method by “packaging” all information from a one-point entry principle. This was also necessary in order to access respondents who were not physically present. The software Articulate Storyline (see <https://articulate.com/360/storyline>) has met many of our needs. It allows us to integrate instructions (text and oral recordings), pre-surveys, sound files with relevant illustrations (see below) and response surveys in one package which is accessible from a single URL link. Articulate Storyline has the added advantage of being flexible in terms of delivery mode—it can be accessed





**Fig. 8.3** Drawing attention to one of the conversational participants using iconic symbols. Note how “Robin” is represented as male in one version and female in the other version

from a mobile phone, tablet or computer. In this way, we ensure that the packaging of the experiment does not become a variable that interferes with the results. An added benefit of this is that we can deliver the method to various groups outside university contexts.

In the latter trials, when respondents were asked to focus on one speaker only, efforts have been made to eliminate the risk of the respondents focusing on the wrong speaker. For this purpose, we have used iconic symbols to draw attention to a certain speaker in the conversation. Figure 8.3, for example, illustrates how attention is drawn to the speaker “Robin” using an image of the speaker, a name tag and a speech bubble.

More recently we have opted to use silhouette images only of the speakers to eliminate the potential of facial features, etc. affecting the respondents. Silhouette images have proved sufficient to signal the gender of the speaker.

## Ethical Issues of the Project<sup>1</sup>

Ensuring anonymity while at the same time creating a system whereby we can follow the respondents in different phases of the process (pre-survey, response survey and post-survey) is essential for the design of our method. If respondents are not confident that they are anonymous, they may not

---

<sup>1</sup> The methods of the project have been approved by the Swedish National Ethical Vetting Authority.

answer honestly. At the same time, we need to be able to track their responses. Accordingly, we have devised a system whereby respondents create a seven-digit code based on personal information which we have no access to (first letter of your mother's first name, for example). In this way, respondents can recreate their code easily even if they should forget it. We also make sure that we avoid working with groups of less than ten individuals where the identity of the respondents can be jeopardised.

Informed consent is another issue that we have had to consider. Obviously, we cannot inform the respondents about what we do prior to the matched-guise treatment. Instead, we give the chance for participants to withdraw their responses from the study in the post-survey. Results from participants who do not do the post-survey are not included.

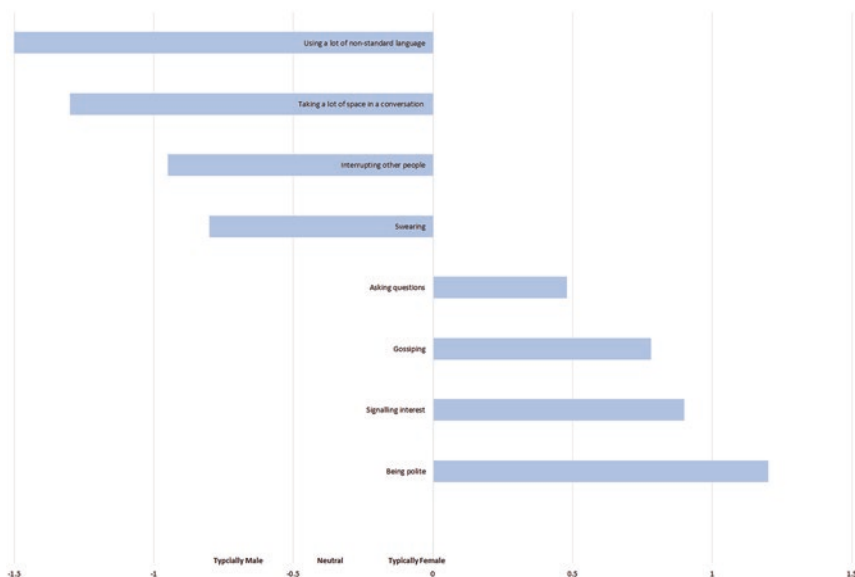
### **Reliability of Data—Obtaining Baselines and Dismissing Unwanted Variables**

Our method builds on splitting a group into two sub-groups which respond to different versions of the recorded dialogue. In this design, it is important to control for unwanted variables that may affect the results. In other words, we need to ensure, as far as possible, that the observed differences in responses are a direct result of the voice or identity morphing of the recordings and not imbalances in the make-up of the response groups. Aspects such as age, gender and cultural or national identity of the respondents are included in the pre-survey and can be controlled for in the statistical analysis of the results as potential variables affecting the results. In addition, if, as we hypothesise, the respondents' stereotypical preconceptions act as a filter which draws selective attention to some language features, then potential differences in preconceptions between the response groups also need to be taken into account. In an attempt to control for this variable, we have included three measures in the post-survey. Two established tools from social psychology, namely the Modern Sexism Scale (Ekehammar, Akrami, & Araya, 2000) and the Ambivalent Sexism Inventory (Glick & Fiske, 1996), attempt to measure sexism among the respondents. Both tests consist of a number of statements such as "Discrimination of women is no longer a problem", which the

respondents can agree or disagree with on a five-point Likert scale. Low values indicate little sexism. We have also started devising our own measure, the Linguistic Stereotyping Inventory, which we include in the post-survey. In this test we list a number of linguistic tendencies and ask respondents to rate these on a scale ranging from typically male (−2)—neutral (0) to typically female (+2). A typical response pattern among Swedish students is illustrated in Fig. 8.4.

Using these inventories, we can compare the nature and strength of the stereotypical preconceptions that the response sub-groups may have. So far, however, our experiences indicate that Swedish students hold fairly similar stereotypical pre-conceptions regarding sexism and language behaviour but we need to explore this further by refining the linguistic inventory and further testing the model on more heterogeneous groups.

Controlling for background variables is motivated. Using ANCOVA and MANCOVA multivariate analyses on the response data retrieved so far indicate that the gender of the respondent seems to affect how they



**Fig. 8.4** Typical response pattern to Linguistic Stereotyping Inventory: (−2) indicates typically male; (0) indicates neutral; (+2) indicates typically female

rate some of the linguistic features of the guise (floor space and the signaling of interest). In addition, the differences found in the rating of guises can be partially explained by the respondents' sexism. Here, it is difficult to elucidate what is a gender effect and what is a sexism effect since these have a strong tendency to correlate (males are more sexist than females). So far, we have not been able to establish any effects related to linguistic stereotyping but this is mainly due to the fact that results here have been quite homogeneous. Pilot studies in other cultural contexts (the Seychelles, for example) do suggest that this is a very important background variable, however.

## Debriefing

Debriefing is a pedagogical activity that has long been employed in social sciences such as psychology and medicine, where it has been used in educational contexts involving simulations, or other experiential teaching methods. Since the RAVE project essentially builds on a simulation activity, a debriefing session became a natural part of the design. More importantly, as the learning opportunity *par excellence* in the RAVE set-up, the nature of debriefing session is crucial for the learning outcome.

The internet site [Debriefing.com](http://Debriefing.com) describes the term *debriefing* as referring to “conversational sessions that revolve around the sharing and examining of information after a specific event has taken place”, and it can take many shapes as shown by Lederman (1992) and Dreifuerst (2009), for instance. Two contexts, listed by Lederman (1992), in which the concept has been developed are particularly relevant to our setting. First, there is the use of debriefing in psychological studies in which participants were deceived in one way or the other in an experiment. The debriefing here serves the main purpose of telling participants what the experiment was all about. As pointed out by Lederman, the designers of such an experiment become the debriefers, who are in a powerful position, which may lead to them promoting their own explanations and labels at the expense of any ideas the participants may have. The second context for debriefing is an educational setting, in which debriefing is used after an experiential activity of some sort. The purpose here is to

help participants reflect and learn from their experience. Given our ambitions to raise self-awareness, the latter context is of primary interest in our method.

The procedure of the debriefing session in the RAVE project has a design which largely follows the steps outlined by Lederman (1992, pp. 151–152). Lederman lists three main phases in the debriefing: (1) Systematic reflection and analysis; (2) Intensification and personalisation; and (3) Generalisation and application.

In the RAVE application of this model, in phase (1) we start by organising students into groups of four or five individuals belonging to the two groups that experienced different simulations. Then the nature of the simulation is described, giving students a possibility to recollect what happened using brief snippets from both simulations, and, after this, the results from the response questionnaires are presented. We show how the two groups responded to the statements, and the attention of the participants is directed towards aspects where the greatest differences have been recorded. This step leads us over to the second phase in which the groups are encouraged to discuss their own experience of the simulation and possible explanations of the recorded differences in responses. The second step here leads to the third phase in which generalisations and implications are discussed. We partially use prepared questions in order to help students focus on important aspects—“what implications might these results have for your future professional roles?”, for example. It is in this phase that we hope to achieve an “aha-moment” by developing an understanding of the simulations and their results and a transformation of this into metacognitive awareness of more general and applicable consequences of stereotyping. Further, rather than ending the debriefing with a discussion of “what did you learn from this experience?”, where a few participants might formulate answers which might affect several students, we have this explicit question in the post-survey which is answered individually with the help of a digital tool at the very end of the session. It is with the help of this post-test that we hope to record and measure a possible change in awareness of the influence of stereotypes. Typically the class debriefing is achieved in a double lesson (2 × 45 minutes). The post-survey is administered individually and students are requested to answer this survey within a week after the debriefing.

In reframing the simulation as a case making no claims about its authenticity, we have been able to play down the deception aspect thereby aligning the goals of the debriefing activity more closely to that of educational settings. While still in more control than in classic educational debriefings, we try to adapt a position of guiding discussions rather than providing answers. For example, participants are encouraged to discuss and reflect on the results of the experiment in small groups comprising participants from both “treatment groups”. In common with Lederman’s (1992, p. 149) characterisations of debriefings in educational settings, we have created a setting where the teacher knows what kind of reaction the experiment was meant to generate, but where we are nevertheless interested in learning about the participants’ experiences and understandings. In this way, we are also able to help them go from the specific to the generic with the aim to raise self-awareness.

## How to Identify and Measure Awareness Raising

The debriefing session has a crucial position in the RAVE set-up as the learning arena. The goal of the activity is to raise awareness about how stereotypical preconceptions affect our judgements in everyday contexts. An important aspect of the project is thus measuring success or failure in reaching this goal. The literature on awareness raising is quite barren in terms of discussions regarding how to measure raised awareness. In the development of the RAVE project, we have tried different methods, which are briefly described below. This is an area which needs further development as will be clear from the descriptions.

Initially the idea was to use the established Implicit Association Test (IAT) (Greenwald, McGhee, & Schwartz, 1998) to measure awareness raising. It is a test based on reaction time which is designed to measure the strength of unconscious associations between concepts, in our case certain linguistic behaviour and gender. The participating students performed an IAT test designed for this special purpose immediately before the RAVE simulation and after the debriefing. Because the IAT is designed to measure indirect and unconscious associations, we were from the very start concerned that it would not be a good tool for measuring awareness

raising. We believed, however, that it could at least serve as a reference point, a baseline, for the interpretation of the results. As it turned out, the IAT was problematic. For example, it was difficult to make sure that the circumstances were identical for all participants on the occasions they performed the IAT; since the test builds on reaction times for the presented associations, it is important that there are minimal distractions. This was difficult to achieve and meant that we had to work in computer labs, thereby excluding students working from a distance. The IAT was also quite time consuming and required full concentration. We could notice that students were less concentrated when performing activities following the IAT session. In addition, the results from the IATs turned out to be inconclusive thereby providing a baseline of questionable validity. We thus decided to drop this test. Furthermore, given our ambition to create an online packaging of our methods with easily interpretable feedback (see Summary and Looking Ahead below), there were more aspects favouring another solution.

We needed a reliable but far less exhaustive tool for measuring any change in awareness. An important aspect of the tool was also that it should not in any way prime the participant for the answer we wanted. Initially, we tried a solution based on an open-answer question, where the participants were invited to provide five explanations for the language behaviour of a speaker in a fictive scenario. The test was given before and after the experiment and care was taken so that there was nothing to suggest what the test was really meant to measure. The hope was that the answers could be categorised in such a way that we could see some progression in terms of awareness of how our own interpretation can colour our experience of an event. We wanted to see whether there was any systematic drift in the nature of the explanations provided by the participants in the pre-test and the post-debriefing tests. Here, we were looking for answers that included perspectives where participants' own interpretations of the event were questioned. For example, rather than saying that "John is pushy in the conversation because he is a man", we were hoping that the post-tests also would include explanations such as "I experience John as pushy because this is the sort of behaviour I expect from a man". As it turned, out there was some change in this respect. However, it was

too small to be significant, and more importantly, the categorisation of the answers was laborious and often difficult.

After the above attempts, a simplified model which combines quantitative and qualitative measures was opted for. In the post-survey, we simply ask the open-ended questions “What was your general experience of the experiment that you have just partaken in? Did you learn anything new?”. These questions are in line with what Lederman (1992) suggests for debriefings and can be analysed qualitatively. In addition, we also attempt to get a quantitative measure of awareness raising that allows us to compare the responses of each participant in the pre- and post-surveys. Here, we use a 0–100 Likert scale response option to the question “To what extent do you think that you are influenced by stereotypical preconceptions (conscious or unconscious) in your expectations and judgements of others?” Note that this question is “hidden” among dummy questions in the pre-survey in order not to draw attention to the real purpose of the activities. Our hypothesis is that the matched-guise experiment and the debriefing will make the participants more aware that they, in fact, are affected by stereotyping and that the values generated in the post-survey will be greater than in the pre-survey. The quantitative measure can also be triangulated with the qualitative data for each respondent adding to reliability.

Results so far have, however, been difficult to interpret. A cross-comparison between the qualitative and quantitative data reveals that there is considerable variation. For instance, a closer examination of 40 positive responses to the qualitative questions, which suggest that respondents have become more aware, and their corresponding responses to the quantitative measure suggest that the latter cannot be interpreted in a straightforward way. The average result of this group showed an increase by 6.9 units in the quantitative measure, thus indicating, in keeping with their comments, that they have increased their awareness that they are affected by stereotypical preconceptions. This result, however, is not statistically significant primarily due to a very large standard deviation, 17.90. A concrete example can provide some insights into problems with the measures. One student wrote the following comment: “I found it to be interesting, and it gave me food for thought. Even though I believed myself to be relatively free of prejudice I can’t help but wonder if I make



assumptions about personalities merely from hearing someone’s voice”. It was apparent from the comment that the student had become more aware of the influence of stereotypes as a result of the simulation and the debriefing session. Yet, this same participant’s indication in the quantitative measure gave a negative result of 35 units. In other words, the answer suggested that the participant in question was less aware of how he was influenced by stereotypical preconceptions in his judgements of others after the experiment than before the experiment. One way to interpret this paradox is that some participants may use the Likert scale to indicate that with an increased awareness of stereotypes, they actually become less affected by these. This is another illustration of the difficulty of measuring raised awareness in this context in a simple numeric way, a challenge we are still battling to resolve.

### 3 Summary and Looking Ahead

The RAVE project has an action research-like format in which we repetitively revisit a cycle of method development with the aim of improving it (see Fig. 8.2). This chapter has focused on this process. For example, initially, the tools we used for digitally manipulating the recordings were rudimentary, but with continuous trialling, based on the feedback of colleagues, reflection and explorations of new methods, we have now improved methods so that the manipulations sound believable in the contexts they are used. The contextualising of the cases has also undergone changes. Originally, we presented the recordings as authentic conversations between two researchers, whereas we now present them as reproductions of real conversations thereby decreasing the risk of respondents suspecting the real nature of the manipulations. We have rationalised the packaging of the method and we have also simplified the model, by instructing the respondents to focus on one speaker only, for example. Here, we also use various iconic signals to guide respondents. These measures have led to improved results and we are now in a position where we achieve reproducible statistically significant differences between the responses to the two manipulations. This, we argue, is a prerequisite for the achievement of the “aha-moment” leading to awareness raising.

With that said, there are still many parts of the method where there is room for improvement. For example, we are still battling with how to measure awareness raising in an effective way. Previously trialled methods have been time consuming, unsuitable for online data accumulation, complicated and unreliable. Our current method has issues too, as highlighted in the previous section. There are indications that the questions asked are open to misinterpretation, which makes analyses of the quantitative data difficult, as some respondents report a negative value when they most likely mean a positive value.

Furthermore, we need to develop the method for new implementations on more diverse arenas. We will end this chapter by pointing to three such areas of expansion, which will generate further development as well as interesting results. First, we have recently been implementing the model in other learning contexts. Awareness regarding the effect of stereotypes is arguably relevant in many professional practices and key knowledge for anyone working with human interaction. Thus, an expansion of the project into other people-oriented professions was always an ambition. In line with this ambition, we have been implementing the RAVE model in a course of social psychology where it is used in the context of a module on personality traits. In this context, the model is used to provide students with an opportunity to consider how their perception of a person's gender in a dialogue can affect their understanding of that person's personality traits. The implementation has required simulations of a different character, taking personality features into consideration and not only conversational features, and has also led to further pedagogical discussions with the teachers about how to smoothly integrate the model into students' course work and how to debrief with the best possible result. Thus, this collaboration is stimulating the development of packaging and the measurement of awareness among other things.

Another interesting area, which was also always part of the project's original ambition, is the testing of the model in other cultural contexts. Since stereotyping is a cognitive phenomenon that can be described as an automatic and reductive categorisation of groups of people, it follows that cultural contexts can have great influence on stereotypical assumptions. Although gender has been studied in many different cultural con-

texts, and occasionally with contrastive purposes, studies using the method described here (matched-guise techniques for gender) have not previously been conducted. With this in mind, we are currently piloting the collection of comparable material in the Seychelles, where we have good contacts and where we have been given access to language teacher-training classes. This implementation does not only provide us with new and exciting data but also motivates further development of the model and the pedagogy. For instance, it has been observed (Chung, Dieckmann, & Issenberg, 2013) that debriefings may have to be adjusted to suit participants in different cultural contexts. Thus, a model well-suited for students at a Swedish university may well leave much to be desired elsewhere. Moreover, in a context such as the Seychelles, it is not necessarily the case that online solutions work well, so, for a general applicability, it has become apparent that the project requires “low-tech” backup solutions.

Looking further ahead, a primary ambition is to create an open-access online resource based on the methods developed within the project, which, in its fully functional state, would be a resource that could be used for awareness-raising activities in various learning environments, including contexts where low-tech solutions are needed. These ambitions require further development and adaptations of the method in close contact with technical staff with the necessary knowledge of how to create interactive and intuitive online facilities easily accessible for users, while at the same time considering how low-tech adaptations of the same can be designed. Interesting times lie ahead.

## References

- Bradac, J. J., Cargile, A. C., & Hallett, J. S. (2001). Language Attitudes: Retrospect, Conspect. In W. P. Robinson & H. Giles (Eds.), *The New Handbook of Language and Social Psychology* (pp. 137–158). Chichester: John Wiley.
- Bucholtz, M., & Hall, K. (2005). Identity and Interaction: A Sociocultural Linguistic Approach. *Discourse Studies*, 7(4–5), 585–614.
- Buchstaller, I. (2006). Social Stereotypes, Personality Traits and Regional Perception Displaced: Attitudes Towards the “New” Quotative in the UK. *Journal of Sociolinguistics*, 10, 362–381.

- Butler, J. (1990). *Gender Trouble: Feminism and the Subversion of Identity*. New York: Routledge.
- Cargile, A. (1997). Attitudes Toward Chinese-Accented Speech. *Journal of Language and Social Psychology*, 16, 434–443.
- Carson, L., Drummond, J., & Newton, J. (2004). Social Perception in the Clinical Dental Encounter: The Matched-Guise Technique Re-visited. *Psychology & Health*, 19, 667–683.
- Cavallaro, F., & Ng, B. C. (2009). Between Status and Solidarity in Singapore. *World Englishes*, 28(2), 143–159.
- Chavez, C. I., Ferris, W. P., & Gibson, L. A. (2011). Predicting Values and Beliefs: Learning That Can Last. *Journal of Management Education*, 35(4), 504–536.
- Cheshire, J., & Trudgill, P. (1998). Section I: Introduction. In J. Cheshire & P. Trudgill (Eds.), *The Sociolinguistics Reader: Volume 2: Gender and Discourse* (pp. 1–6). London: Arnold.
- Chung, H. S., Dieckmann, P., & Issenberg, S. B. (2013). It Is Time to Consider Cultural Differences in Debriefing. *Simulation in Healthcare*, 8, 166–170.
- Coates, J. (2004). *Women, Men, and Language: A Sociolinguistic Account of Gender Differences in Language*. New York: Pearson Education Limited.
- Connell, R. W. (1987). *Gender and Power: Society, the Person and Sexual Politics*. Malden: Polity Press.
- Connell, R. W. (2005). *Masculinities*. Cambridge: Polity Press.
- Connell, R. W., & Messerschmidt, J. W. (2005). Hegemonic Masculinity: Rethinking the Concept. *Gender and Society*, 6, 829–859.
- Crawford, M. (1995). *Talking Difference: On Gender and Language*. London: Sage. Darcy.
- Donaldson, M. (1993). What Is Hegemonic Masculinity? *Theory and Society*, 22(5), 643–657.
- Dreifuerst, K. T. (2009). The Essentials of Debriefing in Simulation Learning: A Concept Analysis. *Nursing Education Perspectives*, 30(2), 109–114.
- Ekehammar, B., Akrami, N., & Araya, T. (2000). Development and Validation of Swedish Classical and Modern Sexism Scales. *Scandinavian Journal of Psychology*, 41, 307–314.
- Fuertes, J., Gottdiener, W., Martin, H., Gilbert, T., & Giles, H. (2012). A Meta-Analysis of the Effects of Speakers' Accents on Interpersonal Evaluations. *European Journal of Social Psychology*, 42, 120–133.
- Gilligan, C. (1982). *In a Different Voice: Psychological Theory and Women's Development*. Cambridge, MA: Harvard University Press.

- Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating Hostile and Benevolent Sexism. *Journal of Personality and Social Psychology*, 70(3), 491–512.
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. (1998). Measuring Individual Differences in Implicit Cognition: The Implicit Association Test. *Journal of Personality and Social Psychology*, 74(6), 1464–1480.
- Hay, J., Warren, P., & Drager, K. (2006). Factors Influencing Speech Perception in the Context of a Merger in Progress. *Journal of Phonetics*, 34, 458–484.
- Higgins, T. E., & Bargh, J. (1987). Social Cognition and Social Perception. *Annual Review of Psychology*, 38, 369–425.
- Holmes, J. (1995). *Women, Men and Politeness*. London: Longman.
- Hyde, J. S. (2005). The Gender Similarities Hypothesis. *American Psychologist*, 60(6), 581–592.
- Johnson, F. L. (2000). *Speaking Culturally: Language Diversity in the United States*. Thousand Oaks, CA: Sage.
- Johnson, K., Strand, E., & D’Imperio, M. (1999). Auditory-Visual Integration of Talker Gender in Vowel Perception. *Journal of Phonetics*, 27, 359–384.
- Kaiser, A., Haller, S., Schmitz, S., & Nitsch, C. (2009). On Sex/Gender Related Similarities and Differences in fMRI Language Research. *Brain Research Reviews*, 61(2), 49–59.
- Ko, S., Judd, C., & Blair, I. (2006). What the Voice Reveals: Within- and Between-Category Stereotyping on the Basis of Voice. *Personality and Social Psychology Bulletin*, 32(6), 806–819.
- Ko, S., Judd, C. M., & Stapel, D. A. (2009). Stereotyping Based on Voice in the Presence of Individuating Information: Vocal Femininity Affects Perceived Competence but Not Warmth. *Personality and Social Psychology Bulletin*, 35(2), 198–211.
- Lambert, W., Hodgson, R., Gardner, R., & Fillenbaum, S. (1960). Evaluational Reactions to Spoken Languages. *Journal of Abnormal and Social Psychology*, 60, 44–51.
- Lederman, L. C. (1992). Debriefing: Toward a Systematic Assessment of Theory and Practice. *SAGE Journals*, 23(2), 145–160.
- Lippi-Green, R. (1997). *English with an Accent: Language, Ideology, and Discrimination in the United States*. New York: Routledge.
- Macrae, N. C., & Bodenhausen, G. (2001). Social Cognition: Categorical Person Perception. *British Journal of Psychology*, 92, 239–255.
- Messerschmidt, J. W. (2009). “Doing Gender:” The Impact and Future of a Salient Sociological Concept. *Gender & Society*, 23(1), 85–88.

- Money, J., Hampson, J. G., & Hampson, J. (1955). An Examination of Some Basic Sexual Concepts: The Evidence of Human Hermaphroditism. *Bulletin of the Johns Hopkins Hospital*, 97(4), 301–319.
- Niedzielski, N. (1999). The Effect of Social Information on the Perception of Sociolinguistic Variables. *Journal of Language and Social Psychology*, 18, 62–85.
- Pecis, L. (2016). Doing and Undoing Gender in Innovation: Femininities and Masculinities in Innovation Processes. *Human Relations*, 11, 2117–2140.
- Pyke, K. D., & Johnson, D. L. (2003). Asian American Women and Racialized Femininities: “Doing” Gender Across Cultural Worlds. *Gender and Society*, 17(1), 33–53.
- Risman, B. J. (2009). From Doing to Undoing: Gender as We Know It. *Gender & Society*, 23(1), 81–84.
- Schippers, M. (2007). Recovering the Feminine Other: Masculinity, Femininity, and Gender Hegemony. *Theory and Society*, 36(1), 85–102.
- Sunderland, J. (2006). *Language and Gender: An Advanced Resource Book*. London: Routledge.
- Talbot, M. (2003). Gender Stereotypes. Reproduction and Challenge. In J. Holmes & M. Meyerhof (Eds.), *The Handbook of Language and Gender* (pp. 468–486). Oxford: Blackwell.
- Tannen, D. (1990). *You Just Don't Understand: Women and Men in Conversation*. New York: Morrow.
- Tsalikis, J., DeShields, O. W., & LaTour, M. S. (1991). The Role of Accent on the Credibility and Effectiveness of the Salesperson. *The Journal of Personal Selling and Sales Management*, 11(1), 31–41.
- Wallenberg, L., & Thanem, T. (2016). Just Doing Gender? Transvestism and the Power of Underdoing Gender in Everyday Life and Work. *Organization*, 23(2), 250–271.
- West, C., & Zimmerman, D. (1987). Doing Gender. *Gender and Society*, 1(2), 125–151.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.





# 9

## “Going on Trial”: Teachers’ Team Performance in Social Media Groups When Facing Problematic Work-Related Issues

Louise Peterson, Annika Lantz-Andersson,  
Thomas Hillman, Mona Lundin,  
and Annika Bergviken Rensfeldt

### 1 Introduction

Teachers’ work is complex and socially and intellectually demanding. Reforms and policies of education are changing and teachers are held accountable in completely new ways, not only in relation to their students and their parents, colleagues and school leaders, but also towards their own professional learning, identity and development. The connection between professional development, teacher quality and pupil attainment together with policy instruments<sup>1</sup> for assessing and comparing such

---

<sup>1</sup> For example, the OECD’s Teaching and Learning International Survey (TALIS) or the Programme for International Student Assessment.

---

L. Peterson (✉) • A. Lantz-Andersson • T. Hillman • M. Lundin •  
A. Bergviken Rensfeldt

Department of Education, Communication and Learning, University  
of Gothenburg, Gothenburg, Sweden

e-mail: [louise.peterson@ped.gu.se](mailto:louise.peterson@ped.gu.se)



qualities across countries, further have stressed the accountability of teachers and schools. The expectations put onto the teaching profession is multidirectional also from the perspective of international and European policies (e.g. European Commission, 2013; OECD/Schleicher, 2012) also affecting local and national contexts. In Sweden for example, the discourse of crisis has prevailed after declining Programme for International Student Assessment school results and the new public management reforms of school decentralization and increased teacher autonomy (Nordin, 2016). The teaching profession is more exposed to public and judgmental opinions as well as new forms of governmental control, and weaker in the sense that the professional practice and development is more decentralized and individualized. Continuing professional development and regular opportunities to learn from other teachers with similar assignments or challenges are crucial. Both formal initiatives like educational courses and programmes, as well as more informal and self-initiated learning activities have shown to support teachers' professional learning (Tour, 2017). Today, increasing numbers of teachers use virtual learning sites like social media to share experiences and challenges, give advice and support each other on a regular basis (Macià & García, 2016; Robson, 2017).

Based on the above, the emerging social media activities now taking form through online teacher professional communities, should reflect the multilayered expectations directed to teachers' professional learning, not only for the individual teacher or local school, but also in large-scale teacher professional communities on national and regional scales (Macià & García, 2016) where teachers interact around specific content areas and shared educational interest. How larger communities work and actually support teachers' self-organized professional learning is however under researched.

This study intends to contribute to the field of research by taking an interest in the interactions in a thematic online teacher community and more specifically in interactions where the prevailing norms are challenged. According to Manca and Ranieri (2017, p. 617), studies on teacher's social media-based professional communities hitherto has lacked more large-scale computational analyses. Instead, a significant part of research has been informed by teachers' self-reported perceptions of

participating in social media discussions (Kelly & Antonio, 2016; Macià & García, 2016). To address this current deficit, we have selected a discussion thread from a large corpus of data for more in-depth analysis. The large corpus is covering a three-year period of all posts, comments, likes in a group of 13,000 members, assembled through the Facebook Application Programming Interface. For tracing an illustrative thread that dealt with problematic work-related issues within this large-scale data corpus, we systematically selected discussions that stood out in terms of length and intensity, and proved to be relevant. Depicting from the perspective of Goffman interactional approach, detailed analysis was then conducted. With this chapter, we aim to unpack how norms of social support in detail are performed around a particularly problematic work-related issue in a large thematic teacher professional social media group.

## 2 Teachers’ Participation in Social Media

There is an established literature on the role teachers’ informal professional communities play for professional development (Vangrieken, Meredith, Packer, & Kyndt, 2017). Recent research has suggested that it is becoming commonplace for teachers to participate in collegial discussions in social media groups and the field of research is gradually growing (e.g. Kelly & Antonio, 2016; Macià & García, 2016; Rashid, 2016). General findings of studies on teachers’ professional use of social media imply that interaction in these contexts provides support for participants in solving work-related issues, which leads to strengthening personal and professional relationships (Cook & Pachler, 2012; Manca & Ranieri, 2017). These findings align with results from studies that more specifically focus on teachers’ participation in professional social media groups, suggesting that generally such contexts can be characterized as sharing and supportive environments (e.g. Macià & García, 2016). Studies concluding that teachers’ participation can be characterized by supportive interchanges, show that when emotional support is provided for, a sense of belonging is established which consequently enhances teachers’ motivation to participate (see, e.g., Davis, 2015; Krutka, Carpenter, & Trust, 2016; Noble, Mcquillan, & Littenberg-Tobias, 2016; Ranieri, Manca, &

Fini, 2012; Tsiotakis & Jimoyiannis, 2016). Ranieri et al. (2012) and Krutka et al. (2016) argue that teachers are motivated to participate in such groups, as social media constitutes non-hierarchical contexts where teachers address each other as experts, which in turn gives teachers a sense of empowerment. However, an important factor for this kind of professional support to be meaningful is that trust is actively fostered and sustained, in terms of experiencing collegiality which involves confidence to share knowledge and negotiate ideas with peers (Booth, 2012). This is however not always easy to render possible let alone in self-initiated teacher professional development. Thus, in particular, studies have shown that teachers use online communities to “receive many kinds of social support” (Kelly & Antonio, 2016, p. 142).

## Understanding Supportive Work and Professional Identity in Social Media

The supportive qualities of an online community as important factors for teachers' participation in social media were emphasized in a survey by Duncan-Howell (2010) that included 99 teachers from three online communities. In this study, 40% of the responding teachers stated that emotional support is a key reason for participating in social media groups. A similar result is reported in a study by Ranieri et al. (2012), but this study also considered differences between generic social media groups and those organized around a specific theme. Their study of teachers' professional learning in Facebook groups included more than 1100 members of five Italian Facebook groups. It was concluded that the main difference between generic and thematic FB-groups was that the interaction in these groups afford different types of social capital development. Ranieri et al. (2012) found that especially in thematic groups where a shared interest formed the basis of the group, “the emotional dimension seems stronger, with an emphasis on the need to feel less lonely and on sharing emotions rather than information” (p. 765).

The supportive function of participating in social media groups for teachers has also been discussed in terms of the shared norms that evolve in thematic Facebook groups in relation to the issues and topics discussed

(Lantz-Andersson, Peterson, Hillman, Lundin, & Bergviken Rensfeldt, 2017; Lundin, Lantz-Andersson, & Hillman, 2017). These studies show that rather strong norms can develop in these groups, implying on the one side a constraint for participating teachers to align with, and on the other side support for teachers to develop professional identities and thus be able to own and share discussions of collective teaching issues. For example, in one study, a basic assumption of support for a specific teaching approach that is the theme of the group becomes a strong foundation and norm for the teachers' discussions that is manifested in a shared repertoire (Lantz-Andersson et al., 2017). The findings in this study illustrates a shared way of presenting and discussing the teaching approach. Such shared repertoires and established norms develop over time (Lundin et al., 2017), and thus the importance of temporality is indicated in several studies. For example, Robson (2016, 2017) discusses the role of temporality as identities are developed through repeated performances in an online group and become modified presentations of idealized teacher identities. In the study, this movement is formulated in terms of the establishment of a shared norm that implies that teachers' interactions "shape not only the ways in which they interacted with each other, but also their understandings of their subject and themselves as professionals" (Robson, 2016, p. 135). These studies speak to some general conditions for online teacher professional communities, but the particularities of how norms of social support are established, maintained but also challenged requires further scrutiny to understand the role these communities have.

### 3 Theoretical Framework

Similar to Robson (2016), this study aims to examine shared norms and professional identity in teacher's social media communities. However, this study focuses specifically on how social support is performed when problematic work-related issues arise. With this focus and similar to previous studies by Lantz-Andersson et al. (2017) and Lundin et al. (2017), the study draws on Goffman's theoretical notions of social support and (professional) identity work in social media group discussions. Based on Goffman (1959), identity is not something you have, or are, but rather,

identity is performed in interaction with others and in front of an audience. In our case this means teacher interaction taking form in front of an expert audience and other teacher professionals around specific instructional themes. With a case thread selected for detailed analysis at the level of the interaction between participants, we chose as already mentioned to adopt Goffman's (1959) interactional approach. In particular, we chose to understand the participants in the case thread as a "performance team" drawing on the definition that such a team is "any set of individuals who cooperate in staging a single routine" where team members stage their individual performances (similar or dissimilar) and an "emergent team impression arises" (Goffman, 1959, p. 85). For this study, aspects of performance team that are of particular analytical interest are teamwork, team member performances, and their relation to an audience. Given our focus on social support, our analysis of team member performances relies on Goffman's (1971) notion of supportive and remedial interchanges following Scott's (2015) description of such interchanges as "the two main types of verbal ritual that facilitate teamwork" (p. 121). Specifically, supportive interchanges are defined as team members' expressions of "fellow-feeling, through shows of concern for each other's welfare, status of social face" (Scott, 2015, p. 123), whereas remedial interchanges (e.g. accounts, apologies and requests) work as repairs of conduct that otherwise might be interpreted as a virtual offence (Goffman, 1971). Analysis of these interchanges is contextualized within the dramaturgical framings of each interaction developing an understanding of the overall framings in the thread in relation to the ways that social support is performed. The analysis is guided on: (1) how the supportive norm of the group is maintained by the participants interacting as team members and (2) how teamwork is performed in response to comments that deviate from such supportive norms.

## 4 Study Design and Methodological Considerations

The analysis in this study examines a discussion thread where a problematic work-related issue is raised, selected from a larger corpus of data through three analytical procedures: (1) Assembling a large corpus of

posts, comments and likes through the Facebook Application Programming Interface (API), (2) Computational content analysis to identify patterns and trends in the corpus, and (3) Detailed analysis of the communication in one selected thread.

### **Assembling a Large Corpus of Posts, Comments, and Likes Through the Facebook Application Programming Interface (API)**

Our analysis is based on a corpus of activity from nearly 13,000 Facebook-group members over a three-year period. This corpus was assembled by programmatically querying the Facebook Application Programming Interface through the use of the Facepy library (Gorset, 2014) for the Python programming language. The data collected included all posts, comments, and likes with the accompanying information about who conducted these activities and when. Once collected, the dataset was processed to create continuous transcripts of each thread and a large spreadsheet file with all the data organized by type.

### **Computational Content Analysis—Identifying Patterns and Trends**

Given the large size of the assembled corpus of 2970 threads containing 15,135 comments, we worked to identify particularly relevant discussions for analysis based on our strategy of identifying and analysing cases where established norms are challenged. This process began with computational content analysis using exploratory data analysis techniques (Morgenthaler, 2009) guided by prolonged ethnographic engagement (Davies & Merchant, 2007), that is, observations of the discussions in the Facebook group. With the aim of unpacking how social support is performed through moment-by-moment online interactions, we chose to look for examples of discussions that were problematic work-related issues or themes that were otherwise “at stake” for participants with the premise that such discussions would foreground the challenging of established norms in relation to social support. To identify such discussion

within the corpus, we worked with a macro level pattern identified where the large majority of posts received relatively equal numbers of likes and comments. Across the corpus, for every 100 likes a post received, it received on average 87 comments. This distribution is skewed, however, with only 22.86% (679 of 2970) of posts receiving more comments than likes. This makes posts that received more comments than likes a relatively uncommon occurrence and our ethnographic engagement in the group led us to suspect that these threads might contain discussions of problematic work-related issues or otherwise “at-stake” themes. Examining these 679 threads, we found that the majority consisted of only one comment with no likes and as such were not suitable for our analysis. Across the corpus, only 27.41% of threads contained more than five comments and only 79 of the 679 threads with more comments than likes contained more than one standard deviation above the mean number of comments (20). Based on this, we chose to further exam the 79 threads that deviated from the norm by receiving significantly more comments than likes.

## Detailed Analysis of the Selected Case Thread

To select a case for detailed analysis, the 79 identified threads were read to confirm that they included problematic work-related issues or otherwise “at-stake” themes and with confirmation of the pattern, we chose to select the thread with the most comments and therefore most interaction as a case. In total, 195 unique group members participated in this six day long discussion thread, either by commenting or liking posts. Fifty-four of these members produced 155 comments with 15 only commenting and the remaining 39 both commenting and liking the comments of others. Discussion in the thread concerns a problematic work-related issue in which a teacher (the original poster [OP]) describes being called to an extraordinary meeting with the parents of their students. The discussion thread goes on for six whole days. It is initiated on a Thursday evening and finishes the following Tuesday evening, but is most active for the first two days and least active on the fourth day (Sunday) when no comments or likes are contributed.

## Ethical Considerations

The project in which this study has been conducted has been approved by the Regional Ethics Board that determined that it did not constitute a risk for causing harm to individuals. However, aligning with the Swedish research council’s (2017) ethical guidelines and ethical rules in social science research, for publication we have chosen to withhold much of the data in the corpus, including the name of the Facebook group studied along with the specific instructional approach discussed, the names of individual members, and the dates on which activities occurred. In addition, the original corpus is in the Swedish language and all excerpts used in this chapter have been translated into English. This combination of obscuring identifying features of the group and group members along with translation of their discourse is intended to protect the integrity of participant identities. The group owner agreed to the use of the group for research purposes and participants were also informed by the moderator’s pinned post describing the study and declaring each members’ right to withdraw from the study and have their data deleted. Given the specific case selected for this chapter, and the potential of professionally sensitive nature of its original post where personal aspects and the “inner-life” of teacher professional work life are revealed (Bergviken Rensfeldt, Hillman, Lantz-Andersson, Lundin, & Peterson, 2019), we asked and received consent from the original poster to use a translated version of their posting and the thread that followed in publications. This recurrent concern of risks of harm for the profession or individual is a situated ethics approach (Simon & Usher, 2000), meaning that we have tried to be sensitive to the contingent constellations of analytical focus, methodological choices, and participants involved in the activities under study.

## 5 Findings

The paragraph is structured in three sections. First by presenting *Going on trial: an ethnographic account* to provide a broad description of the dramatic framing of the selected thread of the six days of interaction.



Thereafter the two following sections will be presented: *Team performances: Norms of conduct* and *Team collusion: Deviations from norms of conduct*.

## Going on Trial: An Ethnographic Account

As already mentioned, the original post that initiated the selected case thread concerns a problematic work-related issue in the original poster's (OP) professional life and is posted in the late evening:

The topic of the OP's original post is twofold. First, the OP narrates a problematic work-related issue in a teacher's professional life, that is, an upcoming extraordinary parent meeting seemingly initiated by the parents regarding the OP's teaching methods. Second, the teacher makes a request for scientific research showing positive effects of the teaching approach that the group is thematically organized around, and which the teacher is using, that characterizes the teaching methods in question and frames the post as relevant for the group. However, as the analysis will show, it is the teacher's reporting of a problematic work-related issue, the "trial" that becomes the figure of the discussion to follow. According to Goffman (1959) when people are in the presence of others, the first impression is important. The dramaturgical framing of the OP's problematic work-related issue says something about what is at stake professionally and the use of the first-person singular pronoun "I" indicates the presentation of self as someone who is going to be questioned or even interrogated by a group of parents, framed as the antagonists. By requesting "references to research", the OP also presents the self as knowledgeable of the idea of using research as the basis for defending their teaching methods to the parents. Sharing a problematic work-related issue like

### Excerpt 9.1 The dramaturgical framing

---

#### ORIGINAL POST:

OP I'm going on trial before a group of parents that don't like my lesson approach (or anything else for that matter) next week. Wondering if anyone has references to research that shows positive effects of [teaching approach in focus in the group] ...

Day 1 20:51:43

Likes: 10

---

this, that might open up for scrutiny, demands some trust (cf. Booth, 2012). Posting an original post portraying a meeting with parents as a going on "trial" indicates that the OP is somewhat confident at least in their role as member of the Facebook group, but perhaps also in their professional role. Posting a problematic work-related issue indicates trust that those members will mobilize a team work for support. The original post only attracted 10 likes, which is not surprising as this is a post that can be viewed as requiring to be commented upon and not only liked (cf. Lundin et al., 2017). We will add here that the data for this project was scraped when comments and likes were the only two ways of contributing, whilst from 2015 a number of options alongside like have been made available by Facebook.

