

Chapter 7

Toward a Semiotics of Digital Places

Roberto Maggi

Abstract Information architecture is an applied art that solves the “problems arising when we need to manage, produce and consume large amount of information” (Resmini, Problemi dell’Informazione, 38:63–76, Resmini 2013). Information architecture reflects upon complex systems of signs, understanding their mutual relationships and finding the best way to organize them. This chapter introduces a number of theoretical tools from semiotics that are relevant for information architecture, in particular for tracing cultural phenomena down to the specific information architectures of specific digital places, and reflects upon the role of information architecture in the creation of a sense of place in digital space. A definition of digital place and of the forces acting upon it is offered, extended to cross-channel ecosystems, and then applied to understand the way we inhabit platforms such as Facebook and Twitter. Key factors in the creation of place information architecture impacts upon are subsequently introduced, and then a few conclusive remarks close the chapter.

7.1 What Is a Digital Place?

The term *place*, as a linguistic first, usually indicates a limited area that stands in opposition to the wide unlimited area that is *space*.

In humanistic geography, space is the wide open and continuous area of action that individuals understand by experiencing movement, while place is a discrete space devoted to the ideas of staying, resting, and engagement, aspects that all relate to “value” and a “sense of belonging”, what Yi-Fu Tuan called *topophilia*, “the affective bond between people and places” (Tuan 1974, p. 4). A place is where a person dwells, independently from scale (e.g. Central Park or my favorite chair in the living room). As cultural geographers argue, the bond between an individual and a place can also be partly or totally influenced by the surrounding socio-cultural forces (Cresswell 2004).

On the other hand, the phenomenological approach of scholars such as architect Christian Norberg-Schultz frames places as the settlements where man gathers,

R. Maggi (✉)
PoiStory, Bologna, Italy
e-mail: rob.maggi@gmail.com

tames and reproduces the natural forces of the surrounding world—gravity, the cycles of the sun—“freeing meaning from the immediate situation and making it cultural” (Norberg-Schultz 1979, p. 17). According to Norberg-Schultz the creation of an artificial place gives birth to a specific *genius loci*, a spirit of the site, and one people have to deal with in order to fully experience the essence of that place.

Although place can be socio-culturally influenced and intentionally designed by an instance of power, the way we interpret it is however extremely subjective (Lynch 1960) and influenced by specific navigational needs. Knowledge about a place is the result of the merging of multiple everyday experiences.

7.2 Semiotics of Places and Culture

If we want to explain the *sense* of a particular place—and understand the sense of that particular kind of places based on information that we call *digital*—we need to find a way to systematically analyze the way people interpret it. Here is where semiotics comes into play.

While other analytical disciplines usually separate what is in the realm of facts and what is representation, semiotics finds its own specificity in a third realm made of pure relational elements, called *interpretants* in Peirce’s framework, *values* in de Saussure’s, *classes* in Hjelmslev’s.

These constitute the basis on which the identities of all elements pertaining to a specific system can be defined. For example, the meaning of a word depends on the difference between that particular word and the other words of that language, that is, on the *value* that word assumes within the system: its meaning does not depend on how the word sounds nor on ideas it recalls (de Saussure 1922), it is purely semiotic.

This is also why spatiality interests semiotics: through the construction of places collectivities tell what they are. They express and represent their values, which social interactions are acceptable and which are inappropriate, how do individuals should express their identities. This process is for both their own and other groups’ benefit.

In semiotics, to study a place means to think of it as a text, as something that talks about something different from itself (Hammad 2003), identifying first which elements are the expression of which content, in order to delineate the two plans that compose any sign relation and delimit that particular spatial system. Topological semiotics (Greimas 1976; Marrone 2001; Hammad 2003) considers the expression plan the result of the interpretation—through several topological/gestaltic categories¹—of the scene being perceived. The content plan would consist instead of the narrative programs inscribed within the place-text, namely the actions that can be

¹ For example continuous/discontinuous, internal/external, open/closed, center/periphery. These possess a corresponding culturally-influenced basic meaning, for example in Western cultures the opposition “top vs bottom” is often associated to the opposition “sacred vs profane”, “internal vs external” to “secure vs dangerous”.

performed within it, including all cognitive, pragmatic and emotional modalizations acting on subjects, and the cultural values that the whole place-text implies. The meaning of a place is then equivalent to “the effective actions it produces on the subjects who get in touch with it” (Marrone 2001, p. 322).

However, semiotics also considers perception to be highly intertwined with an individual’s goals in a particular context, and massively influenced by her previous experiences and knowledge. For example, the presence of other people moving within a scene can lead me to focus on particular elements and influence my interpretation. Then, what elements are in and what are outside of “place” when considered as a formal object?