The narrative of the discussion thread stays on topic during the six days it lasted and resembles a classical dramatic structure with an exposition, conflict, climax and resolution (Kirzner & Mandell, 1994). The original post can be seen as the exposition presenting the characters, the kind of situation and some information about time and place. The original post voices the report of a problematic work-related issue in a teacher's working life. The dramaturgical structure is quite dramatic with the OP teacher going "on trial", that is, called in for an extraordinary parent meeting, in front of his antagonists, "a group of critical parents who does not like the lesson approach". To address the criticism from parents, the protagonist requests research that shows positive support to the instructional approach. The dramaturgical structure of the problematic work-related issue is at first verified by the other teachers, and the overall norms that are established include supportive comments showing loyalty followed by responses from the OP thanking the participants and maintaining control of the dramaturgical framing by unfolding more details about the problematic work-related issue. All comments in the threaded discussion are oriented to the actual time of the extra parent meeting will take place. However, as the discussions unfold the dramaturgical structure is challenged and conflicts emerge. These conflicts involve comments on how professional teachers as professionals should regard parents and imply that other participants react in defence of the OP. Finally, the thread is finished by the OP reporting on the accomplished parent meeting and thanking the group members for their support.

## Team Performances: Norms of Conduct

As the threaded discussion unfolds during the six days, an overall supported norm is established. Team performances are mainly done by *supportive interchanges*, and a very few examples of *remedial interchanges* were found in the threaded discussion. Together these two interaction rituals (Goffman, 1971) represent the norms of conducts that are established.

### Supportive Interchanges: Working as Team Members

The emerging norm is initiated within minutes after the original post with a comment focusing on the OP's choice of word to describe the parent meeting.

This first comment is contributed just six minutes after the original post. Commentator 29 (C29) picks up on the OP's use of "trial" and demonstrates dismay at the situation presented. In this manner, C29 displays loyalty to the OP's dramaturgical framing of the problematic work-related issue: as someone who is preparing for self-defence going up against a group of critical parents. C29's supportive interchange (Goffman, 1971), "seems quite crazy", explicitly positions C29 as being on the OP's side, that is, the protagonist's side. It is clear that the OP is closely following comments to their original post as the OP responds within two

#### Excerpt 9.2 Supportive work: Loyalty to the dramaturgical framing

---

COMMENTS:

- 1 C29<sup>1</sup> Is it true? Trial? Seems quite crazy.  
Day 1 20:58:04  
Likes: 1
  - 2 OP Of course, that's not the official label. That is how I feel though.  
However, I've accepted it and feel that I really have a good grasp on every aspect except for the research (and at least one parent in the group has a PhD).  
But summed up, it's really criticism of everything. From an unclear website, to boring movies, to strange tasks, to high demands, to me as a person.  
Day 1 21:00:27
- 

<sup>1</sup>The commentators have been sorted in alphabetic order and named by numbers

minutes and in doing so shows that they take responsibility for how the problematic work-related issue is discussed further. The OP mitigates C29's dismay at the upcoming "trial" by explaining that "trial" is not the official label of the upcoming meeting, but expresses their feelings about it.

What the OP makes visible is that being a teacher called to an extra meeting with parents is something that "feels" like being on trial. At the same time, the OP stresses that they have agreed to such a meeting and although the OP seems to be quite confident about their teaching methods in general, they are specifically concerned about a lack of knowledge of the research of the specific teaching approach to support their performance. This concern is, in turn, explained as revolving around producing valid arguments for parents who value research knowledge highly. Directly afterwards, however, the OP returns to more personal reflections about the upcoming event as a critique against themselves and their teaching generally. As the next excerpt will show, this OP reply occasions more supportive interchanges (Goffman, 1971) from other teachers in the thematic group:

In the comments that follow, supportive interchanges (Goffman, 1971) are made evident in several ways. Initially C23 orients to the OP's vulnerability and emotional needs by demonstrating emotional support: "Ugh, that's awful, I hope you have the leadership on your side!" (comment 12). This is followed by an indication of solidarity with the OP as a

**Excerpt 9.3** Supportive work: Displaying emotional support, motivational support and encouragement

---

12 C23 Ugh, that's awful, I hope you have the leadership on your side!  
 Strange that parents can decide what you should do as a professional! However, it's nice to be able to connect your teaching to current research! Go for it!  
 Day 1 21:10:52  
 Likes: 5

/.../

14 OP [names C23]—I have always felt supported by the leadership before! However, I'm not so sure anymore. They could easily have brushed off agitated parents! Unfortunately, we are in a situation where we can't afford to lose more students from homes with high education levels, and then parents get a lot of influence.  
 Day 1 21:12:48

---

professional teacher and once again the parents are maintained as the antagonists in the discussion. This also explicates C23's concern for the OP's relations with school leadership and expresses a perceived norm where a teacher should have support from the "leadership" when their professional identity is threatened or questioned by parents. Furthermore, C23 also provides more constructive support by claiming that for a professional teacher it is "nice to be able to relate your teaching to current research" (comment 12). This formulation by C23 could be understood as indicating that relating one's teaching practice to research is "nice" but not necessary. Furthermore, the formulation could be seen as part of the supportive framing since it is research knowledge specifically that the OP has revealed feeling uncertain about. Finally, C23 demonstrates support by means of encouragement writing simply, "You for it!" (comment 12).

As a response to C23, the OP describes "feeling" questioned as a teacher and no longer sure about being supported by the school leadership as the leadership has not actively acted on the issue as they "could easily have brushed off agitated parents" (comment 13). The school leadership is instead portrayed as being in the hands of some parents as schools nowadays cannot afford to lose students with highly educated parents to other schools.

A third example of supportive interchanges in the discussion thread is from an excerpt where the issue of parents, that is, the antagonists, dictating a teacher's work is discussed further as a general issue:

In Excerpt 9.4, C53 re-issues the OP's earlier argument about parents not dictating the terms for teachers' work (see Excerpt 9.3, comment 12), but frames it as an issue that teachers in general can relate to: "Think we are quite a few who recognize this" (comment 31). Here the use of the first-person plural pronoun "we" indicates both a solidarity and a collective identity the issue is thus interactively framed as a performance team (Goffman, 1959). By this statement, all teachers who are members of the group are included on the premise that they can relate to running into parents with opinions about this specific teaching approach that is theme of the group. In this way, the discussion thread also exemplifies some of the challenges teachers who introduce and make use of new instructional approaches must be prepared to be held accountable for—parents being one group of possible sceptics. C44 continues with the supportive inter-

**Excerpt 9.4** Supportive work: Displaying solidarity and collective identity

- 
- |    |     |  |
|----|-----|--|
| 31 | C53 | Something has gone totally wrong when parents are allowed to dictate terms for school activities and the teachers’ teaching. Think we are quite a few who recognize this.<br>Day 1 21:24:12<br>Likes: 15 |
| 32 | OP  | It is a serious problem!<br>Day 1 21:24:42<br>Likes: 1   |
| 33 | C44 | Yes and we have to get them on board. First, they have to understand that school has changed and is changing.<br>Day 1 21:26:31  |
| 34 | OP  | The fact that this discussion took off so quickly says something about how many see themselves in this.<br>Day 1 21:26:31<br>Likes: 1  |
- 

change by agreeing but then stresses the teachers’ responsibility for making sure that parents are “onboard” (comment 33) in the sense that it is the teachers’ job to make sure that parents understand the current transformations of schooling. This responsibility is thus put forward as part of teachers’ professional accountability. In their response, however, the OP stays oriented to the notion that many teachers in the group align with the dramaturgical framing of the problematic work-related issue itself and not towards the more general responsibilities teachers have with regard to parents.

Other examples of how mobilizing social support before the extra parent meeting are displayed during the second day of the thread is active by members commenting on the discussion thread or referencing the group itself as a performance team, for example: “Crazy long thread. Indicates a great commitment and that we all support you [names OP], good luck” (comment 100), “Wow—what a long thread. Wish my colleague had read that last year when she had to defend the self in a similar situation” (comment 110). In a similar vein, an explicit example of an interactive framing as a performance team (Goffman, 1959) with reference to the Facebook group itself is shown in Excerpt 9.5:

As seen in Excerpt 9.5, all the members of the group are used as an indication of the massive support. This way the performance team (Goffman, 1971) formed of the entire group is used as a resource for

**Excerpt 9.5** Supportive work: Establishing a group identity as “we Facebook group members”

---

124	C24	We are 7616 members in this group who are behind you... Hope you feel our support at the meeting! Day 2 20:12:59 Likes: 9
125	OP	/.../ [names C24]—That’s something I’ll take with me! Day 2 20:47:49 Likes: 4

---

showing collective social support, even though only 54 members make contribution to the discussion thread by commenting and this particular comment received only nine likes. The OP acknowledges this comment on the scale of the support by responding directly to C24 saying they will take the support to the parent meeting.

Social support is also given by member displays of the performance team in the next example. In the same manner, as in Excerpt 9.2, it illustrates loyalty to the OP’s dramaturgical framing of the problematic work-related issue, as well as the OP’s request for “references to research that shows positive effects of the teaching approach in focus in the group is acknowledged:

As can be seen in comment 129, C34 aligns with the initial original post by using the same formulation “put on trial” in reference to the extra parent meeting. In Excerpt 9.6, C34 provides social support by both displaying loyalty to the dramaturgical framing and through professional support by posting seven scientific articles stating that they will help the OP “sharpen [OP’s] arguments”. A few minutes later in a new comment, C34 continues showing sympathetic support by expressing that “it’s completely insane that you’re questioned”. The OP acknowledges C34’s offerings, but does not discuss the provided references to scientific articles further. Instead, the OP resumes the dramaturgical framing, and informs the group when the parent–teacher night will take place with the words: “Execution takes place tomorrow”. This is responded to with several comments expressing social support through complements about the strength of the OP’s professional identity and (comments 132 and 135), wishing the OP good luck (comments 134, 135, 137, 141). The examples

**Excerpt 9.6** Supportive work: Displaying loyalty to the dramaturgical frame, acknowledging the original request and providing offerings to the request

---

129	C34	Hi, don't know if you've "gone on trial" yet but here are some tips on scientific articles that can help you to sharpen your arguments: [list references to 7 scientific research articles formatted in APA-style] Day 5 13:59:07 Likes: 1
130	C34	By the way it's completely insane that you're being questioned. Day 5 14:01:34 Likes: 3
131	OP	Thanks! Execution takes place tomorrow. Day 5 15:12:22

---

above have illustrated the different ways social support is performed and maintained in the group. Participants work as team members to support ideal identities of the professional teacher and the collective identity as the ideal identity as professional teachers, and collective identity as Facebook group members working with a specific instructional approach. Supportive interchanges (Goffman, 1971) are to a large extent the most common interaction ritual in the discussion thread. If no supportive interchange will occur, Goffman (1971) argues that a virtual offence will occur, which will require a remedy. This means that team members have the possibility to show their loyalty to the relations within the team by displaying they are loyal to the norms of conduct in the group by correcting failures, which the next example will illustrate.

### Remedial Interchanges: Challenging the Team Performance

Towards the end of the first day of the discussion thread, several teachers share their experiences and views on parent interaction as ways of tempering the foregrounded conflict between teachers and parents:

In Excerpt 9.7 above, one of the teachers who attempts to temper the foregrounded teacher–parent conflict, C37, opens up for a different way of seeing the role parents play and the role teachers can take when they are questioned by parents in contemporary schooling. This different perspective on the relation with parents is presented by formulating an initial



**Excerpt 9.7** Remedial work: Tact and avoiding virtual offence

- 
- 45 C37 Now I have no idea at all how “your” parents are ... but when I get questioned I usually think it’s great that it reaches me and doesn’t stay around the kitchen table. The fact that parents are questioning is actually a sign that they are engaged and interested in the schooling of their children—which is a great condition for the child. I think you should keep your head high and rely on your profession. Parents have experience from their own schooldays. We would never ever be satisfied thinking that the science of medicine was the same as when we were small...  
Day 1 21:38:06  
Likes: 6
- 46 C37 ... so ... “go for it”! Be professional. It’s YOUR job to take care of the teaching and the parents’ responsibility to keep informed about how the teaching is going  
Day 1 21:38:50  
Likes: 7 (MB)
- /.../
- 49 OP [names C37]—Thank you! The biggest problem is that there is actually no interest in having a discussion with me. Nobody has talked to me. Everyone complains to the boss. Then it’s impossible to have a dialogue, even though I wanted to.  
Day 1 21:43:31
- 
- /.../

repair “Now I have no idea how ‘your’ parents are” (comment 45). Analytically, this can be understood as a remedial interchange (Goffman, 1971), which implies that the general supportive norm in the thread is left unscathed. Thus, drawing on Goffman’s concept of remedial interchanges, comments 45 and 46 can be seen as anticipating the OP taking offence to the presentation of a discourse of reconciliation instead of a discourse of “us” and “them” as suggested by the OP. The perspective taken by C37 is that critique from parents is better handled when they are openly discussed and “not left at home at the kitchen tables”. Furthermore, as stressed by C37, the critique put forward by parents can also be interpreted as showing engagement and thus beneficial for students and to be drawn upon by teachers. As seen in comment 49, the OP responds by first thanking C37 for the encouragement and then reverts to the dramaturgical framing by providing explanatory details about the problematic work-related issue where the parents are described as the

one's showing a disinterest in discussing directly with the OP. This is one of few examples of remedial work in the thread where the performers challenge the ideal identity of the group, but doing so by showing awareness to the norm established in the group. Supportive and remedial interchanges compose the norms of conduct in the group. The next section will illustrate how teamwork is performed in response to comments that deviate from established norms.

### **Team Collusion: Deviations from Norms of Conduct**

As mentioned earlier the dramaturgical framing of the problematic work-related issue is challenged as the interaction unfolds and potential conflicts emerge. In this section, we will analyse how teamwork is performed in response to comments that deviate from the supportive norms of the group, that is, how the group mobilizes to rebut such critique. The general conflict can be characterized as different perspectives on the teacher–parent relationship, where one side argues that teachers have to meet “parents where they are” in dialogue, and the other side maintains that parents should not interfere so much in the work of teachers. These kinds of critical interchanges are slowly established throughout the thread, first demonstrated by means of critical questions from several members and culminating rather late in the course of the discussion thread with the OP's displayed attitude towards parents being directly criticized.

In the excerpt to follow, comment 14, as also included in Excerpt 9.3, is in the following example illustrating how the OP's suggestion that the school leadership could “have brushed off agitated parents” is responded to by C13 in a rather critical manner.

### **Virtual Offence: Defensive Facework**

C13 deviates from the supportive norm by clearly challenging the OP with a question about whether or not parents who are engaged in their children's schools should be dismissed. Their use of the formulation “brush them off” is a direct reference to the previous comment made by

the OP. The use of terms such as “them” and “theirs” indicates that the comment aligns with the dramaturgical framing where the parents are positioned as the antagonists. However, as we will argue, a clear group of protagonists against this other, a “we” is not yet evident. Instead C13 uses the indefinite pronoun “one” (Swedish: “man”) indicating a vague professional identity in this issue. This vagueness is initially maintained by the OP as well when they respond: “No one doesn’t have to”. However, then the OP clearly positions teachers in relation to other groups of professionals as a strong “we” saying: “We’ll cooperate with the families, but they will not dictate our conditions”.

C13 brings forward an opposing position on how to handle questioning (engaged) parents. In this manner, the dramaturgical framing of the discussion is challenged and a shift in the argumentative claims is displayed. Judging from the OP’s response above, comment 17 is taken to dispute the OP’s claims and thus rejected. By directly addressing C13, the OP makes it clear that parents do not have to be met in the way suggested by C13 to win their trust. They motivate this position by comparing teachers to other (high status) professionals such as physicians and lawyers, who do not allow for “people calling to tell them how to do their job”. The OP continues writing that “we”, that is, professional teachers, should collaborate with parents but that they should not under any circumstances “dictate” the conditions under which teachers work. The next example illustrates how defensive facework is performed when the impression of the team is challenged:

### **Virtual Offence: Protective Facework**

On day six of the thread, the same day as the extra parent meeting, the OP is addressed in six comments where other members display encouragement and support by wishing the OP good luck. However, another comment posted that day starts with a supportive statement, but continues to with a displaying of shift in loyalty:

The divergent comment (145) is posted at 6AM the day of the parent meeting and starts and finishes with a supportive interchange wishing the OP good luck. However, between these bracketing statements of support,

**Excerpt 9.8** Professional identity repair work: Justification by sustaining the dramaturgical framing and denial of the harm done by social comparison of professions

---

14 OP [names C23]—I have always felt supported by the leadership before! However, I'm not so sure anymore. They could easily have brushed off agitated parents! Unfortunately, we are in a situation where we can't afford to lose more students from homes with high education levels, and then parents get a lot of influence.  
Day 1 21:12:48

/.../

17 C13 Should one brush them off then? Don't you have to meet them where they are to gain their trust?  
Day 1 21:15:20  
Likes: 2

/.../

19 OP [names C13]—No, one doesn't have to. Just as little as a physician or a lawyer should have people calling to tell them how to do their job. We'll cooperate with the families, but they will not dictate our conditions.

/.../

Day 1 21:17:27  
Likes: 8

---

C40 diverges from the prevalent dramaturgy by challenging the OP's framing of the meeting with parents by offering the OP some advice to the OP on how to embrace an appropriate attitude when meeting the "counterparts" (comment 145). C40s use of counterparts in quotation marks indicates that C40 disagrees with the established dramaturgical framing in the thread where parents are presented as antagonists. From the response to comment 145 made by another member (comment 147), it is clear that the challenge framed as advice deviates from an established norm in the group. Sensitivity to this deviation is also shown from the outset as C40 uses the downgrading formulation "slightly" (comment 145) before stating their argument that the OP should display a more "receptive attitude (...) than you have expressed here", and offering the further downgrading formulation "it feels like we didn't get the whole picture" (comment 145). By acknowledging eventual hurt feelings of a professional teachers' private self, C49 suggests OP taking pedagogy into account.

The OP's response to the comment by C40 could be interpreted as what Goffman (1971) called a *virtual offence*, claiming that not understanding what C40 implies in comment 145. However, in the comments that follow it is made clear that C40's deviation from a norm occasions the performance team to work in collusion to make repair work. C39 performs this role on behalf of the team in their statement, "So unnecessary, C40! Support is what's needed?" (comment 146). C39 performs protective facework (Goffman, 1971) on behalf of the OP. This is followed by C49 "cooling the mark out" (Goffman, 1952) between the established dramaturgical framing in which the parents are the antagonists and the critique put forward by C40. Such mediation work is done by invoking the voice of teacher professionals, stating that it is not a question of agreeing or not but "a matter of pedagogy" (comment 148). By doing this, the focus of the disagreement on the OP's dramaturgical and personal framing is broken and a more general educational issue is invoked. The examples above have illustrated deviations from norms of conduct which is read as performances that do not succeed providing the

**Excerpt 9.9** Displays of shift in loyalty to the dramaturgical framing

- 
- |     |     |  |
|-----|-----|--|
| 145 | C40 | Good luck today [names OP]! I hope you'll have a slightly more humble and receptive attitude towards your "counterparts" at the meeting than you have expressed here. If you do, and if this is just a criticism of using the [instructional approach], then there's nothing to worry about. But based on how you have expressed yourself, it feels like we didn't get the whole picture. Well, good luck anyway, as I said.<br>Day 6 06:04:40 |
| 146 | OP  | I don't really understand what you mean [names C40]. But I'll listen for sure, just not saying I'll agree.<br>Day 6 15:03:08   |
| 147 | C39 | So unnecessary, [names C40]! Support is what's needed? I think [names OP] seems sound in their thinking, and anyway this might not be the time for that discussion?<br>Day 6 15:58:02<br>Likes: 7  |
| 148 | C49 | For or against, see, it's a matter of pedagogy. It's clear that this job takes time and involves many fears, stepped-on toes, wishes and inability to look beyond what one believes in today:<br>Day 6 20:06:27  |
-

ideal professional identity established in the threaded discussion. Goffman (1959) is concerned by the team members' performances to stage a single routine, and their relation to an audience. Excerpts 9.8 and 9.9 are alike in that the comments made in these two excerpt deviates from the supportive norms established in the group, they differ from the social norm established in the group in that C13s (see Excerpt 9.8) and C40s (see Excerpt 9.9) comments are read as made by someone taking a discrepant role and in that way as someone not sustaining the team impression.

## 6 Discussion

The aim of this study was to unpack how norms of social support are enacted in relation to problematic work-related issues in a professional social media group. More specifically, we were interested in examining how social support is performed when a problematic work-related issue was raised by one of the members in a large thematic Facebook group for teachers. The findings of this study illustrate how the performance of social support in a thread includes both supportive and remedial interchanges that reveal an emergent impression management and a mutually shaped professional teacher identity. They indicate that member performance, generally relatively neutral in non-critical discussion threads, changes in relation to the problematic work-related issue in the post that challenges the collective identity of the group. This means that the interaction engenders cooperative and supportive interchanges that motivate members to perform as a team and cooperate as supportive team members.

Findings from detailed analysis of a discussion thread unpack ways a problematic work-related issue raised by a teacher in an original post occasions members to perform social support in ways that lead to a co-construction of teacher professional identity. The original poster can be regarded as a team leader (Goffman, 1959) who is cooperatively supported in the discussion that unfolds by the majority of other members in the thread by staging of a collective professional teacher identity. The discussion lasted for six days and the original post in the thread attracted 155 comments, with 38% contributed by the original poster ("team

leader”). This suggests that the team leader takes responsibility for the issue raised and for keeping the discussion going. The social media function “likes” used by the team might be understood as a back channel, showing other team members and potential readers those comments considered interesting in the unfolding discussion. Comments that are responses to the original post receive most likes while comments directed to other members in the discussion attract neither many likes nor comments. This confirms previous research that shows that discussions in Facebook are hierarchical and mainly dyadic with posts that attract many comments producing multiple dyadic configurations (Rashid, 2016). In the case examined in this chapter, cooperative support is performed through strategies of supportive interchange seen in such features as how members apologize in advance for a comment that might otherwise be interpreted as threatening to the prevailing formulation of professional identity. When supportive norms in the discussion are broken, the action is clearly disciplined by remedial interchanges done as repair work to assist in face-saving of the implicated members and to facilitate the on-going supportive interaction. Emergent impression management and mutually shaped professional teacher identities also designate other teams in relation to the teaching profession such as parents and pupils, headmasters and school leadership, researchers and research.

This study contributes to previous research by empirically illustrating how informal social media groups function as virtual spaces for teacher to reflect on their teacher practice and receive emotional and social support from their peers (Kelly & Antonio, 2016; Macià & García, 2016). Our findings suggest that teacher-driven thematic Facebook groups can be supportive and emotional virtual sites for professional learning for teachers to receive collegial social support when faced with problematic work-related issues at work. They also suggest that Goffman’s (1959) notion of performance team enables an emphasis on the situated character of member relations within a FB group. In the group studied, member performance changes in response to posts where a problematic work-related issue challenges the collective identity in the group to involve cooperative and supportive interchanges that occasion members to perform as teams and cooperate as supportive team members. This is

something that originates from the original post, and something that disperses when the discussion has ended.

The Swedish context rendered visible here illustrates the individualized character of the teaching profession, teachers are free to try new instructional approaches and use Facebook groups for sharing challenges around such choices with colleagues from other schools and contexts. Interestingly, the teacher group discussion shows a strong prescription for research-based arguments for promoting ones’ teaching practice and for approaching parents doubts and critique, a clear uptake from current international policies. Indeed, teachers are held accountable by parents, school leaders and other stakeholders for their teaching performances and methods. At the same time, the individual exposure teachers risk facing are evident as well, “going on trial”, illustrate strong emotions at play, at the same time it also invites a strong supportive norm to take form. The emotional and supportive aspects of collegial interaction is widened to circles at a distance from the actual workplace. This is a new tendency that would be valuable to further explore and capitalize in terms of competence enhancement in future research.

**Acknowledgements** This research is a part of a larger research project on teacher professional learning in social media funded by the Swedish Research Council Dnr 2014–2135 and conducted within the University of Gothenburg Learning and Media Technology Studio (<http://socav.gu.se/english/centers/letstudio-the-university-of-gothenburg-learning-and-mediatechnology-studio>) and the Linnaeus Centre for Research on Learning, Interaction and Mediated Communication in Contemporary Society (<http://lincs.gu.se>).

## References

Bergviken Rensfeldt, A., Hillman, T., Lantz-Andersson, A., Lundin, M., & Peterson, L. (2019). A ‘Situated Ethics’ for Researching Teacher Professionals Emerging Facebook Group Discussions. In Å. Mäkitalo, T. Nicewonger, & M. Elam (Eds.), *Designs for Experimentation and Inquiry: Approaching Learning and Knowing in Digital Transformation* (pp. 197–213). Abingdon, Oxon; New York, NY: Routledge.



- Booth, S. (2012). Cultivating Knowledge Sharing and Trust in Online Communities for Educators. *Journal of Educational Computing Research*, 47(1), 1–31.
- Cook, J., & Pachler, N. (2012). Online People Tagging: Social (Mobile) Network (ing) Services and Work-Based Learning. *British Journal of Educational Technology*, 43(5), 711–725.
- Davies, J., & Merchant, G. (2007). Looking from the Inside Out: Academic Blogging as New Literacy. In M. Knobel & C. Lankshear (Eds.), *A New Literacies Sampler* (pp. 167–198). New York: Peter Lang.
- Davis, K. (2015). Teachers' Perceptions of Twitter for Professional Development. *Disability and Rehabilitation*, 37(17), 1551–1558.
- Duncan-Howell. (2010). Teachers Making Connections: Online Communities as a Source of Professional Learning. *British Journal of Educational Technology*, 41(2), 324–340.
- European Commission. (2013). Supporting Teacher Competence Development for Better Learning Outcomes. Retrieved from [http://ec.europa.eu/education/policy/school/doc/teachercomp\\_en.pdf](http://ec.europa.eu/education/policy/school/doc/teachercomp_en.pdf)
- Goffman, E. (1952). On Cooling the Mark Out: Some Aspects of Adaption to Failure. *Psychiatry: Journal of Interpersonal Relations*, 15(4), 451–462.
- Goffman, E. (1959). *The Presentation of Self in Everyday Life*. New York: Anchor Books.
- Goffman, E. (1971). *Relations in Public: Microstudies of the Public Order*. New Brunswick, NJ: Transaction Publishers.
- Gorset, J. (2014). Facepy (version 1.0.7) (software). Retrieved November 2015, from <https://github.com/jgorset/facepy>
- Kelly, N., & Antonio, A. (2016). Teacher Peer Support in Social Network Sites. *Teaching and Teacher Education*, 56, 138–149.
- Kirzner, L. G., & Mandell, S. R. (1994). *Fiction: Reading, Reacting, Writing*. Orlando, FL: Harcourt Brace College Publishers.
- Krutka, D. G., Carpenter, J. P., & Trust, T. (2016). Elements of Engagement: A Model of Teacher Interactions Via Professional Learning Networks. *Journal of Digital Learning in Teacher Education*, 32(4), 150–158.
- Lantz-Andersson, A., Peterson, L., Hillman, T., Lundin, M., & Bergviken Rensfeldt, A. (2017). Sharing Repertoires in a Teacher Professional Facebook Group. *Learning Culture and Social Interaction*. <https://doi.org/10.1016/j.lcsi.2017.07.001>
- Lundin, M., Lantz-Andersson, A., & Hillman, T. (2017). Reshaping Professional Learning: Teacher Professional Identity Work in Social Media. *QWERTY Open and Interdisciplinary Journal of Technology, Culture and Education*, 12, 2.

- Macià, M., & García, I. (2016). Informal Online Communities and Networks as a Source of Teacher Professional Development: A Review. *Teaching and Teacher Education*, 55, 291–307.
- Manca, S., & Ranieri, M. (2017). Reshaping Professional Learning in the Social Media Landscape: Theories, Practices and Challenges. *QWERTY Open and Interdisciplinary Journal of Technology, Culture and Education*, 12, 2.
- Morgenthaler, S. (2009). Exploratory Data Analysis. *Computational Statistics*, 1(1), 33–44.
- Noble, A., Mcquillan, P., & Littenberg-Tobias, J. (2016). "A Lifelong Classroom": Social Studies Educators' Engagement with Professional Learning Networks on Twitter. *Journal of Technology & Teacher Education*, 24(2), 187–213.
- Nordin, A. (2016). Teacher Professionalism Beyond Numbers: A Communicative Orientation. *Policy Futures in Education*, 14(6), 830–845.
- OECD/Schleicher, A. (Ed.). (2012). *Preparing Teachers and Developing School Leaders for the 21st Century: Lessons from Around the World*. OECD Publishing.
- Ranieri, M., Manca, S., & Fini, A. (2012). Why (and How) Do Teachers Engage in Social Networks? An Exploratory Study of Professional Use of Facebook and Its Implications for Lifelong Learning. *British Journal of Educational Technology*, 43(5), 754–769.
- Rashid, R. A. (2016). Topic Continuation Strategies Employed by Teachers in Managing Supportive Conversations on Facebook Timeline. *Discourse Studies*, 18(2), 188–203.
- Robson, J. (2016). Engagement in Structured Social Space: An Investigation of Teachers' Online Peer-to-Peer Interaction. *Learning, Media and Technology*, 41(1), 119–139.
- Robson, J. (2017). Performance, Structure and Ideal Identity: Reconceptualising Teachers' Engagement in Online Social Spaces. *British Journal of Educational Technology*. <https://doi.org/10.1111/bjet.12551>
- Scott, S. (2015). *Negotiating Identity: Symbolic Interactionist Approaches to Social Identity*. Cambridge, UK: Polity Press.
- Simon, H., & Usher, R. (2000). *Situated Ethics in Educational Research*. London: Routledge.
- Swedish Research Council. (2017). God forskningsred. Stockholm: Vetenskapsrådet. Retrieved November 2017, from <https://publikationer.vr.se/produkt/god-forskningsred/>
- Tour, E. (2017). Teachers' Self-Initiated Professional Learning Through Personal Learning Networks. *Technology, Pedagogy and Education*, 26(2), 179–192.

- Tsiotakis, P., & Jimoyiannis, A. (2016). Critical Factors Towards Analysing Teachers' Presence in On-line Learning Communities. *Internet and Higher Education*, 28, 45–58.
- Vangrieken, K., Meredith, C., Packer, T., & Kyndt, E. (2017). Teacher Communities as a Context for Professional Development: A Systematic Review. *Teaching and Teacher Education*, 61, 47–59.



# 10

## The Conceptualization of Time, Space, and the Body in Virtual Sites and the Impact on Language Learner Identities

Regine Hampel

### 1 Introduction, Research Questions, and Approach

The growth of digital technology in recent decades has been fast and global and it has been accompanied by the introduction of increasingly sophisticated tools. By 25 March 2019, the number of internet users had reached almost 4.4 billion, having grown over 1000% since 2000 ([internetworldstats.com/stats.htm](http://internetworldstats.com/stats.htm)). The amount of digital information is expanding exponentially, and the increasing use of portable computers (e.g. in the form of mobile phones) allows a greater number of people to access information whenever and wherever they are.

These developments also provide new opportunities for learning, opening up new sites beyond the confines of the traditional classroom. As Edwards and Usher (2000/2008, p. 9) point out, our view of what we think of as learning contexts has widened:

---

R. Hampel (✉)

Faculty of Wellbeing, Education and Language Studies, The Open University,  
Milton Keynes, UK

e-mail: [regine.hampel@open.ac.uk](mailto:regine.hampel@open.ac.uk)

[G]lobalizing processes and associated trends towards discourses of life-long learning raise questions over what precisely we designate as specifically a learning context. Pedagogy, therefore, now has to be seen in a context wider than the classroom both temporally and spatially—in relation to curriculum, the identity of learners and socio-economic and cultural contexts.

This is particularly relevant in relation to language learning where the focus is on developing linguistic and cultural knowledge and skills that relate to people and places that are located in the “real” world outside the classroom and where the focus is communication and interaction.

Against this backdrop I would like to argue in this chapter that the introduction of digital technologies into language learning and teaching and the different materiality of the online medium is not only changing the nature of learning but also the nature of the learner. Traditionally, learning took place in particular contexts, and our understanding of what a learner is is still closely associated with educational institutions, where learning takes place in synchronous time and is embodied, with learners and teachers physically present. This means that learner identity is bound up with notions of time, place, and the body that are closely linked to institutions.

In this chapter I will thus explore the following two questions. How are time, place, and the body conceptualized differently in online learning environments—where the classroom is turned into “an imagined and expanding geography” (Leander, Phillips, & Taylor, 2010, p. 330)—compared to face-to-face (f2f) contexts? And how does this affect our understanding of what learner identity means in online spaces today and how it is constructed and communicated, using language but also “other meaning resources of physical, social and symbolic kinds” (van Lier, 2004, p. 80)? In answering these questions, this chapter synthesizes how these new conceptualizations of time, space, and the body—though not original in themselves—interact in novel ways in virtual learning contexts, and how this may impact learning in various ways. It is also important for teachers who use or consider using virtual sites to be aware that many of the conceptualizations that are associated with learning in a physical classroom do not apply, and to take account of the ramifications

of alternative conceptualizations that are discussed in this chapter in their teaching.

In order to answer the questions posed above, I want to move away from the still predominant psycholinguistic approach in second language learning research and draw on sociocultural and poststructuralist theory, and on social semiotic approaches to communication and meaning making instead. Recent research has been exploring in what ways digital tools can encourage a particular “learning ecology,” “one that harnesses learner identities, deepens their sense of engagement, and increases their motivation to devote time to task and engage with others in their knowledge community” (Kalantzis & Cope, 2015, p. 384). I would argue that this kind of ecology is particularly powerful for language learning, with the new technologies providing learners with new social contexts for interaction and for engagement in the world outside the classroom, in online communities where the language they are learning is used for communication purposes. However, the use of virtual sites for language learning also has implications for learner identity, challenging more conventional notions of what a learner is.

The next section explores identity in general and language learner identity in particular, starting with Locke’s theory of mind and then drawing on theories and approaches developed mainly in the twentieth and early twenty-first centuries, including the notion of the person as a social actor (Goffman, 1959/1990; Scollon & Wong Scollon, 2003). The concept of identity as an individual’s sense of self in relation to a particular social context or community of practice (Mercer, Ryan, & Williams, 2012) will be shown as being rooted in notions of time, place, and the body. I will examine how these notions are conceptualized in virtual contexts to try to understand how identities are constructed by language learners today. Drawing on recent research, I will explore in the following section how time has become more flexible, how place is experienced as space or spatiality, and how learning has become disembodied (or differently re-embodied). I will end with a discussion of the implications of this for the identity of language learners today and what it means for teachers, summarizing opportunities and examining challenges, and linking this back to the more recent constructs of identity and learning introduced in the next section.

## 2 Theoretical Framework: (Language) Learner Identity

In the Middle Ages God was considered to be the guarantor for a person's identity (Marquard, 1979), and identity was seen as fixed and immutable. How we conceive of who we are starts to be transformed during the Renaissance, with the role of the guarantor shifting from God to the individual him-/herself. This is exemplified in Locke's *Essay of Human Understanding* (1690/1959), where personal identity is understood as being based on a person's sense experience of his or her self in different times and places (pp. 448–9). In the nineteenth century, the notion of identity itself starts to be questioned. Thus, Nietzsche (1930) describes the subject as fictitious, as something added-on (“etwas Hinzugedichtetes, Dahinter-Gestecktes,” 1883/1930, p. 337) and as multiple (“Vielheit,” p. 341). In modern identity theory, identity is seen as socially constructed in our interaction with other people. Mead (1934/1967), for example, describes humans as social beings, whose identity is formed in the reflection of others. Thus, he understands the self “not as an autonomous psychological entity but as a multifaceted social construct that emerges from people's roles in society; variation in self-concepts is due to the roles that people occupy” (Hogg, Terry, & White, 1995, p. 256). This is reflected in the original meaning of “persona” as a mask or a role—which in turn links to Goffman's (1959/1990) conceptualization of social interaction as “theatrical performance” (p. 9) where people put on a “front” (p. 32).

Poststructuralist and postmodern theorists have taken the critique of a stable and unique individual identity even further and see it—as Darvin and Norton (2017) point out—as “multiple, fluid, and a site of struggle” (p. 3). Identity is something that is constructed, performed, and imagined. Thus, Kristeva (1984) describes the self as follows: “the speaking subject is no longer a phenomenological transcendental ego nor the Cartesian ego but rather a ‘subject’ in process/on trial [sujet en procès]” (p. 37). And Hutcheon (1989) observes that in postmodernism (with its commitment to doubleness, self-consciousness, contradiction, and subversion) “subjectivity is represented as something in

process, never as fixed and never as autonomous, outside history. It is always a gendered subjectivity, rooted also in class, race, ethnicity, and sexual orientation” (p. 39). Similarly, Norton (2000) pinpoints three defining characteristics of subjectivity: “the multiple, nonunitary nature of the subject; subjectivity as a site of struggle; and subjectivity as changing over time. Furthermore, and of central importance, subjectivity and language are theorized as mutually constitutive” (p. 8). Drawing on Foucault’s work on discourse and on Weedon (1987) allows her to see identity “as discursively constructed and as socially and historically embedded,” as “constituted in and through language” (Norton, 2013, p. 4).

In terms of learning, identity has also been linked to the notion of communities of practice (Lave, 1991; Wenger, 1999), a sociocultural construct that focuses on the situatedness of learning. For Mercer et al. (2012) “[i]dentity is an individual’s sense of self in relation to a particular social context or community of practice” (pp. 11–12). An important concept here is recognition, as Coll and Falsafi (2010, p. 213) suggest:

[L]earning enables participation in communities of practice, and participation in communities of practice enables learning. Through this participation individuals become members of communities and occupy a certain position in them. This participation enables a sense of recognition as someone or something to a higher or lower degree.

However, in traditional classroom-based education, the identity of a learner is constituted through participation in that particular educational context (school, university etc.), which is characterized by particular social practices. As Scollon and Wong Scollon (2003, p. 45) point out, “our bodies as humans cannot fail to anchor us in the real, physical world in which we are performing as social actors.” They call the ways in which we may be together with others in the world the interaction order, and identify a number of resources within this interaction order, namely sense of time, perceptual spaces, interpersonal distances, and personal front. Using the categories of time, place/space, and the body as organizing principles, I would like to describe this educational context as follows:



- It is organized temporally—for example, formal education covering a particular age range, primary education being separated from secondary education, the school day as well as individual lessons following particular temporal patterns;
- It is located in a bounded place—for example, the classroom featuring a familiar geography and certain ways of being, which in turn is situated within an institutional structure, for example, a school or a university with particular rules and regulations;
- It is made up of a set group of embodied participants—including one or several teachers or lecturers, learners (usually in groups), who play particular roles, follow particular rules and regulations, and interact in particular ways.

In this traditional approach to learning there seems to be little space for language learners to develop their identity in relation to the world outside the classroom. Instead, it takes place in a classroom, where there is a greater focus on form than on meaning and communication and where the language teacher represents the larger community of practice of more proficient speakers of the language. The identity of language learners is thus tied to institutional activities and constituted through institutional actions (see Kasper & Wagner, 2011, pp. 121–2).

This is in contrast to Norton's understanding of language learners' identity; she talks about integrating "the individual language learner and the larger social world" (Norton, 2013, p. 2). According to Norton and McKinney (2011), "[I]anguage learning engages the identities of learners because language itself is not only a linguistic system of signs and symbols, but also a complex social practice through which relationships are defined, negotiated, and resisted." (p. 77). This identity approach to second language acquisition (SLA) is based on three key concepts, namely investment, imagined communities, and imagined identities.

The theoretical assumptions of an identity approach to SLA [...] suggest that language learning is not a gradual individual process of internalizing a neutral set of rules, structures, and vocabulary of a standard language. Rather, such theoretical principles suggest that language learners need to struggle to appropriate the voices of others; they need to learn to command

the attention of their listeners; and they need to negotiate language as a system and as a social practice. Further, learners' investments in the practices of their communities, whether real or imagined, are also important for SLA. An imagined community assumes an imagined identity, and investment in target language practices can be understood within this context. (Norton & McKinney, 2011, p. 81)

The role of the language teacher is thus to support learners to develop an imagined identity within a desired target language community—ideally going beyond the confines of the traditional classroom.

The traditional approach to language learning—that is, institutionalizing it, limiting it to interaction between learner and teacher, and focusing on form and accuracy over communication and social practice—conflicts with the identity approach to SLA put forward by Norton and others. For many language learners the reality is still an approach where emphasis is placed on the acquisition of a linguistic system of signs and symbols into which they have no investment, rather than being offered the opportunity to participate in a real or imagined community where the language is actually used as social practice and the use of this language has an impact on the learners' identity.

The new digital technologies are one way of enabling learners to participate in language communities, experience language as a social practice and develop their own subjectivity as a language learner and an imagined identity as a speaker of the language. This can be done both in the context of more formal learning contexts as well as more informally. Sefton-Green and Erstad (2015, p. 4) cite the new media as a central force that is impacting on learning and is changing identity today.

In general, much current social theory is preoccupied with the impact of changing forms of individuation and individualisation, of changing and different notions of identity in the current era. How such changes relate to ideas about learning is an important focus. Work from this perspective is interested in schools, the role of technology in learning and the role of the home and other out-of-school experiences as key sites where changing forms of individualisation are both constructed and constituted by these shifting social practices.

### 3 The Impact of New Technologies on Time, Place, and the Body in the Context of Language Learning

This section explores some aspects of the change in today's social life that Leander et al. (2010) describe, a change in “mobilities of people, media, material goods, and other social phenomena, including the reach or extension of such movements, connections between ‘global’ and ‘local’ life, the creation of new spaces and places, and new speeds and rhythms of everyday social practice” (p. 329). How is the use of the new technologies resulting in shifts in time, place, and the body in the context of language learning? What does it mean being a language learner in today's digital society? In the three sub-sections that follow I will explore how time, space, and the body are conceptualized in traditional face-to-face language learning settings. A number of recent research studies will then help me to explore the repercussions that the introduction of new technologies has had on each of these concepts and try to understand how identities are constructed by language learners in virtual sites today.