When we *interpret* a place—as well as a sign in general—we don’t merely *associate* a preexistent set of perceived elements with something else that is not present but still prefabricated (an idea, a concept). Indeed, the expression plan and the content plan of a sign are *the result* of the particular interpretation act we perform when conferring sense to that sign (Paolucci 2010, pp. 337–372). The first step of every interpretation is, in fact, to decide a so called “encyclopedic plan of pertinence”, a structured group of cultural units acting as a background that allows us to suppose that a specific “sign function” is in action. Then, while proceeding through the interpretation act, hypotheses can be rearranged, proved, or corrected until we get to a valid interpretation (at least, valid for us)². Therefore, to define a place as a text we need to *get out of it* and take into account also other “texts, speeches, sedimented representations, social practices, paths” (Violi 2009, p. 117) and all cultural elements that contribute to the overall meaning of that place.

Culture functions like an organism, where each part—every text, every social practice—lives in such close correlation with the others that a change in one single element modifies the whole semiotic system that element belongs to (Lotman 1985), in a substantial isomorphism. Furthermore, culture works by elaborating and handing down content, both synchronously—through communication—and asynchronously—through memory. Any society creates several coherent representations of itself as means to control its own functioning: these representations actually act as *self-models*, representations with specific goals that can be grouped in three classes (Lotman and Uspenskij 1975):

- a. *self-models that reproduce reality*, that aim at telling facts congruently. For example, an official encyclopedic entry;
- b. *self-models that are distant from reality*, and that aim at changing reality. For example, a religious practice that teaches compassion;
- c. *self-models that work as ideal self-consciousness*, utopian and unattainable. For example, the idea of a “pure art” not influenced by a sub-culture.

Places have a primary role in this framework not only because they are cultural texts, but especially because they are environments that allow social practices to be performed, eventually becoming self-models that frame the behaviors of those

² This point of view is supported by most semioticians, especially those who refer to the interpretative semiotics approach and Eco. For more on this and the opposing views of generative semiotics, see References.

who participate. As a matter of fact, any practice consists of a certain interaction that happens in a certain place: whether it is among people or between people and objects, a practice consists of certain activities performed in one or more settings through the concrete presence of people and/or objects (or their so called simulacral form).

How should we deal then with the relationships between a place and the cultural practices it allows? We should always try to collocate a place *within* the cultural dynamics of which it is part, by setting up *series* of significant objects (Foucault 1969; Lorusso 2010). Every place is a cultural organ in the body of society dedicated to certain socio-cultural interactions.

7.3 The Forces of Digital Space and the Hodological Turn

“We live online”. It is a common turn of phrase, and it implies a series of nontrivial facts, including the idea that *the digital is a space*, and not simply a medium. Indeed, the digital world we know is *navigable*, and by interacting with it we understand its spatial dynamics: a gesture in digital space corresponds to a topological change (Murray 2012); the organization of its areas is meaningful and reflective of orders and pertinences; maps can be created that represent the relationships between its elements.

There are forces as well, underlying this digital habitability—analogue to gravity or the sun’s cycles: its algorithmic nature; multilinearity; componibility; the possibility to be acted upon; freedom from material support.

Algorithmic Nature Digital space is based on calculus and in plenty of “good compromise(s)” to transition out of analog without much loss (Lanier 2010). Since new media, including digital spaces, is “created on computers, distributed via computers, and stored and archived on computers, the logic of a computer can be expected to significantly influence the traditional cultural logic of media” (Manovich 2001, p. 46). And while every algorithm, however complex, is mathematically defined and its unpredictability will fall short of the complexity of the “natural” world, it is still complexity that we ordinarily cannot manage. This makes it equivalent to an inspiring natural force, just like the laws of physics or gravity.

Multilinearity At the heart of digital space there is hypertextuality, what Ted Nelson defined simply as “non-sequential writing” (Nelson 1992). This means that every text in digital space provides an inversion between paradigm and syntagm (Manovich 2001, pp. 229–233): if linearity consists in an implicit paradigm entailed by the sequential nature of the syntagm, here the paradigm is made explicit and the user determines the text’s syntagm through her actions³. These free-access

³ This dynamic is also at the basis of Kirby’s idea of pseudo-modernism: “what is central now is the busy, active, forging work of the individual who would once have been called its recipient” (Kirby 2006).

alternatives allow us to follow different directions, to retrace our steps, to skip some parts or run through the same paths again at will⁴.

Componibility Hypertextuality allows to compose any number of separate objects into one single artifact. Every digital space can become a fragment of another digital space through an operation that decontextualizes it and reconfigures a part of its expression plan and of its content plan, factually changing the sign function in action. It is a semiotic movement of meanings that produces new navigable spaces.

Possibility to be Acted Upon Unlike analogical spaces, digital spaces constitutively imply the possibility to be acted upon. A forest can evolve over centuries without any implications of action on the part of human beings, but every fragment of digital space entails an active human presence.

Freedom from Material Support Since digital spaces are made of bits, they can be reallocated at will on different supports. Still, they are not immaterial, as they need to be grounded in some material support, digital, physical, or hybrid, in order to be actionable.

These forces have consequences on the way people move and interact within digital space: the algorithmic nature and the possibility to be acted upon lead designers to create algorithmically controlled environments where individuals are encouraged to perform actions. These actions are pre-coded within the system, even those that the designers had not expected.

Indeed, like a novel or a film, digital space implements a textual strategy through affordances, clues and feedbacks to drive actors within the system to perform specific cognitive actions. This strategy implies what semiotics calls a model reader (Eco 1979), namely the requirements a reader must fulfil to actualize the text's potential content: the reader indeed interprets the text on the basis of what it allows her to do (*intentio operis*), independently of the will of the empirical author (*intentio auctoris*).

Eco's theory of textual cooperation is a helpful framework: movement within a digital space ends up being perceived as pure interpretative movement rather than bodily movement. And while liminal movements have been progressively forced to a limited set (we touch a screen with our fingertips), cognitive actions in digital space and occurring through semiotic interpretative mechanisms have increased. It is important to remember that digital spaces do not need to be represented in 3D. As Murray (2012) noted, it is possible to move within verbally narrated spaces as in the early text adventure game *Zork*. Spatiality concerns the comprehension of topological relationships and is not grounded in a specific substance or support: its visual representation is nothing but one possible *interpretant* of it—in Peirce's terminology—a sign that stands for that space in one specific respect. This also introduces the important corollary that when computing becomes ubiquitous through mobile devices, kiosks, real-time displays, and sensors, each of these touchpoints

⁴ At every moment of its existence, the electronic text consists in several alternative virtual paths, which become actualized when the branches appears, and only one of them becomes realized after a choice is made (Zinna 2008).

becomes an entry point into digital spatiality, effectively creating the overlapping layer of cyberspace mentioned by Resmini and Rosati (2011).

Since movement within this fluid, complex and pervasive space is not bodily-based but has a strong cognitive connotation, how can we explain and study the act of dwelling in the digital? We need one more piece for this specific puzzle: Bollnow and his theory of space that frames spatiality as anthropological and not physical/mathematical in nature (1963). Bollnow insists that space is relative, depending upon individual, direct and personal experience. In his approach, all spatial references happen relative to a subjective system that is articulated through the focal points of an individual navigation: where we start from, and where we return. Our own house, or a hotel room when on holidays. These focal points continuously change and every new step reconfigures space in dynamic “sacred-safe” areas that we consider familiar and “profane-hostile” areas where chaos reigns. This is what Bollnow calls “hodological space”, a space of movement,

based on the factual topological, physical, social, and psychological conditions a person is faced with on the way from point A to point B (Ergenter 1992).

Space is paths and experiences along these paths and “corresponds exactly to what we perceive if we move between two different locations” (Resmini and Rosati 2011, p. 68).

Safe, in a hodological sense, is what is familiar, the units that are part of our cultural knowledge. Hostile spaces are characterized by breadth, strangeness, and distance (Bollnow 1961, pp. 4–5). *Breadth* is the absence of restrictions that attracts us, but also deprives us of all stable points and of the security to both control the world and control ourselves. *Strangeness*, instead, is what makes us feel helpless, because what we experience follows rules that we have never encountered. *Distance* is the difference between that particular space and what is “our own”, a gap that seduces us by showing an organization different from our habits, a difference that exhorts us to go beyond what we know.

The act of moving through the space is therefore just a continuous act of re-interpreting as safe or as hostile what surrounds us. Streets become networks, a safe way to move into the world and an accepted habit in Western commons sense. What lies beyond the streets is experienced from the vantage point of the “safe way”:

The motorist does not move in the surrounding country, but just on the road, and remains separated from the country by a sharp boundary. The countryside becomes a panorama which passes by (...) He can enjoy its beauty, but it is remote as a picture. His real feeling of space is that of breadth and of the speed which opens up broad spaces. This is the space he lives, his real space, not the picturesque view (Bollnow 1961, p. 5).

Like the motorist’s, our exploration of digital space moves first of all along the trails drawn by others, trails that cross the information universe following schemes that become conventional over time. From a semiotic perspective these schemes are organs of the bigger organism of culture: as such, we learn how to move within digital space by observing the behaviors of the social groups we get in touch with, and by following the movement schemes they are used to.

7.4 The Digital Place and Its Genius Loci

How can we now define what is a digital *place*?

What we are dealing with is a complex and heterogeneous space, a hostile chaos that must somehow be understood and tamed. Manovich describes it through the analogy of the database, a model that “represents the world as a list of items, and (...) refuses to order this list” (Manovich 2001, p. 225), leaving to the user the burden of choosing among the paradigmatic alternatives, as opposed to the “cause-and-effect trajectory” among elements generated when we are in presence of a *narrative*. The opposition “database vs narrative” is not just a question of “order vs disorder”, but is primarily a question of *safe streets* through which we make sense of the hostile information overload.