#### Flexing Time

Time is an important factor in learning. In traditional face-to-face contexts, learning is usually carefully scheduled, hour after hour, and year after year. Starting with primary school, there are set class times with fixed periods for certain subjects and certain activities. This means that time is precious; in language classes, for example, the four skills (i.e. listening, speaking, reading, and writing) and grammar have to be covered as well as the culture of the country or countries where the language is spoken, and there needs to be time for communication. Often the results are unsatisfactory; students lose motivation and their achievement is low. A report on language learning in the UK included the following survey findings:

[Y]oung people are put off learning a language: they accept it can be good for an international career, speaking with other people and understanding

their culture, but they're turned off because it feels too difficult. Many regard grammar as hard and remembering vocabulary a chore. They complain what they learn in school isn't useful in the real world, and they don't feel confident speaking a foreign language out loud. (*The Guardian*, 2015, p. 8)

This can lead to what Horwitz, Horwitz, and Cope (1986) have called foreign language classroom anxiety—an emotional state that can have a negative impact on the language learner's identity. They also point out that “second language communication entails risk taking and is necessarily problematic” (p. 128)—something that is difficult to do in the usually very restricted class time.

[T]he language learner's self-esteem is vulnerable to the awareness that the range of communicative choices and authenticity is restricted. The importance of the disparity between the “true” self as known to the language learner and the more limited self as can be presented at any given moment in the foreign language would seem to distinguish foreign language anxiety from other academic anxieties such as those associated with mathematics or science. Probably no other field of study implicates self-concept and self-expression to the degree that language study does. (p. 128)

A report by the Scottish Government Languages Working Group found “that young people are not always sufficiently challenged and motivated by current language learning approaches” (2012, p. 3). In the context of primary language teaching, the authors assert that restricting the teaching of a second language to the time formally allocated is not sufficient.

New technologies offer language learners and teachers additional contexts for learning that have the potential to provide more flexibility in terms of time. They provide 24/7 access to target language communities as well as offer tools for online interaction that can take place synchronously or asynchronously using different modes of communication. In the early days of computer-assisted language learning, teachers started using email, instant messaging or forums to enhance learner interaction in the classroom and beyond (e.g. through telecollaborative projects). Research has shown that such tools give learners more time to plan and

execute their interaction moves, and thus have the potential to decrease learner anxiety (González-Bueno, 1998; Hanson-Smith, 2001). Even synchronous written chat—developed a little later—gives learners more time to reflect and prepare their turns than when speaking face-to-face (Sauro & Smith, 2010). These new communication technologies—which have since greatly increased in variety and in terms of the modes they offer—also enable teachers to bring together language learners more easily with other speakers of the language who are in different locations and in different time zones.

Advances in technology have also had an impact on what used to be the fleeting nature of a spoken conversation. Many online environments that allow for spoken interaction have facilities for recording, thus making spoken interaction less ephemeral and allowing language learners to revisit online conversations.

More recent developments of immersive environments have resulted in an increase in the potential exposure of language learners to settings where the second language is used to make meaning in spaces that have not been set up specifically for learning purposes and that offer a wide range of discourses. They include massively multiplayer online role-playing games (MMORPGs) and virtual worlds, which are available at any point in time. For the learners who use these spaces, the experience can be intense, resulting in an increase in motivation and a loss of the sense of time—an experience that is comparable with Csikszentmihalyi's (1992/2002) notion of flow. Thus Bytheway's (2015) study of the vocabulary learning strategies of six students at a US university whose first language was not English showed that each student spent on average between 5 hours and more than 40 hours per week playing digital games. The participants reported that they purposefully played in English and that the game context provided the motivation they needed to use English.

At the same time, however, the affordances (i.e. the possibilities and constraints) of online communication tools are different compared to face-to-face interaction and can result in a number of challenges that relate to time. Asynchronous interaction, for example, can be slow and learners may lose motivation while waiting for a response to their message. When using synchronous online written messaging in a group, the possible delay between receiving and sending a message can result in

multiple threads that can disrupt the interaction (Toyoda & Harrison, 2002). Many telecollaborative projects that cross national and cultural boundaries as well as temporal ones struggle with the practical arrangements around synchronous sessions as well as intercultural challenges. And engaging with others in virtual environments that are open to all across the globe can also create problems in terms of time, with participants being located across different time zones.

## **From Place to Space/Spatiality and from Institutions to Communities of Practice**

The notion of place tends to be associated with a specific location, something that is imbued with social and cultural meaning, whereas space is seen as an unbounded location, which is less regulated by time or by culture. In contrast, Dourish (2006) suggests the notion of spatiality in relation to technology. He describes these alternative spatialities as

encounters with everyday space and the opportunities for action that it affords which, in turn, become ways in which spaces, their extents, their boundaries, and their capacities become legible, understandable, practical, and navigable. It is tempting perhaps to think of these as radical new possibilities opened up by the latest technology; however, these sorts of space-making are fundamental aspects of embodied experience and should be seen as variants on the ways in which spatial experience is seen through a cultural and social lens. (n.p.)

Sefton-Green and Erstad (2015, p. 5) also use the notion of spatiality—“it uncouples places from their location and thus is interested in formulations of place as movement and as relationships.”

When we look at the social context of traditional language learning in terms of place, we find that this relates first and foremost to the place of the classroom and the institution. This classroom has certain physical properties that carry particular meanings with which society imbues schools as well as colleges and universities—meanings, which usually relate to educational models that see learning as a transfer of knowledge from teacher to student. These properties include particular pieces of

furniture (a teacher's chair and desk, often at the front, learners' chairs and desks, bookshelves, etc.) and other resources that are necessary for classroom learning (whiteboard, books, computers, etc.). There are set actors (usually one teacher/lecturer and a group of students), whose relationship is defined by a certain hierarchy, rules about behavior (from being on time to turn-taking and behaving during an exam), set content provided by the curriculum, certain interaction patterns (e.g. the IRF model, consisting of teacher initiation, learner response, and teacher feedback), and different types of activities (e.g. teacher presentation, teacher-led discussions, group work, assessment). An educational institution (i.e. a school, college, or university) is similarly characterized by certain physical characteristics (e.g. a building or a set of buildings with a certain layout), a set of actors (including students, teachers, head, assistants, administrators) as well as certain structures and hierarchies, rules about behavior (from attendance to dress code), and regulations regarding academic performance (e.g. learning outcomes, assessment).

The use of digital media brings with it the potential for disrupting these physically based and constricted systems and structures, opening up the classroom to the wider world and giving learners more opportunities for communication. For language learners this means having access to new spaces where they can informally use the language they are learning and develop it through using it to make meaning—beyond the places where the second language is traditionally available to learners, that is, the language classroom or the countries where the language is spoken.

Language teachers can employ new pedagogical approaches around, for example, telecollaborative activities, complementing their otherwise classroom-based pedagogy. In an early example of telecollaboration, Belz and Kinginger (2002) used FirstClass (offering synchronous chat and email) to bring together American learners with French/German/Spanish learners “for the purposes of linguistic development and intercultural learning” (p. 189), in particular to support the development of the use of the address form in the second language. Also, virtual worlds such as Second Life can open up the classroom. Mobile learning is another way for learners to connect with the world outside the classroom. As

Kukulska-Hulme (2012, p. 2) shows in a study of distance language learners, their use of handheld technologies meant that the learning space is thus “augmented or expanded and becomes a means of looking outwards and making connections.”

In addition, the new technologies are providing learners with access to virtual spaces where they can develop their linguistic and intercultural skills and knowledge more informally, with little or no teacher guidance. These spaces include social media such as Facebook or Twitter and online spaces that have been described as internet interest communities—from virtual worlds and massively multiplayer online games to fanfiction (see Sauro, 2017; Thorne, Black, & Sykes, 2009). As Sadler and Dooly (2013) point out, virtual worlds “provide opportunities to have immediate, visual and affective access to speakers of the language(s) they are learning” (p. 159), and they do so 24 hours a day every day.

Gee (2005, pp. 225–8) has introduced the notion of “affinity spaces,” which aptly describes such communities. He characterizes the features of an affinity space as follows:

1. Common endeavour, not race, class, gender or disability, is primary
2. Newbies and masters and everyone else share common space
3. Some portals are strong generators
4. Internal grammar is transformed by external grammar
5. Encourage intensive and extensive knowledge
6. Encourage individual and distributed knowledge
7. Encourage dispersed knowledge
8. Use and honor tacit knowledge
9. Many different forms and routes to participation
10. Lots of different routes to status
11. Leadership is porous and leaders are resources

Comparing what goes on in these spaces with traditional school-based environments, Gee (2005) not only comes to the conclusion that schools usually do not feature these characteristics of affinity spaces but he also states the following: “This comparison is particularly important because many young people today have lots of experience with affinity spaces and, thus, have the opportunity to compare and contrast their experiences



with these to their experiences in classrooms” (p. 223)—with the latter not faring particularly well.

These affinity spaces share certain features with communities of practice, which Lave and Wenger (1991, p. 98) describe as follows:

A community of practice is a set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice. A community of practice is an intrinsic condition for the existence of knowledge, not least because it provides the interpretive support necessary for making sense of its heritage. Thus, participation in the cultural practice in which any knowledge exists is an epistemological principle of learning.

However, in practical terms it can be difficult for learners to find their way round some of the virtual spaces or make best use of the opportunities provided for example by mobile learning. Also, when interacting online, the computer restricts our visual space and limits the amount of information that interactants can glean about one another. Learners can be anywhere, and unless told (or shown via a camera), they have no information about where their counterparts are located (e.g. at home or on the move, in a quiet or a noisy space) and how the context may impact on their ability to communicate.

## **The Body: Disembodiment and Re-Embodiment**

Educational institutions are normally conceived around learners who are physically present, have physical characteristics, and who use their bodies to interact in a physical environment. In their paper on embodied cognition, Rambusch and Ziemke (2005) stress the importance of the body for situated learning.

Embodied cognition research has provided an additional picture of the situated nature of situated-learning activity by putting emphasis on the close and mutual relationship between thinking and doing from a different point of view. The underlying assumption in the theoretical framework of embodied cognition is that cognition arises from bodily interactions with

the world and is, thus, grounded in and linked to sensorimotor activity. [...] The body in situated learning activity, accordingly, (1) makes possible a shared understanding of the world between individuals, (2) functions as means for communication and social interaction, and (3) is the basis of human thought. (p. 1807)

The body is also crucial in the context of language learning. Research has shown that this applies not just to first language learning by infants (Yu & Ballard, 2009) but also to second language learners. Non-verbal communication is paramount for meaning making, and even more so for language learners who use gestures to compensate for their lack of linguistic skills. Gullberg (1998), for example, explored gesture as a communication strategy and showed how strategic gestures of second language learners complement speech.

Goffman (1959/1990) points out the importance that the body plays in interaction. He stresses the importance of “personal front,” which includes “insignia of office or rank; clothing; sex, age, and racial characteristics; size and looks; posture; speech patterns; facial expressions; bodily gestures; and the like” (p. 34). This notion of the personal front is highly relevant in educational institutions which are normally conceived around learners who are physically present and who are marked out by their age and their behavior, by where they sit, and maybe by their uniform, and where the body plays an important role in teacher–student and student–student interaction.

With research showing the crucial role of the body for interaction as well as for situated learning, the disembodiment that can be experienced by a learner when using online tools such as forums, instant messaging, or audio conferencing—that is, tools which do not allow for the use of body language—can be challenging. The additional level of mediation through the computer and the lack of stimuli available in face-to-face communication mean that interaction can be less immediate and interlocutors have to make a more conscious effort, especially when interaction is mainly written. The lack of body language in audiographic conferencing means that communication can be slower (e.g. there are more silences, see Stickler, Batstone, Duensing, & Heins, 2007), interaction can be more difficult to manage (e.g. in terms of turn-taking), and

communication can break down more easily (see Hampel, 2014). To help with this, visual tools (such as emoticons) have been developed to compensate for the lack of body language, and users can also employ other ways of communicating illocutionary force (e.g. using acronyms, punctuation, bold, color, repeated letters, or symbols).

With the arrival of video conferencing tools, the body—alongside the physical environment—has become more visible again and can thus play a greater role in terms of communication, at least potentially. Although the interlocutors are physically distant, they can see one another and also at least some of the environment where the other person is located. But even when using a tool such as Skype, the relatively small amount of space that is visible on the screen and the positioning of the camera restrict communication through visual means. As Lee, Hampel, and Kukulska-Hulme (2019) have shown in their study exploring how pairs of language learners negotiate meaning from a range of informal spaces via mobile devices, gestures often take place off-screen—especially when the learners are using relatively small mobile devices. With larger devices, eye contact (another crucial non-verbal communication mode) is difficult to achieve because the camera is usually located above where the interlocutor's eyes are (Austin, Hampel, & Kukulska-Hulme, 2017; Kern, 2014).

Communicating online also has an impact on how interpersonal distance is experienced. In a face-to-face conversation the participants' experience of interpersonal distance would be the same as each other's. In a webcam-mediated conversation, this is not necessarily the case as the space perceived by an interlocutor depends on the distance their conversational partner is from their webcam. This means that a speaker can affect the degree of social space that is represented to their partner, but they are unable to directly influence the distance at which their partner appears before them (Austin et al., 2017, p. 92).

Conversely, one's own personal front is accentuated when communicating in an environment such as Skype, which shows not just the image of the interlocutor but also one's own. Using a webcam and observing oneself as well as one's interlocutor can make learners more self-conscious and the interaction even more like a theatrical performance where people are on stage and put on a front. Kozar (2015), for

example, found that in her study most teachers and students only used their webcams at the beginning for socio-affective reasons and stopped after a couple of weeks. Participants reported that using a webcam was more tiring and that they felt self-conscious; they were also concerned about their privacy.

With the body playing a key role in learning, we need to consider how learners can successfully communicate in digital environments that either do not allow for the use of body language or curtail it. This means that learners need to develop their literacy skills so they are able to use other modes that are available (such as emoticons in written environments or gestures in Skype conversations on the move) and adapt the way they communicate to the affordances of the device used. Wigham and Chanier (2013) explored how language learners displayed emotional states in virtual environments such as Second Life. By making use of the multidirectional synchronous written communication possibilities and the iconic gestures of their avatar, they were able to compensate for the lack of facial expression. In Lee et al.'s study (2019), participants accommodated to as well as made use of the affordances of the mobile tools they were using to communicate. Thus, one learner realized that she needed to gesture within the limited space that the screen allowed, and several learners used their mobile phones as a pointing device.

Virtual environments (especially virtual worlds and MMORPGs) allow users to hide or change certain aspects of their bodily identity (e.g. age, appearance, sex, accent), or go as far as playing a role and trying out alternative identities. I would suggest that we can talk about “re-embodiment” in such contexts. As Peachey (2010, p. 48) argues, “virtual worlds provide a potent opportunity to be who we want to be, to explore a range of identities if we so choose and to mediate those identities by the way we look, the way we act and the way we speak.” Using Goffman's work, Bullingham and Vasconcelos (2013) showed in their study of bloggers and Second Life inhabitants how participants deliberately chose to project a given identity by editing facets of self. And in an ethnographic study of two language learners using MMORPGs to communicate with global players, Strachan, Kongmee, and Pickard (2016) found that the fact that his identity was hidden helped one of the players who had low

English skills to practice his language. However, it also means that learners who use virtual worlds or MMORPGs often do not know who they engage with, making them potentially more vulnerable to online abuse.

## 4 Implications for Language Learner Identity

The section above has shown the opportunities of introducing technology into language learning and teaching in terms of time, place, and the body in virtual spaces where time is more flexible and experienced differently than in face-to-face learning settings, where the physical place of the classroom is opened up to a vast array of online spaces in which learners can informally use the language they are learning for meaning making but where the physical space is not shared; where meaning can be made in a disembodied way or where a learner can choose to interact with speakers of the L2 using new identities beyond their learner role.

For language learners, engaging with other speakers of the language that they are learning—formally through for example telecollaborative exchanges that are part of a university course or informally through joining a group of online gamers or fans—means engaging with and negotiating language as a social practice rather than treating it as a school or university subject with little real-world relevance. In terms of identity this means that the new digital technologies afford learners to become part of a distributed community—which can be described as a community of practice or an affinity space—where the language is used for real-life purposes and where they are able to develop the social practices that are used in that particular community, with all the challenges that such identity work entails.

This fits in with the poststructuralist approaches to identity that opened this chapter, approaches which understand identity as “multiple, fluid, and a site of struggle” (Darvin & Norton, 2017, p. 3), as something “in process, never as fixed and never as autonomous, outside history” (Hutcheon 1989, p. 39), something that is constructed, performed, and imagined. As Norton (2013, p. 2) suggests, “[w]ork on identity offers the

field of language learning a comprehensive theory that integrates the individual language learner and the larger social world.”

The rapid growth of the internet in today’s world and its increased use in language education makes it imperative to examine what the implications of online learning are for language learner identity. We have seen in the course of this chapter how the digital media impact on time, space, and the body; how the use of new technologies can help to increase the learner’s investment in the practices of the L2 speaking community; and how online communities can offer language learners possibilities for an enhanced identity in the L2.

At the same time, there are a number of challenges that arise from the materiality of the online medium and the repercussions this has for learning in terms of time, space, and the body. The additional level of mediation, for example, that the new digital technologies entail can mean that the often quite disembodied nature of interaction online is experienced as less immediate than face-to-face interaction and more like a theatrical performance, with interactants putting on even more of a front than they do normally in social interaction. Virtual sites offer very different communicative spaces compared to f2f environments. For language learners to benefit from immersing themselves in such sites requires that they develop new literacy skills.

Learning languages online means having access to an entire new world. The role of educational institutions and the role of the teacher thus need to shift from imparting knowledge to supporting learners developing knowledge across a diversity of spaces. However, online learning also means having less or no access to the safety net that the face-to-face classroom offers, a safety net which ensures that learners are co-located with other learners who are similar in terms of backgrounds and language competence, that they are supported by a competent teacher, and that they are not abused or preyed upon. Institutions thus need to support learners in developing digital literacy (Philip, Schuler-Brown, & Way, 2013, see also Lankshear & Knobel, 2008) so they can become more autonomous in these new learning spaces while also being aware of and able to deal with the risks of being online. This presupposes that teachers themselves have the appropriate skills needed to support their students (see Stickler & Hampel, 2015).

When it comes to informal learning, there is even less of a safety net, and there are risks in terms of cyber security. It can be a challenging step to enter a new online space, especially for learners whose language skills are less advanced. As with other communities, there are rules and practices that need to be followed; Peachey (2010) talks about the stigma attached to appearing as an uncoordinated “newbie” in a virtual world. Successful immersion in such environments requires advanced literacy skills on behalf of the user, skills which schools can help develop.

The fact that many learning activities are digitally mediated today also means that learners leave an abundance of often indelible traces that open up the learning processes of individuals to much closer scrutiny. Language learner identity is impacted on by developments around the use of big data, specifically in the context of learning analytics. If such developments are accompanied by a shift in the education agenda—in the case of big data this could be a change in focus from summative to formative assessment (Kalantzis & Cope, 2015)—they can be beneficial and motivate learners. If not, they are more likely to be perceived as surveillance resulting in a lack of privacy and civil liberties (Philip et al., 2013).

## 5 Conclusion

The new media are changing when, where, and how learning takes place. As a result, they have started to transform how we understand learner identity, widening—and often challenging—the traditional institution-based notion of what a learner is. Ushioda (2011, p. 207) summarizes the potential of virtual sites for language learners as follows: “the opportunities that cyberspace presents for trying out new and alternative identities and modes of self-presentation (e.g. through bots or avatars in virtual worlds such as Second Life) offer interesting possibilities for learning and communicating in the L2 in ways that are creative, individual and exploratory.” As van Dijck (2013) points out, “social media are not neutral stages of self-performance—they are the very tools for shaping identities.”

This chapter has shown how the introduction of new technologies has been changing how time, space, and the body are conceived of in

learning contexts and how this impacts on learners and learning. First, the new digital technologies afford language learners a more flexible approach to time, for example, by giving access to the second language (and to second language speakers) anytime and anywhere, allowing for asynchronous as well as synchronous communication, or by offering learners an immersion experience in particular online environments where communicating in a second language feels like being in a flow state. Second, the new technologies have opened up new learning contexts beyond the traditional classroom. The use of digital media for learning has also resulted in a change from the notion of place to that of space or spatiality, which includes a shift from physical institutions to distributed communities which can act as communities of practice or be experienced as affinity spaces. These can have educational goals but often they do not. Third, the new technologies entail a move from embodied to disembodied communication, as well as a move to online re-embodiment in online games and computer-simulated virtual worlds.

The different conceptualization of time, place, and the body in online learning environments compared to face-to-face classrooms has a fundamental impact on language learning and teaching and on the nature of the learner, opening up new contexts and new communities that are beneficial for language learning. These environments offer language learners the opportunity to engage with the larger social world where the language is spoken and to negotiate language as a social practice, thus enabling them to make an investment in the practices of a target language community and helping them to develop imagined identities. However, as we have seen, there are also challenges associated with interacting in virtual sites, and learners as well as teachers have to develop appropriate levels of literacy. It is crucial that as educators we ensure that the ways in which learners use digital tools encourage the kind of learning ecology that Kalantzis and Cope (2015) promote, and that as researchers we support the creation of “an account of a ‘new learning’ that includes these new media and that is appropriate to social conditions broadly created by these new media” (Kalantzis & Cope, 2015, p. 374)—not just in more privileged contexts but also for the benefit of learners in less privileged countries (see Gleason & Suvorov, 2019).



## References

- Austin, N., Hampel, R., & Kukulska-Hulme, A. (2017). Video Conferencing and Multimodal Expression of Voice: Children's Conversations Using Skype for Second Language Learning in a Telecollaborative Setting. *System*, 64, 87–103.
- Belz, J., & Kinginger, C. (2002). The Cross-Linguistic Development of Address Form Use in Telecollaborative Language Learning: Two Case Studies. *The Canadian Modern Language Review/La Revue canadienne des langues vivantes*, 59(2), 189–214.
- Bullingham, L., & Vasconcelos, A. (2013). The Presentation of Self in the Online World: Goffman and the Study of Online Identities. *Journal of Information Science*, 39(1), 101–112.
- Bytheway, J. (2015). A Taxonomy of Vocabulary Learning Strategies Used in Massively Multiplayer Online Role-Playing Games. *CALICO Journal*, 32(3), 508–527.
- Coll, C., & Falsafi, L. (2010). Learner Identity. An Educational and Analytical Tool. *Revista de Educación*, 353, 211–233.
- Csikszentmihalyi, M. (2002). *Flow: The Classic Work on How to Achieve Happiness*. London: Random House. (Original work published in 1992).
- Darvin, R., & Norton, B. (2017). Identity, Language Learning, and Critical Pedagogies in Digital Times. In J. Cenoz et al. (Eds.), *Encyclopedia of Language and Education, Volume: Language Awareness and Multilingualism* (pp. 1–12). Cham: Springer.
- van Dijck, J. (2013). 'You Have One Identity': Performing the Self on Facebook and LinkedIn. *Media, Culture & Society*, 35(2), 199–215.
- Dourish, P. (2006). Re-Space-Ing Place: "Place" and "Space" Ten Years On. In *CSCW '06 Proceedings of the 2006 20th Anniversary Conference on Computer Supported Cooperative Work* (pp. 299–308). New York: ACM.
- Edwards, R., & Usher, R. (2000/2008). *Globalisation and Pedagogy: Space, Place and Identity*. Abingdon: Routledge.
- Gee, J. P. (2005). Semiotic Social Spaces and Affinity Spaces. From the Age of Mythology to Today's Schools. In D. Barton & K. Tusting (Eds.), *Beyond Communities of Practice: Language Power and Social Context* (pp. 214–232). Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511610554.012>
- Gleason, J., & Suvorov, R. (2019). Promoting Social Justice with CALL. *CALICO Journal*, 36(1), i–vii. <https://doi.org/10.1558/cj.37162>

- Goffman, E. (1990). *The Presentation of Self in Everyday Life*. London: Penguin (Original work published in 1959).
- González-Bueno, M. (1998). The Effects of Electronic Mail on Spanish L2 Discourse. *Language Learning & Technology*, 1(2), 55–70. Retrieved from <http://llt.msu.edu/vol1num2/article3/default.html>
- Gullberg, M. (1998). Gesture as a Communication Strategy in Second Language Discourse: A Study of Learners of French and Swedish. *Travaux de l'institut de linguistique de Lund*, 35. Lund: Lund University Press. Retrieved from <https://lup.lub.lu.se/search/publication/18684>
- Hampel, R. (2014). Making Meaning Online: Computer-Mediated Communication for Language Learning. In A. Peti-Stantić & M.-M. Stanojević (Eds.), *Language as Information. Proceedings from the CALS Conference 2012* (pp. 89–106). Frankfurt am Main: Peter Lang.
- Hanson-Smith, E. (2001). Computer-Assisted Language Learning. In R. Carter & D. Nunan (Eds.), *The Cambridge Guide to Teaching English to Speakers of Other Languages* (pp. 107–113). Cambridge: Cambridge University Press.
- Hogg, M. A., Terry, D. J., & White, K. M. (1995). A Tale of Two Theories: A Critical Comparison of Identity Theory with Social Identity Theory. *Social Psychology Quarterly*, 58(4), 255–269.
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign Language Classroom Anxiety. *The Modern Language Journal*, 70(2), 125–132.
- Hutcheon, L. (1989). *The Politics of Postmodernism*. London: Routledge.
- Kalantzis, M., & Cope, B. (2015). Learning and New Media. In D. Scott & E. Hargreaves (Eds.), *The SAGE Handbook of Learning* (pp. 373–387). Los Angeles: Sage.
- Kasper, G., & Wagner, J. (2011). A Conversation-analytic Approach to Second Language Acquisition. In D. Atkinson (Ed.), *Alternative Approaches to Second Language Acquisition* (pp. 117–142). Abingdon: Routledge.
- Kern, R. (2014). Technology as Pharmakon: The Promise and Perils of the Internet for Foreign Language Education. *Modern Language Journal*, 98(1), 330–347.
- Kozar, O. (2015). Perceptions of Webcam Use by Experienced Online Teachers and Learners: A Seeming Disconnect Between Research and Practice. *Computer Assisted Language Learning*, 29(4), 779–789.
- Kristeva, J. (1984). *Revolution in Poetic Language*. New York: Columbia University Press.
- Kukulska-Hulme, A. (2012). Language Learning Defined by Time and Place: A Framework for Next Generation Designs. In J. E. Díaz-Vera (Ed.), *Left to My*

- Own Devices: Learner Autonomy and Mobile Assisted Language Learning. Innovation and Leadership in English Language Teaching*, 6 (pp. 1–13). Bingley, UK: Emerald Group Publishing Limited.
- Lankshear, C., & Knobel, M. (2008). *Digital Literacies: Concepts, Policies and Practices*. New York: Peter Lang.
- Lave, J. (1991). Situating Learning in Communities of Practice. In L. B. Resnick, J. M. Levine, & S. D. Teasley (Eds.), *Perspectives on Socially Shared Cognition* (pp. 63–82). Washington, DC: American Psychological Association.
- Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.
- Leander, K. M., Phillips, N. C., & Taylor, K. H. (2010). The Changing Social Spaces of Learning: Mapping New Mobilities. *Review of Research in Education*, 34, 329–395.
- Lee, H., Hampel, R., & Kukulska-Hulme, A. (2019). Gesture in Speaking Tasks Beyond the Classroom: An Exploration of the Multimodal Negotiation of Meaning via Skype Videoconferencing on Mobile Devices. *System*, 81, 26–38.
- van Lier, L. (2004). The Semiotics and Ecology of Language Learning: Perception, Voice, Identity and Democracy. *Utbildning & Demokrati*, 13(3), 79–103.
- Locke, J. (1959). *An Essay Concerning Human Understanding*. New York: Dover Publications (Original work published in 1690).
- Marquard, O. (1979). Identität: Schwundtelos und Mini-Essenz – Bemerkungen zur Genealogie einer aktuellen Diskussion. In O. Marquard & K. Stierle (Eds.), *Identität* (pp. 347–369). München: Fink.
- Mead, G. H. (1967). *Self and Society: From the Standpoint of a Social Behaviorist*. Chicago: The University of Chicago Press (Original work published in 1934).
- Mercer, S., Ryan, S., & Williams, M. (2012). Self Concept: Situating the Self. In S. Mercer, S. Ryan, & M. Williams (Eds.), *Psychology for Language Learning: Insights from Research, Theory and Practice* (pp. 10–25). Houndmills: Palgrave Macmillan.
- Nietzsche, F. (1930). *Der Wille zur Macht: Versuch einer Umwertung aller Werte*. Leipzig: Alfred Kröner (Original work published in 1883).
- Norton, B. (2000). *Identity and Language Learning: Gender, Ethnicity and Educational Change*. London: Longman.
- Norton, B. (2013). *Identity and Language Learning: Extending the Conversation* (2nd ed.). Bristol: Multilingual Matters.
- Norton, B., & McKinney, C. (2011). An Identity Approach to Second Language Acquisition. In D. Atkinson (Ed.), *Alternative Approaches to Second Language Acquisition* (pp. 73–94). Abingdon: Routledge.

- Peachey, A. (2010). Living in Immaterial Worlds: Who Are We When We Teach and Learn in Virtual Worlds? In K. Sheehy, R. Ferguson, & G. Clough (Eds.), *Virtual Worlds: Controversies at the Frontier of Education. Education in a Competitive and Globalizing World* (pp. 33–51). Hauppauge, NY: Nova Science.
- Philip, T. M., Schuler-Brown, S., & Way, W. (2013). A Framework for Learning About Big Data with Mobile Technologies for Democratic Participation: Possibilities, Limitations, and Unanticipated Obstacles. *Tech Know Learn*, 18, 103–120.
- Rambusch, J., & Ziemke, T. (2005). The Role of Embodiment in Situated Learning. *Proceedings of the Annual Meeting of the Cognitive Science Society*, 27(27). Retrieved from <https://escholarship.org/uc/item/43g827br>
- Sadler, R., & Dooly, M. (2013). Language Learning in Virtual Worlds: Research and Practice. In M. Thomas, H. Reinders, & M. Warschauer (Eds.), *Contemporary Computer-assisted Language Learning* (pp. 159–182). London and New York: Bloomsbury.
- Sauro, S. (2017). Online Fan Practices and CALL. *CALICO Journal*, 34(2), 131–146.
- Sauro, S., & Smith, B. (2010). Investigating L2 Performance in Text Chat. *Applied Linguistics*, 31(4), 554–577.
- Scollon, R., & Wong Scollon, S. (2003). *Discourses in Place: Language in the Material World*. London and New York: Routledge.
- Scottish Government Languages Working Group. (2012). *Language Learning in Scotland: A 1+2 Approach*. Report and Recommendations, Scottish Government.
- Sefton-Green, J., & Erstad, O. (2015). *Identity, Community, and Learning Lives in the Digital Age*. In O. Erstad & J. Sefton-Green (Eds.), *Identity, Community, and Learning Lives in the Digital Age* (pp. 1–20). Cambridge: Cambridge University Press.
- Stickler, U., & Hampel, R. (2015). Transforming Teaching: New Skills for Online Language Learning Spaces. In R. Hampel & U. Stickler (Eds.), *Developing Online Language Teaching: Research-Based Pedagogies and Reflective Practices* (pp. 63–77). Houndmills: Palgrave Macmillan.
- Stickler, U., Batstone, C., Duensing, A., & Heins, B. (2007). Distant Classmates: Speech and Silence in Online and Telephone Language Tutorials. *European Journal of Open, Distance and e-Learning*, 2.
- Strachan, R., Kongmee, I., & Pickard, A. (2016). Using Massively Multiplayer Role Playing Games (MMORPGs) to Support Second Language Learning: A Case Study of the Student Journey. In K. K. Terry & A. Cheney (Eds.), *Utilizing Virtual and Personal Learning Environments for Optimal Learning* (pp. 87–109). Hershey, PA: IGI Global, Appalachian State University.

- The Guardian. (2015). *Living Languages: A Special Report on Language Learning*. Sponsored by the British Academy. Retrieved from [http://static.guim.co.uk/ni/1428923743291/BritAcFINAL\\_living\\_language.pdf](http://static.guim.co.uk/ni/1428923743291/BritAcFINAL_living_language.pdf)
- Thorne, S., Black, R. W., & Sykes, J. M. (2009). Second Language Use, Socialization and Learning in Internet Interest Communities and Online Gaming. *The Modern Language Journal*, 93(1), 802–821.
- Toyoda, E., & Harrison, R. (2002). Categorization of Text Chat Communication Between Learners and Native Speakers of Japanese. *Language Learning & Technology*, 6(1), 82–99. Retrieved from <http://llt.msu.edu/vol6num1/toyoda/>
- Ushioda, E. (2011). Language Learning Motivation, Self and Identity: Current Theoretical Perspectives. *Computer Assisted Language Learning*, 24(3), 199–210.
- Weedon, C. (1987). *Feminist Practice and Poststructuralist Theory*. Oxford, UK: Blackwell.
- Wenger, E. (1999). *Communities of Practice. Learning, Meaning and Identity*. New York: Cambridge University Press.
- Wigham, C. R., & Chanier, T. (2013). A Study of Verbal and Nonverbal Communication in Second Life – The ARCHI21 Experience. *ReCALL*, 25(1), 63–84.
- Yu, C., & Ballard, D. H. (2009). The Role of the Body in Infant Language Learning. In K. S. Mix, L. B. Smith, & M. Gasser (Eds.), *The Spatial Foundations of Language and Cognition*. Oxford: Oxford University Press.



# 11

## Self-Directed Language Learning: A Semiotic Analysis of a Language Learning App

Wing Yee Jenifer Ho

### 1 Introduction

The widespread availability of mobile technologies, helped by the positive attitude of viewing multilingualism as an asset, have together contributed to a change in the way people learn a language, leading to the rise in popularity of language learning apps. So far, research on technology-assisted language learning, as well as virtual learning, has been focusing on usability (Brick, 2011; Stevenson & Liu, 2010; Zourou, 2012), material design and evaluation (Chapelle, 1998, 2009; Reinders & Lewis, 2005), as well as learner autonomy and motivation (Alm, 2006; Healey, 2007; Lai, 2013; Lamy & Goodfellow, 1999; Terhune, 2015; Ushida, 2013). Moreover, a considerable number of these studies focused on the use of digital technology in institutionalised settings, e.g. to be used in language classes, or to be assigned as out-of-class supplementary learning activities (see e.g. Hampel & Stickler, 2012). There is oftentimes an

---

W. Y. J. Ho (✉)

Department of English, City University of Hong Kong, Hong Kong, China  
e-mail: [jenifer.ho@cityu.edu.hk](mailto:jenifer.ho@cityu.edu.hk)

implicit, if not explicit goal for using these digital technologies to enhance social interaction, both between learners, as well as between learners and teachers. While the above areas are important in understanding the different aspects of virtual learning sites, a more fundamental analysis of the semiotic arrangement of these platforms is also required to shed light on how the platforms are designed to facilitate language learning.

In this chapter I am concerned with examining a popular language learning app which is called *Memrise*. It has been downloaded over 1,000,000 times on Google Play as at mid-2018, and is awarded as the ‘Best App’ in Google Play Awards in 2017 (Google Play, 2018). This chapter is partly informed by a larger study by Ho (2018b) on self-directed Chinese learning using *Memrise* (see also Ho, 2018a; Li & Ho, 2018). In that study, Ho observed how eleven transnational learners mobilised their multilingual and multimodal repertoires, as well as the resources provided by *Memrise* to learn Chinese as a foreign language. Using the *Memrise* app as an example, this chapter sets out with the following research question: How does the multimodal design of the *Memrise* app contribute to language learning?

This chapter is structured as follows: I begin by reviewing some of the existing studies in the area regarding the use of mobile technologies in language learning, and how multimodality is helpful in understanding the design of this kind of learning environment. I then proceed to unpack the kind of resources that are available to language learners. Afterwards, I demonstrate the pedagogic work performed by individual modes and discuss how each of them facilitate the learning of Chinese. Lastly, I examine how the complex interplay of the multimodal ensemble can offer us some insights into material design in virtual learning sites.

## 2 Mobility and Language Learning

Language learning, once an activity that was conducted within the four walls of a classroom, usually supervised by a teacher, has now gone mobile. It can now be done in the comfort of one’s home, on the train, in a café, and so on. The possibilities are limitless, thanks to the rise in availability of smartphones and tablets that are small enough to be carried around.

From the discussion of Pachler, Bachmair, and Cook (2010), mobile devices enable learning to penetrate into people's everyday lives, blurring the boundary between learning and everyday lives.

The use of mobile technology has been found to have changed students' learning strategies. In a study that investigated learning strategies used by learners of Chinese when they learned to write Chinese characters, Kan, Owen, and Bax (2018) found that as new ways of learning characters are used, such as using mobile apps, new learning strategies emerged as a result, such as the use of *pinyin* (the official Romanisation system of Chinese characters) input to choose/identify the correct characters on the screen, which was not possible before technology became common. They also identified some strategies that had been used previously, but technology has made them more important than before. For instance, while previously Shen (2005) had identified self-testing as one of the strategies for character learning, its importance has grown due to the use of mobile learning apps, possibly because digital technology offers affordances that enable easier ways of self-testing without using pen and paper.

Online language learning platforms such as *Memrise* featured in this study have received attention from researchers in recent years. For instance, Stevenson and Liu's (2010) study explored how learners make use of the social networking features of three selected platforms to fulfil their goal of learning a new language. Through using online surveys and usability testing methods, they found that despite students' interests in the social elements offered by these platforms, they still valued traditional means of language learning, such as structured curriculum, more highly than the social aspects. Students participating in the study also expressed concern over the quality of user-created content. Harrison and Thomas's (2009) study examined how students in a Japanese university used *Livemocha*, an online language learning platform, to learn a foreign language of their choice. The authors observed students in the classroom while they were using *Livemocha* through classroom monitoring and 'think-aloud' sessions in five bi-weekly classes. They found that the use of *Livemocha* helped language learners explore new social networks, and that the mediation between learners and the site, as well as between learners, has to be constructed by learners themselves in a trial-and-error process.



In addition to understanding the user experience, a fundamental analysis of the semiotic arrangement on which these platforms based their design on is also important. Chik (2015) compared two such platforms, *Duolingo* and *Busuu*, by using positioning theory in order to understand how platform designers position themselves through making various claims about language learning. She identified textual and semiotic devices that the platforms used to promote various positionings and conceptualisations of language learning. Her study revealed the importance of understanding the design of the platforms based on how they are designed textually and semiotically so as to understand the language learning beliefs that these platforms intend to promote, and how learners are put in a position to accept these beliefs.

There is currently no consensus in the literature as to what virtual learning sites for language learning featured in the review above should be called. Depending on the features that researchers would like to highlight, they have been called differently in the literature, some of these names include ‘Social Networking Sites’ (Brick, 2011, 2012; Harrison & Thomas, 2009), ‘Social Network Sites for Language Learning’ (Liu et al., 2013, 2015), ‘language learning social network sites’ (Chik, 2015), ‘(Structured) web 2.0 language learning communities’ (Zourou, 2012; Zourou & Loiseau, 2013), and the list goes on. All these names emphasise the social and interactive nature of these platforms, focusing on their affordances regarding language learning and social networking. For me, I have preferred to foreground the fact that they are online spaces for language learning, not necessarily ‘social’ or ‘networking’ spaces (although they could well be used by learners in such ways), so I have chosen to call them ‘Online Language Learning Platforms’, which hopefully could focus our attention to the ‘online’ and ‘language learning’ perspectives, without over-emphasising the ‘social’ and ‘networking’ features.

From the discussion above, it can be seen that language learning is gradually moving from classroom-based instruction to virtual sites beyond the classroom which affords higher flexibility and mobility. As Levy & Stockwell (2006, p. 107) pointed out, successful virtual learning sites need to have “clear pedagogical objectives in mind, knowledge of the technological options and an awareness of the needs, goals and skills of

the learners”. While a considerable number of studies have the tendency to focus on using technology to enhance social interaction, to explore ways to enhance user experience, as well as to develop ways to evaluate these self-directed learning materials, all in all, a better understanding of the semiotic resources provided by these platforms is needed to unpack the pedagogic design of the platform, and how the affordances of the resources facilitate language learning.

### 3 Multimodality and Language Learning Apps

All communications are multimodal, and language learning is no exception. In Jewitt’s words, “[m]ultimodality describes approaches that understand communication and representation to be more than about language, and which attend to the full range of communicational forms people use...and the relationships between them” (Jewitt, 2009, p. 14). In the context of education, in the earlier decades before digital technology was widely used in the classroom, there had been an ideological preoccupation with language. Language had been the dominant mode used in teaching and learning contexts, with other modes being used in the periphery. In the contemporary education landscape, different modes are now more easily accessible thanks to the development of technology which enables teachers and learners to have a wider access of modes in an easily accessible way. For example, years ago, training to be a language teacher would include learning to draw simple pictures on the board. Twenty years later, ready-made images are widely and easily available, making it a valuable resource in the language classroom. This change challenges the centrality of language in the education context and points to a need in an approach that takes into account modes beyond language.

In a multimodal approach, language is considered to be one of the modes to make meaning, amongst other modes such as image, sound, colour, etc. Kress (2010) defines mode as a “socially shaped and culturally given semiotic resource for making meaning” (p. 79). Each mode has

different potentials for making meaning which are shaped through their cultural, historical and social uses. Individual modes contributes to meaning in their own ways, for instance, what can be done through language differs from what can be done through image, and therefore, all modes, including language, are seen as part of a multimodal ensemble which have to be understood in its entirety (ibid.). To sum up, modes do not work individually; they orchestrate to make meanings. This will be discussed in Sect. 9.