Therefore granting easy access to information is certainly important, but creating *a narrative set up of the pathway* is paramount. An information space where we feel safe is one that *tells* a world and does not limit itself to expressing it: it sets itself up in order to house us as individuals within it, it suggests how to move, it makes our actions easier and, above all, it causes us (good or bad) emotional reactions at each step.

Narrative is articulated through three components: an *actantial structure*, that defines narrative roles which then, at the discourse level, become characters who have specific thematic roles⁵; a procedure of *aspectualization*—divided in temporalization, actorialization (character marks) and spatialization, that on the whole express the observer’s perspective on the discourse—and that manifest the actantial structure at the discursive level; a process of *modalization* of individuals at the cognitive, pragmatic and passional level, which acts as the main narrative engine. Every action is the consequence of a relational and tensive structure⁶.

If we apply this framing to digital space, for example that of a social network, it results that we feel comfortable there because its space *talks about us*, not in the sense that it allows us to talk about ourselves, but because *it includes us as subjects and confers us a role in a story*. It tells us that we have the opportunity to change the development of a story and, exactly like in a videogame, it shows the result of every actions we perform by inscribing it in its space. Thus, the narrative set-up makes us feel at home and creates a microcosm wherein it is possible to dwell. Narration *per se* seems to be the theoretical core that allows us to identify a digital place.

Narration and place are indeed connected. A story expresses a specific topology: it has places for events to happen and it must create a spatial location for each role and every narrative program that it articulates explicitly. On the other hand, it is place that makes a story possible, and in digital places discursive aspectualization

⁵ Narrative roles differ from thematic roles. For example, Snowwhite is a child (thematic role) who is the subject (narrative role) of the story, and the seven dwarves (thematic roles) act as her helper (as a single narrative role).

⁶ For an introductory overview on the process of modalization, see Greimas and Courtés 1979, p. 209.

is mainly a spatial aspectualization⁷. Thus, a digital place is a *spatial striature* (Deleuze and Guattari 1980) that implies and suggests the pathways to cross it and escape from it, encouraging individuals to let these possibilities of action seduce them, and to live the story it exposes. Indeed, the “modal weight” of the role that an individual plays in the story can influence her actions only after a cognitive modalization, that is, only when she “wants-to-do” or “has-to-do” something.

Digital places are not cohesive, closed structures. The cultural network is what influences the relationship between individuals and places. If a digital place is indeed a place, it is because we can take part to certain social practices within it, practices that are only meaningful within the social context we live. What conditions us is the rigidity of the behavioral rules these practices follow: accepting or refusing them is something that exceeds any specific place-text, and has to do with the interpretative practices that a collectivity shares.

For example, we could choose to take revenge of an overly finicky boss making fun of her on Facebook. The technology-mediated physical distance between us and her makes some of the behavioral rules of the analogical world feel less imposing. Similarly, we use Facebook more and more to congratulate friends on their birthday because posting our wishes there charges the action with more meaning and emotional content. Maybe we share a picture. This interaction between analogical and digital practices is one of the most interesting aspect of this problem space, as it invisibly changes the *common sense*, “not what the mind cleared of cant spontaneously apprehends (but) what the mind filled with presuppositions concludes” (Geertz 1983).

Considering a digital place in terms of narration means considering it as a textual manifestation of a narration. The website or mobile app *can be* a digital place when it textualizes one or several existing *visiting practices* and *dwelling practices*. Indeed, every website sets itself and the individual visitors up as *actants* of a narrative and does a certain *mise-en-discourse* of several specific narrative programs. However, while every website instantiates some visiting practices—articulated through viewing, searching and selection pathways—we can dwell just in a few of them⁸.

However, considering digital places in terms of narration does not entail that a website or an app *is* a digital place. Digital spatiality is pervasive and thinking in terms of isolated, independent websites has little sense. In the connected world of today, individuals interact with a certain entity—be it another individual, group of peers, band, book, company, institution, topic, or event—through a plethora of different channels that allow access to the same (or parts of the same) narration, where

⁷ “Me” is present in the scene in all different semiotic modes of existence—virtual, actual, and real—thanks to input-boxes, buttons, images and icons; others are present to this “me” through their pictures and texts, positions convey meaning, and temporal flow is articulated through specific ordering/linking of content.

⁸ In the mid-1990s we could navigate the Internet but we could only dwell in our electronic mail-boxes, the one space that we could consider our own. The rest of the time we were just passing through, visiting, observing, understanding, extending our cultural knowledge, accumulating pictures of the surrounding landscape, but ultimately moving elsewhere.

we have the same role in the story and we can perform, although in different ways, the same narrative programs.

It is the complex ecosystem that includes the website and the app that manifests a digital place, not the single channel nor the sum of them. If this ecosystem requires an individual to interact with physical artifacts as well, then the digital place includes these as well. For example, the narration that takes place in the digital place “Sant’Orsola Malpighi”, a hospital located in Bologna, Italy, includes the way-finding signage within the compound, a website, a mobile app, patient and staff experiences reported on a trade magazine, conversations on social media, and in-hospital systems. Narration cannot be reduced to reside in any single artifact: it naturally spans across all of these channels (Resmini and Rosati 2011).

According to Murray (2012), when I live a first-person experience within a virtual space—experience related to me as individual and not to my avatar—I accept the reality of that world and identify myself with my digital self. Therefore, the notion of digital place can be defined as a limited area of digital space, with a name and a stable if fleeting identity, that embeds us as actants of a story articulated through a pervasive information architecture (with a specific amount of pervasiveness) across different channels, that confers us a role and that defines the grammar for those practices of interaction we can take part to.

7.5 Semiotics for Information Architecture

Let us now apply this semiotics-oriented theoretical framework to Facebook and Twitter, to understand how they respectively construct the identity of their users and their social interactions. I will try to analyze how these systems confer a thematic role to us and how they include us in the narrative they create. Pages, tools, widgets, connections, hyperlinks, these compose the scene that we need to investigate, and from our analytic perspective they are the discursive manifestations of the narrative structures in place⁹.

Facebook and Twitter have at least three formal traits in common:

- they both allow people to aggregate with individuals that are far beyond the reach of their physical social network—this implies that both systems have a specific idea of what is one’s “real” social network—parents, relatives, colleagues, close friends—and how to extend it;
- they both have at least two dimensions through which individuals can express their identities: the *synchronic dimension*—namely a representation of the self that seldom changes, and that constitutes a core group of information with which an individual can self-identify, such as a name, short bio, and profile pic—and

⁹ These are presented as introductory case studies and not as a complete analysis of a vast cultural phenomenon, for which two items only are certainly not an appropriate series. Also consider that the analysis takes into account the Italian cultural semiosphere. Some aspects might work differently—or be not pertinent—in other cultures.

the *diachronic dimension*—namely the content being posted over time, having the peculiarity of becoming a log of that person’s evolution;

- they both construct identity and social interactions along three axes: *self-telling*, ways and mechanisms to tell one’s story for both personal and public benefit; *pervasiveness*, ways and mechanisms to link a real identity to the one represented in the digital world; and *intersubjectivity*, ways and mechanisms to represent and expose the relationships between an individual and others.

We need to keep in mind that when an individual starts using one of (or both) these platforms she usually reduces the time she dedicates to other customary socio-cultural activities. This thoroughly reorganizes the value she attributes to every single activity she performs daily.

7.6 Facebook and the College-Identity Stereotype

To understand how Facebook constructs our identity, we need to observe the elements related to the task of representing ourselves and those related to the process of viewing content.

In Facebook, the former relate to what can be called the *exhibitionist narrative program*, which proceeds through the insertion of biographic information, the posting of content, and the performing of social actions such as shares or likes. Facebook works through stereotypical characteristics (movies we like, places we visit), emphasizing the traits that make us similar to what the system already knows. In the 90’s, as well as in the early versions of MySpace, identity could be expressed any way we liked, posting all of the information *we* believed was important about us on blank slate webpages.

Instead, Facebook does not only ask us to precisely declare some indicators (for example, our workplace) and not others (for example, our favorite dish or film director), but often structures choices via lists of preexisting elements and sometimes forces us to choose anyway, as with the infamous relationship entry.

From a narrative point of view, this means that if we find an adequate element to describe ourselves in the list we are positively sanctioned by the system, whereas if we cannot find any we perceive our behavior or status as not appropriate in respect to the place “normality”. *To be* on Facebook means to flatten out our personality to the stereotypical person template available on the platform: whoever is not willing to do this will not fully get in tune with the place and its *genius loci*.

This is confirmed at the discursive level, where the synchronic profile information is shown through a largely static layout that has been already chosen for us. Semiotically, adding my information and organizing it in a page is a particular interpretation of the object “identity”. In the 1990s, both the point of view¹⁰ and the

¹⁰ In semiotics, the point of view is “a set of procedures utilized by the enunciator in order to (...) diversify the reading which the enunciatee will make of the narrative” (Greimas and Courtés 1979, pp. 237–238). We discern the different points of view of the policeman and the robber, regardless

discourse perspective were the user's¹¹: Facebook limited both the point of view and the perspective: our profile page, as a place, does not talk about our identity, but rather about the particular interpretation that Facebook wants to make of it.

The diachronic dimension of identity is instead articulated through two processes: posting content, and liking or sharing social objects¹². The design principles behind these are the same we noted for the synchronic dimension. When we post something we are forced to choose a type of content, and the more specialized the content type is (for example, life events), the more the system will reward us with a visually distinctive sign of our personality on the timeline. We are led to reduce our activities to a set of standardized representations. And when we click on the *like* button—whose semantic is not articulated through a “positive vs negative” opposition but is factually equivalent to conferring a vote that can only be revoked via *un-liking*—we are reducing our affective bond to the simplified, fan-like logic of digital.