## 4 A Social Semiotic Approach to Learning

This chapter employs a social semiotic approach to learning to make sense of the increasingly multimodal nature of learning and learning environments. By exploring learning through the lens of social semiotics, it can be seen that the design of the learning environment is just as important as other aspects of learning, as it affects the possibilities of learning by determining what resources are available to learners, and how learners can utilise and transform those resources. The importance of the design of learning environment is summarised by the following quote from Kress: “*Learning happens in specific environments that offer specific semiotic/conceptual resources in particular configurations*” (Kress, 2009, p. 20; original emphasis). Multimodal design, as explained by Kress (2010), is the use of different modes “to present, to realize, at times to (re-)contextualize social positions and relations, as well as knowledge in specific arrangements for a specific audience” (p. 139). From the above, it can therefore be seen that learning, from a social semiotic frame, involves constant interaction and meaning-making between the learner and the surrounding learning environment. Learning is about transformative engagement that sign-makers do not simply internalise the signs created by others; instead, they actively engage with the world and create new signs to demonstrate their learning. Learners are encouraged to build collaborative dialogue, to negotiate meanings, as well as to use language to mediate their conceptualisations and thinking, all of which achieved through social interactions (see Swain, 2006; Swain & Lapkin, 2013).

Furthermore, as Li (2018, p. 22) argues, language is a “multilingual, multisemiotic, multisensory, and multimodal resource for sense- and meaning-making”. Understanding language learning would require us to see it as a multimodal and embodied activity. Rather than seeing language learning as a passive activity, Li (2018) invites us to see it as “a process of embodied participation and resemiotization” (Li, 2018, p. 9; see also Gallagher & Zahavi, 2008). Adopting a multimodal lens in this study would enable us to unpack how the learning environment of the featured language learning app is designed, what kind of resources are offered, and how the multimodal design of the app contributes to language learning. With the affordances of digital technology that allows for digital mashup or remixing, it is now much easier for learners to add personal touches to existing artifacts as well as to demonstrate their signs of learning through resemiotization (Godwin-Jones, 2012; Hafner, 2015; Iedema, 2003; see also Li & Ho, 2018). As Motteram (2011) observed, the adoption of virtual learning environments not only puts the power of content-creation into the hands of teachers, but also into the hands of students as well, which echoes what Jones and Hafner (2012) has described as the move from the “read-only web” to the “read-write web” which allows internet users with a greater power to participate and contribute. In addition, it is also an indisputable fact that virtual learning platforms offer a wide range of semiotic resources for teachers and students to be content-creators, leading to wide variation in the content, style and aesthetics of sign-making practices (Adami, 2018b).

Pedagogy, from a social semiotic perspective, is broadly conceptualised as the social relations that exist in the classroom. It is concerned with how relations between school, teachers and students are constructed using different resources, such as the spatial arrangement of the classroom, the design of the curriculum and so on. Similar to a physical school, *Memrise* has its own pedagogic assumptions of how languages should be taught and learned, and they are realised in the way the platform is designed, more specifically, the selection of modal resources. Here *Memrise* takes on the role as designer of the learning environment, just like teachers in ‘conventional’ learning settings.

## 5 An Introduction to *Memrise*

*Memrise* is one of the many online platforms available on the Internet that offers free language courses. It was founded in 2005 and is based in London. It is available as desktop site and mobile app, and the latter is the focus of this chapter (see Ho (2018b) for an analysis of the *Memrise* desktop site). Thanks to its crowdsourcing nature, *Memrise* is able to offer courses teaching more than 200 different languages, from languages that are widely spoken in the world (e.g. English, Spanish, Chinese), to lesser-known languages (e.g. Inuktitut, Creek), to constructed languages (e.g. Esperanto, Toki Pona), to sign languages (e.g. British sign language, American sign language). It has over a million users from all over the world, and from my observation, its intended audience is people who want to learn a new language from building up functional vocabulary that they can use immediately. *Memrise* adopts a freemium model whereby users can access basic functions for free, but will have to pay if they want to unlock more functions. As for the ways of interaction between users, *Memrise* offers the possibility for users to create pedagogic materials, be it an entire lesson based on a particular topic, or a meme (note that ‘memes’ are called ‘mems’ in *Memrise* which refers to short multimodal texts which are created based on the principle of mnemonics), to be uploaded to the platform for others to use (see Li & Ho, 2018).

### A Virtual Walk-Through of *Memrise*

The *Memrise* app and website have undergone a lot of updates during the research period, which is a common challenge associated with online research (see Fletcher (2007) for a discussion of the ephemerality of web-based research). The analysis presented here is conducted in June 2018, based on the *Memrise* app used on a tablet using the Android operating system. Despite the regular updates of the graphic elements and functions in *Memrise*, the method, analysis, as well as the results presented in this chapter are still relevant. The dashboard page features a space theme (as seen in the app version offered in the East Asia region). Now, learners take on the role as an avatar which looks like an astronaut. As learners become

more advanced, they rise higher and higher up in space until they reach the next level.

Within each level there are numerous sub-levels. For instance, in the Swedish 1 course that I have just completed at the time of writing this chapter, the different sub-levels are shown in Fig. 11.1. Note that a reproduction of the page is given here instead of the actual screen, as I could not obtain permission from *Memrise* to include the original screenshots in this chapter due to copyright issues. This is the same with all other figures used in this chapter.

This page is arranged in a linear format. Learners are invited to start the learning journey from the bottom of the screen, and move up to the top as they progress from one planet to another. A close reading of Kress and van Leeuwen (2006) would tell us that the bottom-up reading path which starts from the bottom is not the usual arrangement for Western readers, who are more accustomed to reading from the top to the bottom. This can also be understood from the role of astronauts that learners are playing. The more planets they have explored, the further up they are in the outer space, thus learners are expected to progress from the bottom to the top. This reading path is also indicated linguistically by the use of writing and numbers.

In general, the dominant modes of this page are image and colour. The images shown on this page are mostly cartoon-like drawings that are colourful. The colours are unmodulated and contrastive, drawn with simple lines, which evokes the feeling of looking at a child's drawing, but at the same time it looks professionally designed. Images shown on this page is on the theme of space, reinforced by the colour scheme of dark blue with tiny white dots, signifying the dark outer space and stars. Different sub-levels are shown as a planet. Before a sub-level is completed, the planet has no colour, and there is only a faint outline showing the silhouette of the planet. As the sub-level is being completed, a solid, thick yellow line starts to appear around the planet, indicating the proportion of the sub-level that is completed. After a sub-level is completed, the planet is fully-coloured. Colour is used to indicate several important information, such as which sub-level the learner is currently in, how many words needs reviewing (the number of words is indicated in a blue circle), and how many words are difficult for the learners (the

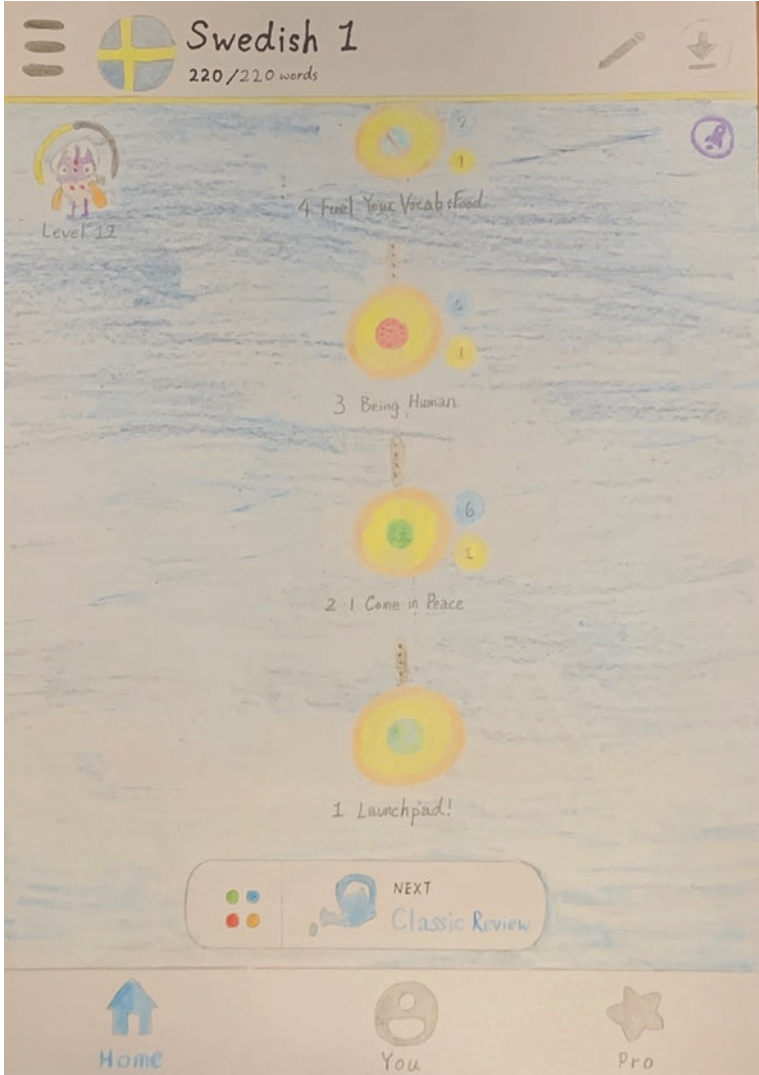


Fig. 11.1 A reproduction of the screenshot of Swedish 1 course

number of words is indicated in an orange circle). The way these small circles are arranged around the planet resembles small planets oscillating around a big planet. Language is only used to name the sub-levels, and it is shown in relatively small font under each planet, in white in the original

screenshot. Compared to the other elements of the page, it can be assumed that it is not intended to draw learners' attention. Overall, salience is given to the planets (i.e. the sub-levels) by the use of bright colours against the dark blue background. The top of the page shows a grey bar showing the course being taken, the number of words learned over the total number of words that needs to be learned. The yellow line indicates the completion progress. All of these are considered 'given' information, according to Kress and van Leeuwen (2006).

It should also be noted that *Memrise* allows users to download a course (by tapping on the downward arrow on the top right corner) to learners' devices so that they can take lessons even without Internet access. Towards the bottom of the page is a grey rectangular tap with round edges which shows the suggested learning activity that learners could do next. This is by no means prescriptive. Learners can override the suggestion and do something else if they tap on the button with four coloured dots. There they are given more options of the different learning activities they can do. The bottom part of the page is the menu bar where learners can gain access to different sections of the app (e.g. the profile page and the 'Pro' page which allows learners to access the paid section of the app).

Having established an initial idea of the appearance and the basic functions provided by the platform, the following sections discuss the pedagogic work performed by the selected modes: writing, speech, image, moving image, page layout. These modes are selected for analysis because they are all relevant to language learning.

## 6 Pedagogic Work of Modes

As Littlejohn (2011) suggested, there is a need now more than ever to analyse teaching materials closely in order to examine the implications these materials have to teaching and learning. While he made this suggestion from the context of developing English language teaching materials, the same is needed for other kinds of teaching materials as well. To do this, he called for an analytical framework which treats materials as "pedagogic device". His framework urges us to pay attention to the tangible aspects of materials ("publication"), as well as the "thinking



underlying the material” (“design”). The framework suggested by Littlejohn (2011) is indeed a comprehensive framework for material analysis in a relatively ‘macro’ manner, nevertheless, in this chapter, I present a considerably ‘micro’ semiotic analysis of materials. In view of this, a multimodal social semiotic approach is used to unpack the learning environment provided by *Memrise* to offer a more ‘micro’ level of analysis of *Memrise* as a provider of Chinese teaching materials.

The method of analysis is based on social semiotic multimodality. In particular, it is informed by the method outlined in Kress and van Leeuwen (2006) and Kress (2010). My data analysis is also inspired by the framework used by Adami (2014a, 2015) in her comparative study of the aesthetics of food blogs, and Bezemer and Kress’ (2016a) study of textbooks. I borrowed the concept of ‘semiotic work’ (Kress, 2015) from the work of social semiotics. It is a term to describe the sign-maker’s agentic, purposeful action. It brings about changes to the tools, to the worker, and to what is worked on. All these are meaningful, and lead to new meanings for the sign-maker and her/his resources (Kress; personal communication). Following from this understanding, in my analysis of *Memrise* I adopt the term ‘pedagogic work’ to highlight the fact that modes are purposefully used to achieve pedagogical purposes for language learning, which has the potential to bring about new meanings to learners when the mode is being used, in this case, in a pedagogical way.

In social semiotic approach to multimodality, there are two types of affordances: (1) modal affordances, and (2) affordances of the medium. Modal affordances focus on the “potentialities and constraints of different modes” (Jewitt, 2013, p. 254). This type of affordance focuses on what one mode, within a multimodal ensemble, can or cannot do. On the other hand, affordances of the medium consider the multimodal ensemble in its entirety. Instead of looking at what one mode can or cannot do, the affordances of the medium gives a functional analysis of what a range of modes can or cannot do (see chapter by Elisabetta Adami and Gunther Kress on affordances of smartphones in *Multimodality: A Social Semiotic Approach to Contemporary Communication*). In this chapter, I use modal affordances as my starting point. This view offers more in-depth insights about what functions individual modes play in this learning environment, and also the ‘pedagogic work’ they contribute to facilitate

Chinese learning. While acknowledging the notion of multimodal ensemble and the fact that modes orchestrate to make meaning, I am separating modes in the following analysis due to methodological reasons. It has to be noted that modes always work in multimodal ensembles in the real world.

Now I turn my attention to examine the modal affordances of *Memrise* with reference to an actual learning page, this time featuring Chinese. The analysis below is part of a larger data set from Ho (2018b). The reproduction of the original screengrab shown in Fig. 11.2 shows a typical learning page. Different from learning from a textbook, the affordances of *Memrise* allow the creation of user-generated pedagogic materials which aims to promote collaborative knowledge creation and sharing (see Fig. 11.5). These user-generated pedagogic materials play an important role in language teaching and learning in *Memrise*. It can be seen that even though learners used *Memrise* to learn Chinese in isolation, once they are learning from materials offered by the site, they encounter materials created by others, and can possibly interact with

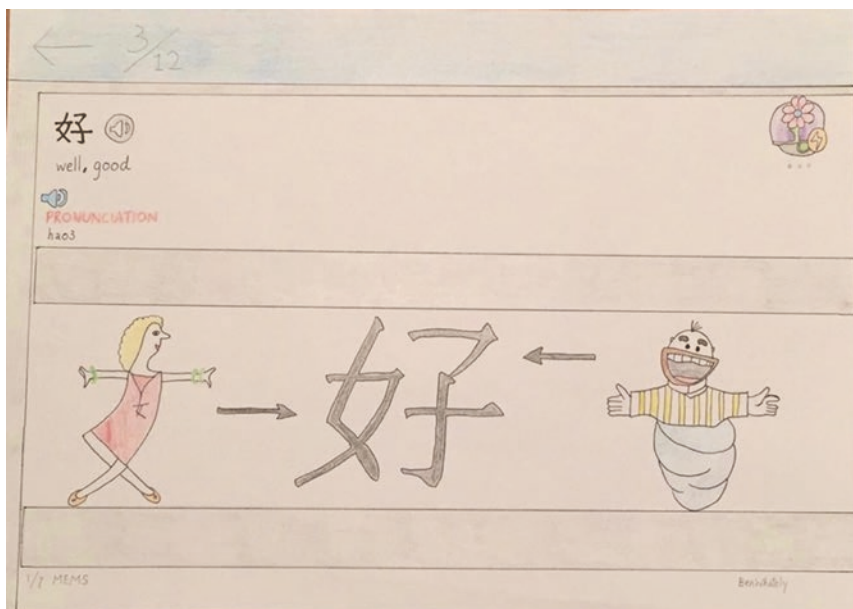


Fig. 11.2 A reproduction of the learning page

these materials by ways afforded by the site. This could be seen as an example of ‘multimodal sign-making from below’ (Adami, 2018a; Pennycook & Otsuji, 2014).

The following analysis aims to compare and contrast the pedagogic work performed by different modes. This is summarised in Table 11.1, which is a modified version of the categories used in Adami’s (2014a) comparison of the aesthetics of food blogs.

## Writing

Figure 11.2 shows the learning page of a lesson in *Memrise*. In *Memrise*, there is a default language used, depending on the users’ choice. In the case of this chapter I have chosen English to be the default language, meaning that I intend to learn Chinese in English. The reason for featuring Chinese in my analysis is that Chinese has a different script system from other European languages, and its logographic nature can better demonstrate how the meme section of the app offers what Li (2011) called a ‘translanguaging space’ for learners to experiment with their creativity and criticality in their use of multimodal resources, which includes the use of multiple semiotic and linguistic resources that learners possess in their repertoire (see also Li & Ho, 2018). Different script systems are used in *Memrise*, such as Chinese characters, Chinese *pinyin* (short for *Hanyu Pinyin*, which refers to a standardised Chinese phonetic transcription system), and English. They are normally used separately from each other, except in the case of user-generated memes where different languages and script systems are sometimes used alongside each other in one sentence. An example of one such meme could be found in Li and Ho (2018). In *Memrise*, instead of using the ‘standardised’ form of pinyin symbols (i.e. *hǎo* for 好), it uses a different kind of pinyin symbols (i.e. *hao3* for 好). This is probably due to the difficulty in typing the tone symbols, and therefore numbers are used to replace the tone symbols.

The font used in *Memrise* is the standard font generated from the computer. The same font is used consistently throughout the app. The writing that is presented in most Chinese courses is standard simplified Chinese. In terms of the register, it is usually formal, but in some cases, such as in

**Table 11.1** A summary of the pedagogic work performed by individual mode (adapted from Adami, 2014a and Ho, 2018b)

Mode	Modal element	Observable descriptor	Evaluative descriptor	Modal affordance	Contribution to Chinese learning
Writing	Script system Font Size	Standard simplified Chinese characters in most learning pages English alphabets Non-standard pinyin symbols Standard language (in most cases) Creative use of language (in memes) Formal Informal (occasionally seen in memes)	Standardised Professional Authoritative Down-to-earth (in memes)	Serves navigation function Presents words/phrases Shows translation Shows pronunciation (pinyin) Helps learners make association of new words with their L1 Describes etymology of words (in some memes)	Provides a complete form of the character so that learners can learn to deconstruct the character into its constituting radicals Encourages learners to make educated guesses which provides learners with the life-long skills of deciphering an unknown Chinese character
Speech	Quality of recording Types of Chinese accent	Background noise (in some recordings) Studio-quality (in some recordings) Both Northern and Southern Mandarin Chinese accents can be heard	Amateurish (in some recordings) Professional (in some recordings)	Allows proficient Chinese speakers to upload recordings which can be shared with learners	Demonstrates pronunciation of words/phrases Exposes learners to a variety of accents

(continued)

Table 11.1 (continued)

Mode	Modal element	Observable descriptor	Evaluative descriptor	Modal affordance	Contribution to Chinese learning
Image	Palette Type	Colourful	Fun	Provides visual resources to indicate progress of learning	Makes the logographic property of the Chinese character more transparent
		Cartoon Drawings (in some memes) Photos (in some memes)	Relaxed Child-like Professionally-designed	Provides visual resources to help form associations Supports the writing	Makes certain radicals salient
Moving image	Type of movement	Animation	Professional	Animations to illustrate the combination of Chinese radicals to form characters	Allows learners to visualize the composition of a character
		Swiping back and forth	Fun Dynamic Control of pace	Choosing appropriate memes by swiping back and forth	Allows learners to learn at their own pace
Page layout	Arrangement Framing Reading path	Linear	Modern	The use of different colours and font sizes gives salience to the area where the target material is presented	Helps learners to focus on the learning content
		Spaced	Clean		Creates a space for learners to practice using the language, to remix and recontextualise it to create new meanings
		Regular	Minimalist Top to bottom reading path (in learning pages)		

memes, the register may sometimes be informal, as memes allow a space for the creative use of language.

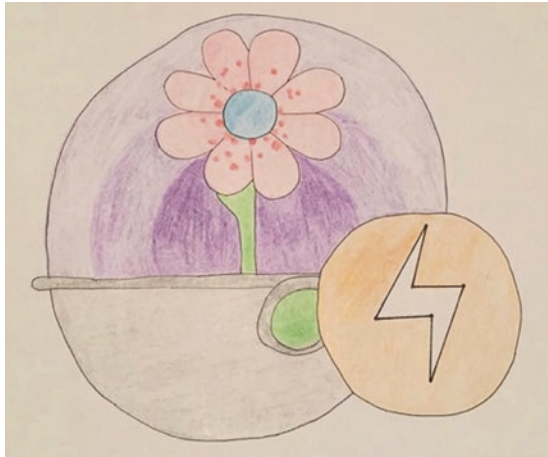
Writing is used to show the target content matter that learners are supposed to learn. For instance, writing is used in the target Chinese character, as well as the English translation underneath it. The fact that the Chinese character is in a slightly bigger font, as well as in solid, black colour as compared to the smaller font and grey colour used in the English translation indicates that salience is given to the Chinese character. Writing is also used to indicate what ‘hao3’ means, as beginning Chinese learners may not know the *pinyin* system. The word ‘PRONUNCIATION’ in pink is given salience by means of colour and the use of capital letters. Looking at the meme which occupies the bottom half of the screen, the Chinese character is shown in the centre, in a large font. It indicates the importance of knowing the written form of the character. It is seen as the most important thing that learners are supposed to learn from the content designer’s perspective.

## Speech

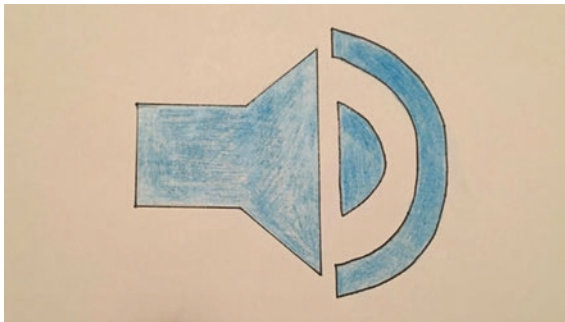
Speech is another important mode for language learning. Speech in the case of the *Memrise* platform refers to the audio recording uploaded by *Memrise*, or other users of *Memrise*, that allows learners to listen to the pronunciation of the target vocabulary. In *Memrise*, audio is represented by the image of a blue speaker that is located towards the top of the page (Fig. 11.4). The recording is triggered upon tapping on the blue speaker. The quality of the recording varies from lesson to lesson, depending on who created the recording. Some are of studio-quality and no background noise can be heard, which seem to be professionally-made, possibly made in-house by *Memrise*, while in others some background noise can be heard, which seem to be more amateurish. The recordings also feature different accents of Chinese, as they are user-generated. Speech offers a way for learners to control the pace of the learning. Learners are free to listen to the recording repeatedly as they wish. It can be seen that the function of speech in *Memrise* is mainly to demonstrate the pronunciation of the target vocabulary at learners’ own pace.

### Image

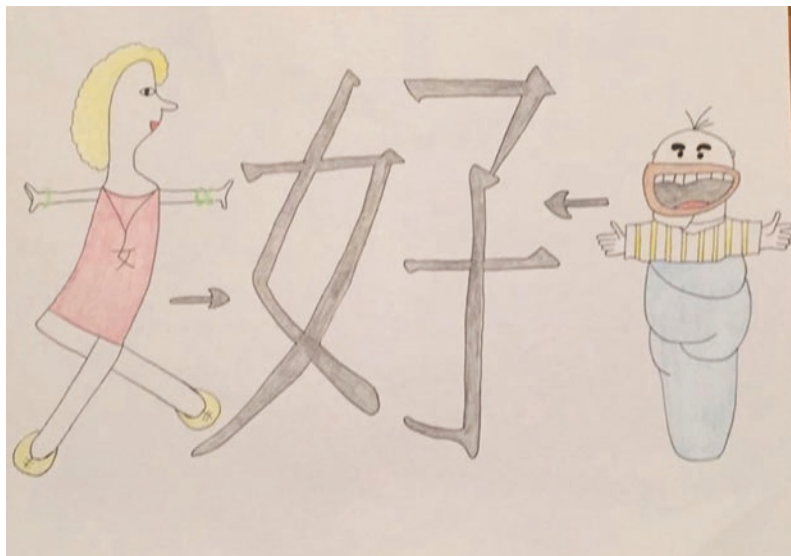
On this learning page, there are two types of images: professionally-designed images such as the flower (Fig. 11.3) and the blue speaker (Fig. 11.4), as well as hand-drawn images such as the woman and the child images (Fig. 11.5). The hand-drawn images are presented in such a



**Fig. 11.3** A reproduction of the image of a flower and lightning to indicate a difficult word



**Fig. 11.4** A reproduction of the image of the blue speaker



**Fig. 11.5** A reproduction of the image of a user-generated meme to illustrate the relationship of the components of a character

way that the wooden colour pencil marks can roughly be seen in the original shown on a screen. When displayed on the same screen together with the professionally-designed images, it is accentuated that these hand-drawn images are not professionally-designed, thereby not provided by the platform, but more likely by individuals. In this example, perhaps coincidentally, the meme is contributed by Ben Whately, a co-founder and Chief Operating Officer of *Memrise*.

Images are used both for navigation and to illustrate learning materials. For example, the image of the blue speaker means audio. When learners tap on it, they can hear the pronunciation of the word. The flower shown on the top right-hand corner of the screen shows how familiar the word is to a learner. For words that learners encounter for the first time, only a leaf can be seen. As learners encounter it for a few more times, it gradually turns into a flower, as shown in Fig. 11.3. The lightning image in orange indicates difficult words that learners need to pay extra attention to (Fig. 11.3). This is determined by the number of wrong answers given by learners in previous exercises. In other words, this is a way for



the platform to make learning more individualised by making use of some kind of algorithms. In memes, images are used to provide visual resources to help learners to remember a word, often by association. In Fig. 11.5, the character 好 is made up of two radicals: 女 and 子, meaning ‘woman’ and ‘son’ respectively. The corresponding images are shown in the meme so that learners can remember this combination more easily. The constant use of cartoon images in *Memrise* may be what Chik (2015) described as a kind of “discursive practices of infantilising learners as a display of power relations” (p. 127). Nonetheless, from the perspective of language learning, when images form a part of teaching materials, they are likely to make it easier for learners as language learning is a multi-modal and embodied experience.

## Moving Image

In *Memrise*, moving image, or animation, is used primarily in memes. Learners can swipe back and forth between different memes and decide which one they want to choose. This use of moving image allows learners to control the pace of learning, and also to decide on the learning content that they would like to pay more attention to. When used in a meme, moving image is used to illustrate the relationships between different radicals, for instance, how they combine to form a new word. This is particularly helpful for Chinese learners to understand how a character is constructed visually. Nonetheless, moving image is not a dominant mode used throughout the app, probably because creating moving images requires more technical skills and so it signifies certain degree of professionalism and technical know-how.

## Page Layout

The page contains only the essential information, with minimal use of language and predominant use of images. The page looks clean, minimalist, but informative. This design ensures that learners are not overloaded with information, and they can focus on the important aspects of the target word without distractions, bearing in mind that a lot of

learners may be using the app on the go. The page is divided into three parts, marked by the colours blue, white and grey. The blue part shows the progress of a lesson, as indicated by the words learned over the total number of words. The white part shows the content of the lesson, showing the form of the word/phrase, English translation, and pronunciation in pinyin. The grey box shows the memes created by other learners (Fig. 11.5 shows one such meme created by Ben Whately, one of the co-founders of *Memrise*). From a social semiotic perspective, the page is arranged in a linear way, and learners are encouraged to read from top to bottom, from left to right, a typical Western reading path (Kress & van Leeuwen, 2006). Saliency is given to the grey area where the meme is located, and the images of a woman and the son is coloured, which aims to draw attention from learners when compared to the white background. Table 11.1 summarises the pedagogic work performed by each of the above modes.

## 7 Implications to Chinese Learning

The five modes that were analysed—writing, speech, image, moving image, page layout—all contribute to Chinese learning in their unique way. Not only are their individual contributions important, their collective contribution as multimodal ensemble is just as profound. Since language learning is a multimodal and multisensory experience (Li, 2018), it is crucial to understand the design of the learning environment through a multimodal lens which takes into account modes beyond language, and explore how the multimodal resources afforded by technology contributes to language learning.

The Chinese writing system is logographic, which is different from alphabetical writing (e.g. English, French, German, etc.), as Chinese writing is derived from graphs whereas alphabetical writing is derived from syllables (Xing, 2006). Chinese characters are made of strokes. However, a stroke, which is the smallest orthographic unit of a character, on its own does not take on a great deal of meaning. Strokes combine to form radicals—the smallest *meaningful* units which make up a Chinese character. They are largely similar to morphemes in the English language.

Mastery of a Chinese character very often depends on the ability of learners to deconstruct the character into its constituting radicals which either give clues in terms of meaning from a semantic radical, or pronunciation from a phonetic radical (Shen & Ke, 2007). Learners then have to extract the meaning and in some cases, the pronunciation, based on what radicals are present, and how they are arranged. As a result, writing plays an important role in *Memrise* because it not only shows the completed form of the character, it also provides clues to which learners can try to deconstruct a given character, and subsequently make educated guesses when they see a new character that is unknown to them (Xing, 2006). To a certain extent, it encourages learners to make self-discovery and to manage their own learning.

Chinese is a tonal language. Subtle differences of tone would result in a completely different character, with a different meaning. Furthermore, as Chinese is a logographic script which lacks sound-script correspondence (Shen, 2005), very often pronunciation has to be learnt separately, as it may not be transparent to learners. It would be very helpful for learners to listen to the pronunciation and imitate the sounds. In the study by Ho (2018b), it was found that learners of Chinese often find remembering the pronunciation and practising them repeatedly a useful strategy to learn Chinese pronunciation, as language learning involves embodied participation. The affordances of including audio input in *Memrise* allow 'proficient' Chinese speakers to upload a recording of how they would say the character to *Memrise* so that it could be shared with other Chinese learners. It also exposes learners to a variety of accents of the language, which is something a standard textbook may not be able to provide.

As identified by Shen (2005), one of the major challenges that learners of Chinese faces is the complex graphic configurations of Chinese characters. Characters are made up of radicals, and radicals are formed by individual strokes. It could be difficult for beginners to deconstruct a character in order to extract the meaning and sound out of it. To make this important process easier, images are often used by educators to make salient the logographic property of the Chinese character more transparent by showing what the radicals represent, and how they are combined to give meaning to a character. Sometimes moving images (animations)

are used to make the relationship more explicit, and for learners to visualise how a character is formed by its radicals.

The page layout of the screen serves a more general indicative function in which it shows learners the arrangement of the different learning content. The clean, modern, and minimalist design helps learners to focus on the learning content and not be distracted. It suggests a reading path for learners that is easy to follow, from top to bottom. Pedagogically, the clear, linear reading path reduces learners' semiotic work in navigating the site, and directs them to the learning content. Nevertheless, a space (e.g. meme) is also offered to learners to remix and resemiotise content from other sources, and recontextualise it to create new meanings.

## 8 Orchestration of Modes

After examining the pedagogic work of individual modes, and their contributions to Chinese learning, it has to be reminded that as mentioned in previous sections, each mode has its own unique set of affordances and constraints. Jewitt (2009) pointed out that the meanings of different modes in a text are always interwoven and that they “co-present” and “co-operate” with each other in the communicative event (p. 15). A simple metaphor of the relationship between modes and multimodal ensemble could be illustrated by an orchestra. Different instruments play their own tunes, and together it becomes a piece of music that is enjoyed as a whole, not as music produced by separate instruments. Each mode has its own situated meaning and it varies from context to context. While the above analysis seems to have examined each mode in isolation, and how they contribute to meaning in different ways, one important understanding of multimodality is that modes combine and interact with each other to create new meanings.

As Kress (2010, p. 162) pointed out, “orchestration describes the processes of selecting/assembling/designing the semiotic ‘materials’ which seem essential to meet the rhetor’s interests...through the processes of design”. Platform designers are tasked with the work of understanding the affordances of modes, and bring them together in a way such that “semiotic harmony” of the multimodal ensemble can be achieved—orchestration (Kress, 2010). As each mode takes on different meaning,

they are selected, arranged, sequenced, and orchestrated by the sign-makers, the platform designers.

As Adami (2014b; 2015) reminded us, interactivity is an affordance of digital texts. It enables users to act on texts using ‘interactive sites/signs’ such as links and buttons so as to create a limitless number of ways to navigate the site. This sets virtual learning platforms apart from other ways of learning, e.g. textbooks. The affordances of digital texts allow language learners to control their pace of learning, and to generate their own learning path based on their interests. In such kind of environment, learners are invited to ‘redesign’ the page and shape their own learning experience. This has profound impact for learning. In particular, the affordance of user-generated memes provide the space for learners to use resources creatively, which leads to a transformation of their semiotic/conceptual resources (Kress, 2010).

Examining Figs. 11.1 and 11.2 again, which show the dashboard page as well as the learning page respectively, it can be seen that when modes are brought together as an ensemble, a new meaning, a different aesthetic emerged. The space theme and avatar in the dashboard page has added the element of ‘gamification of language learning’ by means of inviting language learners to take on a different role and to conquer different levels of challenges; the cartoon-like, colourful images and animations has injected elements of fun and relaxation to the platform. On the other hand, the standardised writing and pronunciation in the learning page has brought us back to the reality of language learning, just like being in a language classroom. Although these elements may not look cohesive in a ‘traditional’ sense, however, once they are combined, there is a sense of “semiotic harmony” which cannot be accounted for without using the tools of multimodality.

The complex interplay of the five modes under investigation creates a fun and relaxing learning environment, which at the same time one which displays professionalism and expertise. This is done through the platform designers’ strategic and creative deployment of a range of modes, with an understanding of the functionalities, affordances, and aesthetics of each of them. The resulting virtual learning environment resembles the popular notion of ‘edutainment’, characterised by the heavy reliance on “visual material, on narrative or game-like formats, and on more informal,

less didactic styles of address” (Buckingham & Scanlon, 2005; see also Ho, 2018b for an analysis of the alternation between formal and informal register used in the About Us page of *Memrise*).

## 9 Is Technology for Language Learning a Panacea?

The use of technology in the context of education is a fast developing field and it warrants more attention from researchers to understand the potentials and pitfalls of it, especially in self-directed learning contexts whereby learners have to make all learning decisions on their own. This chapter does not intend to provide a one-sided account of the advantages of technologies and virtual learning environments. It also calls for a critical view of the use of technology in language education. In language classrooms all over the world, it is not uncommon for teachers to equate the use of technology with interactivity. Numerous research done in the UK concluded that convincing evidence showing improvements in learning brought about by technology is elusive (see, e.g. Livingstone, 2012; Macaro et al., 2012). Selwyn (2015) argued that there is “a lack of a sustained critical perspective” in the present academic study of technology and education and asserted that the academic studies of technology and education tend to focus on the future benefits of using technology, but not enough attention is paid to the realities of the present.

No one can say for certain what the rapid growth of virtual learning sites would mean for language educators and learners. While there is some encouraging evidence that these sites have great potentials for language learning (see e.g. Hampel & Pleines, 2013; Hampel & Stickler, 2012; Lamy & Goodfellow, 1999), some educators would see mobile, virtual learning as a threat due to the fact that learners are learning ‘in the wild’, beyond the reach of teachers (see, e.g. Kukulska-Hulme, 2009). There are also studies showing that learners may lose motivation and become frustrated due to isolation, as well as the routine nature of tasks (Isbell, Rawal, Oh, & Loewen, 2017). Furthermore, more research is needed to understand, for instance, the impact of user-generated materials to the quality of learning. In particular, as researchers, language

practitioners, or as content providers, how can these stakeholders strike the balance of adopting user-generated materials that are authentic on the one hand, and at the same time ensure the quality and appropriateness of the content on the other? Take for example the platform featured in this chapter whereby members of the community are able participate in the process of material creation. In an earlier study conducted by Ho (2018b), as well as in Stevenson and Liu (2010), quality of user-generated content is a concern for learners, and it affected how they choose to engage in the platform. For instance, in the case of *Memrise*, some of the learning content are created ‘in house’, which have presumably undergone some quality assurance processes. In the larger study in Ho (2018b), these courses are more popular than those that are created by other members of the platform. As researchers and content creators, there is an urgent need to account for these issues, as technology is allowing more and more participation from users to involve in content creation.

## 10 Conclusions

Language learning apps have become a popular way to learn new languages. The surge of the use of these apps is partly a result from the increase in mobility of the globalised world, and partly due to the increasingly positive attitude of multilingualism. People are no longer confined to learning languages from attending classroom-based lessons, and are more inclined to learn languages through apps so that learning can be done continuously, with minimal interruptions even with high transnational mobility. However, very little is known about how these apps are designed, and how these design decisions impact on language learning. This chapter demonstrated how a multimodal semiotic analysis can be done on an online language learning environment to achieve better understanding of the relationship between pedagogic material design and language learning. Nevertheless, it has to be recognised that, as Littlejohn (2011) reminded us, “analysing materials...is quite a different matter from analysing ‘materials-in-action’” (p. 181). Whilst the analysis of “materials-in-action”—such as the creation of meme and the creation of lesson—are examined in Li and Ho (2018) and Ho (2018b) respectively,

this chapter aims to take the analysis one step back and consider the fundamentals of the design features of this virtual learning environment by offering a mode-by-mode analysis of the platform. Furthermore, this chapter has also elucidated how language learning is closely related to multimodality by examining the 'pedagogic work' performed by five selected modes and their relation to language learning, in the context of learning Chinese as a foreign language. Among the Mobile-Assisted Language Learning (MALL) implementation studies from 1994 to 2012 that Burston (2014) studied in his review, over 60% of MALL studies still focused on the learning of English; only less than 10% of the studies were on learning Chinese. The learning of Chinese through mobile apps is certainly an expanding area in the literature in need of more research.

The increasingly 'isolated' and mobile nature of language learning is largely a result of the advent of mobile technologies for language learning. Such kind of emergent learning practice has profound implications to the pedagogic design of language learning materials, as well as shaping our understanding of learning in the age of mobility which has become more fluid and flexible. From the analysis, it can be seen that not only can learners interact with the site through accessing content, *Memrise* also offers a space for teachers and learners to remix and resemiotize existing content, and transform them into new knowledge and share it with a wide audience, as in the case of the meme shown in the analysis. Language learning is an embodied activity which is multimodal. The analysis shown in this chapter shows the contribution of multiple modes to language learning. Contrary to the belief that writing is the dominant mode of language learning, I argued that the role of other modes, such as speech, image, moving image (animation), as well as page layout are equally important resources for language learning. Learning, as seen from a social semiotic perspective, is transformative engagement with the world (Bezemer & Kress, 2016b). It invites us to conceptualise learning using a different paradigm that can reflect the heterogeneity and mobility of the society. Language learning using virtual sites does not mean that learners are cut off from the outside world. On the contrary, learners can be exposed to a wider repertoire of ways of representation, thanks to the affordances of virtual learning sites such as *Memrise*. Not only can they interact with the site itself, learners can also interact with other learners



through interacting with the signs created by each other. To sum up, this chapter has illustrated a how multimodal semiotic analysis can be useful for the analysis of learning environment, and to unpack the implications of learning. While each mode contribute to language learning in different ways, the orchestration and interplay of modes have created a kind of virtual learning environment that is both fun to use but appear professional at the same time. While interaction is not the focus of this chapter, it has profound effect on learning. Therefore, the way learners interact in such kind of learning environment is certainly an area that warrants more of our attention in the future.

**Acknowledgement** First and foremost, thanks must be given to the Bloomsbury Colleges PhD Studentship for funding the PhD project in which the data of this study is drawn from. I would also like to thank the *Memrise* team, in particular Ed Cooke and Ben Whately, for their support in this project. I would also like to thank the editors for providing constructive feedback which greatly improves the quality of the chapter. Thanks must also be given to Heidi Chan for her help in preparing this manuscript.