If the exhibitionist paths are evident, those of the *voyeuristic narrative program*—related to the process of viewing—are hidden and embedded in the place's *mise en scène*. Facebook constructs us as observers, and confers us a “want-to-watch” trait that is constitutive of our act of dwelling in this place. While we scroll the viewport, the interface keeps us focused on our value-object—content—by hiding, excluding or moving the remaining elements, driving our voyeurism to a climax.

All the same, the place is structured to maintain several references to us in view (profile picture, notification bar), making it clear that this area does not talk about us but it includes us as an actant of the narrative.

Through its architecture, Facebook teaches us how to move our attention quickly from a piece of content to another, implying that this is the correct way to act to fully live up to its potentiality. In response, we develop a behavioral habit that shortens the amount of time we consider necessary to understand an event. Basically, the voyeuristic narrative program trains us so that we can stay on Facebook all of the time and reduce the time/depth of our thinking and engage in a parody of American college life.

7.7 Interaction, Reputation and Beyond

To be coherent with the American college semantic isotopy, the base model of activity consists in a post followed by a judgment (the number of likes and shares) and a series of comments. As soon as I post something, say a picture, it goes on to occupy a slot in the stream and it appears on my “friends” timelines, who are included as participants in what is already an actualized conversation. To a friend, my post

of who is recounting the facts: emphasizing carefully chosen facets of “identity” at the expense of others modifies the point of view on identity itself.

¹¹ For example, compare the rigid predetermination offered by Facebook to the freedom and flexibility of earlier platforms such as MySpace.

¹² Joining groups or events works similarly.

is represented with two additional links—“Like” and “Comment”—that mark her potential presence and modalize her both with a “be-able-to-comment” and “know-how-to-comment”, entailing that she *has the right* to comment.

An interesting aspect of this social architecture is the fact that moderation—the deletion of undesired comments—is possible just *a posteriori*, after the comment has had its role into the discussion. For those who particularly care about what other people say about their posts, this aspect creates another narrative program, tasked with the *obsessive control of reputation*. This mechanism is present in different ways in all social platforms, and many of them—Twitter for example—do not allow deleting an undesired reply by another user. As a consequence, digital space has silently introduced the cultural practice of the *unavoidable dialogue* as a form of weak control system: if you aim to have a conversation that can positively promote your content/brand, then you will have to lead the discussion where you want it to go and deal with consequences, including undesired criticism.

If the strategy is simply to delete what is not in line with the desired narrative, people will notice and will react consequently. The only way to moderate successfully entails engaging others in constructive dialogue—and this is why companies or politicians have their “brand reputation” managed 24/24 by dedicated professionals.

A thorough awareness of the social dynamics of the digital place is also necessary: in 2011, then Italian Prime Minister Mario Monti (or someone from his staff) demonstrated a complete lack of understanding posting on Facebook that “(m)aking proposals is acceptable, but insulting is not. We remind you, if it is needed, that offences posted on this social network site—as in every other place—could be prosecuted.” Analog politics enters a place whose architecture is designed to go beyond real-life social hierarchies, a place that models the interactions between us and the Prime Minister in the same way it models the interactions between us and our friends or siblings, and completely misses the cue.

The model “post+comments” is also at the base of Facebook’s *groups*. Groups are used by people to aggregate around topics of interest, and derive from the forum model. While in analog life joining a group requires effort to keep up-to-date and participate, on Facebook the system keeps us informed at every changes in the stream. This has an interesting effect, for example, in the way students participate in protests: in a study about the use of digital tools in the widespread protest against the educational reform in Italy 2008–2012, Capelli and Fiocchi (2009) demonstrated that *borderline* students “who support the protest movement but do not want to go the full mile” are attracted to join the Facebook groups “because of the weaker relationship it requires” compared to joining the militant mailing-lists. Clicking “Like” or sharing posts is what they do to support the cause: the story Facebook is telling is that this way they have an active role nonetheless.

Cultural values are flattened as well: in the analog world the practice of joining a protest and the practice of joining a group to organize a film festival are considered very different things, but the digital side of those practices on Facebook is the same: joining a group, clicking on “Like”, commenting and sharing information with friends. Socio-cultural practices as diverse as exchanging notes about univer-

sity classes or arguing over a pop star meltdown are reduced, through a common information architecture, to the same practice.

7.8 Twitter and Identities on the Go

Twitter's idea of identity is instead characterized by minimalism in both the synchronic and diachronic dimensions.

Profiles allow for a short description of oneself, shorter than Facebook, but this does not mean that personality is not important, it is just expressed differently. Twitter tells us "let your tweets talk about you". This way Twitter constructs an *individual on the go* who lives her experiences and shares them in almost real-time, who describes events as a witness.

On one side, we are our authentic and sincere self, "not-able-not-to-communicate" emotions; on the other hand, we are "on-task", interpreting and signifying what we perceive, mediating the world. The temporal aspectualization—realized through the chronological ordering of tweets, the timestamps, and the adoption of specific verbal tenses when tweeting—produces an effect of sense that leads us to believe in an effective equivalence between what is posted and what is happening: that tweet is the real emotional status of that person at that moment. Geo-location often contributes to extend the pervasiveness of the digital place to the analog world, anchoring it across channels¹³.

A Twitter identity is also by and large *public*. There is no explicit notion of "private" visibility over what we can post, nor an explicit subdivision in friends' lists that receive different sets of message (such as Facebook's lists or Google+ circles). Followers are granted rights to read any of our tweets with the exception of direct messages, one on one conversations that Twitter has been trying to downplay for quite a while. Twitter constructs us as worthy to be listened to, owner of a "be-able-to-be" that sets all of us on the same level of social importance. This influences our pragmatic acting, because it implies a series of cultural limits: we feel we have the same influence than those who occupy positions in society we might consider more important and this leads us to build our diachronic identity following specific narrative programs coded in the architecture.

A first narrative entails the role of *know-it-all*: since the place confers me the right to easily intervene in every conversation, I feel it's my right to do so, and I take on the role of news reporter, commentator, politician, expert of new media, chef extraordinaire. The positive sanction coming from the fact that I am part of the discussion—and that my tweets will remain in the discussion log with the same visual weight of every other opinion—increases the effect of sense that leads me to

¹³ Note Twitter's freedom from material support: the command set still works today through SMS and it is entirely possible to change one's profile description (SET BIO <text>), send a direct message, or poke someone entirely via text messages.

confer correctness and relevance to what I am posting, especially when my tweet is shared through retweets.

The second narrative program is driven by *discretion*: as everybody will see my tweet, my words carry weight. As a beginner tweeter, my tweeting is poor and I fear being scrutinized. The panoptical nature of the place's architecture weighs on me¹⁴; as I improve, my posts will begin to be edited to support the narrative I'm weaving. As Francis Bacon would say, it seems that those 140 characters are not a blank space to be filled in, but a canvas bulging out with all our cultural suppositions.

Obviously, nobody follows one of these narrative programs strictly: there is always a degree of blending that makes our digital presence more human-like and informal. Even so, we can observe a *uniforming regularity*, analogous to Facebook's standardizing tendency, especially visible when events are live-tweeted. During these marathons, a high percentage of the tweets are just transcripts of a catchy phrase being said, implying a lack of re-interpretation that results in a conflation of our diachronic identity to someone else's.

Furthermore, by conferring us the role of "follower", Twitter modalizes us with a "wanting-to-know" that drives all our narrative programs of discovery, with the value-object here being any piece of information about the world that another user could provide us with, instead of information about that user¹⁵.

7.9 Looking for Context

Twitter's architecture of social interactions sees no opposition between an author and those who contribute with comments, but rather frames a debate among same-level speakers that reply to each other. Linguistically, the lexemes "to comment" and "to reply" activate two different semantic frames: a comment expresses the sender's opinion on a subject, opinion that could exist independently from a debate; a reply, on the other hand, entails a *dialectic* between two or more people in reference to a specific discussion.

The Twitter and Facebook models are very different. It is clearly possible to use Facebook's commenting tools to debate, and use Twitter's replies to comment, but the spatial setup of a Facebook interaction always represents a visual hierarchy that sees the main content top, in a larger area, and with a larger font size in respect to replies in the thread. This is not the case in Twitter, where messages are showed independently and indicate their status as part of a conversation with special icons

¹⁴ For an excellent, Foucault-inspired discussion of how our lives are turning into "lives in a digital panopticon", see Rayner (2012).

¹⁵ Interestingly enough, pictures have never be at the center of the Twitter publishing system, contrary to what happens on Facebook, where the use of pictures is supported as a best practice. In 2011, the Twitter user interface—both the website and its mobile counterparts—showed every image as a link within the text. As of 2013 this has changed, but the layout still renders text before any picture, preserving the design principle that textual content lies at the core of the Twitter experience.

and links. There is no *a priori* “wanting-to-do”: in order to participate, we need to actively decide to access the thread, and even then, conversations remain difficult to follow as they unfold non-linearly and the lack of an always visible representation grouping the messages increases both the dispersion of information and the cognitive load for late-in-the-game readers.