## References

- Adami, E. (2014a). *Multimodal Analysis of Aesthetics: Two Versions of a Food Blog Compared*. NCRM Working Paper 05/14.
- Adami, E. (2014b). What's in a Click? A Social Semiotic Framework for the Multimodal Analysis of Website Interactivity. *Visual Communication*, 14(2), 133–153. <https://doi.org/10.1177/1470357214565583>
- Adami, E. (2015). Aesthetics in Digital Texts Beyond Writing: A Social Semiotic Multimodal Framework. In A. Archer & E. Breuer (Eds.), *Multimodality in Writing: The State of the Art in Theory, Methodology and Pedagogy* (pp. 43–62). Leiden: Brill.
- Adami, E. (2018a). Shaping Public Spaces from Below: The Vernacular Semiotics of Leeds Kirkgate Market. *Social Semiotics*, 1–25. <https://doi.org/10.1080/10350330.2018.1531515>
- Adami, E. (2018b). Styling the Self Online: Semiotic Technologization in Weblog Publishing. *Social Semiotics*, 28(5), 601–622. <https://doi.org/10.1080/10350330.2018.1504713>

- Alm, A. (2006). CALL for Autonomy, Competence and Relatedness: Motivating Language Learning Environments in Web 2.0. *JALT CALL Journal*, 2(3), 29–38.
- Bezemer, J., & Kress, G. (2016a). *Multimodality, Learning, and Communication*. New York and London: Routledge.
- Bezemer, J., & Kress, G. (2016b). The Textbook in a Changing Multimodal Landscape. In N.-M. Klug & H. Stöckl (Eds.), *Handbuch Sprache im multimodalen Kontext* (pp. 476–498). Berlin and Boston: De Gruyter Mouton.
- Brick, B. (2011). Social Networking Sites and Language Learning. *International Journal of Virtual and Personal Learning Environments*, 2(3), 18–31. <https://doi.org/10.4018/jvple.2011070102>
- Brick, B. (2012). The Role of Social Networking Sites for Language Learning in UK Higher Education. *International Journal of Computer-Assisted Language Learning and Teaching*, 2(3), 35–53. <https://doi.org/10.4018/ijcallt.2012070103>
- Buckingham, D., & Scanlon, M. (2005). Selling Learning: Towards a Political Economy of Edutainment Media. *Media, Culture and Society*, 27(1), 41–58. <https://doi.org/10.1177/0163443705049057>
- Burston, J. (2014). The Reality of MALL: Still on the Fringes. *CALICO Journal*, 31(1), 103–125. <https://doi.org/10.11139/cj.31.1.103-125>
- Chapelle, C. (1998). Multimedia CALL: Lessons to Be Learned from Research on Instructed SLA. *Language Learning & Technology*, 2(1), 21–36.
- Chapelle, C. A. (2009). The Relationship Between Second Language Acquisition Theory and Computer-Assisted Language Learning. *The Modern Language Journal*, 93, 741–753.
- Chik, A. (2015). Recreational Language Learning and Digital Practices: Positioning and Repositioning. In R. Jones, A. Chik, & C. Hafner (Eds.), *Discourse and Digital Practices: Doing Discourse Analysis in the Digital Age* (pp. 112–129). New York: Routledge.
- Fletcher, W. H. (2007). Concordancing the Web: Promise and Problems, Tools and Techniques. In M. Hundt, N. Nesselhauf, & C. Biewer (Eds.), *Corpus Linguistics and the Web*. Amsterdam/New York: Rodopi.
- Gallagher, S., & Zahavi, D. (2008). *Phenomenological Mind: An Introduction to Philosophy of Mind and Cognitive Science*. London: Routledge.
- Godwin-Jones, R. (2012). Digital Video Revisited: Storytelling, Conferencing, Remixing. *Language Learning & Technology*, 16(1), 1–9. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ972342&site=ehost-live&scope=cite>

- Google Play. (2018). Retrieved from <https://play.google.com/store/apps/details?id=com.memrise.android.memrisecompanion>
- Hafner, C. A. (2015). Remix Culture and English Language Teaching: The Expression of Learner Voice in Digital Multimodal Compositions. *TESOL Quarterly*, 49(3), 486–509. <https://doi.org/10.1002/tesq.238>
- Hampel, R., & Pleines, C. (2013). Fostering Student Interaction and Engagement in a Virtual Learning Environment: An Investigation into Activity Design and Implementation. *CALICO Journal*, 30(3), 342–370. <https://doi.org/10.11139/cj.30.3.342-370>
- Hampel, R., & Stickler, U. (2012). The Use of Videoconferencing to Support Multimodal Interaction in an Online Language Classroom. *ReCALL*, 24(2), 116–137. <https://doi.org/10.1017/S095834401200002X>
- Harrison, R., & Thomas, M. (2009). Identity in Online Communities: Social Networking Sites and Language Learning. *International Journal of Emerging Technologies & Society*, 7(2), 109–124.
- Healey, D. (2007). Theory and Research: Autonomy and Language. In J. Egbert & E. Hanson-Smith (Eds.), *CALL Environments: Research, Practice, and Critical Issues* (2nd ed.). Alexandria, VA: Teachers of English to Speakers of Other Languages.
- Ho, W. Y. (2018a). Mobility and Language Learning: A Case Study on the Use of an Online Platform to Learn Chinese as a Foreign Language. *London Review of Education*, 16(2), 239–249.
- Ho, W. Y. (2018b). *Translanguaging in Online Language Learning: Case Studies of Self-Directed Chinese Learning of Multilingual Adults*. Unpublished PhD thesis, UCL Institute of Education, University College London, UK.
- Iedema, R. (2003). Multimodality, Resemiotization: Extending the Analysis of Discourse as Multi-semiotic Practice. *Visual Communication*, 2(1), 29–57. <https://doi.org/10.1177/1470357203002001751>
- Isbell, D. R., Rawal, H., Oh, R., & Loewen, S. (2017). Narrative Perspectives on Self-Directed Foreign Language Learning in a Computer- and Mobile-Assisted Language Learning Context. *Languages*, 2(4), 1–20. <https://doi.org/10.3390/languages2020004>
- Jewitt, C. (2009). An Introduction to Multimodality. In C. Jewitt (Ed.), *The Routledge Handbook of Multimodal Analysis* (pp. 14–27). London: Routledge.
- Jewitt, C. (2013). Multimodal Methods for Researching Digital Technologies. In S. Price, C. Jewitt, & B. Brown (Eds.), *The SAGE Handbook of Digital Technology Research* (pp. 250–265). Los Angeles and London: SAGE.

- Jones, R. H., & Hafner, C. A. (2012). *Understanding Digital Literacies: A Practical Introduction*. New York: Routledge.
- Kan, Q., Owen, N., & Bax, S. (2018). Researching Mobile-Assisted Chinese-Character Learning Strategies Among Adult Distance Learners. *Innovation in Language Learning and Teaching*, 12, 1–16.
- Kress, G. (2009). Assessment in the Perspective of a Social Semiotic Theory of Multimodal Teaching and Learning. In C. Wyatt-Smith & J. J. Cumming (Eds.), *Educational Assessment in the 21st Century* (pp. 19–41). Dordrecht: Springer Netherlands. <https://doi.org/10.1007/978-1-4020-9964-9>
- Kress, G. (2010). *Multimodality: A Social Semiotic Approach to Contemporary Communication*. London: Routledge.
- Kress, G. (2015). Semiotic Work: Applied Linguistics and a Social Semiotic Account of Multimodality. *AILA Review*, 28, 49–71.
- Kress, G., & van Leeuwen, T. (2006). *Reading Images: The Grammar of Visual Design* (2nd ed.). London: Routledge.
- Kukulka-Hulme, A. (2009). Will Mobile Learning Change Language Learning? *ReCALL*, 21(2), 157–165. <https://doi.org/10.1017/S0958344009000202>
- Lai, C. (2013). A Framework for Developing Self-Directed Technology Use for Language Learning. *Language Learning & Technology*, 17(2), 100–122.
- Lamy, M. N., & Goodfellow, R. (1999). “Reflective Conversation” in the Virtual Classroom. *Language Learning & Technology*, 2(2), 43–61. Retrieved from <http://llt.msu.edu/vol2num2/article2/>
- Levy, M., & Stockwell, G. (2006). *CALL Dimensions: Options and Issues in Computer-Assisted Language Learning*. Mahwah: Lawrence Erlbaum.
- Li, W. (2011). Moment Analysis and Translanguaging Space: Discursive Construction of Identities by Multilingual Chinese Youth in Britain. *Journal of Pragmatics*, 43(5), 1222–1235. <https://doi.org/10.1016/j.pragma.2010.07.035>
- Li, W. (2018). Translanguaging as a Practical Theory of Language. *Applied Linguistics*, 39(1), 9–30.
- Li, W., & Ho, W. Y. (2018). Language Learning Sans Frontiers: A Translanguaging View. *Annual Review of Applied Linguistics*, 38, 33–59. <https://doi.org/10.1017/S0267190518000053>
- Littlejohn, A. (2011). The Analysis of Language Teaching Materials: Inside the Trojan Horse. In B. Tomlinson (Ed.), *Materials Development in Language Teaching* (pp. 179–211). Cambridge: Cambridge University Press.
- Liu, M., Abe, K., Cao, M. W., Liu, S., Ok, D. U., Park, J., et al. (2015). An Analysis of Social Network Websites for Language Learning: Implications for Teaching and Learning English as a Second Language. *CALICO Journal*,

- 32(1), 113–152. <http://dx.doi.org/myaccess.library.utoronto.ca/10.1558/cj.v32i1.114-152>
- Liu, M., Evans, M. K., Horwitz, E., Lee, S., McCrory, M., Park, J.-B., et al. (2013). A Study of the Use of Social Network Sites for Language Learning by University ESL Students. In M.-N. Lamy & K. Zourou (Eds.), *Social Networking for Language Education* (pp. 137–157). Basingstoke: Palgrave Macmillan.
- Livingstone, S. (2012). Critical Reflections on the Benefits of ICT in Education. *Oxford Review of Education*, 38(1), 9–24. <https://doi.org/10.1080/03054985.2011.577938>
- Macaro, E., Handley, Z., & Walter, C. (2012). A Systematic Review of CALL in English as a Second Language: Focus on Primary and Secondary Education. *Language Teaching*, 45(1), 1–43. <https://doi.org/10.1017/S0261444811000395>
- Motteram, G. (2011). Developing Language-Learning Materials with Technology. In B. Tomlinson (Ed.), *Materials Development in Language Teaching* (pp. 303–327). Cambridge: Cambridge University Press.
- Pachler, N., Bachmair, B., & Cook, J. (2010). *Mobile Learning: Structures, Agency, Practices*. New York: Springer.
- Pennycook, A., & Otsuji, E. (2014). Metrolingual Multitasking and Spatial Repertoires: ‘Pizza Mo Two Minutes Coming’. *Journal of Sociolinguistics*, 18(2), 161–184.
- Reinders, H., & Lewis, M. (2005). How Well Do Self-Access CALL Materials Support Self-Directed Learning? *The JALT CALL Journal*, 1(2), 41–49.
- Selwyn, N. (2015). Technology and Education – Why It’s Crucial to Be Critical. In S. Bulfin, N. F. Johnson, & C. Bigum (Eds.), *Critical Perspectives on Technology and Education* (pp. 245–256). Basingstoke: Palgrave Macmillan.
- Shen, H. H. (2005). An Investigation of Chinese-Character Learning Strategies Among Non-native Speakers of Chinese. *System*, 33, 49–68. <https://doi.org/10.1016/j.system.2004.11.001>
- Shen, H. H., & Ke, C. (2007). Radical Awareness and Word Acquisition Among Nonnative Learners of Chinese. *Modern Language Journal*, 91(1), 97–111. <https://doi.org/10.1111/j.1540-4781.2007.00511.x>
- Stevenson, M. P., & Liu, M. (2010). Learning a Language with Web 2.0: Exploring the Use of Social Networking Features of Foreign Language Learning Websites. *CALICO Journal*, 27(2), 233–259.
- Swain, M. (2006). Linguaging, Agency and Collaboration in Advanced Second Language Proficiency. In H. Byrnes (Ed.), *Advanced Language Learning: The Contribution of Halliday and Vygotsky* (pp. 95–108). London: Continuum.

- Swain, M., & Lapkin, S. (2013). A Vygotskian Sociocultural Perspective on Immersion Education: The L1/L2 Debate. *Journal of Immersion and Content-Based Language Education*, 1(1), 101–129. <https://doi.org/10.1075/jicb.1.1.05swa>
- Terhune, N. M. (2015). Language Learning Going Global: Linking Teachers and Learners Via Commercial Skype-Based CMC. *Computer Assisted Language Learning*, 29(6), 1–21. <https://doi.org/10.1080/09588221.2015.1061020>
- Ushida, E. (2013). The Role of Students' Attitudes and Motivation in Second Language Learning in Online Language Courses. *CALICO Journal*, 23(1), 49–78.
- Xing, Z. J. (2006). *Teaching and Learning Chinese as a Foreign Language: A Pedagogical Grammar*. Hong Kong: Hong Kong University Press.
- Zourou, K. (2012). On the Attractiveness of Social Media for Language Learning: A Look at the State of the Art. Retrieved from <https://alsic.revues.org/2436>
- Zourou, K., & Loiseau, M. (2013). Bridging Design and Language Interaction and Reuse in Livemocha's Culture Section. In M.-N. Lamy & K. Zourou (Eds.), *Social Networking for Language Education* (pp. 77–99). London: Palgrave Macmillan.

# Part IV

## Researching Virtual Learning Sites



# 12

## Handling Language during Empirical Research: Ethnography as Action in and Across Time and Physical-Virtual Sites

Sangeeta Bagga-Gupta, Giulia Messina Dahlberg,  
and Annaliina Gynne

### 1 Introduction and Aim

A growing body of literature recognizes the inappropriateness of conceptualizing and representing communicative practices in terms of fixed codes where different named languages mutually exclude one another. This could also be expanded to the study of embodiment where gestures and other semiotic resources have come to play a central role in scholarly

---

S. Bagga-Gupta (✉)

School of Education and Communication, Jönköping University, Jönköping, Sweden

e-mail: [sangeeta.bagga-gupta@ju.se](mailto:sangeeta.bagga-gupta@ju.se)

G. Messina Dahlberg

Department of Education and Special Education, University of Gothenburg, Gothenburg, Sweden

A. Gynne

School of Education, Culture and Communication, Mälardalen University, Västerås, Sweden



writing only relatively recently (Finnegan, 2015; Linell, 2009). When dealing with educational research in which the units of analysis consist of social interaction across (analogue-digital) settings, there is also a need to be reflexive while attending to what we do as researchers. Furthermore, post the digital-technological explosion, people's communicative practices have changed drastically at the global as well as the local levels (Leandri & Neumann, 2014). The point that is salient is that capturing a moving object empirically, that is, a phenomenon occurring at the boundaries of different physical-virtual sites, requires particular analytical attention and methodological creativity.

Academic scholarship has contributed in important ways to our understandings of human beings—children and adults'—use of (primarily oral) talk, body orientations, such as gaze and gestures, and the semiotic affordances of tools in different settings (Finnegan, 2015; Goodwin, 1994; Jewitt, 2009; Linell, 2009; Machin, 2013). Some of this focus is more recently being directed towards learning as well as communicative practices, or languaging more generally (Kress, 2003; Linell, 2009; Paulasto, Riionheimo, Meriläinen, & Kok, 2014). This type of scholarship has furthered our understandings of embodiment and the materiality of human talk-centred communication in different settings, including more recently in institutional learning arenas (see, e.g., Goico, 2019; Gynne, 2016; Holmström, 2013; Messina Dahlberg, 2015; St John, 2014; Tapio, 2013). The role of written-communication and communication where more than one language-variety are deployed is, however, only sparingly centrestaged in much of the existing literature. Moreover, here the role of an oral-language bias and a monolingual bias is being increasingly flagged (Bagga-Gupta, 2012a, 2017a, 2017b, 2017c; Gal & Irvine, 1995). Another issue that is relevant for present purposes is the demarcated nature of scholarship within the language sciences and the bearing this has in the domain of educational research. In general, written-communication is focused upon in literacy scholarship, and the use of more than one language-variety has traditionally been considered as the “property” of the domains of bilingual studies, Second Language Acquisition (SLA), foreign languages etc. (Bagga-Gupta, 2012a, 2014a, 2017c, 2019a, b; Deters, Gao, Miller, & Vitanova-Haralampiev, 2014; Pitkänen-Huhta & Holm, 2012). Furthermore, contributions from the scholarship that focus on the

modality heterogeneity of signed communication also continue to be conducted in separate academic domains and remain, for the most, eclipsed from the mainstream academic scholarship.

This chapter contributes in two ways to the different areas of research presented above. First, by investigating the ways in which the demarcations of the scholarship domains can be addressed, and second, by illustrating the challenges and opportunities of (n)ethnographic work in the study of phenomena that cannot/should not be framed and limited in terms of specific areas across time and space. Scholarship gives recognition to the fact that fieldwork is undergoing changes rapidly (Fabion & Marcus, 2009; Horst & Miller, 2012). The latter specifically address the implications of digitalization of everyday practices (not least in educational settings) as well as research practices in (n)ethnographic fieldwork<sup>1</sup> and scholarly writing. This chapter highlights the need for ethnographically inclined researchers working in domains such as communication, culture and diversity to pay greater reflexive attention to their fieldwork, analysis and writing collaborative practices. To this end, we attend to three epistemological and practical challenges that reflect significant methodological issues currently in the very doing of (n)ethnographic fieldwork. It is these challenges that constitute the aims of this chapter.

1. First, we analytically frame ethnographic methods and data in terms of where, when and what is the field and data by discussing how (and for what purposes) the boundaries of the field(s) are constructed; this includes ethical issues that arise when the possibilities afforded by participants' trajectories across physical-virtual spaces change the kinds of (ethnographic) research that are possible to conduct.
2. Second, by using a range of representational techniques, we illustrate the ways in which multimodal analysis across physical-virtual sites can contribute towards meeting challenges related to research methodological practices.

---

<sup>1</sup>The analyses presented in this chapter highlight that (n)ethnography as a term is well suited for describing how the practices of netnography and ethnography “work in concert to illuminate new issues in the social sciences” (Kotzines, 2010, p. 58).

3. Finally, we explicitly illustrate and discuss the role of the researcher during as well as beyond fieldwork phases. Focusing reflexivity, we discuss the choices and challenges we (continue to) face, during fieldwork, analysis and writing phases (both during collaborative and during individual writing).

This chapter attempts to go beyond the biases and gaps highlighted above and takes a point of departure in the multidisciplinary work that we have been involved in, since the 1990s, in different ethnographically framed research projects. While our projects were previously framed in analogue terms (in that the field was primarily physical and research methods deployed analogue technologies), a digital presence marks both the fields of engagement and the tools of recording and data generation since the turn of the century. Our interests focus upon a range of ethnographical methods that attempt to analytically engage with representations of human communication including its visual, auditory, manual and semiotic dimensions.

By bringing together data from different (n)ethnographic projects where participants use more than one language-variety<sup>2</sup> and more than one modality,<sup>3</sup> the study presented in this chapter makes visible the complexities of languaging inside, outside and across (virtual) learning sites. Related to the study's first challenge, having access to multi-sited and multiple projects brings forth the issue of boundary framings of the field(s), data, participant(s) and researcher trajectories. The second challenge attended to relates to the representational techniques in scholarly writing; stretching the boundaries of interaction analysis and reporting, this chapter highlights the diversity of human languaging and identity positions (see Sect. 2). Discussing the challenges involved in conducting fieldwork, analysis and reporting where the data is multifaceted and complex, involves making visible the dynamics of languaging itself. The third challenge attended to in this study deals with the very issues related to reflexivity, including creativity, in the various phases of (n)ethnography.

---

<sup>2</sup>The range of named language-varieties covered in these projects include English, Finnish, Gujarati, Hindi, Italian, Marathi, Swedish, Swedish Sign Language.

<sup>3</sup>Oral, written, signed, pictorial, embodied, visually oriented modalities etc.

Examining these by juxtaposing experiences across projects opens up for meta-analytical framings that can transgress monodisciplinary framed analysis and reporting. This means that analytical issues by default call for attending to and engaging with the specificities of a number of different individual academic domains (e.g. literacy, bilingualism, signed communication and foreign languages) in the language and educational sciences simultaneously.

The remainder of this chapter is structured as follows: Sect. 2 presents the theoretical framings on performing (n)ethnographic research across the twentieth and twenty-first centuries. Tenets of sociocultural, dialogical and decolonial perspectives are highlighted as the main premises for our thinking when the analytical focus is set on languaging and doing research. In Sect. 3, the data and the projects that we draw upon in the analysis are presented. Section 4 focuses upon the analysis of epistemological, pragmatic and analytical challenges in the doing of (n)ethnographic research by discussing research *as* action. In its three sub-sections, boundary framings across physical-virtual research fields, issues of data-creation and representations and researcher's positionings are analytically highlighted. In the final section of this chapter, the complexity of research *as* practice is discussed from a critical and reflexive perspective.

## 2 On Performing Research: Theoretical Framings

Framed in sociocultural, dialogical framings and decolonial perspectives, this chapter presents a study that builds upon our collective and cumulative experiences of doing (n)ethnographically framed research in multi-sited projects that have been, and are being, conducted in different geopolitical and digital spaces. A key premise in sociocultural and dialogical framings is that learning or socialization is conceptualized in terms of a situated and distributed process (Lave & Wenger, 1991; Säljö, 2005; Vygotsky, 1962; Wertsch, 1998, 2002) where communication—irrespective of whether this occurs in one or more named language-varieties and modalities—is collaboratively achieved. Thus, participation and social

interaction are understood as key aspects of human ontological development.<sup>4</sup> Furthermore, communication is understood as being a significant dimension of the construction of human realities, rather than being a conduit that in some neutral sense mirrors reality. A key issue that Berger and Luckman's treatise, from 1966, on "The Social Construction of Reality" highlights, is the significance of the mundaneness of everyday existence, that is, the social practices in which humans and their actions are embedded. Such a premise implies that the analysis of everyday life must refrain from "any causal or genetic hypothesis, as well as from assertions about the ontological status of the phenomena analysed" (Berger & Luckman, 1966, p. 34). This type of fundamental premise has a significant bearing upon how we, as scholars, approach and handle the research enterprise itself. Thus, how social practices in general and languaging in particular are handled during fieldwork or "data generation" processes and analysis is important to focus upon.

Action-oriented concepts like languaging that build upon the key premises of a sociocultural, dialogically framed perspective, can be understood in terms of constituting renewed attempts by scholars to sidestep monological and static understandings that mark an essentialist, bounded notion of language (Linell, 2009; see also Bagga-Gupta & Messina Dahlberg, 2018). It is thus within the matrix of mundane interactions of everyday life that conventions are established (Berger & Luckman, 1966). Here patterned norms eventually become transparent, taken for granted, and constitute the very fabric of human existence. Scholarship that takes such a position as a point of departure highlights, at least in a theoretical sense, the need to address the complex heteroglossic (Bakhtin, 1981) nature of communication and to unravel such patterns.

With the above as backdrop, the following issues are salient for present purposes. Monolingual positions in the scholarship and in institutional learning contexts continue (in large parts of the global-North at least) to obscure the fact that the large majority of the people in the

---

<sup>4</sup> See, for instance, the work by Merlin Donald (2001) where the concept of hybrid minds refers to the inextricable connections and interdependence between human cognition and culture, through the use of semiotic tools, in and through languaging.

world live their lives while engaging with and deploying resources from more than one named language-variety (Gal, 2007). Significant here is that boundaries between named language-varieties and modalities are not of prime concern in the nitty-gritty communicative actions of human beings wherein meaning-making is key.<sup>5</sup> This colonial linguacentrism furthermore, only in a limited manner, recognizes the routine ways of meaning-making inside, outside and across institutional settings. A decolonial perspective postulates that these settings are not only rich sites for research, but that languaging needs to be attended to from such complex points of departure in the research enterprise itself (Bagga-Gupta, 1995, 2013, 2019b; Garcia, 2009). This, as we have argued previously, highlights the need for promoting “critical multilingual and participatory perspectives [that] themselves make up marginal positions in the bilingual research landscape” (Bagga-Gupta, 2012, p. 88). This means, for instance, that there is merit in the researchers’ experiences related to the named language-varieties and modalities deployed in the settings they explore. Critical reflections regarding issues of “othering”, including the uncritical manner in which the language-varieties of the peoples in focus were (and continue to be) handled in the days when anthropology routinely used interpreters to understand the new spaces they studied, emerged only in the post WW II era (Asad, 1986; Fabian, 1983). Despite the near cult status of scholarly texts like Clifford and Marcus (1986) “Writing Culture”, a self-critical stance has not spilled over onto ethnographies everywhere. For instance, newer discussions on translations highlight the continuing lack of reflexivity in the field with regard to representations:

---

<sup>5</sup> It is in the meaning-making enterprise of human languaging that boundaries are insignificant and inconsequential for people. This does not mean that boundaries are not significant in the political and ideological work that individuals and communities are engaged in, for instance, to get recognition, as users of a specific named language-variety or modality that is (for any number of reasons) marginalized in different geopolitical spaces. Thus, it is the tension between the routine ways-of-being-with-words (Bagga-Gupta, 2014a) where meaning-making is central against the backdrop of political/ideological segregation of specific named language-varieties or modalities that exclude people or communities that we attempt to illuminate in this chapter.

Ethnography always involves translation, and usually in the narrowest sense of making words in one language accessible to speakers of another; yet even the new, or 'postmodern', ethnographers make little or no mention of the epistemological and political difficulties translating carried with it. (Sturge, 1997, p. 21)

Furthermore, Sturge (1997) highlights the duality of ethnographic translation,

from the oral to the written form as well as from one language to another; the reproduction of the performative aspects of an utterance—its physical, temporal and social contextuality—defies the translator's supposed task of reproducing meaning intact [...] ethnographic translation is faced with 'raw' words hovering around the mouths and ears that produced them. (p. 22)

Such a line of thought validates a reflexive position as well as a critique of the assumed *neutrality* of translation-based ethnographic research. For present purposes, our point is that a theorizing related to a sociocultural perspective needs to bring centerstage the importance of scholars' own language experiences with the named language-varieties and modalities deployed in the communities and by the peoples they study (Hoppers, 2009).

Another key theoretical idea that frames an action-oriented, socio-cultural and dialogical perspective builds upon the mediational role attributed to cultural tools that have emerged phylogenetically and that are appropriated ontogenetically (Säljö, 2012; Vygotsky, 1934/1962; Wertsch, 1998). The recognition accorded to the symbiotic relationship between cultural tools (like language—the tool of tools) and people in inter-action with one another has given rise to hyphenated concepts in the sociocultural scholarship. Such concepts attempt to explicitly challenge the boundary-marked nature that dominates understandings of individuals, tools and named language-varieties and modalities. However, while the rich potentials and dimensions of languaging in concert with intellectual and material tools are recognized theoretically, attention in analysis and academic reporting has—as highlighted above—been dominated by an oral language bias and by a monolingual

bias (Gramling, 2016). Thus, we argue, the multi-layered complex endeavour of languaging has not been given analytical emphasis in relation to the study of human meaning-making wherein recognition and visibility are accorded, at the level of data representation, to the composite irreducible nature of individuals in concert with tools.

Furthermore, an attempt is made to centre-stage power differentials in social practices empirically in this study from a decolonial framing (Comaroff & Comaroff, 2009; Daiute, 2015; Fanon, 1961; Mignolo, 2012). Cultivating a decolonial imagination (Savransky, 2017) implies going beyond the hegemonies of namism (where references to key post-colonial texts circulate in the European scholarship) and “academic branding” (Pavlenko, 2017; where some neologisms have gained currency in the twenty-first century; see also Bagga-Gupta & Messina Dahlberg, 2017, 2018). Namism has tended to fix issues of power differentials in terms of historically colonized places and branding tends to cement ideologies even though concepts have been re-worded through alternative theorizing. Going beyond such popularized framings, we argue for recognizing decolonial perspectives in terms of a paradigm where it is the here and now in all spaces—east/south and west/north, including physical-virtual spaces—that are important (Bagga-Gupta, 2017c, 2019a, b) and where “academic terms” (as compared to “academic branding”) build upon emically framed explorations of empirical data across time and space. Such a stance implies that analytical units of analysis cannot be reduced to bounded entities that build upon a recognition of “imagined” boundaries that demarcate communities, nations, individuals or named language-varieties and modalities.

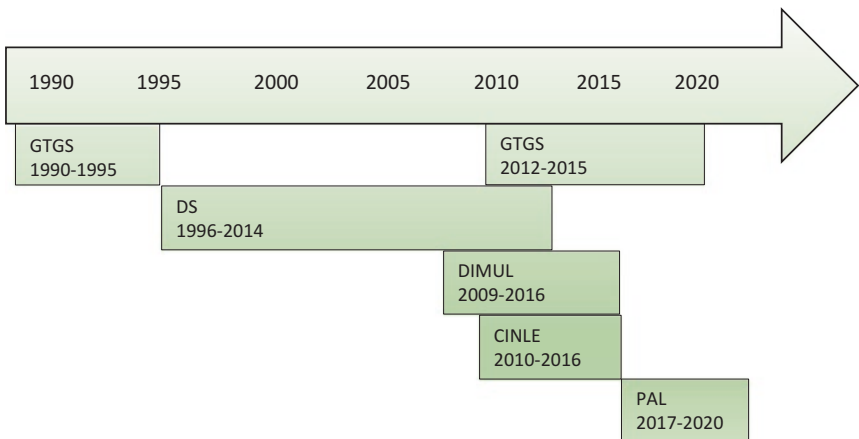
These sociocultural, dialogical and decolonial intersecting theoretical positions are used to set the analytical focus on the performance of languaging and the ways-of-being-with-words that take into cognizance marginalized global-South epistemologies. The latter emerge from groundings in situated experiences of human beings, including researchers who study the former. We engage with the three aims or the challenges of the present study framed within these intersecting positions. In other words, we take these analytical framings as points of departure and illustrate the need for cross-disciplinary critical viewings and voicings in contemporary research.



### 3 On Data and Projects

The projects that are included in the study presented here share an interest in observing, describing and interpreting social practices as they unfold in the everyday lives of people in and across settings. These include natural textual spaces which encompass individuals, communities and institutions across space and time. Empirical data from five multi-sited (n)ethnographic projects (see Fig. 12.1) where linguistic-modality diversity is a salient feature are drawn upon. Fieldwork in these projects has been conducted in different geopolitical contexts (the nation-states of Sweden and India) and digital-physical spaces.

The GTGS (Gender Talk Gender Spaces), DS (Deaf Studies), DIMUL (Doing Identity in and through Multilingual Literacy Practices), CINLE (Studies of everyday communication and identity processes in net-based learning environments) and PAL (Participation for all? School and post-school pathways of young people with functional disabilities) projects are



**Fig. 12.1** Timeline for the projects which are engaged within the study (projects GTGS and PAL are ongoing, while fieldwork in projects DS, DIMUL and CINLE has concluded); data from project PAL are not used for illustrative purposes in this study

situated at the CCD research group in Sweden.<sup>6</sup> They are multi-sited, recently concluded and/or ongoing. They all draw upon data and experiences from and focus upon issues of learning and linguistic heterogeneity, inside, outside and across physical and virtual institutional spaces. Furthermore, they all share an ethnographic approach towards data generation. The specific data in these five projects consist of video-documentation, extensive fieldnotes, study materials, digital and/or analogue pictures, informal interviews and archive materials. Table 12.2 in the Appendix presents, apart from the nature of data, the language-varieties and modalities used by participants in the projects, the salient aims and results of each project. Table 12.1 presents an overview of the data that is upfronted from the different projects and that allows us to attend to the three key challenges that are focused upon in the present study.

Juxtaposing datasets from different projects is, as we have argued earlier, important since analysis across projects and datasets allows for rising above the specificities of individual projects. Moreover, this potentially allows for engaging with reflective discussions on the processes of

**Table 12.1** Overview of the figures and issues dealt with in the analytical sections of the chapter

Figure	Issue 1	Issue 2	Issue 3	Project	Section
12.2	x	–	–	–	4.1
12.3	x	–	–	CINLE	4.1
12.4	x	–	–	DIMUL	4.1
12.5	x	–	–	DS	4.1
12.6	x	x	–	DIMUL	4.2.1
12.7	x	x	–	DS	4.2.1
12.8, 12.9, 12.10	x	x	–	CINLE	4.2.1
12.11, 12.12, 12.13	–	x	–	GTGS	4.2.2
12.14	–	x	–	DS	4.2.2
12.15	–	–	x	CINLE	4.3
12.16	–	–	x	DIMUL	4.3
12.17, 12.18	–	–	x	–	4.3

<sup>6</sup>The Communication, Culture and Diversity (CCD) network-based research environment at Jönköping University includes a number of research projects, in addition to those we draw upon here, that deal with issues of modality layered analysis. Of the five projects, fieldwork is currently ongoing in projects GTGS and PAL. Data is engaged with from all the projects, even though the present study does not illustrate data from project PAL.

data-creation at a meta-level, including issues of categorization and analysis. Given that one of our important points of departure is that categorizations in themselves re-create identity positions (Bagga-Gupta, Hansen, & Feilberg, 2017), a summary of the analytical or standard labels used in a field or those that arise in the analysis process (e.g. named language-varieties and modalities) do not in themselves promise neutrality or lend themselves an a priori fit into tables. Not reflecting upon this issue could in effect amount to a significant risk of falling into an essentialist trap. This constitutes another example of a challenge regarding how scholarship frames data pertaining to the boundaries that are drawn, for instance, for creating something as digital and something as physical or something as belonging to one named language-variety or modality and not another. This exemplifies the type of issues that are in themselves key analytical dimensions that we focus upon in the next analytical section.

## 4 Research as Action: Challenges and Opportunities

The first challenge focused upon in this study in the next sub-section discusses the tangible slipperiness related to where, what and when is “the field” in which we conduct fieldwork, and where, what and when is the very “data” that we scholars (have the possibility to) create today. Furthermore, Sect. 4 also highlights some of the representational issues that are salient in contemporary (n)ethnography (challenge two) and focuses upon issues related to the researcher’s positionality across time and space in the field (challenge three).

### Where, What and When Is the Field? Boundary Framings Across Physical-Virtual Spaces

A salient issue with regard to doing fieldwork—particularly in the twenty-first century—has to do with where the boundaries of “the field” lie. In relation to the contours of the field, practical and ethical issues emerge

since possibilities afforded by participants' trajectories across physical-virtual spaces change the type of data-creation that is possible. What is, then, multi-sited ethnography or research? According to Marcus (1995), a certain conception of fieldwork (in conventional terms, i.e. related to a specific community as well as space) gets lost in the attempt to include a variety of interests and therefore research questions that arise within multidisciplinary research. In particular, questions regarding locality are more often than not strictly bound with global dimensions, in which issues of temporality and spatiality take on new meanings, also for ethnographers (Horst & Miller, 2009).

Figure 12.2 illustrates the trajectories in the five projects we have chosen as illustrative points of departure in and across the global and the local, as well as in and across virtual and physical spaces. These movements both within and across projects challenge the very doing of (n)ethnographic fieldwork currently. An analytical endeavour of tracing

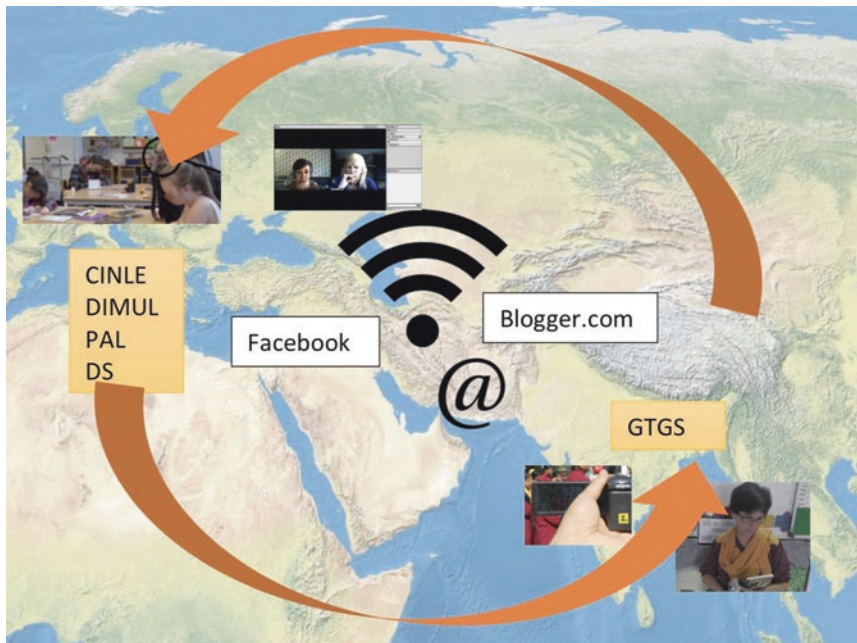
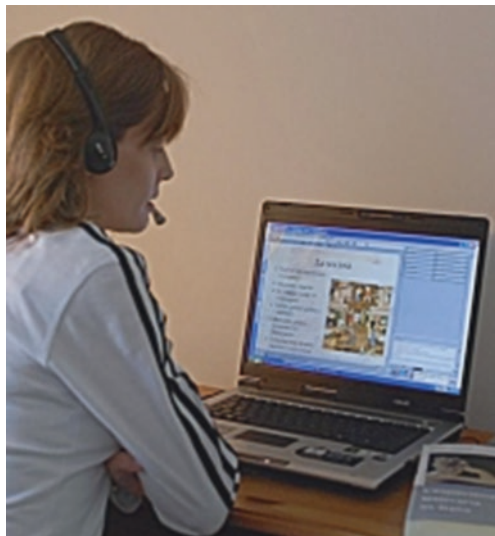


Fig. 12.2 Trajectories across physical-digital spaces in the five projects

participant trajectories (as well as the trajectories of practices, linguistic items etc.) across time and spaces may be a challenge, which is why we see the need for bringing together ethnographic and netnographic approaches.

The data we use highlights a paradox wherein multi-sited research is currently made possible by the very digital technology that allows the researcher an immobility in terms of trips to physical field-sites across the globe. Some methodological challenges that ensure (and that we have encountered) during the course of designing fieldwork, data-creation and analysis illustrate this issue. For instance, what is the relationship between the spaces of interaction inside the physical world of the members participating in a university course, the videoconferencing digital space of the virtual classroom and “the field” where the researcher/s have spent hours watching the data, taking fieldnotes a posteriori (project CINLE)?

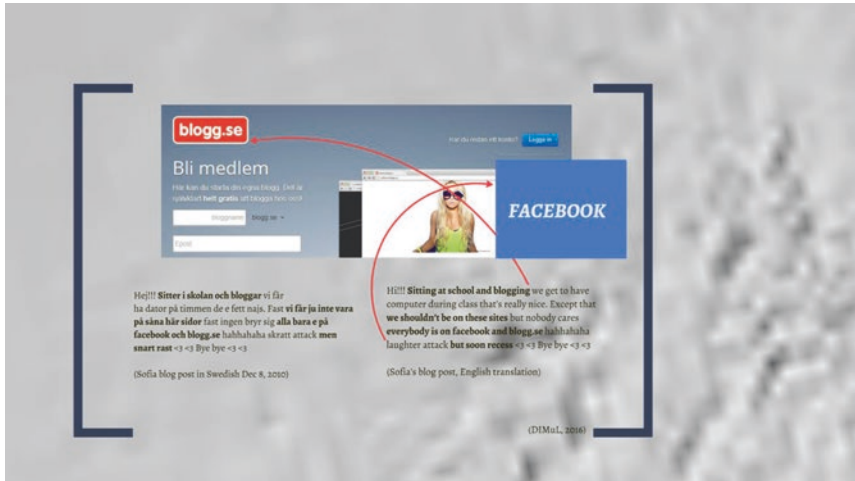
Being able to record institutional instructional meetings in project CINLE using a recording tool embedded in the videoconferencing platform Adobe Connect (and which we have, in our previous studies, referred to as the virtual classroom; see Fig. 12.3), meant that the researchers could take the position of a rather unobtrusive observer in the field. At the same time, the nature of the data allowed us to go back to “the field” as if we were present there and then, watching the interaction at the point of time it transpired. However, limitations in terms of the possibilities to be there with the dispersed students at each of their physical sites meant that we could not generate data regarding the participants’ settings outside the virtual classroom. Despite this curtailment, we could perhaps bring a more emic perspective to the data, since we as researchers had the same limited access to the participants’ physical contexts as they had to one another’s settings during their online course meetings. In fact, an interesting analytical, as well as methodological, discussion emerged from our attempts to engage with the “fractured ecologies” (Luff et al., 2003) of online learning in general, including synchronous online learning activities. Such a fractured ecology of the online space of the virtual classroom (Messina



**Fig. 12.3** Student sitting simultaneously at the desk *and* inside Adobe Connect: A video-conferencing environment (project CINLE)

Dahlberg & Bagga-Gupta, 2015) in project CINLE challenged the position of the ethnographer as the “knowing observer”, an issue that is salient in doing fieldwork in both analogue and digital spaces (Clifford & Marcus, 1986). Clifford and Marcus (1986), way back in a pre-digital era, discuss this issue: a “conceptual shift, ‘tectonic’ in its implications, has taken place. We ground things, now, on a moving earth. There is no longer any place of overview” (Clifford & Marcus, 1986, p. 22). Such a shift is relevant for the kind of complex cultural descriptions that constitute a point of departure for doing fieldwork, when the field lies within the backyard or at the fingertips of the researcher’s keyboard. Figure 12.3 illustrates a digital platform used by all language departments that offer online language courses at a Swedish university since 2007.

In addition to virtual classrooms designed for formal learning activities, the affordances of social media allow participants, as well as researchers (and in principle any human being with access to a device connected to the internet), a variety of ways of simultaneously being



**Fig. 12.4** Blog post as an illustration of (a) chaining and (b) crossing time and space (project DIMUL)

both *here* and *there*. Researcher and participant trajectories across time and space became an issue also in project DIMUL. Figure 12.4 illustrates an instance of a blog post, authored by 12-year-old student Sofia.<sup>7</sup> The blog post was authored on the one hand in the physical and temporal place of the school classroom during a lesson when we were doing fieldwork inside the classroom. It was simultaneously authored on the other hand inside a virtual blog portal called Blogg.se. The bold sections in Fig. 12.4 represent Sofia's presence in the physical space of the classroom, as well as her synchronous presence in the virtual world. She is "at school", "during class" and it's "soon recess", but at the same time, she is "blogging" "on these sites" (i.e. Blogg.se), and she is cognizant of the fact that the case is the same for her peers: "everybody is on facebook and blogg.se".

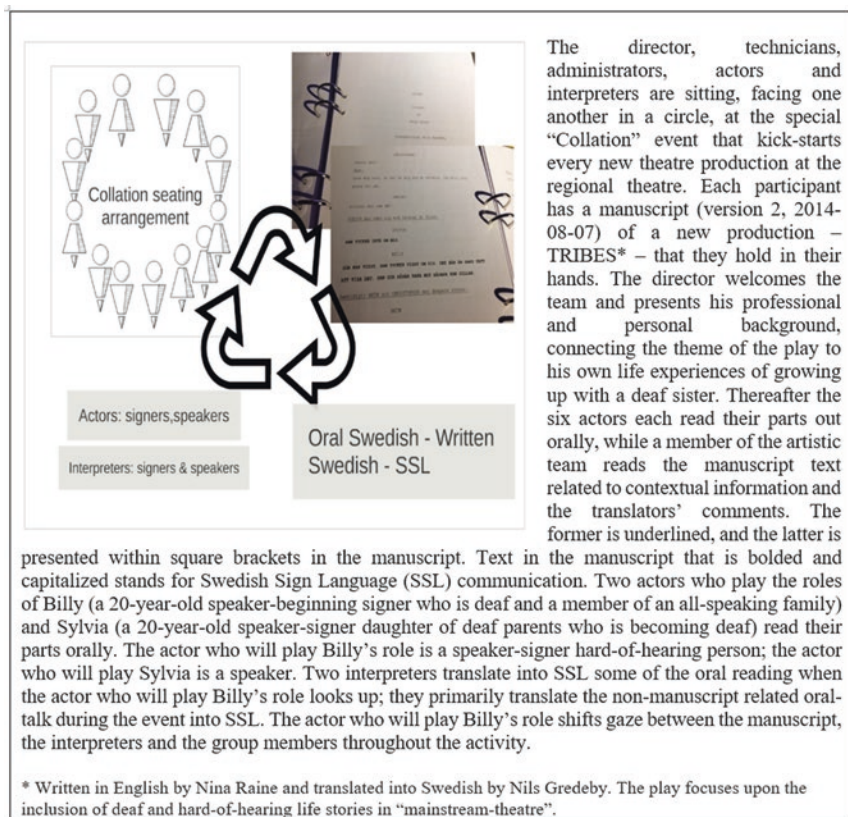
Figure 12.4 makes visible our analytical efforts to highlight the issues of what, where and when is the field emically. Furthermore, a blog text, representing a slice of everyday life in a specific context, also highlights

<sup>7</sup>All names used in this and our other projects are pseudonyms.



how participants chain different named language-varieties and modalities in mundane languaging practices, an issue we deal with below.