This lack of context has always been a Twitter issue, and it was worse early on when no mechanism was in place to connect tweets. Several proposals to aggregate tweets by subject or thread were discussed, and ultimately the *hashtag* proposed by Chris Messina was chosen. The now familiar syntax “# + *keyword*” derives from the language of late 1980s IRC chatrooms, a way to associate all messages from users that join a specific conversation space, so that a group is generated and preserved over time. However, Messina was not suggesting groups, but rather trying to help users understand the *context* of an ongoing conversation:

Every time someone uses a *channel tag* to mark a status, not only do we know something specific about that status, but others can eavesdrop on the context of it and then join in the channel and contribute as well. Rather than trying to ping-pong discussion between one or more individuals (Messina 2007).

Hashtags allow Twitter digital places to expand beyond the physical boundaries of a socio-cultural practice: a conference is enriched by a digital layer constituted *in primis* by the presence of people who declare to be part of that story by using its specific hashtag.

7.10 Conclusions

Digital spatiality is characterized by five traits that we have called its *algorithmic nature, multilinearity, componibility, possibility to be acted upon, and freedom from material support*. Information architects gather and ply these forces to build digital places and allow people to dwell in them by including them as actants in a story, conferring specific roles to them, and designing the socio-cultural practices they can take part in.

I maintained that in respect to this framework, services such as Facebook or Twitter configure places, and I proceeded to examine the way these two construct identities and interaction mechanisms through the three perspective axes of *self-telling, pervasiveness* and *intersubjectivity*.

The exploration of both their impact on society and the way they have progressively substituted “being here” with dwelling in a place that is not bounded by the rules of analogical space forces us to reflect on one of the most interesting questions being debated today: if—or how much—what is digital is real¹⁶.

What I proposed here is that we frame this opposition, *digital vs real*, as a dialogue between two different cultures, two different semiospheres. A semiosphere

¹⁶ “Digital is real” was the theme for the Italian Information Architecture Conference 2013.

has a so called “semiotic personality”, constituted by texts and practices, and grows through progressive exchanges with different cultures, creating “through its own efforts this «alien» that brings a different consciousness, that codes the texts and the world in different ways” (Lotman 1985, p. 124). This allows for the translation of anomalies into comprehensible normalities, but, as Lotman notes,

the introduction of alien cultural structures in the inner world of a culture involves the creation of a common language and this, in turn, requires the interiorisation of those structures. Therefore, a culture has to interiorise the alien culture inside its world (Lotman 1985).

Over the last twenty years and more, analogical and digital culture have conducted exactly this kind of dialogue, opposing and exchanging their different social structures, the articulation of personal and collective identities, their socio-cultural practices, the very idea of being here or there in space. This mutual translation between the two semiospheres created an *upper level semiosphere* where the articulation of socio-cultural phenomena is hybrid and merges what is digital with what is analogical, turning this new blend into the *de facto* “real”. This process is far from being over: the increasing amount of time we spend “online” steadily raises the impact architecting the digital has in shaping society, while the importance of analogical-only structures of culture keeps decreasing.

Information architecture is a primary contributor to the shaping of this dialogue between the digital and the real: information architects build digital places that will become self-models for the society of tomorrow. As such, information architecture has a profound impact on our social and cultural structures that is mostly expressed through its handling, good or bad, of three specific factors:

1. Digital places have the intrinsic tendency to reduce identity and social interactions to stereotypes individuals are forced to accept in order to fully dwell within the environment. This act of reducing ourselves to a social structure that is not completely equivalent to that of the analog semiosphere produces a double action/rejection mechanisms: we are seduced by its diversity, but we understand that we are being reduced. Any capability to reject this reduction is an illusion: even if we can create a fake or parallel identity, the narrative programs lead us to embrace certain behaviors in terms of content that we post and dynamics we experience. Living in a digital place implies a reduction to what its architecture wants us to be: hence, when structuring a narrative program, information architects need to be aware of what they are asking actants to be.
2. Different socio-cultural practices are equalized on the basis of an identical interaction model. Digital places lead us to overlap the cultural backgrounds pertaining to completely different practices by reducing every practice to the same structure: this way we progressively induce individuals to perceive every situation not corresponding to the model as lacking or faulty. The individual learns to interact through certain dynamics and develops a need to apply those dynamics to every aspect of life. The fact that we are comfortable with the Facebook model of interaction does not mean that that model is compatible with every socio-cultural practice: by applying it as is we would reduce every practice to

Facebook's architecture¹⁷. When designing an interaction mechanism to enhance any analogical socio-cultural practice, we should act like cultural mediators and respect the cultural values that that practice carries with it.

3. Digital places determine the timing of an individual's activities. Because of the sheer amount of information and the "publish then filter" model that these services adopt, to participate successfully we are forced to quickly scan content and collect as much knowledge as possible in the shortest possible time. This pushes us towards an always-on model that allows us to stay up-to-date with the events, and moves our reflections towards shallowness: to dwell in these digital places we have to follow the strict timing that their information architectures impose on us. When considering the amount of time individuals spend in our system, we should strike a balance between the needs of the actors and the requirements of the platform.

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¹⁷ For example, a project that tries to promote tourism in a region through an application with the same social architecture of Foursquare.

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