Thus, while the fractured ecology of the research field emerges in a clear-cut manner when we deal with (n)ethnographic research, a final example that illustrates this challenge highlights the need to understand the field, including the fieldwork, in a more nuanced manner. Our next example reiterates the issue of what, where and when is the field, from fieldwork in one of our more recent DS projects. It highlights the physicality of the *here* and *now*. Figure 12.5 offers a vignette



**Fig. 12.5** Chained oral-written-signed embodied communication at a kick-start event of a theatre production (Project DS)



where the participants “visual-orientation”<sup>8</sup> necessitates camera presence and visual access by the participants as well as the researcher. This creates issues with writing fieldnotes since eyes on the notes being created mean that eyes on the actions that are transpiring in the field cannot be engaged with.

Resources from oral-written-signed named language-varieties and modalities are deployed in a complex medley when participants in a collation activity orally read-aloud written role parts and information, including comments, from a manuscript, and interpreters translate selected parts of the oral-talk into Swedish Sign Language (henceforth STS; previously also abbreviated to SSL) in the example presented in Fig. 12.5. Three participants in the social activity zoomed upon here—the actor who plays the central role of Billy, and two interpreters—are signers and speakers. If one focuses an audiological scale, this actor is hard-of-hearing and the interpreters are hearing. The circular seating arrangement where participants face one another is also a dimension of visual-orientation. Such use of space potentially enables access to embodied communicative resources. Having access to such social action through video-recorded data is of utmost importance if the nitty-gritty nature of peoples’ actions are to be attended to. While the central written-text (the play by British author Nina Raine) used in the collation activity is re-cycled from British English to Swedish, access to data is curtailed in that the fieldwork is framed through the here and now.

The use of meaning-making resources from across named language-varieties and modalities is chained (see further below). Even being inside a field (behind a camera) or focused on writing notes creates both affordances and restrictions regarding what the field is, where it is and when it is. This brings to the forefront issues regarding representational techniques that we have used so far, and that point towards specific layers of complexities that emerge in the analysis.

---

<sup>8</sup>In contrast with *visual* communication, *visually-oriented* languaging acknowledges the complex use of resources across oral-written-signed modalities.

## Where, What and When Is the Data? Issues of Data-Creation and Representations

A key theme regarding the handling of communication in the research enterprise itself relates to the nature of communication across time and space. Going beyond participants' and institutions' concrete accounts of their communication and deployment of different language-varieties and modalities, the issues and challenges related to emically studying languaging, learning and identity positions have been salient dimensions of the analysis in each of the projects we draw upon here. Salient for our argument is that each one of us has experiences of using the named language-varieties—oral, written and/or signed—that are deployed by the members of settings in the five projects. In other words, an interest in participants' use of particular named language-varieties and modalities comprises one aspect of our research interest here. The next two sub-sections focus upon the complexities of deployment of named language-varieties and modalities in participants' everyday lives and in textual spaces. Separating language-varieties from modalities deployed in the mundane everyday life of human beings is done here merely for heuristic purposes; these are not separate.

### **(Im)mobility Across Modalities**

The challenges faced by scholars working with data where one or more than one named language-modality or variety is deployed are, as we have highlighted above, numerous. For the most part, these get ironed out in a hegemonic sweep where oral (monolingual) talk is centre-staged. As for any researcher with similar interests, we have faced challenges vis-à-vis representing written and/or oral communication both in datasets from classroom settings and from virtual worlds. For instance, in the analogue datasets from project GTGS from the 1990s, we were focused to abandon the presentation of named language-varieties and modalities in any conventionalized manner since the participants did not, in the meaning-making enterprise of their daily social practices, adhere to such

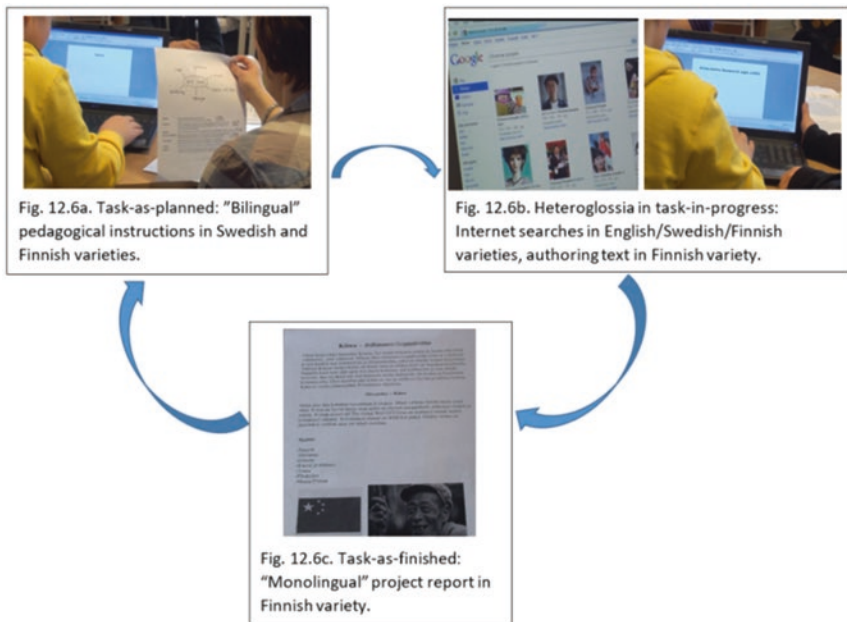
conventions (Bagga-Gupta, 1995, 2012). These issues have continued to attract our attention in the twenty-first century.

From an epistemological perspective, action-oriented concepts give visibility to dimensions of human communicative social practices. Chaining constitutes one such concept. Drawing upon meaning-making in languaging, the term highlights equivalencies between linguistic resources and across modalities. In our previous studies from the projects, chaining has emerged as an emic dimension of multilingual-multimodal settings across scales: local-chaining (see Figs. 12.4, 12.5, 12.8, 12.9, 12.11, 12.12, 12.13, and 12.14), event or activity chaining (see Figs. 12.6, 12.7, and 12.10) and simultaneous/synchronized chaining (cf. Bagga-Gupta, 1999/2000, 2002; Hansen, 2005). Going beyond the oral language and monolingual biases, the analytical-descriptive use of the concept chaining allows for highlighting the interconnectedness of both local phenomena (in terms of oral, written, signed and other semiotic resources) and trajectories of human interaction across time and space (see also section “Where, What and When Is the Field? Boundary Framings Across Physical-Virtual Spaces”).

Analytically, chaining provides us with a fruitful way in which to—both within and across the five very different projects—illuminate the interconnectedness of oral, written and other semiotic resources in human communication (both online and offline)—rather than emphasize the separate nature of, for example, different named language-varieties and/or modalities. Furthermore, analyses across the projects (see, e.g., project DIMUL, for example, Gynne & Bagga-Gupta, 2013, 2015) emphasizes (1) the importance of methodologically bringing together various datasets in analyses, (2) analytically highlighting the interplay of oral, written and other modalities in both micro-interactive and meso scale analyses of languaging and (3) engaging in these endeavours across time and space. Such dimensions can be seen in Fig. 12.6a, b, and c that illustrates a learning activity, in which two boys in a project DIMUL classroom were working on a project-based task within the school subject of Geography. The chosen project topic was “China” and it was framed by both oral and written pedagogical instructions in the named language-varieties Finnish and Swedish in a manner where the two were also assigned to different modalities. This means that the teacher presented

oral instructions primarily in Finnish, while the instruction sheet handed out to students (Fig. 12.6a) was in both Finnish and Swedish. Such languaging reflects the practices and the formal policy of the school.

During their work on this specific classroom task, the two students in focus used a laptop and conducted searches on the Google search engine (Fig. 12.6b) with the intent of finding facts that would support their report writing (Fig. 12.6c). Such a work flow raises the issue of where the students are when they move beyond classroom spaces as well as our possibilities of accessing this type of data. The students' working process on this type of task also stretched from the physical classroom to home spaces and across the time-span of two weeks; such classroom work routines pose specific types of challenges for data-creation. The analyses of



**Fig. 12.6** Languaging in pedagogical instructions, working process and final project presentation (project DIMUL; see also Gynne & Bagga-Gupta, 2015). (a) Task-as-planned: "Bilingual" pedagogical instructions in Swedish and Finnish varieties. (b) Heteroglossia in task-in-progress: Internet searches in English/Swedish/Finnish varieties, authoring text in Finnish variety. (c) Task-as-finished: "Monolingual" project report in Finnish variety

both this particular learning activity and the outcomes of other similar activities (see Gynne & Bagga-Gupta, 2015) highlight not only chained and heteroglossic languaging but also people's activities in concert with tools across space and time. We faced similar challenges in project GTGS in the early 1990s where the activity-system of the NGO that formed the basis of fieldwork and data generation was itself dispersed across the mega-city of Bombay.<sup>9</sup> This meant that we needed to follow the trajectories of participants across the city as well as between their private spaces (homes, for instance) and professional work places (Bagga-Gupta, 1995, 2012, 2014b).

Project DS datasets highlight a number of different types of chaining (as we have already seen through Fig. 12.5). Here we illustrate some of these through lessons in STS. These as well as lessons in social/natural science across the school years are often organized into theme units that are focused upon across a couple of school days. Furthermore, the use of different language-varieties and modalities in systematic and multi-layered ways characterizes, as we saw earlier in the theatre collation activity, mundane languaging in these contexts. Figure 12.7 represents the routine organization of life, the participant constellations, the patterned flow of named language-varieties deployed and tools used during the analytically identified phases in one DS project context.<sup>10</sup>

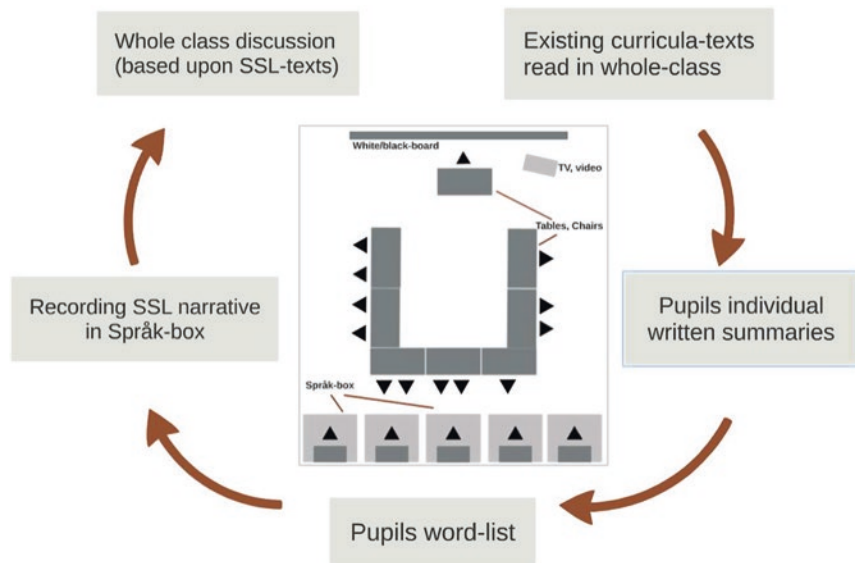
The creation of a visually oriented video narrative enables collective analysis of a task during a whole class discussion phase of a STS lesson. The process of producing a visually oriented video-text, however, necessitates the creation of a text first on paper. In other words, pupils are required to (re)produce and (re)use a written text that circulates in classroom practices over time and across space during the course of the STS lesson-unit (Fig. 12.7):

- Pupils individually author a narrative in the main classroom and adults and/or other students comment upon this in the classroom.

---

<sup>9</sup>The city is now called Mumbai.

<sup>10</sup>See Bagga-Gupta (2002, 2004, 2014a, 2019a) for other examples of STS lessons from the projects from where data are drawn.



**Fig. 12.7** Cyclic-chained activity of signer-writer pupils and teacher during STS lessons (project DS)

- Once the written text has been approved by an adult, the pupils proceed to individually create a list of keywords, also in the main classroom.
- The keyword list is used as a resource for producing a coherent visual narrative in the small technology infused spaces called *Språk* Boxes (Sw-En: Language Boxes).<sup>11</sup>

The teacher-led phases of the STS lesson-unit are interwoven with individual or small group work phases either in the named language-varieties STS or Swedish or a complex mixed pattern where both are in concert. Such languaging over larger chunks of time constitutes “activity-chaining” and “cyclic-chaining”.<sup>12</sup> STS usage dominates during specific phases, while the use of primarily written Swedish dominates during oth-

<sup>11</sup> See Bagga-Gupta (2004, 2014, 2017, 2019a) for more on these spaces.

<sup>12</sup> See Bagga-Gupta (1999/2000, 2002, 2004, 2010, 2012a), Hansen (2005), Hansen and Bagga-Gupta (2017), Gynne (2016, 2017) and Gynne and Bagga-Gupta (2013, 2017) for other examples of these types of chaining in both speaker-writer and speaker-writer-signer settings.

ers; both modalities and varieties are intricately interwoven in large parts of the interactions during some. In addition to the chaining of the two named language-varieties STS and Swedish, there is a layering of different modalities here:

1. the visually oriented signing modality on-the-hands (mediated via tools like TV, video-player, whiteboard (WB) etc), including the composite signing resources of fingerspelling, mouthing etc);
2. the written modality in textual tools like books, papers, whiteboard etc.; and,
3. the oral modality on-the-mouth.



The analysis of the dispersed nature of languaging represented in Fig. 12.7 is also related to the data represented in Fig. 12.5, where languaging at the kick-off event of a theatre production involves the layered use of different named language-varieties and modalities. The oral and written varieties, Swedish and STS, including embodied linguistic resources (of fingerspelling and mouthing), are chained in patterned ways: at the micro-interactional level, at the meso-activity level, and furthermore, when oral-talk by a speaker is translated into STS by a signer. Such mundane chained languaging is, as we pointed out earlier, visually oriented (rather than being only “visual”). This means that access is framed through written-language, signed-communication, embodiment, and includes the use of oral-talk: here different tools, varieties and modalities are employed in patterned ways.

While an important part of the creation of data in the DS projects was that we created and had access to video-data even when we were present physically in the classrooms, getting access to areas where individual students were creating their video-narratives as well as accessing the analogue and digital word and video-texts was not always easy. Furthermore, handling datasets where languaging was either taking place entirely in cyberspace or across the virtual-physical divides raised its own issues. Starting with more simplified oral talk transcriptions, the addition of features of written texts in our transcripts enabled representing the complexity of languaging in more detail. Projects CINLE and DIMUL also highlight this issue. We have resorted to, for example, the use of screen

shots of the chat tool used by participants inside our transcripts (Fig. 12.8; see also Messina Dahlberg & Bagga-Gupta, 2014). Embedding screen shots in the transcript in the sequentiality of the interaction allows for representing a turn-at-talk, and goes beyond the oral language and the monolingual bias in contemporary reporting.

However, the chaining of different modalities is at times difficult to represent as separate turns, since participants use the chat tool as a parallel conversational floor. Using a table with different columns to represent a timeline, the oral talk and the written mode afforded by the chat tool allows for making visible this layer of complexity (Fig. 12.9). In addition, since the sequentiality of talk did not rely solely on the oral mode, it became necessary to create a transcription system that would account for the chaining that occurs across modes, time and space, including digital spaces (Fig. 12.9).

The arrows in Fig. 12.9 highlight that the student orients towards both the task as it is displayed on the WB and to offline material in the form

23 A:  

24 D: T-I-C-C?

25 A: *len-ti-cchia* (.) så där  
len-til (.) like that

26 D: är det H med? (.)  
is there an H? (.)

27 A: det är H med (.) jag skrev [det i: ](.) chattrutan  
it is with an H (.) I wrote [it in: ](.) the chat window

28 D: [ah ok!] ja ja ja (.) ja (.) *lenticchia* (.) "ok"  
[ah ok!] yes yes yes (.) yes (.) lentil (.) "ok"

29 A: det är singular "eh"?  
it's singular "eh"?

**Fig. 12.8** Example of transcription system where screen shots are used (project CINLE; adapted from Messina Dahlberg & Bagga-Gupta, 2014). Note on transcription conventions used in Fig. 12.8: Grey highlighted: participants' topicalization of the chat-tool content; T-I-C-C: orally spelled word



Time	Voice	Chat-tool
00.00	01 Giovanna: vado io? (4) ok e:m nella mia casa facciamo di solito <i>Shall I? (4) ok e:m in my home we do usually</i>	
	02 la spesa insieme io e il mio fidanzato e: sono due <i>the shopping I and my boyfriend e: there are two</i>	
	03 grandi supermercati vicino a casa si chiamano (xxx) <i>big supermarkets near home they are called (xxx)</i>	
	04 e morrisons preferisco (xxx) perché sembra più <i>and morrisons I prefer (xxx) because it seems more</i>	
	05 organizzato e i prodotti sono migliore ma sfortunato <i>organised and the products are better but unfortunately</i>	
00.41	06 è più costoso là quindi normalmente facciamo la spesa al <i>it is more expensive there therefore normally we do the shopping at the</i>	
	07 morrisons e quando vogliamo comprare qualche prodotto con qualità <i>morrisons and when we want to buy some quality product</i>	
00.51	08 allora andiamo al waitrose e poi per comprare la frutta e le verdure <i>then we go to <u>waitrose</u> and then to buy fruits and vegetables</i>	
	09 preferisco di andare al mercato dove abito adesso sono tante frutterie e mercati <i>I prefer to go the market where I live now there are a lot of fruit stores and markets</i>	
	10 all'aperto che vendono la frutta fresca e quando sono in tempo vado là <i>that sells fresh fruit and when I manage I go there</i>	
01.11	11 ma l'unica cosa è che le frutterie chiudono presto verso le sei e quindi <i>but the only thing is that the fruit stores close early around six and</i>	Teacher: esiste ancora Europa Foods, Giovanna?
	12 tante volte non ho tempo per andare dopo il lavoro e devo comprare anche <i>therefore a lot of times I don't have time to go after work and I have to buy also</i>	Teacher: Does "Europa Foods" still exist Giovanna?
01.37	13 la frutta e la verdura al supermercato e questo è un peccato perché qui <i>fruits and vegetables at the supermarket and this is a shame since here</i>	

Fig. 12.9 Example of transcription that uses arrows to highlight chaining across modes and literacy practices, online and offline (project CINLE; adapted from Messina Dahlberg & Bagga-Gupta, 2016)

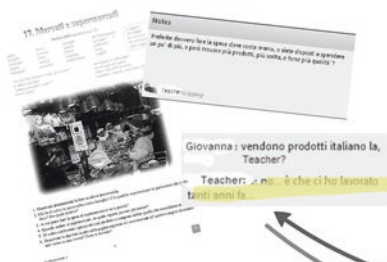
of Giovanna’s physical handwritten notes (Fig. 12.10). Thus, chaining as an analytical construct allows for visually representing and mapping the ways in which languaging is afforded (and constrained) by the set of semiotic resources that participants have access to and indeed deploy dur-

ing any stretch of interaction. Such use of resources also has consequences for how participants orient towards one another in the oral mode; we the analysts thus need to engage with the fragmented character of languaging across digital-physical spaces by expanding the use and conventions of interactional analysis, including conversation analysis wherein oral talk has been traditionally privileged.

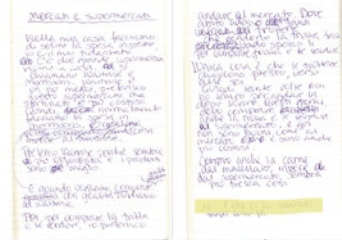
Figure 12.10 illustrates the chaining between the written texts inside the virtual classroom (online) and at one student's physical desk (offline) during the stretch of interaction illustrated in Fig. 12.9. A close analysis of Giovanna's offline notes allows us to follow and attend to the intricate chaining within digital languaging. In these notes, the student writes some sentences in Italian that the teacher has written in the chat tool inside the online environment: no, è che ci ho lavorato tanti anni fa (Italian: no, it is that I have been working there for several years; highlighted in Fig. 12.10). Illuminating the nature of people's languaging thus implies that data generation needs to be sensitive to both practices inside and outside digital spaces—even when the instructional activity takes place only in a virtual platform, as was the case in project CINLE.

The analytical focus here lies on chaining across time and space—that is, what takes place at the student's physical space in terms of the creation of notes as a task-oriented activity framed within the online language

Online: languaging in the virtual classroom



Offline: languaging at a student's desk



**Fig. 12.10** Literacy practices and chaining at the borderlands of digital/physical or online/offline spaces (project CINLE; adapted from Messina Dahlberg & Bagga-Gupta, 2016)

course. Giovanna's handwritten notes are visible on the right side of Fig. 12.10. The analysis of the synchronous meeting in Adobe Connect shows that Giovanna uses the written notes in lieu of a manuscript to perform her contributions in the virtual classroom: the oral contribution is identical to the written text in her notes. Giovanna's performance of her notes gets interrupted when the teacher asks a question in the chat tool (Fig. 12.9). Accessing such offline data has, however, not been an easy task for us as ethnographers and analysts. This draws attention to a research and fieldwork design that leaves many doors open in terms of what data is possible to generate. In this case, the written notes have been elicited only after the virtual data-creation process had started and when particular patterns of participation had emerged in the initial analysis: for instance, when we suspected that students were reading aloud specific scripts, which we could—based upon offline data—show they were (Messina Dahlberg & Bagga-Gupta, 2016).

### (Im)mobility Across Language-Varieties

An issue we faced during some of our early projects (in the 1990s) concerned what transcription system to use for the different named language-varieties and modalities in our data: for instance, the written word in addition to the spoken (project GTGS) or the written word in addition to the signed and where oral resources were present (project DS). As pointed out above, people's mobilities and use of space was significant in these projects too. Given our interests of making visible different dimensions of everyday interaction (see also Flewitt, Hampel, Hauck & Lancaster, 2009), the need arose for going beyond available transcription

Due to trains running late on the *WESTERN LINE* the *CENTRE* was opened only at 9.30 a.m. One *COMMUNITY* woman was beaten up by her drunk husband at night. She has been treated at the *CENTRE*. Shanti made a *COMMUNITY VISIT* to talk to the men during their lunch break. The woman's husband was not there, but Shanti spoke to the people in the neighbouring *jhuggies*. The *DELIVERY VAN* arrived with the monthly *STOCK*. Everything ordered has arrived.

**Fig. 12.11** Adult Hindi-*ENGLISH* written communication (project GTGS, reproduced from Bagga-Gupta, 1995, p. 125). Note on transcription conventions used in Fig. 12.11: *Abcd efi*: Hindi words in the text; *ABCK Efi*: English loan words in the text; *Abcd*: specific Hindi words retained in the text (eg. *Jhuggies*)

conventions. Projects GTGS and DS are particularly illustrative in this sense, not least since they emerged in the 1990s. Figure 12.11 represents a written diary entry (project GTGS, 1990s dataset) and the analytical stance we took to present it in a 1995 publication.

The issue of representing multiple named language-varieties that have different scripts and where the participants used separate scripts for separate language-varieties at times and used one script for different language-varieties at other times or transliterated the language-varieties in an ad hoc manner called for careful consideration regarding how to represent both oral language and written language examples from the dataset. Figure 12.12 explicates our attempts to tweeze out the issues we faced more than two decades ago.

Analysing project GTGS datasets from 2012 to 2014 is enabled by a different set of concerns but significantly also by the availability of digitalized resources. Reporting upon discussions about gendered violence in public spaces in the mega cities of New Delhi (Dilli), Mumbai (Bambai) and Poona (Pune), one of our previous studies presented transcripts using the Latin script even when the far majority of the oral talk transpired in

1. Hindi and Marathi oral and written discourse is represented by the use of a smaller font (in contrast to referenced quotes from other texts).
2. Capitalised italics represents “English loan words in their Hindi and Marathi oral discourse, and English loan words written in the Devanagari script in their written texts” (Bagga-Gupta 1995: xv).
3. Specific Hindi terms are presented in italicised form and their inclusion is qualified in the following terms: “firstly, many of them have long translations...; secondly, such terms usually carry a composite of meanings...; thirdly, many of these terms... are regularly used in English texts and in some sense are on the way to being (if they have not already been) incorporated into the English language vocabulary” (Bagga-Gupta 1995: xv).
4. The convention of using the South Asian Roman font that is commonly used in the literature to transliterate Indian languages like Hindi and Marathi into the Latin script is only sparingly used in the reporting. Bagga-Gupta offers the following arguments for this choice: “I have consciously chosen not to use this system in my own text, since texts that are produced and used at the Mobile Crèches use a more everyday phonetically based method to transliterate these words... In addition, I am not aware of any font system that could be used to convey the fact that English loan words were being transliterated into the Devanagari script. And neither could one make clear the fact that sometimes two to three languages were being used within the same textual practice. In fact, the use of the South Asian Roman font would undermine the dynamic nature of the written and oral discourse that exists within the different arenas at the Mobile Crèches” (Bagga-Gupta 1995: xv).

**Fig. 12.12** Analysts’ account of attending to multilayered oral-written complexity in academic reporting (project GTGS; reproduced from Bagga-Gupta, 1995)

1.01:	film से समझ आता है के हमारे जो शहर है तो किस तरे से ओउरते के प्रति hostile हो चुके है we can understand from the <u>film</u> how cities have become <u>hostile</u> for women
105:	तो ये सिर्फ़ दिल्ली के कहानी नहीं हे (.) बम्बई में एहि है पुणे में एहि है this is not the case with dilli (.) in bambai too in pune too
109:	बम्बई में जहा में बड़ी पढ़ी हुए हूँ bambai where ever i have grown up and studied
1.12:	और जहा खबि कोई रोक धोक नहीं ता की घर इतने बड़े तक आना है and where there were no restrictions about what time one had to return home
1.16:	कवकी बम्बई मई एक सुरक्षा थी अवुराती के लिए because there was safety for women in bambai
1.20:	पर हम देख राजे है की बम्बई में भी वो सुरक्षा काम होइते जा रही है but we are seeing that even in bambai this safety is becoming less

**Fig. 12.13** Chaining and meaning-making—representation of original oral talk and translated oral talk (project GTGS, 2012 dataset). Note on transcription conventions used in Fig. 12.13: Oral talk in bambaiya-hindi: presented in Devanagri script; Oral talk in English: presented in Latin script underlined

Bambaiya-Hindi (see Bagga-Gupta, 2014b). We represent a slice of a previously discussed transcript now using digital resources in Fig. 12.13.

The translation of this stretch of oral talk can be understood as being un-problematic at one level since almost all of it can be assigned to the language-variety Bambaiya-Hindi. However, given that the vernacular is recognized as a dialect of Hindi, such transcriptions build upon phonetic renditions that are non-standardized, risking being riddled with issues. Furthermore, we have assigned two lexical items to the named language-variety English in Fig. 12.13. While the word “hostile” would not be accepted as a part of any dialect of Hindi (by any stretch of the imagination), the same cannot be said of the item “film”. Given the fact that Mumbai/Bombay is the seat of Bollywood and is also called “filmcity”, the usage of this word crosses linguistic boundaries. This complicates the fact that the meaning-making represented in line 1.01 includes the chaining of resources from (at least) two linguistic systems in the oral talk.

<p>Line i. Pupil HOW SPELL A-U-T [pause]</p> <p>(Official public authority A-U-T what?)</p> <p>Line ii. Adult MEAN A-U-T-H-O-R-I-T-Y PUBLIC AUTHORITY A-U-T-H-O-R-I-T-Y [looks questioningly]</p> <p>(Do you mean public authority?)</p> <p>Line iii. Pupil [Nods] A-U-T-H [pauses, looks questioningly]</p> <p>(yeah, A-U-T-H, it is spelled?)</p> <p>Line iv. Adult A-U-T-H-O-R-I-T-Y &lt;AUTHORITY&gt; PUBLIC AUTHORITY [points to what she has written on the board]</p> <p>(It is spelled A-U-T-H-O-R-I-T-Y; this is how it is written; this is how it is signed)</p>
--

**Fig. 12.14** Chaining and meaning-making—adult-teenagers STS—Swedish communication (project DS; adapted from Bagga-Gupta, 2004, pp. 193–194)

Similar issues vis-à-vis meaning-making are at stake in the context of the DS projects as we have already seen above. Participants' use of resources from the named language-varieties Swedish and STS involve focusing upon a language-variety on-the-mouth (oral-talk), on-the-paper (written communication) and on-the-hand (signed communication). Furthermore, linguistic resources like fingerspelling and mouthing—significant dimensions of visually oriented languaging—needed to be made salient in the transcriptions. Finally, use of space and embodiment (pointing, underlining, sitting face-to-face etc.) constitutes meaningful dimensions that need to be highlighted in the reporting. Representing the visually-oriented languaging where a signed modality interacts with written and oral resources of a language like Swedish is built upon textual resources enabled by two-dimensional reporting (Fig. 12.14).

Spelling out the alphabets on-the-hand is similar to sounding-out alphabets in oral talk (see Figs. 12.8 and 12.14). Such fingerspelling is a composite dimension of languaging that is visually oriented. As we have argued for analytically, and illustrated here empirically, being able to tweeze out the rich or complex nature of languaging necessitates that the analysts are experienced users of the language-varieties deployed in the communities or affinity spaces that they are interested in. Using interpreters, for instance, would not allow for such a close scrutiny of the

meaning-making potentials that participants are engaged in. Such experiential baggage together with creativity and reflexivity constitutes the corner stones of research as action.

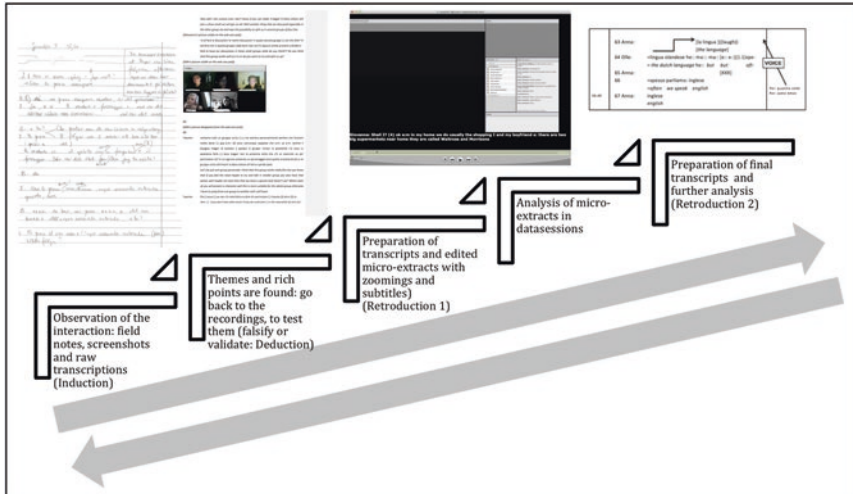
## Researchers' Positioning Repertoires in and Across Fieldwork Phases: Individual and Joint Enterprises

The last overarching challenge that we focus upon in this chapter relates to the need for explicitly illustrating and discussing the role of the researcher during as well as beyond fieldwork phases. Focusing upon reflexivity, the choices and challenges that have emerged and that we continue to face during fieldwork (e.g. in projects GTGS and PAL), analysis and writing phases (both during collaborative and during individual writing) are centre-staged here.

Ethnographer's reflexive work is essential during as well as beyond fieldwork phases. Entering social settings as a (participant-)observer routinely entails producing written accounts of people's practices in those settings. Thus, a common (n)ethnographically inclined procedure in all our projects was that of writing fieldnotes, a process that consists of several phases, in which we as researchers went from taking headnotes or jotting, to constructing relatively coherent sequences of action and evocations of scenes and characters we had followed (Emerson, Fretz, & Shaw, 1995, p. 51).

Figure 12.15 provides an example of the processes involved in data-creation during which an analyst moves from observations and fieldnotes to the preparation of transcripts and excerpts and further on to the presentation of data at data-sessions and other research activities like seminars and conferences. In project CINLE, data was created by recording the online synchronous meetings of an Italian for beginners' course inside the videoconferencing platform Adobe Connect (see Fig. 12.3). This type of work is commonly understood in terms of "adopting an ethnographic perspective" (Androutsopoulos, 2008, p. 15) or understanding (n)ethnography "as a method, not an epistemology" (Androutsopoulos, 2008, p. 2). This follows from the fact that digital technology enables creating a data corpus that was not possible in pre-





**Fig. 12.15** The reiterative processes of data-creation and analysis (project CINLE; adapted from Messina Dahlberg, 2015)

digital times where observations were recorded by means of paper and pencil, or an analogue video-recorder or tape-recorder.

In addition, the organization of knowledge circulation in academia, for instance, takes place through the production of relatively short journal articles that are a challenge when it comes to ethnographic writing. This means that the limited writing spaces of scientific journals necessitate compressing the rich and complex accounts of social practices. While some journals create possibilities for the inclusion of data (including video-data) in online spaces, ethical issues often curtail analysts' possibilities to do so. In other words, there is an increasing tension between what is known about society and constraints related to "holistic" representations in the scholarship: "what is holistic representation? What is holism once the line between the local worlds of subjects and the global world of systems become radically blurred?" (Marcus, 1986, p. 171).

Pink, drawing from Okely (1996), refers to the concept of retrospective fieldwork, that is, how the researcher's personal experiences are used in the creation of ethnographic knowledge which may, later on, "become part of



a piece of professional work” (Pink, 2007, p. 34). Thus, for instance, in project CINLE a relevant point of departure was our (i.e. Messina Dahlberg’s) previous experience as a teacher in online language courses at the same institution where fieldwork was conducted. This means that retrospective fieldwork is a mixture of the researcher’s own experiences as a former professional in the field, but also, and very importantly, it refers to the possibility enabled by the digital format of recordings of the virtual classroom to go back to the field, with the intent of observing the phenomena closely from the same point of view as if we were there, in the specific moment in time when the actions unfolded. Our going back to the recordings is (in this and other projects) also, in this sense, a re-enactment of the educational sessions, from the perspective of the other participants in the encounter. Here the position of the researcher necessitates leaving and taking on a different role in the field of engagement, that is, leave the role of a professional and take on the role of an analytical scholar. This process is also facilitated by the collaborative nature of data-sessions and co-authorship.

Another example of the many positions that a researcher may enter during different fieldwork phases can be illustrated from project DIMUL (Fig. 12.16). Being an ethnographically oriented researcher in the physical classroom entails positioning oneself both physically and socially in relation to the field and the people in it. In the classroom, the physical position of the researcher consists, more often than not, of being a (participant-)observer, sitting at the back of the classroom, jotting down fieldnotes or manoeuvring a video camera or other equipment. This is a position which entails different kinds of social interactions and moment by moment shifting roles; in DIMUL (as well as in the GTGS project), these included being “borrowed” as an assistant teacher or being friendly with someone during class work and/or recess or taking on consultative tasks. Being in the virtual field allows for other kinds of social positionings, which in many ways coincide with the identity position the researcher is ascribed to in physical spaces like classrooms. In project DIMUL, a researcher profile was created on Facebook solely for the purposes of fieldwork (Fig. 12.16 bottom middle). This profile allowed us to become (participant-)observers, whereby we could follow members languaging and identity work across time and space. Furthermore, Fig. 12.16 illustrates the researcher in DIMUL being positioned by a



**Fig. 12.16** The many positions of a researcher. Researcher identity-positions in project DIMUL

few participants, in a drawing, created on a computer in the physical classroom. Here, the researcher is given her “Facebook alias” name (which is not her real surname). The students inscribe her in a specific position, by illustrating her with a video camera in her hand—a position in which she appears to be engaged in the very “doing of research”.

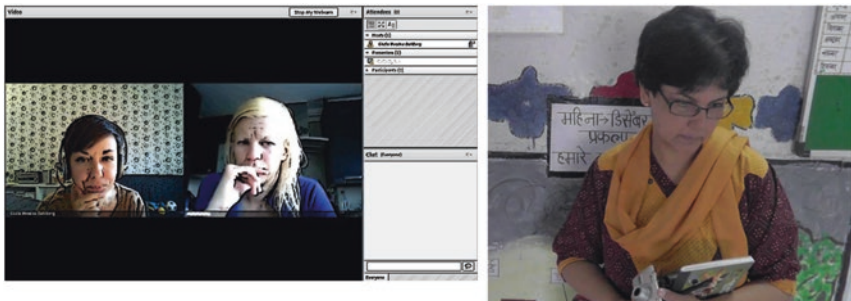
Positioning of researchers across fieldwork in digital and physical spaces includes being *there*, but at the same time also *here*. The researcher’s professional persona needs to be understood in terms of a: “recalibrating practice of positioning in terms of the ethnographer’s shifting affinities for, affiliation with as well as alienation from, those with whom he or she interacts at different sites [this] constitutes a distinctly different sense of ‘doing research’” (Marcus, 1995, p. 113).

A qualitative research(er) perspective calls upon scholars to shift between being outsiders and insiders. Such shifting positionalities necessitate that scholars remain open to unexpected developments. In contrast, scholars within a positivistic tradition are specifically expected to maintain an unbiased vision—and remain outsiders—in relation to their research objects. Denzin and Lincoln refer to this as the “gold standard” of educational research, where evidence-based methods were seen as the “good

way” of conducting research (Denzin & Lincoln, 2000, p. 1). Furthermore, such closeness and distancing of the researcher from his/her subjects is in line with the historical and theoretical backgrounds of anthropology and ethnography as colonial endeavours. Figure 12.17 illustrates some of our positionalities inside physical and digital sites of engagement.

The methods used in ethnography create a window into the world through the use of a range of practices and representations which themselves change that world (Denzin & Lincoln, 2000). Thus, looking at research subjects/participants is always looking at the Other through the epistemological lenses that derive from the use of language, gender, social class, ethnicity and other fluid positionalities (ibid.). In this sense, the researcher becomes a multicultural subject, because “we no longer have the option of deferring the decolonization project” (ibid., p. 11). This means, we argue, that researchers need to acknowledge the complexity of their own lived experiences as well as the vantage points they bring with them to their analysis and reporting, providing layered understandings of different processes that are in focus.

By attending to the complex layered dimensions of languaging in both mundane everyday life (i.e. data) and in the languaging within research processes themselves (data at a meta-level), we engage with reflexivity by attempting to illustrate and make visible the mundane nature of social practices across different projects where we have generated data and have participated in the analysis and reporting enterprise. A significant caveat here is that our ethnographical journeys across time and space need to be



**Fig. 12.17** Being there, but also here. Doing research at borderlands (projects CINLE and GTGS)

seen in terms of representations in scholarly writings from diverse angles, none of which will ever succeed in (re)creating the ethos and complexity of the world “out there” (Clifford & Marcus, 1986). Representations are just “representational” simplified snapshots of everyday life. We, however, suggest that such limitations can be partially bridged in the collaborative and creative processes of doing research across the boundaries of academic domains, named language-varieties and modalities, geopolitical spaces, projects etc. (Fig. 12.18).

A reflexive collaborative research enterprise across time and space, including physical and virtual spaces, as illustrated in Fig. 12.18, is essential for the viewings and voicings of the common dimensions of human



**Fig. 12.18** Doing research in collaboration across time and space: IRL, online, while contributing individually by writing at one's desk

action and the more specific characteristics related to a specific context. It is such a point of departure that is relevant for critical discussions of discipline-related ontologies and traditions. Reflexivity, in other words, implies attending to such limitations and accounting for the ways in which analysis and representations are inextricably bound to the researchers' viewings and voicings, in terms of the researchers' analytical toolkits and the material artefacts that are used during the process of data-creation, analysis and reporting. Reflexivity in the research process opens for the acknowledgement that we (researchers) are always in a process of becoming, recognizing the limitations of research, including our own prior experiences/limitations, and furthermore, recognizing the fluidity and processual nature of the phenomena that we are studying (Cerwonka & Malkki, 2007).

The analytical discussions we have raised in this section are also associated with a creative, ethically responsible and never-ending journey across a scholar's lifespan, through his/her experiences with other scholars within projects, research fields, issues and includes the areas of interest that the scholar has navigated. Reflexivity, furthermore, helps us position ourselves in relation to research in terms of "a multifaceted, complex and ongoing dialogical process that is continually evolving" (Byrd Clark & Dervin, 2014, p. 2). Engaging with reflexivity thus enables us—scholars—to potentially become aware of the ways in which representations inflect and shape our own viewings, which in turn is shaped by our epistemological lenses as well as our experiences as human beings. Thus, a reflexive aperture is far from neutral; it is—at best—reflexive in its endeavour to critically engage with its own analytically framed assumptions.

## 5 Reflexivity and Creativity: "Unboxing" the Research Process

The study presented in this chapter explicitly illustrates and discusses the role of the researcher during as well as beyond fieldwork phases in the research enterprise. Focusing upon reflexivity, the choices and challenges that emerge and that we continue to face during fieldwork (in current projects), analysis and writing phases (both during collaborative and

individual authorship) have been touched upon implicitly in the previous sections. They are centre-staged in this final section.

Our analyses touch upon key issues of being a researcher situated in the human sciences and the doing of research within the human sciences in the twenty-first century. Affordances of digital technology enable, for instance, the doing of research across spaces: the researcher can stay “at home” and access participants through online engagement. Juxtaposing projects and datasets, as we have done in this chapter, opens up for alternative understandings of the complexity of research methods as practice at a range of levels:

- first, in relation to issues of fieldwork and the imagined boundaries therein, and the complexities that arise in the digital age where access to the field is potentially only one-click or touch away;
- second, in relation to how we represent the (im)mobility of a digital field, including that of the researchers; and,
- finally, in relation to reflexivity in research and in how language, space and the very nature of human interaction defies being framed in the same analytical terms as when research was conducted with tape recorders and video recording equipment that could only be stored in car vans and boxes, rather than in the palms of our hands.

Ethnographic fieldwork, methods and data need to, as we have illustrated through the display of data and analysis, be analytically framed in terms of where, when and what is the field and data, including the researcher’s positionality in and across different fields of enquiry. Going beyond participants and institutions’ concrete accounts constitutes an important first step that allows for emically studying social practices, including languaging across projects (Back, 2015) as well as across physical-virtual learning sites. Employing a reflexive stance that is maintained across different phases of a research project is another key dimension that scholars engaged in (n)ethnographies face. Our point is that while this has been the case during analogue times, it is more so in the digital lives that ethnographers attempt to illuminate currently.

The collaborative and reflexive nature that is strived for within the five projects, the studies conducted within them, and the empirical

nature of the work highlighted in this chapter, illustrates the importance of paying attention to different scales from an emic stance. This includes making visible participants' everyday concerns and behaviours. The chained and intertwined nature of languaging across settings that our work has identified highlights a common feature that points to the linguistic heterogeneity in the meaning-making enterprise of human communication (across the projects and datasets). This highlights the fluidity and hybridity of communication as well as of semiotic resources and repertoires: participants draw upon different means in order to make sense of the interaction going on *here* (their physical spaces), including *there*, if they are situated in shared online spaces simultaneously (see also Liddicoat, 2011).

The datasets that we have presented in this chapter highlight specific issues that have arisen for us as scholars across time. Physical spaces continue to be significant despite newer possibilities that digitalization enables. For instance, we as ethnographers (at best) have only a partial view of the different physical spaces where students are located while they are studying Italian in a course that is offered online. These students share the digitally mediated spaces of the virtual classroom, but also a range of materials that frame their choices of what to talk about in the oral and written modalities. Access to such local resources is completely curtailed—for us, the researchers—even though we have complete access to the specific virtual site of engagement. Students orient towards the course materials using mediating tools that are not transparent to the participants or for us analysts. Such analysis across micro-meso scales that encompass physical-virtual learning sites potentially (1) enables meeting challenges related to research methodological practices and (2) contributes to pedagogical insights. The latter, for instance, has consequences in the language and learning sciences where keeping named language-varieties and modalities apart in instruction has long been the norm in global-North contexts like Sweden and where reporting of research reinforces the boundaries between named language codes and modalities. What (n)ethnography affords educational research today (focusing on human meaning-making) is the ability to map individuals' digital



contributions to locate the movement of information and ideas across time and space. We argue that such a stance is key if we are to contribute from an emic, that is, participants' perspective. Such possibilities enable the creation of datasets that can be very large, encompassing a wide range of spaces and activities. However, scholars can only (re)create such shared spaces in the ethnographic processes of data-creation, representation and reporting.

Attending to the fallacy of thinking in terms of fieldwork in static geopolitical-linguistic spaces and communities, the work we have presented in this chapter also highlights the need to focus on the distributed-situated and the discursive-technological constitution of participants' worlds; that is, humans-in-concert-with-tools (Bagga-Gupta, 2014a). Furthermore, data-creation and analysis are strictly connected processes in our research endeavours (and in line with an ethnographic, open-ended approach) where the issue of representation is crucial for making visible the complexities of (1) communicative processes across time and space and (2) our own processes of data-creation and analysis. This is illustrated in different ways in our examples and in our attempts at creating alternative representational techniques that attend to the (im)mobility of people, utterances, named language-varieties and modalities. Moreover, what the very different projects we have included in this chapter share is an underlying ambition of (re)creating (analytical) boundaries, that are shaped by research questions and endeavours, rather than by policy or/and ideology and normative stances.

Using a range of representational techniques constitutes yet another way in which scholars (can potentially) operationalize a reflexive stance. The data analyses we have re-presented and pointed to in this chapter illustrate the ways in which an analysis across scales and modalities can be holistically approached. The analytical snapshots presented in this study illustrate the ways in which knowledge is distributed across sites and boundaries. This is relevant in relation to a recent line of thought concerning a mobility-turn in educational research (Leandri & Neumann, 2014). This turn encompasses alternative ways of (re)presenting the performativity of learning as economically, symbolically, materially pro-



duced and reproduced by looking “in the middle of things” as well as their boundaries, with the aim of shedding light on “the material conditions of the circulation of people, things, objects and ideas” (Leandri & Neumann, 2014, p. 2). Recognizing that following people’s learning trajectories constitutes a complex endeavour, we argue that we as scholars need to pay critical attention to methodologies and epistemologies if we are to help ourselves understand the fluidity of such trajectories. Such a stance also (at least potentially) enables methodological integration and theoretical discussions to “unbox” the research process, making it more transparent for the analysts, the practitioners and, ultimately, the participants.

## Appendix

Table 12.2 Main foci, data sources, main results and language-varieties in the five projects

Project name time frames and www	Main purpose	Type of data	Main results	Language-varieties
CINLE 2010–2016 <a href="http://www.ju.se/ccd/cinle">www.ju.se/ccd/cinle</a>	To contribute towards an understanding of the complexity of students' interaction and their languaging in online synchronous learning environments.	Video data (screen recordings of synchronous online meetings), course materials, students' hand-written notes, course syllabi, official reports (1995–2012)	Sheds light on the communicative patterns in synchronous technology-mediated communication. Illustrates the participants' communicative strategies in the online space of the virtual classroom when having a limited experience in target language.	Italian, Swedish, English, Spanish
DIMUL 2009–2016 <a href="http://www.ju.se/ccd/dimul">www.ju.se/ccd/dimul</a>	To examine young people's languaging, including literacy practices, and their relation to meaning-making, learning and identity work across different settings (a physical school setting with a formal bilingual-bicultural Swedish-Finnish profile, and a social networking site).	Video and audio data, pedagogic instructions, student texts, virtual data	Highlights issues of bilingualism as pedagogy and practice, the (un)problematicity of multilingualism across space and time and multimodal-multilingual languaging as a premise for social positioning.	Finnish, Swedish, English

(continued)

(continued)

Project name time frames and www	Main purpose	Type of data	Main results	Language-varieties
DS (an acronym for three large Deaf Studies projects) 1996–2014	In project LISA-21, three formal bilingual schools—a school for multiethnic pupils, an “international English-Swedish” school, and a “special school for the deaf”—were tracked in separate sub-projects in order to study language focused learning environments in secondary schools. In project RGD, intensive fieldwork was conducted in four programs at two of the three national upper secondary schools for the deaf for two years. In project SS, intensive fieldwork was conducted in four of the five segregated schools of the deaf during one semester.	Fieldnotes, Video and audio data, classroom instructions, classroom texts, student texts, virtual data.	Highlights the nature of bilingualism in and across physical and virtual classroom and social sites. Illuminates the unproblematic nature of multilingual-multimodal languaging and the non-binary nature of social-positioning in special school arenas	STS, Swedish, English, Spanish

(continued)

(continued)

Project name time frames and www	Main purpose	Type of data	Main results	Language-varieties
GTGS 1990–1995, 2012–2014 and ongoing <a href="http://www.ju.se/ccd/gtgs">www.ju.se/ccd/gtgs</a>	To create knowledge about issues related to human and societal development and communication through the lens of institutional practices. To understand the sociocultural pathways of sustainable development via analysis of shifts in, and the role and usage of discursive-technological tools.	Fieldnotes, video recordings and texts generated and used inside and outside the institutional settings of women's work, and digital resources of and about three NGOs	Highlights the nature of multilingualism inside and across physical and virtual spaces. Illuminates the unproblematic nature of multilingual-multimodal languaging across NGO sites in the geopolitical states of Maharashtra and Rajasthan.	Hindi, Marathi, English, Gujarati, Marwari, Rajsthani
PAL 2017–2020 <a href="http://www.ju.se/ccd/pal">www.ju.se/ccd/pal</a>	To generate knowledge that can contribute to identifying successful criteria for transitions to adulthood for children and young adults.	Video and audio data, documentation of special support (schools, university, rehabilitation etc.), demographic data (longitudinal), archival case-study data	Highlights the complexities involved in including and marginalization of children, young people and adults inside and outside institutional school, workplace and other settings.	Swedish, STS

## References

- Androutsopoulos, J. (2008). Potentials and Limitations of Discourse-Centred Online Ethnography. *Language @ Internet*, 5, 1–20.
- Asad, T. (1986). The Concept of Cultural Translation in British Social Anthropology. In J. Clifford & G. E. Marcus (Eds.), *Writing Culture. The Poetics and Politics of Ethnography* (pp. 141–164). Berkeley: University of California Press.
- Back, L. (2015). Why Everyday Life Matters: Class, Community and Making Life Livable. *Sociology*, 49(5), 820–836.
- Bagga-Gupta, S. (1995). *Human Development and Institutional Practices. Women, Child Care and the Mobile Creches*. Linköping Studies in Arts and Science 130. Doctoral dissertation, Department of Communication Studies, Linköping University, Sweden.
- Bagga-Gupta, S. (1999/2000). Visual Language Environments. Exploring Everyday Life and Literacies in Swedish Deaf Bilingual Schools. *Visual Anthropology Review*, 15(2), 95–120.
- Bagga-Gupta, S. (2002). Explorations in Bilingual Instructional Interaction: A Sociocultural Perspective on Literacy. *Journal of the European Association on Learning and Instruction*, 5(2), 557–587.
- Bagga-Gupta, S. (2004). Visually Oriented Bilingualism. Discursive and Technological Resources in Swedish Deaf Pedagogical Arenas. In V. Herreweghe & M. Vermeerbergen (Eds.), *To the Lexicon and Beyond. Sociolinguistics in European Deaf Communities*, Volume 10 – The Sociolinguistics in Deaf Communities Series. Editor C Lucas (pp. 171–207). Washington, DC: Gallaudet University Press.
- Bagga-Gupta, S. (2012a). Challenging Understandings of Bilingualism in the Language Sciences from the Lens of Research that Focuses Social Practices. In E. Hjørne, G. van der Aalsvoort, & G. de Abreu (Eds.), *Learning, Social Interaction and Diversity – Exploring School Practices* (pp. 85–102). Rotterdam: Sense.
- Bagga-Gupta, S. (2012b). Privileging Identity Positions and Multimodal Communication in Textual Practices: Intersectionality and the (Re)negotiation of Boundaries. In A. Pitkänen-Huhta & L. Holm (Eds.), *Literacy Practices in Transition. Perspectives from the Nordic Countries* (pp. 75–100). Bristol: Multilingual Matters.
- Bagga-Gupta, S. (2013). The Boundary-Turn. Relocating Language, Identity and Culture Through the Epistemological Lenses of Time, Space and Social

- Interactions. In I. Hasnain, S. Bagga-Gupta, & S. Mohan (Eds.), *Alternative Voices: (Re)searching Language, Culture and Identity...* (pp. 28–49). Newcastle-upon-Tyne: Cambridge Scholars Publishing.
- Bagga-Gupta, S. (2014a). Language: Ways-of-Being-with-Words Across Disciplinary Boundaries and Empirical Sites. In H. Paulasto, H. Riionheimo, L. Meriläinen, & M. Kok (Eds.), *Language Contacts at the Crossroads of Disciplines* (pp. 89–130). Newcastle-upon-Tyne: Cambridge Scholars Publishing.
- Bagga-Gupta, S. (2014b). Performing and accounting language and identity: Agency as actors-in- (inter)action-with-tools. In P. Deters, Xuesong Gao, E. Miller & G. Vitanova-Haralampieva (Eds.), *Theorizing and Analyzing Agency in Second Language Learning: Interdisciplinary Approaches* (pp. 113–132). Bristol: Multilingual Matters.
- Bagga-Gupta, S. (2017a). Signed Languages in Bilingual Education. In: S. May (General Ed.), *Encyclopedia of Language and Education*. O. García and A. M.Y. Lin (eds.) Volume 5: *Bilingual and Multilingual Education* (pp. 131–145). Rotterdam: Springer.
- Bagga-Gupta, S. (2017b). Language and Identity Beyond the Mainstream. Democratic and Equity Issues for and by Whom, Where, When and Why. *Journal of the European Second Language Association*, 1(1), 102–112. <https://doi.org/10.22599/jesla.22>
- Bagga-Gupta, S. (2017c). Language and Isms of Reinforced Boundaries Across Settings: Multidisciplinary Ethnographical Explorations. In D. J. Rivers & K. Zotzmann (Eds.), *Volume 11 Series Language and Social Life. -isms of Oppression in Language Education* (pp. 203–229). Berlin: Mouton de Gruyter.
- Bagga-Gupta, S. (2019a). Identity Positioning and Language in Deaf-Hearing Worlds: Some Insights from Studies of Segregated and Mainstream Educational Settings. In I. Leigh & C. O'Brien (Eds.), *Deaf Identities. Exploring New Frontiers*. Oxford: Oxford University Press.
- Bagga-Gupta, S. (2019b, in press). Learning Language matters. Contributions to a turn-on-turn reflexivity. In S. Bagga-Gupta, A. Golden, L. Holm, H. P. Laursen & A. Pitkänen-Huhta (Eds.), *Reconceptualizing Connections between Language, Literacy and Learning*. Rotterdam: Springer.
- Bagga-Gupta, S., Hansen, A. L., & Feilberg, J. (Eds.). (2017). *Identity Revisited and Reimagined. Empirical and Theoretical Contributions on Embodied Communication Across Time and Space*. Rotterdam: Springer.
- Bagga-Gupta, S., & Messina Dahlberg, G. (2017). *Mobilization of Nomenclature in the Language and Diversity Areas in Learning and Instruction*. Paper at the

- invited symposium of SIG 21 at EARLI 2017, Education in the crossroads of economy and politics – Role of research in the advancement of public good, 29 August–2 September, Tampere, Finland.
- Bagga-Gupta, S., & Messina Dahlberg, G. (2018). Meaning-Making or Heterogeneity in the Areas of Language and Identity? The Case of Translanguaging and Nyanlända (Newly-Arrived) Across Time and Space. *International Journal of Multilingualism*, 15(4), 383–411.
- Bakhtin, M. (1981). *The Dialogic Imagination* (C. Holmquist, Ed.). Austin: University of Texas Press.
- Berger, P. L., & Luckman, T. (1966). *The Social Construction of Reality. A Treatise in the Sociology of Knowledge*. New York: Penguin.
- Byrd Clark, J., & Dervin, F. (Eds.). (2014). *Reflexivity in Language and Intercultural Education. Rethinking Multilingualism and Interculturality*. London: Routledge.
- Cerwonka, A., & Malkki, L. H. (2007). *Improvising Theory. Process and Temporality in Ethnographic Fieldwork*. Chicago: University of Chicago Press.
- Clifford, J., & Marcus, G. E. (Eds.). (1986). *Writing Culture. The Poetics and Politics of Ethnography*. Berkeley: University of California Press.
- Comaroff, J. L., & Comaroff, J. (2009). *Ethnicity, Inc. Chicago Studies in Practices of Meaning*. Chicago: University of Chicago Press.
- Daiute, C. (2015). *De-colonial Dialogues: Conversations Within and Across Worldviews*. Discussion paper presented at the Invited Symposium “The Boundary Turn: Challenges in Researching and Practicing De-colonial Education and Community Development”. EARLI 2015 conference, Limassol, Cyprus August 2015.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2000). *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage.
- Deters, P., Gao, X., Miller, E., & Vitanova-Haralampiev, G. (Eds.). (2014). *Interdisciplinary Approaches to Theorizing and Analyzing Agency and Second Language Learning*. Bristol: Multilingual Matters.
- Donald, M. (2001). *A mind so rare. The evolution of human consciousness*. New York: Norton.
- Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). *Writing Ethnographic Fieldnotes* (2nd ed.). Chicago: The University of Chicago Press.
- Fabian, J. (1983). *Time and the Other. How Anthropology Makes Its Object*. New York: Columbia University Press.
- Fabian, J. D., & Marcus, G. E. (2009). *Fieldwork Is Not What It Used to Be. Learning Anthropology's Method in a Time of Transition*. Ithaca: Cornell University Press.

- Fanon, F. (1961). *The Wretched of the Earth*. New York: Grove Press.
- Finnegan, R. (2015). *Where Is Language? An Anthropologist's Questions on Language, Literature and Performance*. New York: Bloomsbury.
- Flewitt, R., R. Hampel, M. Hauck & Lancaster, L. (2009). What are multi-modal data and transcription? In Jewitt, C. (ed.), *The Routledge Handbook of Multimodal Analysis* (pp. 40–53). London: Routledge.
- Gal, S. (2007). Multilingualism. In C. Llamas, L. Mullany, & P. Stockwell (Eds.), *The Routledge Companion to Sociolinguistics* (pp. 149–157). New York: Routledge.
- Gal, S., & Irvine, J. T. (1995). The Boundaries of Languages and Disciplines: How Ideologies Construct Difference. *Social Research*, 62(4), 967–1001.
- Garcia, O. (2009). *Bilingual Education in the 21st Century: A Global Perspective*. Oxford: Blackwell.
- Garcia, O., & Lin, A. (Eds.). (2015). *Bilingual and Multilingual Education*. Volume 5. Encyclopedia of Language and Education, General Editor Stephen May. Springer.
- Goico, S. (2019). *The Social Lives of Deaf Youth in Iquitos, Peru*. Ph.D. dissertation, University of California, San Diego.
- Goodwin, C. (1994). Professional Vision. *American Anthropologist*, 96, 606–633.
- Gramling, D. (2016). *The Invention of Monolingualism*. New York: Bloomsbury.
- Gynne, A. (2016). *Language and Social Positioning in Multilingual School Practices – Studies of Sweden Finnish Middle School Years*. Västerås: Mälardalen University.
- Gynne, A. (2017). “Janne X was here”. Portraying identities and negotiating being and belonging in informal literacy practices. In: Bagga-Gupta, S., Aase Lyngvær Hansen, Julie Feilberg (Eds.), *Identity Revisited and Reimagined: Empirical and Theoretical Contributions on Embodied Communication Across Time and Space* (pp. 271–292). Rotterdam: Springer.
- Gynne, A., & Bagga-Gupta, S. (2013). Young People's Language Usage and Identity Positioning: Chaining in “Bilingual” Educational Settings in Sweden. *Linguistics and Education*, 24(4), 479–496.
- Gynne, A., & Bagga-Gupta, S. (2015). Language in the Twenty-First Century. Exploring Varieties and Modalities in Literacies Inside and Outside Learning Spaces. *Language and Education*, 29(6), 509–526. <https://doi.org/10.1080/09500782.2015.1053812>
- Gynne, A., & Bagga-Gupta, S. (2017). *Chaining: the Use of Language Resources Including Literacies on the Move*. Conference Skriv! Les! 2017, 9–11 May, Trondheim, Norway.



- Hansen, A. L. (2005). *Communicative Practices in Visually Oriented Classrooms: A Study of a Model Education for Deaf Teacher Candidates*. Unpublished Ph.D. thesis, NTNU University, Norway. 1005:132.
- Hansen, A. L., & Bagga-Gupta, S. (2017). *Visually Oriented Multilingual Communication. Participation in Higher Education*. Paper in the Symposium Participation and inclusion in educational settings. Issues and challenges. NNDR, Nordic Network on Disability Conference at Örebro, Sweden, 3–5 May.
- Hasnain, I., Bagga-Gupta, S., & Mohan, S. (2013). *Alternative Voices: (Re) searching Language, Culture and Identity...* Newcastle-upon-Tyne: Cambridge Scholars Publishing.
- Holmström, I. (2013). *Learning by Hearing. Technological Framings for Participation*. Örebro Studies in Education 42. Ph.D. dissertation, Örebro University, Sweden.
- Hoppers, C. O. (2009). Research-Knowledge-Development: Emerging Perspectives in a Global Dimension. Keynote at the Educational Sciences Committees Resultatdialog 2009, Umeå University, Sweden.
- Horst, H., & Miller, D. (2012). *Digital Anthropology*. London: Bloomsbury.
- Jewitt, C. (Ed.). (2009). *The Routledge Handbook of Multimodal Analysis*. London: Routledge.
- Kotzines, R. V. (2010). *Netnography. Doing Ethnographic Research Online*. London: Sage.
- Kress, G. (2003). *Literacy in the New Media Age*. London: Routledge.
- Kress, G., & van Leeuwen, T. (1996). *Reading Images: The Grammar of Visual Design*. London: Routledge.
- Lave, J., & Wenger, E. (1991). *Situated Learning. Legitimate Peripheral Participation*. Cambridge, MA: Cambridge University Press.
- Leandri, P., & Neumann, E. (2014). Introduction. Mobile Sociologies of Education. *European Educational Research Journal*, 131, 1–8.
- Liddicoat, A. J. (2011). Enacting Participation: Hybrid Modalities in Online Video Conversation. In C. Develotte, R. Kern, & M.-N. Lamy (Eds.), *Dé-cirer la conversation en ligne: le face à face distanciel* (pp. 51–70). Lyon: ENS Éditions.
- Linell, P. (2009). *Rethinking Language, Mind, and World Dialogically. Interactional and Contextual Theories of Human Sense-Making*. Charlotte, NC: Information Age Publishing.
- Luff, P., Heath, C., Kuzuoka, H., Hindmarsh, J., Yamazaki, K., & Oyama, S. (2003). Fractured Ecologies: Creating Environments for Collaboration. *Human-Computer Interaction*, 18, 51–84.

- Machin, D. (2013). What Is Multimodal Critical Discourse Studies? *Critical Discourse Studies*, 10(4), 347–355.
- Marcus, G. E. (1986). Contemporary Problems of Ethnography in the Modern World System. In J. Clifford & G. E. Marcus (Eds.), *Writing Culture. The Poetics and Politics of Ethnography* (pp. 165–193). Berkeley, CA: University of California Press.
- Marcus, G. E. (1995). Ethnography in/of the World System: The Emergence of Multi-Sited Ethnography. *Annual Review of Anthropology*, 24, 95–117.
- Messina Dahlberg, G. (2015). *Languaging in Virtual Learning Sites: Studies of Online Encounters in the Language-Focused Classroom*. Doctoral dissertation, Örebro Studies in Education 49, Örebro University, Sweden.
- Messina Dahlberg, G., & Bagga-Gupta, S. (2014). Understanding Glocal Learning Spaces: An Empirical Study of Languaging and Transmigrant Positions in the Virtual Classroom. *Learning, Media & Technology*, 39(4), 468–487.
- Messina Dahlberg, G., & Bagga-Gupta, S. (2015). Learning on-the-Go in Institutional Telecollaboration: Anthropological Perspectives on the Boundaries of Digital Spaces. In E. Dixon & M. Thomas (Eds.), *Researching Language Learner Interaction Online: From Social Media to MOOCs* (Vol. 13, pp. 259–281). CALICO.
- Messina Dahlberg, G., & Bagga-Gupta, S. (2016). Mapping Languaging in Digital Spaces. Literacy Practices at Borderlands. *Language Learning & Technology*, 20(3), 80–106.
- Mignolo, W. D. (2012). *Local Histories/Global Designs. Coloniality, Subaltern Knowledges and Border Thinking*. New Jersey: Princeton University Press.
- Okely, J. (1996). *Own or Other Culture*. London: Routledge.
- Paulasto, H., Riionheimo, H., Meriläinen, L., & Kok, M. (Eds.). (2014). *Language Contacts at the Crossroads of Disciplines*. Newcastle-upon-Tyne: Cambridge Scholars Publishing.
- Pavlenko, A. (2017). Superdiversity and Why It Isn't. Reflections on Terminological Innovations and Academic Branding. In S. Breidbach, L. Küster, & B. Schmenk (Eds.), *Sloganizations in Language Education Discourse*. Bristol: Multilingual Matters.
- Pink, S. (2007). *Doing Visual Ethnography*. London: Sage.
- Pitkänen-Huhta, A., & Holm, L. (Eds.). (2012). *Literacy Practices in Transition. Perspectives from the Nordic Countries*. Bristol: Multilingual Matters.
- Säljö, R. (2005). *Lärande och kulturella redskap: om läroprocesser och det kollektiva minnet*. Lund: Studentlitteratur.

- Säljö, R. (2012). Literacy, Digital Literacy and Epistemic Practices: The Co-Evolution of Hybrid Minds and External Memory System. *Nordic Journal of Digital Literacy*, 12(1), 5–20.
- Savransky, M. (2017). A Decolonial Imagination: Sociology, Anthropology and the Politics of Reality. *Sociology*, 51(1), 11–26.
- Scollon, R., & Scollon Wong, S. (2004). *Nexus Analysis: Discourse and the Emerging Internet*. London: Routledge.
- St John, O. (2014). *Approaching Classroom Interaction Dialogically: Studies of Everyday Encounters in a “Bilingual” Secondary School*. Doctoral dissertation, Örebro University, Örebro.
- Sturge, K. (1997). Translation Strategies in Ethnography. *The Translator*, 3(1), 21–38. <https://doi.org/10.1080/13556509.1997.10798986>
- Tapio, E. (2013). *A Nexus Analysis of English in the Everyday Life of FinSL Signers: A Multimodal View on Interaction*. Oulu: Oulu University.
- Vygotsky, L. S. (1934/1962). *Thought and Language*. Cambridge, MA: M.I.T Press.
- Wertsch, J. (2002). *Voices of Collective Remembering*. Cambridge: Cambridge University Press.
- Wertsch, J. V. (1998). *Mind as Action*. Oxford: Oxford University Press.

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.





# 13

## On Methodology and the Educational Sciences—Reflections on the ViLS Contributions

Ylva Lindberg

### 1 Doings with Tools and Implications for Learning

Humans have developed tools during the species' entire life cycle. The continuous refinement of tools and techniques has had the purpose to facilitate survival, such as tools for cultivating the soil, just as they have been means to experience and understand the world differently and better, such as the telescope, and to produce things faster, for example the sewing-machine for fabrication of clothes. Some technological inventions do not have a specific purpose at all, as well as there are useful inventions slowly falling into oblivion, such as watches—a refashioned object that remains popular but no longer serves an immediate purpose in daily life. As Science Philosopher Junichi Murata (2003) has suggested, there is no essence to technology and its determination is reversible and changing. Human creativity decides areas and purposes toward which a

---

Y. Lindberg (✉)

School of Education and Communication, Jönköping University,

Jönköping, Sweden

e-mail: [ylva.lindberg@ju.se](mailto:ylva.lindberg@ju.se)

specific technology shall be directed. Recently invented tools surrounding us in everyday life are very often *digitized*, that is, their materiality is digital. By the same token, society is becoming more and more *digitalized*, meaning that the integration of digital tools and resources in everyday life is progressing. Human uses of digital tools and resources form an area for intense research activities, which bring insights into the role and function of new technologies in everyday life, for example, in education. In this context, the formulation by McLuhan (2003 [1964]), “The media is the message”, is continuously echoing, reminding us of that, inversely, the message is the media, and that there is no absolute demarcation line between a tool and a resource, neither between form and content. The role and function depend on what we are *doing* with digital technology. Digital tools and resources are not only *used* in human doings, they are *interpreted* as well, and presented in various ideological ways depending on sectors, in order to promote innovation and progress. Virtual sites for learning are approached in the first section of this volume through the focus on the need for analytical studies on how different technologies are linked and used by humans, as well as how these are interpreted and framed, creating norms for what educators and learners are encouraged to do with technology. In addition, glimpses of resistance and unacceptance of humans as digitally infused beings come up to the surface in moments of the reported data, pointing to overlapping cultures and mind-sets regarding learning and virtual sites.

In Chap. 1, “On Epistemological Issues in Technologically Infused Spaces: Notes on Virtual Sites for Learning”, Sangeeta Bagga-Gupta and Giulia Messina Dahlberg elucidate how technology becomes meaningful through human social interaction with tools, by highlighting examples from human communication in analogue–digital learning settings. Patterns of practices are continuously constructed and unmade in these contexts, through creative uses of tools for languaging purposes. The chapter shows that the complexity of technology-enhanced communication processes are challenging for researchers to systematically study and describe, even more so, since digital tools are not accessories, but rather have formed society and knowledge since the millennium shift. Educators and learners active in the digitalized society are pushed to elaborate functional practices that consider and integrate relevant available technologies. The proven experience, guidelines, and research results that practitioners can lean on in these endeavors are still scarce, and

when available, are often delivered as readymade packages, and/or too generally formulated to make a difference. These challenges call for further research regarding new opportunities for learning in time and space. Occasions to learn in new and expanded ways are enacted through practices in and across analogue–virtual sites, where tools are transforming what “knowing” is all about.

In Chap. 2, “Inscriptions and Digitalization Initiatives Across Time in the Nation-State of Sweden. The Relevance of Shifts and Continuities in Policy Accounts for Teachers’ Work”, Lars Almén and Sangeeta Bagga-Gupta offer insights into how policies on a national level are linked and chained, reinforcing or weakening a variety of discourses surrounding digitalization, and, thereby, shaping implementation processes in schools. Understandings embedded in national policy documents are enmeshed with ongoing analogue–digital teaching and learning practices, sometimes to facilitate and establish communicative patterns in development, sometimes to counter visions and strategies at the practitioner level. In addition, while policy documents are general, embracing the national school context with its various activities, the variation in access to digital resources between schools is startling in this study, where the focus lies on the nation-state of Sweden, where almost all citizens have access to the Internet in their homes (Davidsson & Thoresson, 2017).

The divide in access to digital tools and resources is, however, even more flagrant on a global level. The large majority of Internet users are to be found in Asia, but the penetration rate, that is, the percentage of a population in a given country that uses Internet, is among the lowest. In March 2019, North America scored 89.4 percent in penetration rate, while Europe scored 86.8 percent. In the same test, Asia scored 51.8 percent and Africa 37.3, which corresponds to 5 percent and 24.6 percent, respectively, below the world average (Internet Society, 2017). These numbers offer a view of global digital divides, as well as the possibility to reflect on different forms of digital divides within these geopolitical spaces. The material divide is the one that is easiest to measure, though, the security divide (Internet Society, 2017), as well as the support divide (Warschauer, 2002; Warschauer & Matuchniak, 2010) are equally necessary to consider for inclusive digital usage worldwide. In fact, perspectives on opportunities for broader inclusion in learning processes that

digital tools and resources potentially offer form one major aspect that unites the studies in the volume.

In Chap. 3, “Authenticity of Language Practices in Virtual Learning Sites”, Jonathan White addresses a supplementary gap in the global and digitalized world, that is, the linguistic divide. This study indicates that to be included in a global society, it is not enough to be connected. Language and literacy management form additional skills that the global citizen needs to acquire. English dominates virtual sites on a global level, and it is a prioritized language among students, who aim at managing English with “native speaker-like proficiency”. The study explores how communicative practices evolving in digital learning activities challenge students’ ideas of “authentic language”. The results point to the importance of generating knowledge on how languages and social hegemonies in language usages evolve through humans’ *doings* with technology. The addressed inherent potential of digital tools to activate pluricultural and multilingual communication and exchange in learning processes further underscores the aspect of inclusion in learning, as well as challenges regarding how to conceive of and respond to the diversities among student groups worldwide.

## 2 Learning Language, Literacy, and Literature in and with Digital Tools

In Sect. 2 of the volume, challenges and transformations in language, literacy, and literature learning in and with digital tools are upfronted. In addition, quality education in these areas is stressed as a primordial support for bridging digital divides and for participation in society. In order to fully grasp the unifying links between these studies, a time travel back to the 1900 turn of the century is needed. The era of *La Belle époque* illustrates well how humans became aware of how technology had reshaped society, and presents several common features with the millennium shift, insofar that both epochs experienced the consequences of a consistent amount of technological inventions that would transform everyday life. During the era of *La Belle époque*, the telegraph, the lightbulb, the moving

image, the telephone, the fridge, and the car, to mention a few inventions, were brought to common people who strived to integrate and normalize these tools into everyday life. The pace with which the world was changing through new inventions made the world seem “amazing” and “enchanted”. In this context, scientists and inventors were perceived as poets and artists, just as poets and artists were lifted to the status of scientists and inventors (Lindberg, 2013). Both categories possessed skills to reinvent the world and concretize imaginary dreams. The sciences and the arts are traditionally opposed areas in public discourses, but during *La Belle époque*, they supported each other in acclimating society to the modern context of new technologies. The poets and artists processed, visualized, and represented new technologies and thus facilitated society’s mental transition to a technological modern world. Collaborations between science and the arts are anew frequently observed in society, as if the connections between these opposed areas of life have regained recognition and relevance.

Nevertheless, the pronounced artistic support for technology change in *la Belle époque* took another turn in the millennium shift, and was less supported by culturally creative endeavors, except for some well-known science fiction authors in the geek culture of the 1990s *fin-de-siècle* ambiance, for example, Neil Stephenson and William Gibson, who visualized in their novels a technology-intense future with dystopian connotations.

Digital tools are accumulating, appearing, and disappearing at a fast pace in the twenty-first century, which can be seen as an obstacle for educators, heads, and school leaders who try to orient themselves and adopt accurate and stable technology for teaching designs. Since digital tools have allowed for the development of an information age (see Castells, 1996, 1997, 1998), users are expected to learn and understand digital technology autonomously, through nowadays banal inscriptions on the screen, such as Help?, FAQ, and Chat. In addition, tutorials using different media, such as YouTube clips, screen shots, and text guides, are ever-increasing, as well as expert communities for information exchange and support. Consequently, the understandings of the technology at hand target the support of different functions, and the mental and intellectual perception and conception of a specific technology tends to be neglected. This is



contradictory, since the use of available technology in learning processes implies both aesthetic and pragmatic dimensions of languaging activities, which can very well be subject to joint explorations. Science and art, information and fiction are becoming more and more inseparable in the dense landscapes of images, sounds, and texts that the digitalized society generates. Discipline-specific knowledge and skills pertaining to language, literacy, and literature are therefore important assets for adequate research and innovation in analogue–digital–virtual–real learning. Section 2 in the volume includes four studies that support reflections on linguistic and literary knowledges and skills in a digitalized society, as well as on where learning is taking place in an era of digital development that tears down classroom walls.

In Chap. 4, “Wikipedia’s Falling Stars. Arguments for Demotion When Articles Lose Their Status as Featured Articles”, Maria Mattus focuses on articles on Wikipedia that have received a quality mark, in order to analyze practices adopted by the community in its work with the construction of relevant, reliable, and accessible knowledge. The introductory and holistic approach to this digital tool and resource offers a view on how groups of producers and consumers are intertwined and overlapping, recalling the notion of “prosumer”, coined by Alvin Toffler (1980). The unstructured, yet, hierarchical forms of participation range from levels of amateurs to professional producers, who simultaneously are more, or less, regular consumers of the Wikipedia content. Wikipedia is described both as a tool for creating knowledge and as a resource for accessing knowledge. This virtual ongoing project is seen as a prolongation of Diderot’s efforts during the Enlightenment to create a universal encyclopedia for everything of this world. Through the development of digital tools, this unattainable vision has become far more realizable. The study offers insights into how communicative practices within the realm of Wikipedia have developed genre features and specific criteria for evaluating and critically comment on the produced articles on the main pages. In a similar way to language learners who elaborate their own linguistic norms on virtual sites, the Wikipedia community has developed their normative genre system, which is corrected and modified through the talk pages, where arguments with more, or less, strength are put afore in order to confirm or demote an article. The study’s results point to specific ways in which digital environments shape language and communication, and

learning is displaced and transformed. In educational settings, where reluctance and suspicion still are associated with Wikipedia uses, this critical understanding of the role and function of the tool and the resource brings to the forefront possibilities for how and for what purposes Wikipedia can be used for language and literacy learning.

In Chap. 5, “The Story Event “The Beauty and the Beast” in Second Life: Literature Studies and the (Non-)Adoption of Virtual Worlds”, Ylva Lindberg further stresses the communicative practices that unfold in and because of digital environments present in all areas of life. Communication and interactivity of digital environments stand in stark contrast to traditional language and literature learning, where “reading”, “writing”, and “presenting” persist as core skills to become literate in current society. According to the study, literary skills are not necessarily acquired through reading and writing. Certain competences can be learnt interactively in three-dimensional gaming worlds, through the constructed and improvised stories between avatars. In this case, a documented event from Second Life forms the material for the analysis. The results show, for example, that through enacted interaction between avatars, story features can be understood and learnt in embodied ways through play. Characters are formed in the interaction between avatars where stories are unfolded, and elements are recycled from other stories circulating in society. These in-world story events become embedded in several ways, for example, those frequently filmed by YouTubers who make them available for all on the Internet. This is happening in a range of digital tools and resources, not only in the Second Life world which is the study’s object of research. These documented story events form insofar relatively unconsidered material for learning literary competences and uses of virtual worlds in formal learning remain activities “in the wild”. The creative languaging activities in the virtual world call for creative understandings and uses of the technology for learning in and outside virtual settings.

In Chap. 6, “Text Universe: A Pedagogical Strategy to Teach Literary Classics”, Anette Svensson and Stefan Lundström continue to explore literature as a tool in the transition from analogue classroom teaching to analogue–digital–virtual–real contexts. The expanding uses and creations of literary material in the digitally infused society form a major source of interrogations regarding pedagogical strategies that can be developed

in order to integrate current literary conditions in established curriculum-based knowledge content. The point of departure of the study is a piece of classic literature—the novel *Pride and Prejudice* (1813) by Jane Austen, which also is a representative of the English national canon. By presenting examples of different versions and adaptations of the original text, in different media and different languages, the study attempts to show how globally distributed virtual sites negotiate cultural hegemonies. Voices of the subaltern, that have previously been obscured or backgrounded in communication on literature and in literary exchange, step in and claim their interpretative right, which results in stories where counter-discourses are embedded. The data presented in the study offer new perspectives on how literature is used in a media-dense society, as well as how it is interpreted through existing creative versions of original classic literature, and through students' interpretations of these transformations. The highlighted examples of transformations and adaptations of literary texts in various media also highlight the nomadism of contents in the digital society. Literature and fiction are being transformed through the traveling between virtual sites. This nomadic feature further confirms literature's inherent appropriateness for being used as a tool to understand movements between analogue–digital–virtual–real sites where creative storytelling is present and applied in humans' languaging activities.

In Chap. 7, “Wikipedia as a Virtual Learning Site and a Multilingual Languaging Site”, Johansson and Lindberg adopt a similar outlook as in Chap. 6, insofar that the comparative and transformational aspects of texts are prominent in the research design. In this study, the focus is directed toward differences and resemblances between Wikipedia texts on specific topics, which travel through translation across cultures and languages. The languaging practices on the talk pages, more specifically, the argumentative communication constructed in the coulisses of the main page where the knowledge topic is formulated, are focussed upon in the analysis. The study reveals and confirms inequalities regarding which groups are voiced in the participative knowledge construction. The question of who is writing on Wikipedia is further highlighted through the impersonal bots that generate articles from databases. The fact that Wikipedia producers are not only humans but also machines, illustrates how these often-polarized pillars of society jointly shape knowledge

construction and communicative practices. Wikipedia has expanded in exponential ways since its launch in 2001, depending on the number of users and producers in different parts of the world. If the articles originate solely from specific groups, languages, and cultures, this digital encyclopedia will run the risk of becoming biased and partial.

At the center of the study are the various languages and cultures active on Wikipedia as producers of articles, and their different ways of *doing* knowledge through the talk pages. In this context, English language articles are dominating. These articles are translated into other languages, while articles in languages other than English tend to stay local and untranslated. Similarities and differences between languaging practices in various cultural areas are discussed to describe how languages are clustered. Global world views tend to group cultures and languages in the North vis-à-vis the South, the Western world vis-à-vis the East, or vis-à-vis the rest of the world. The study shows reframed categories, where preconceptions of boundaries between languages are challenged by how argumentation is *done*. The results support a renewal of perspectives in language learning and encourage the use of digital tools and “big data”, in order to further investigate connections between languages and thereby challenge linguistic hegemonies where English persists as the dominating language.

### 3 Transformed Identities in Learning with Virtual Sites

The reorientation in the humanities toward explorations of language and literature in and with digital technology is a logical consequence of the digital shift. Human societies are based on communication, interaction, sharing of information, experiences, and reflections. These activities are fundamental to maintaining a societal project where access and participation are possible for individuals. New ways of communicating and interacting are continuously generated through technology innovation. As Bolter and Grusin suggest (Bolter & Grusin, 1999): “our culture wants both to multiply its media and to erase all traces of mediation”

(p. 5). Digital technology offers tremendous potentials for creating contexts and interaction where the “transparency” is complete, and the computer is no longer perceived as a mediating tool. However, even though the technology is in place in some parts of the world, educators and learners are struggling to “make it work”, and the smooth intervention of technology for enhanced learning still seems to be visionary. The dream of an absolute virtual reality, that is a mediated reality that is perceived as if it was taken in through our bodily senses (Merleau-Ponty, 1967), is not completely out of reach, but far from attained in practice.

Despite obvious practical hinders, the Internet is evoked as a source for augmented space, where milieus of communication and social networks are created, transforming our “ways-with-words” (Heath Brice, 1983) and “worlds”. Intellectuals are aware of these ongoing ontological changes, and as an effect of the rapid development of digital technology in the 1990s, representations of and reflections on the demarcation line between the virtual and the real accumulated radically. For example, a sharp distinction between real and virtual is formulated by William Gibson in the novel *Neuromancer* (Gibson, 1984) where the protagonist, Case, is swept away by his inner yearning for the virtual which keeps him cut off from the burden of his own body (Gibson, 1984, [archive.org](#)):

For Case, who had lived the bodily exultation of Cyberspace it was the Fall [...]. The body was meat. He fell into the prison of his own flesh.

In the novel, the digital world is addressed as a space separated from the actual world, a representation that has been further underscored by scholars who have imagined digital space as undiscovered land that people are willing to explore, in the same sense as pioneers traveled to the Far West to find gold (Meadows, 2008). In the same line, economist Edward Castronova (2005) has described the growing interest for virtual worlds in the twenty-first century as economic migration. Users observe the benefits they can make in virtual worlds and, consequently, they move into these new spaces and start to inhabit them. Philosopher Philip Zhai (1998) has taken the image of migration waves toward the virtual even further when he argues that soon virtual worlds will possess the same ontological status as the real world.

The so-called “philosopher of cyberspace”, Michael Heim (1987, 1993, 1998), puts afore a similar line of thought as Zhai’s, as he observes in his works the movement toward a changed ontological status of our being, through transformed notions of body, language use, and relationship to artifact. In his view, humans are progressively moving toward a nascent virtual reality embracing our entire existence. According to Heim, the current difference between the virtual and the real is to be found in some existential features taken from reality: mortality/natality, carryover between past and present, and care (1993, p. 33). Virtuality is not concerned with life and death, or temporal continuity, or with the fragility of our physical condition that encourages us to “take care” not only of ourselves, but also of others. Considering current features of digital landscapes, these differences tend to be confirmed, though, at the same time, virtual and real are completely interdependent and parts of one another.

Conjecturing on why humans are eager to experience contexts, worlds, and situations in immediate ways leads to reflections on reality, which is constantly in development through human actions, interventions, and innovations, and on the perception of the real that becomes stronger if it is not mediated. Apparently, humans strive for making imagined worlds real, which emerge as a condition for a creative mind. In our current context, tools are available for concretizing virtual dreams and creating simulations of events. In fact, digital tools allow us to “see the mind” and what it produces (Hatavara, 2015). In the third section of the volume, the notion of a reality where the actual and the virtual are mixed and intertwined has implications for identity creations and positionings in the learning settings where the studies are taking place. The studies explore constructions of digital identities and intersections with real identities, in order to observe specific aspects of learning online.

In Chap. 8, “‘Oh It Was a Woman! Had I Known I Would Have Reacted Otherwise!’: Developing Digital Methods to Switch Identity-Related Properties”, Mats Deutschmann, Anders Steinvall and Mattias Östling explore possibilities inherent to digital tools and landscapes to develop learning about gender stereotyping through languaging. Digital environments offer a multitude of functions allowing for playing out aspects of an individual’s identity that have not been manifest in real world

framings, partly because of conventions and structures the individual is caught up in, such as, background, geographic location, social contexts, and gender roles. Since Sherry Turkle's groundbreaking work *Life on the Screen* (Turkle, 1995), identity issues in digital environments are addressed in an expanding body of research, in which studies on learning point to dilemmas regarding authenticity. Who are you as a teacher and/or as a student in online contexts? What is altered, and what remains the same? How can we come to an agreement that we are creating relationships, and are doing serious and meaningful things in settings apart from the actual world? These are recurring issues in research of the past decades, still circulating and haunting online learning. The study in Chap. 8 makes use of the possibilities for ambiguous identity traits in digital environments, in order to elaborate cases for learning how to be aware of the impact of specific gender identity traits in human interaction and the perception of the Other. The simulating research methods take advantage of digital environments' inherent potential to unfold humans' "minds", their preconceptions, behaviors, and ideas, in order to challenge structures and behavioral patterns developed in "real" society between men and women. The experiential stand furthers the research front regarding gender stereotyping by focusing on the perception of sociolinguistic features, and by exploring pedagogical means to raise awareness about society's and one's own grounds for judging the Other by gender.

In Chap. 9, "Going on Trial: Teachers' Team Performance in Social Media Groups When Facing Problematic Work-Related Issues", the research team, Louise Peterson, Annika Lantz-Andersson, Thomas Hillman, Mona Lundin, and Annika Bergvik Rensfeldt, continues the line of thought in the previous chapter, that is the tension and fruitful interaction between individuals' digital behaviors and reactions in relation to societal identity formations. The teacher's professional identity as developed through online communication and interaction forms the object of research. In an era of public management and requirements of scientific ground and proven experience in professional doings in different sectors, not least in education and health care, practitioners risk losing their agency and professional judgment to external experts. A need for empowerment of educators emerges through the increasing number of digital

forums, in social media sites such as Facebook oriented toward various topics and different school subjects. In these sites, educators can meet across workplaces and participate with anonymous identities, which facilitate exposure of work-related problems that can, for various reasons, be delicate to approach with the immediate professional surroundings. The study identifies how social media groups support collegial learning and regulate professional identity and doings. The collaborative and collegial support that evolves online appears in the study as an important tool for educators' professional empowerment in real life, just as these digital activities take on the role of a reference frame for the understanding and the embodiment of a professional identity.

In Chap. 10, "The Conceptualization of Time, Space and the Body in Virtual Sites and the Impact on Language Learner Identities", Regine Hampel further explores the formation of identities through digital tools and resources by focusing on the learner. An educational professional most often has an idea of the learner during the planning and construction of courses and contents. In virtual sites, learners are transformed, and the educator encouraged to rethink assumptions about individuals and the group with which education is carried out. Transformational aspects coming into play in learning in and with virtual sites are numerous, and the learner's identity is changing continuously throughout the movements between the virtual and the real, and the different ways of relating to body, space, and time. In language learning, body and space are categories of specific interest, since languaging is an embodied activity in which humans make use of their body, facial expressions, and gestures. In a space that easily can be extended through digital means, the identity, or *persona*, must accept to embrace the technology that mediates bodily and spatial expressions and representations. In addition, time is a common criterion in formal learning activities, indicating precise schedules and temporal frames for acquiring a learning content, however, altered and distorted through uses of virtual sites.

Transformation of relations to body, space, and time in digital environments affects the learner's behavior and self-image. For example, bodies and identities in cyberspace are inclined to take risks that would not have been considered in the actual world. The process of learning a new language most often implies an identity shift, which calls for continuous



risk-taking that allows for exploring a new cultural and linguistic identity. The use of digitally expanded space projects the body and identity into places beyond the classroom, where the time category is not necessarily the same as “real-time”. Digital technology carries the potential to expand learning activities in time, and sometimes shortening them, depending on how the synchronous and asynchronous aspects are enacted. The flexibility and relativity that come into play when digital tools are brought into learning tend to dissolve categories that structures of “reality” have framed and fixed, such as body, space, and time. These considerations concerning what affects the learner’s identity transformation in and across digital technology are further stressed in the last chapter of Sect. 3, where the learner’s choice of learning itinerary is in focus.

In Chap. 11, “Self-Directed Language Learning: A Semiotic Analysis of a Language Learning App”, Jenifer Ho reflects, through the empirical findings in language learning online applications, on the “flexible learning pathways” that the digital learner, or pathfinder, can explore through the digital design that is offered to Internet users. The learner’s own drive for learning opportunities forms the prerequisite for the existence of online language learning applications. The digital environment encourages independent learners, who set their own goals and engage with offered activities. However, this learner profile does not describe heterogenous groups of students that attend language classes, who often need more guidance and support than what educators expected. Despite the elusive knowledge regarding the actual effects of language learning in online digitized environments outside institutional settings, digital sites offer support for multimodal languaging, which has proven to be important in the acquisition of skills in a specific language. Images of different sorts, moving and sequential, drawings, photographs, and paintings are all sources for linguistic comprehension and deep understanding of languages’ semantic layers. Sounds, prosody, and intonations also form an important part of language acquisition. In the *Memrise* application that constitutes the object of research, different modes are made available for the learner who engages with the tool in interactive ways. The learner’s identity and learning style can, therefore, be activated and unfolded through the offer and the learner’s choices. In addition, production and consumption of learning contents are not dichotomized activities, reserved either for educators

or learners, but rather designed for blurring the roles, leaving the option for anyone to create a learning product. This flexibility is further highlighted through possibilities to integrate the digital resources from the application in more regular offline learning settings. Through the study's analysis and results, features of online language courses are unpacked and problematized, which also serves the purpose to gain insight into the changing identities of learners and educators moving, more, or less, unnoticeably, in and between analogue–digital–virtual–real settings.

## 4 Methodological Considerations

The research designs adopted in the volume are shaped for studying a variety of sites and human doings with digital tools, where the learning of language, literacy, and literature can be observed. The larger part of the virtual sites in the studies is not constructed with the purpose to be integrated in formal educational teaching and learning. On the contrary, they are tools for knowledge, learning, and play outside institutional settings, where human *doings* in a range of societal areas are center-staged. This is not innocent, rather it reveals a fundamental urge to educate for a digital society, and to connect learning to resources present in everyday life. In parallel to tools developed for widespread public access, principally by Internet, there are numerous digital tools developed solely for learning activities inside educational institutions. This latter category is not equally distributed, neither at the local level nor at the global level. Access to education where digital skills, tools, and resources are present for all and used by all is often described in policy documents with few concrete solutions to reach a similar goal. For example, the Swedish National Action Plan for Digitalization of Education (SKL, March, 2019) recognizes that there is a need for modernization of education. Variations and inequalities between educational institutions in terms of access and use are observed as well, but the “actions” to bridge these gaps appear elusive in the document. Despite the general and visionary formulations proper to policy documents, precise interrogations concerning the gaps

are formulated, which can be seen as a fundamental step toward strategic moves to bridge digital inequalities in education.

Nevertheless, the gap between politically initiated implementation processes in education and research endeavors remains wide and difficult to bridge. The reason for the distance between frontline research and practice can partly be found in the “urgency” of the matter. In developed countries, politicians strive for fast solutions—the digitalization must be “fixed quickly”, and digitalization is seen as a solution to decreasing educational results and to increasing educational costs—digitalization is a “quick fix”. The reflective dimension, where historical contexts and subject-specific aspects are integrated in situated educational implementation processes, is often aborted, because the time to try out sustainable practices based on research is seldom sufficiently incorporated in implementation plans.

The unity of the studies in this volume contributes to insights into various doings with digital tools and resources inside and outside institutional walls, where different sorts of learning are taking place. Through methods, such as surveys, observations, interviews, debriefing sessions, as well as semantic, semiotic, and discursive analyses, a range of heterogeneous data sets are penetrated, such as policy documents, communication across and within sites, and literary production in different genres and media. The selections of data and the methods used to retrieve, manage, and analyze empirical findings are principally digital, which shed light into the increasing dominance of digital doings in research, as well as in learning. Analogue–digital–virtual–real dimensions as a *continuum*, where tools, resources, and doings are linked and transferred across a multitude of platforms, appears through these approaches as the fundament for educational research with and about digital tools and resources.

In Chap. 12, “Handling Languageing During Empirical Research: Ethnography as Action in and Across Time and Physical-Virtual Sites”, Sangeeta Bagga-Gupta, Giulia Messina Dahlberg and Annaliina Gynne describe a theoretical ground for research processes where languageing in and between spaces for learning is at the center of investigation. According to the authors, (n)ethnography as an approach and a method in the study of *doings* and *languageing* practices in various learning situations requires of the researcher to choose spaces and moments for a specific observational

purpose, as well as representational techniques, and to be able to take on different roles during the research process. The complexity of these activities is reinforced through the analogue–digital interconnectedness of sites and spaces where human communication is present. Moreover, languaging activities in current reality are multilayered, simultaneous, and linked. The chapter also highlights the multilingual aspect, which includes different language varieties within one data set, as well as different modes for languaging, such as gestures and facial expressions. This fluidity of languaging practices avoids attempts of capturing ongoing communication in fixed categories and models. The challenge here is, to some extent, to elaborate methods and representational techniques for illustrating precisely this fluidity.

These features tend to reveal the close connection between human communication as such and the tools used for communicating. The languaging activities reflected in the chapters are intertwined with tools that work, either as a source of languaging production, or as a support mechanism to the most primary tool, which is human language itself. The data in the volume highlight implicit norms and hegemonies inscribed in language use worldwide, which also affects the construction of research. Therefore, the authors observe the necessity for multidisciplinary research endeavors in the field of virtual sites, languaging, and learning, which has the potential to regulate and refine the research process. Frontline research in literary and media studies comes into play in languaging activities in these outlined contexts, in order to highlight cultural and identity positionings that go beyond established categories of nation-states, monoculturalism, centers, and peripheries, or elitist and popular expressions. These disciplinary fields engage with transformation and movement of various contents across sites and cultures, and less with the naming of categories, even though this strand persists as a counterpoint in the respective research fields.

Finally, the facility with which we can observe, retrieve, compare, and reject heterogenous data through digital tools and resources calls for an intensification of ethical discussions between researchers. Respect and integrity are concepts that are reactivated in digital environments where identity, as well as the personal and the public, are ambiguous and

changing. An absolute awareness of who we are as researchers in the range of settings where we move in and out, often without settling or even engaging fully with the situated activities, is arduous to acquire. Nevertheless, the meta-position that the researcher is bound to, even in action and participative research, need to be negotiated from different angles and with representatives from different disciplinary fields.

The pace with which digital technologies for communication, creation, collaboration, and information are appearing and disappearing generate unstable conditions for learning, specifically in language, literacy, and literature areas, since these fields are dependent on how humans communicate, connect, produce, consume, and understand language and languaging artifacts. The studies in this volume bare witness to how explorative research on virtual sites in society paves the way for raising critical issues regarding ever-changing learning conditions in a digitalized and media-dense society.

## References

- Bolter, J. D., & Grusin, R. (1999). *Remediation: Understanding New Media*. Cambridge, MA: MIT Press.
- Castells, M. (1996). *The Information Age: Economy, Society and Culture. Vol. 1 The Rise of the Network Society/Manuel Castells*. Malden, MA: Blackwell.
- Castells, M. (1997). *The Information Age: Economy, Society and Culture. Vol. 2 The Power of Identity*. Malden, MA: Blackwell.
- Castells, M. (1998). *The Information Age: Economy, Society and Culture. Vol. 3 End of Millennium*. Malden, MA: Blackwell.
- Castronova, E. (2005). *Synthetic Worlds: The Business and Culture of Online Games*. Chicago: University of Chicago Press.
- Davidsson, P., & Thoresson, A. (2017). *Svenskarna och internet 2017*. Internetstiftelsen i Sverige, IIS. Retrieved May 14, 2019, from [https://internetstiftelsen.se/docs/Svenskarna\\_och\\_internet\\_2017.pdf](https://internetstiftelsen.se/docs/Svenskarna_och_internet_2017.pdf)
- Gibson, W. (1984). *Neuromancer*. New York: Ace Book. Retrieved May 20, 2019, from [https://archive.org/stream/NeuromancerWilliamGibson/Neuromancer%20-%20William%20Gibson\\_djvu.txt](https://archive.org/stream/NeuromancerWilliamGibson/Neuromancer%20-%20William%20Gibson_djvu.txt)
- Hatavara, M. (2015). Documenting Everyday Life. Mind Representation in the Web Exhibition. In M. Hyvärinen, M. Mäkelä, F. Mäyrä, & M. Hatavara

- (Eds.), *Narrative Theory, Literature, and New Media: Narrative Minds and Virtual Worlds* (pp. 278–294). New York: Routledge.
- Heath Brice, S. (1983). *Ways with Words: Language, Life, and Work in Communities and Classrooms*. Cambridge: Cambridge University Press.
- Heim, M. (1987). *Electric Language: A Philosophical Study of Word Processing*. New Haven: Yale University Press.
- Heim, M. (1993). *The Metaphysics of Virtual Reality*. New York: Oxford University Press.
- Heim, M. (1998). *Virtual Realism*. New York: Oxford University Press.
- Internet Society. (2017). 2017 Internet Society Global Internet Report. Retrieved May 14, 2019, from <https://future.internetsociety.org>
- Lindberg, Y. (2013). De la Belle époque à Second Life. EPU (Cyper).
- McLuhan, M. (2003 [1964]). *Understanding Media: The Extensions of Man*. Critical ed. Corte Madera, CA: Gingko Press.
- Meadows, M. S. (2008). *I, Avatar: The Culture and Consequences of Having a Second Life*. Indianapolis, IN: New Riders.
- Merleau-Ponty, M. (1967). *Phénoménologie de la perception*. Paris: Gallimard.
- Murata, J. (2003). Creativity of Technology. An Origin of Modernity. In J. Misa Thomas, P. Brey, & A. Feenberg (Eds.), *Modernity and Technology [Elektronisk resurs]* (pp. 227–256). Cambridge, MA: MIT Press.
- SKL, Sveriges kommuner och landsting. (2019). *Nationell handlingsplan för digitalisering av skolväsendet.: #skolDigiplan*. (2019). Stockholm: Sveriges kommuner och landsting. Retrieved May 19, 2019, from <https://webbutik.skl.se/sv/artiklar/nationell-handlingsplan-for-digitalisering-av-skolvasendet.html>
- Toffler, A. (1980). *The Third Wave*. London: Collins.
- Turkle, S. (1995). *Life on the Screen: Identity in the Age of the Internet*. New York: Simon & Schuster.
- Warschauer, M. (2002). Reconceptualizing the Digital Divide. *First Monday* 7(7). Retrieved May 14, 2019, from <https://firstmonday.org>
- Warschauer, M., & Matuchniak, T. (2010, March). New Technology and Digital Worlds: Analyzing Evidence of Equity in Access, Use, and Outcomes. *Review of Research in Education*, 34, 179–225.
- Zhai, P. (1998). *Get Real: A Philosophical Adventure in Virtual Reality*. Lanham, MD: Rowman & Littlefield.

# Index<sup>1</sup>

## A

- Action roll-playing game (ARPG),  
124
- Actor-Network Theory (ANT), 29,  
30, 52
- Adaptation, 154–156, 160, 162,  
235, 239, 390
- Adoption model, 125, 127, 130
- Affinity space, 281, 282, 286, 289,  
361
- Affordance, 16, 30, 50, 64, 83, 86,  
87, 122, 125, 127, 145, 148,  
212, 278, 285, 297–299, 301,  
306, 307, 316–318, 321, 332,  
345, 348, 369
- Agency, xiv, 9, 29–37, 45–50, 124,  
394
- Amateur, 101, 165, 388
- Amor and Eros, 130–145
- Analogue, xii, xv, 4, 123, 124, 127,  
132, 154, 155, 158, 175, 334,  
341, 345, 349, 354, 363, 369,  
384, 385, 388–390, 397
- Analogue-digital-virtual-real,  
388–390, 397, 398
- Analytical, xi, xii, 9, 11–13, 21,  
29–36, 81, 103–105, 159,  
246, 249, 305, 332, 333, 335,  
339–344, 346, 350, 352, 356,  
357, 359, 361, 364, 368, 369,  
371, 384
- Application Programming Interface  
(API), 243, 247
- Argumentation analysis, 104, 105
- Argumentation patterns, 189
- Argumentative genre, 200
- Art, 48, 146, 388
- Artist, 187, 387

---

<sup>1</sup> Note: Page numbers followed by ‘n’ refer to notes.

- Asynchronous interaction, 278  
 Atomistic perspective, 99  
 Audiographic conferencing, 283  
 Austen, Jane, 154–156, 160–162, 164–176, 390  
 Authenticity, 63–87, 221, 222, 230, 277, 394  
 Author, 14, 33, 76, 85, 122, 132, 139, 144, 145, 166, 169, 187, 190, 239, 348, 352  
 Avatar, 123, 129, 132–147, 285, 288, 302, 318, 389  
 Awareness raising, 209, 210, 215, 219, 230–235
- B**
- Big data, 288, 391  
 Body, xi, xv, 8, 21, 31, 32, 48, 49, 182–185, 269–289, 331, 332, 346, 392–396  
 Book, vii, 108, 130, 133, 169, 200  
 Bots, viii, 182, 183, 188, 199, 288, 390  
 Boundary, 21, 297, 334, 335, 342–348
- C**
- Chaining, 141, 346, 350, 352–357, 360–361  
 Character, vi, 19, 35, 36, 49, 50, 53, 100, 103, 117, 122, 127, 139, 141–145, 157, 161–172, 174–176, 190, 211, 213, 220, 234, 251, 264, 265, 297, 308, 311, 313–317, 357, 362, 389  
 Character dislocation, 157, 164, 171, 172  
 Collaboration, 99, 124, 126, 143, 144, 181, 234, 280, 367, 387, 400  
 Collaborative research, 367  
 Collective identity, 254, 255, 257, 263, 264  
 Communication, vi, xii, 4, 5, 10–12, 16, 30, 31, 40–42, 48, 63, 65–68, 75, 81, 84, 126, 130, 131, 133, 134, 137, 140, 141, 144, 145, 148, 175, 183, 200, 247, 270, 271, 274–278, 280, 283–285, 289, 299, 306, 332–336, 340, 347, 349, 350, 358, 361, 370, 384, 386, 388–392, 394, 398–400  
 Community of practice, 271, 273, 274, 282, 286  
 Competitive/collaborative styles, 217–219, 221, 222  
 Computational content analysis, 247–248  
 Computer-mediated communication (CMC), 12, 81, 83, 85  
 Continua, 5, 12, 20  
 Contra argument, 105, 107, 113  
 Conversational domain, 158, 159, 161, 166, 173–175  
 Corpus linguistics, 182  
 Credibility, 105, 108, 112, 167, 176, 185, 224  
 Critical discourse analysis (CDA), 29, 33  
 Cross-linguistic comparison, 360  
 Cross-over, 157, 168, 169  
 Cyberculture, 183  
 Cyber security, 288



## D

Debriefing, 210, 213, 215, 218, 219, 224, 228–233, 235, 398

Deep approach, 99

Demotion process, 98, 101–103, 106, 107

Design, viii, xiii, 33, 36, 37, 39, 45, 47, 48, 124, 128–130, 147, 148, 210, 212, 213, 215, 219, 222, 225, 226, 228–230, 235, 246–249, 295, 296, 298–301, 303, 306, 314, 315, 317, 318, 320, 321, 354, 358, 386, 387, 390, 396, 397

Digital, vi, 3, 29, 74, 121, 154, 182, 207–235, 269, 295, 332, 384

Digital agenda, 37, 38, 46–48

Digital competence, 17, 29, 40–42, 44

Digital competence discourse, 37, 39–45, 48, 50–52

Digital divide, 385, 386

Digitalization, xi–xiv, 5, 17, 19, 20, 21n4, 27–58, 129, 147, 157, 158, 333, 370, 385, 398

Digitalized, 3, 17, 41, 42, 131, 359, 384, 386, 388, 400

Digital literacy, 38, 182, 199, 287

Digital manipulation, 209, 212

Digital mashup or remixing, 301

Digital resource, 123–126, 360, 385, 397

Digital shift, 123, 127, 131, 391

Digital tool, xii, xv, 8, 21, 43–45, 123–125, 132, 148, 229, 271, 289, 384–391, 393, 395–399

Digitized, 128, 384, 396

Disembodiment, 282–286

Disinformation, 101

Doings, 11, 383–386, 394, 395, 397, 398

Downgraded article, 98, 106, 114

Dramaturgical framing, 246, 249–252, 255–262

E

Edit wars, 104

Embodiment, 11, 331, 332, 354, 361, 395

Emplotment, 155, 164

Enculturation, 7

Encyclopaedic genre, 100, 116

Encyclopedia, 99, 181–185, 190, 388, 391

Engagement, xiv, 21, 98, 106–113, 126, 129, 136, 143, 146, 147, 154, 160, 174, 247, 248, 258, 271, 300, 321, 334, 364, 366, 369, 370

English as a lingua franca (ELF), 63, 66–71, 74–81, 86, 87

Epistemology, 339, 362, 372

Eroticisation, 157, 164, 171, 172

Ethnography, xv, 17, 331–375, 398

European Commission, 28, 29, 38, 41, 46–48, 51, 242

European Union (EU), 28n2, 30, 37, 38, 68

Expanding the timeline, 157, 168, 169

Experiential, 209, 228, 362, 394

Expertise, xiii, 100, 101, 318

- F**
- Facebook group, 244, 247, 249, 251, 255–257, 263–265
  - Faction, 156, 161
  - Factual error, 112
  - Fan fiction, 155–157, 161, 163–166, 171, 173, 175
  - Featured Article (FA), xiv, 97–117
  - Fiction, vi, xi, 122, 123, 132, 133, 141, 145, 146, 148, 155–157, 161, 163–166, 170, 171, 173, 175, 387, 388, 390
  - Fieldwork, xv, 333, 334, 336, 340, 341n6, 342–348, 352, 358, 362–369, 371
  - Flow, vii, 16, 18, 48, 50, 133, 278, 289, 351, 352
  - Framing, xii, xiv, 5, 7, 11, 30–36, 49, 69, 128, 215, 230, 246, 249–252, 254–256, 258–262, 334–339, 342–348, 394
- G**
- Game worlds, 123, 129
  - Gee, James, 34, 281
  - Gender, 52, 159, 162, 165, 167, 168, 170, 172, 173, 208–210, 212, 213, 215–219, 221, 224–228, 230, 234, 235, 281, 366, 393, 394
  - Genre, vi, xiv, 100, 105, 110, 113, 116, 122, 123, 133, 139–141, 145, 146, 156, 157, 164, 166, 168, 176, 197, 200, 388, 398
  - Genre shifting, 157, 164, 165, 168, 169, 175
  - Gesture, 48, 140, 142, 283–285, 331, 332, 395, 399
  - Global Brain, 185
  - Global-North, 3, 12, 14, 336, 370
  - Global-South, 3, 339
  - Glocal, 12
  - Glocality, 12, 13
  - Goffman, Erving, 31, 243, 245, 246, 250, 252–255, 257, 258, 262–264, 271, 272, 283, 285
  - The Government of Sweden, 28, 29, 35, 38–40, 42, 44–47, 50, 52
- H**
- Holistic perspective, 125
  - How to learn, 158
  - How to mean, 158, 173–177
  - Hutcheon, Linda, 272, 286
  - Hype cycle, 128
- I**
- Identity, vi, xii, xv, 7, 11, 34, 65, 74, 78, 132, 144, 145, 159, 170, 172–174, 183, 208, 209, 211, 213, 219, 226, 241, 244–246, 249, 254–257, 259–261, 263, 264, 269–289, 334, 342, 349, 364, 391–397, 399
  - Identity approach to second language acquisition, 274
  - Imagined communities, 274, 275
  - Imagined identities, 274, 275, 289
  - Immersion, 147, 288, 289
  - Inaccuracy, 112
  - Informal learning, 98, 174, 176, 288
  - Information and Communication Technology (ICT), 28, 40, 42, 46, 51, 53

- Information technology (IT), 14, 15,  
27, 28, 28n1, 35, 38, 41,  
46–48, 52
- Inner Circle, 64–66, 70, 78, 81, 86
- Inscriptions, xiv, 27–58, 387
- Interaction, viii, 4, 6, 10, 12, 13,  
30–32, 49, 53, 64, 65, 67, 74,  
84, 86, 126, 130–134, 140,  
141, 144–148, 174, 182, 183,  
208, 234, 242–249, 252, 257,  
259, 263–265, 270–273, 275,  
277–280, 282–284, 287, 296,  
299, 300, 302, 322, 332, 334,  
336, 344, 350, 354, 355, 357,  
358, 364, 369, 370, 384, 389,  
391, 392, 394
- Interactive fiction, 123
- Intercultural learning, 280
- Interpretations, 65, 103, 143, 157,  
160, 161, 163, 166, 173, 211,  
213, 215, 216, 231, 234, 390
- Intersectionality, 159
- Intersections, xii, 31, 32, 49, 147,  
159, 165, 170, 393
- Intertextuality, 176
- In the wild, 5, 11, 319, 389
- Investment, 20, 274, 275, 287, 289
- K**
- Knowledge, vii, xi, 7, 14, 17, 21, 27,  
29, 33, 34, 41, 42, 44–46, 69,  
74, 97–101, 103, 112–115,  
126, 127, 145–148, 156, 159,  
163, 172, 174–176, 181, 182,  
185, 199, 211, 234, 235, 244,  
253, 254, 270, 271, 279, 281,  
282, 287, 298, 300, 307, 321,  
363, 371, 384, 386, 388, 390,  
391, 396, 397
- Knowledge-in-action, 157, 158, 160,  
165, 173, 174, 176, 177
- Knowledge-out-of-context, 157,  
160, 161, 176
- Kristeva, Julia, 272
- L**
- La Belle époque, 386, 387
- Language, vi, 8, 31, 45–47, 63–90,  
98, 122, 164, 181, 189, 208,  
247, 269–289, 295–322, 331,  
386
- Language anxiety, 277
- Language attitudes, 211
- Language norms, 66, 82
- Language practice, 63–90, 275
- Language variety, xv, 11, 332, 334,  
334n2, 335, 337–339, 337n5,  
341, 342, 347–350, 352–354,  
358–362, 367, 370, 371, 373,  
399
- Languaging, vi, viii, xii–xiv, 11,  
30–36, 45, 46, 49, 122, 135,  
141, 181–200, 331–375, 384,  
388–391, 393, 395, 396,  
398–400
- Learning, vi, xi, 3–21, 27, 63–90,  
98, 121, 155, 181–200, 212,  
241, 269, 295–322, 332,  
383–397
- Learning ecology, 271, 289
- Literacy, xii, 38, 41, 147, 182, 199,  
200, 285, 287–289, 332,  
335, 356, 357, 386–391,  
397, 400
- Literary competences, 121, 122, 127,  
130, 133, 139, 389
- Literary skills, 389
- Literary theme, 130–145

- Literature, xii, 75, 102, 108, 112,  
121–148, 154, 176, 190, 230,  
243, 298, 321, 331, 332,  
386–391, 397, 400
- Locke, John, 271, 272
- Love, 131, 132, 135, 136, 139, 140,  
143–146, 171, 172
- M**
- Makeover, 156, 157, 160, 161,  
163–173, 175
- Many-ways-of-being, 11
- Massively multiplayer online games  
(MMOG), 124, 281
- Matched-guise, 209–215, 226, 232,  
235
- Media, v, vi, xiv, xv, 11, 12, 68, 69,  
74, 121, 122, 141, 146, 147,  
153–158, 161, 163, 164, 173,  
175, 176, 187, 275, 276,  
287–289, 384, 390, 391, 398,  
399
- Mediated action, 6, 30
- Mediation, vi, 131, 132, 141, 158,  
175, 262, 283, 287, 297, 391
- Memrise*, 296, 297, 301–316,  
319–322, 396
- Meta-communication, 33, 100
- Method development, 210,  
215–233
- Methodology/methodological, xi, xii,  
xv, 9, 12, 13, 21, 29–36,  
70–72, 133, 209–213,  
246–249, 307, 332, 333, 344,  
350, 370, 372, 383–400
- Migration, v, 392
- Misinformation, 101
- Mobile learning, 280, 283, 297
- Mobility, xii, 4, 15, 16, 184, 276,  
296–299, 320, 321, 358
- Modalities, 8, 10, 11, 31, 33, 45–47,  
49, 50, 122, 333–335, 334n3,  
337–339, 337n5, 341, 342,  
347–362, 348n8, 367, 370,  
371
- Modes, vi, viii, 33, 37, 45, 48, 50,  
142, 143, 146, 224, 277, 278,  
284, 285, 288, 296, 299, 300,  
303, 305–315, 317–319, 321,  
322, 355–357, 396, 399
- Monolingual, 200, 332, 336, 338,  
349–351, 355
- Multidisciplinary, 116, 334, 343, 399
- Multilingual, xiv, 181–200, 296,  
301, 337, 386, 399
- Multilingual culture, 182–184
- Multimodal ensemble, 296, 300,  
306, 307, 315, 317
- Multiplayer online role-playing  
games (MMORPGs), 278,  
285, 286
- Multi-sited, 334, 335, 340, 341,  
343, 344
- Multi-user virtual environment  
(MUVE), 123
- N**
- Naming, 84–86, 399
- Native speaker, 65, 66, 68, 69, 72,  
75, 78, 79, 81, 83, 86
- Net-based education, 64
- Netnography, 333n1
- Nexus Analysis (NA), 29–36, 51–53
- Non-native speaker, 65–67, 69, 70,  
75, 78, 80
- Non-verbal communication, 283, 284

Normative, xii, xiii, 20, 21, 171,  
208, 216, 371, 388  
Norms of conduct, 250, 252–263  
Norton, Bonny, 272–275, 286  
Notability, 186, 187

## O

Online, viii, xiii, xv, 4, 8, 9, 12, 16,  
18, 19, 36, 39, 64, 78, 81, 82,  
84, 97, 99, 123, 124, 127,  
129, 132, 163, 175, 181, 183,  
231, 234, 235, 242, 244, 245,  
247, 270, 271, 277, 278,  
281–284, 286–289, 297, 298,  
302, 320, 344, 345, 350, 356,  
357, 362–364, 367, 369, 370,  
393–397  
Online community, 244, 271, 287  
Online identity, 183, 270, 394  
Ontology, 368  
Oral, xv, 8, 224, 332, 334n3, 338,  
349–351, 354, 355, 357–361,  
370  
Oral communication, 349  
Orchestration, 317–319, 322

## P

Participation, vii, viii, 4, 6, 8, 12, 19,  
20, 97, 124, 147, 243–245,  
273, 281, 282, 301, 316, 320,  
335, 340, 358, 386, 388  
Pedagogic work, 296, 305–315, 317,  
321  
Performance, xv, 74, 78, 81, 130,  
140, 146, 153, 241–265, 272,  
280, 284, 287, 339, 358  
Persona, 272, 365, 395

Personal front, 273, 283, 284  
Place, xi, 7, 9, 12, 20, 31, 32, 49, 51,  
64, 68, 136, 137, 142–145,  
148, 157, 160, 162, 164, 168,  
172, 174, 176, 182, 183, 186,  
210, 215, 228, 251, 256, 270,  
271, 273, 274, 276–286, 288,  
289, 345, 346, 354, 357, 363,  
388, 392, 393, 398  
Plot, vi, 144–146, 164, 166, 167,  
170–173, 175  
Poet, 6, 387  
Policy documents, vii, 29–31, 33,  
35–40, 44, 45, 47–53, 187,  
385, 397, 398  
Positioning, xii, 7, 11, 65, 140, 284,  
298, 335, 362–368, 393, 399  
Postmodernism, 272  
Poststructuralism, 271–272, 286  
Pride and Prejudice, 154–176, 390  
Pro argument, 105, 107  
Professional identity, 244–245, 254,  
256, 260, 263, 264, 394, 395  
Programming discourse, 37, 40–45,  
48, 51  
Public Consultative Document  
Analysis (PCDA), 29, 33, 36

## R

Reading, xiv, 14, 34, 122, 147, 154,  
155, 159, 160, 162, 169, 171,  
173, 176, 276, 303, 315, 317,  
358, 389  
Reading path, 303, 315, 317  
Récit, 122, 145  
Reduced form, 71, 81–84, 86  
Reflexivity, 334, 337, 362, 366,  
368–369

- Refocalisation, 157, 164, 169, 170  
 Remake, 156, 157, 160–163, 168, 173, 174  
 Remedial interchanges, 246, 252, 257–259, 263, 264  
 Remedial work, 258, 259  
 Representation, vi, 17, 100, 103, 121, 123, 128, 131, 136, 155, 169, 223, 299, 321, 333–335, 337, 339, 349–363, 366–368, 371, 392, 395  
 Representational techniques, 333, 334, 348, 371, 399  
 Re-presentations, 154–156, 158, 160, 166, 173–176  
 Responsibility, 42, 48, 116, 117, 253, 255, 264  
 Revision history, 103  
 Rhetoric, 105, 106
- S**
- Scales, xii, xiv, 29–31, 37, 38, 49, 52, 53, 188, 192, 193, 220, 223, 226, 227, 232, 233, 242, 256, 348, 350, 370, 371  
 Science, v, vi, xi–xv, 6, 42, 156, 158, 187, 190, 228, 249, 258, 277, 332, 335, 352, 369, 370, 383–400  
 Scientist, vi, 128, 387  
 Scollon, Ron, 29, 31–35, 38, 46, 48, 53, 271, 273  
 Scollon, Suzie Wong, 29, 31–33, 35, 38, 46, 48, 53, 271, 273  
 Second Life, xiv, 121–148, 212, 280, 285, 288, 389  
 Self, 65, 135, 250, 255, 261, 271–273, 277, 285  
 Situated, vii, xiii–xv, 6, 21, 140, 141, 147, 159, 163, 249, 264, 265, 274, 282, 283, 317, 335, 339, 341, 369, 370, 398, 400  
 Situated learning, vii, 282, 283  
 SKL, 397  
 Skolverket, 35  
 Social interaction, 31, 182, 272, 283, 287, 296, 300, 302, 364, 384  
 Social media, xv, 69, 182, 187, 241–265, 281, 288, 345  
 Social media groups, 241–265, 394  
 Social practices, viii, xiii, 6–8, 11, 20, 273–276, 286, 289, 336, 339, 340, 349, 350, 363, 366, 369  
 Social semiotics, 271, 300–301, 306, 315, 321  
 Social support, 243–247, 255–257, 263, 264  
 Social theory, 6, 13, 275  
 Sociocultural, 30, 49, 271, 273, 335, 336, 338, 339  
 Sociolinguistics, viii, 81, 208, 209, 211, 212, 217, 219, 394  
 Source text, 154, 156, 157, 159, 161–164, 166, 170, 171, 173, 174  
 Spaces, 3–21, 30, 32, 50, 98, 123, 124, 126–129, 131, 133–136, 140, 141, 145, 146, 148, 154, 158, 159, 161, 163, 171, 173, 174, 192, 218, 219, 221–224, 228, 264, 269–289, 298, 302, 308, 311, 317, 318, 321, 333, 335, 337, 339–353, 355, 357–359, 361, 363–367, 369–371, 385, 392, 395, 396, 398, 399

- Spatiality, 271, 279–282, 289, 343  
 Statement, 50, 100, 103, 104, 109,  
 114, 115, 215, 220, 223, 226,  
 229, 254, 260, 262  
 Stereotyping, viii, xv, 207–235, 393,  
 394  
 Story event, 121–148, 389  
 Storytelling, 131, 132, 145, 390  
 Storyworld, 155, 156, 160–164,  
 167, 172–176  
 Subaltern voices, 159, 174  
 Subjectivity, 272, 273, 275  
 Supportive interchanges, 243, 246,  
 252–257, 260, 263, 264  
 Supportive work, 244, 252, 253,  
 255–257  
 Surface approach, 99, 115  
 Sweden, v, xiii, xiv, 8, 17, 27–58, 64,  
 69, 71, 74, 108, 111, 113,  
 153, 154, 187, 223, 242, 340,  
 341, 370, 385  
 Swedish Digitalization Initiative  
 (SDI), 29, 35, 36, 38, 39,  
 52  
 The Swedish National Agency of  
 Education, 35, 44
- T**
- Talk page, 98, 100, 102–107, 109,  
 111–114, 388, 390, 391  
 Teachers, xiv, 7, 9, 15–17, 20,  
 27–58, 68–70, 75, 81, 83–86,  
 125–127, 129, 154, 165, 182,  
 209, 220, 230, 234, 241–265,  
 270, 271, 274, 275, 277–281,  
 285, 287, 289, 296, 299, 301,  
 319, 321, 350, 353, 357, 358,  
 364, 394  
 Team performance, xv, 241–265  
 Technology, v, vii, xii, 3–21, 28, 29,  
 41–44, 121, 122, 124–129,  
 132, 146–148, 174, 175, 190,  
 209, 269–271, 275–289,  
 295–297, 299, 301, 315,  
 319–321, 334, 344, 353, 362,  
 369, 383, 384, 386–389, 391,  
 392, 395, 396, 400  
 Telecollaboration, 280  
 Text universe, viii, xiv, 153–177  
 Time, xii, xiv, xv, 4, 5, 10, 12, 13,  
 15, 16, 18, 19, 27–58, 68, 71,  
 74, 81, 98, 111, 117, 123,  
 124n1, 126–129, 134, 135,  
 141, 142, 144, 153, 154, 162,  
 166, 167, 169, 172, 184, 187,  
 193, 194, 212, 230, 231, 234,  
 235, 251, 269–289, 296, 300,  
 303, 307, 331–375, 385, 386,  
 395, 396, 398  
 Tools, 4, 6, 8, 9, 11, 13, 16, 20, 21,  
 27, 28, 30, 36, 41–43, 45,  
 122, 126–130, 135, 144,  
 145, 148, 157, 158, 166,  
 171, 175, 176, 182, 199,  
 200, 226, 230, 231, 233,  
 269, 277, 278, 283–285,  
 288, 289, 306, 318, 332,  
 334, 336n4, 338, 339, 344,  
 352, 354, 355, 357, 358,  
 370, 383–390, 393, 395–399  
 Trajectory, 5, 10  
 Transcription, 308, 354–356, 358,  
 360, 361  
 Translation, 36, 110, 115, 165, 174,  
 249, 311, 315, 337, 338, 360,  
 390  
 Transmedial, 155, 163

## U

Unit of analysis (including units-of-analysis), 6, 31, 53

## V

Variation novel, 154–156, 163, 166–171, 173

Verifiability, 103, 105, 107–108, 111, 114, 185, 199

Video conferencing, 284, 345

Virtual, vi, xii, 4, 63–90, 98–100, 121–148, 155, 181–200, 212, 242, 270, 295, 334, 388

Virtual environment, 12, 122, 123, 279, 285

Virtual learning environment (VLE), 123, 126, 301, 318, 319, 321, 322

Virtual learning reality (VLR), 123

Virtual learning site, viii, xiii, 20, 63–90, 155, 160, 165, 174–176, 181–200, 242, 296, 298, 319, 321, 334

Virtual Reality (VR), 16, 124, 148, 392, 393

Virtual space, xv, 8, 126, 131, 133–136, 141, 146, 148, 163, 264, 281, 282, 286

Virtual worlds, viii, 4, 121–148, 212, 278, 280, 281, 285, 286, 288, 289, 346, 349, 389, 392

Visually oriented, 352, 354

Visual orientation, 348

Voice-morphing, 212, 222

## W

Wiki-encyclopaedia, 97

Wikipedia, viii, xiv, 97–117, 181–200, 388–391

Writing, 16, 20, 28, 48, 68, 81, 102, 107, 116, 146, 147, 171, 182, 190, 254, 260, 276, 303, 305, 308–311, 315, 316, 318, 321, 332–334, 348, 351, 362, 363, 367, 368, 389, 390

Written, 8, 31, 43, 48, 64–66, 69, 87, 98, 111, 113, 117, 122, 132, 136, 140, 163, 165–169, 185–187, 190, 200, 278, 283, 285, 311, 332, 338, 348–350, 352–355, 357–359, 361, 362, 370

Written communication, 11, 285, 332, 358, 361