Identity in entrepreneurship effectuation theory: a supplementary framework

Suna Løwe Nielsen · Astrid Heidemann Lassen

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Abstract The article proposes a new framework on identity construction in entrepreneurship that in valuable ways supplements the logic of identity presented in Sarasvathy's (2001, 2008) popular effectuation theory. Effectuation theory assumes that identity is a given and relative stable precondition of the entrepreneurial process that support the entrepreneur in ordering preferences in the process of effectuating resources, stakeholder commitment, etc.. The article shows that identity construction is an active and integral part of the effectuation process, and it importantly influences the manner in which the entrepreneur acts and makes decisions in the process. The article seeks to challenge and advance effectuation theory's view on identity based on a narrative study of ten novice student entrepreneurs. The study gives insight into the identity processes involved in becoming a student entrepreneur, and it may serve as a guide to how entrepreneurship educators and counselors can place more emphasis on identity related struggles involved in the entrepreneurial effectuation process.

Keywords Effectuation theory · Identity · Student entrepreneurs · Social constructivism

Introduction

In the context of entrepreneurship research, rising interest can be identified in the construct of identity as an aspect of the entrepreneurial process (e.g. Downing 2005;

S. L. Nielsen (✉)
Department of Entrepreneurship and Relationship Management, University of Southern Denmark, Engstien 1, 6000 Kolding, Denmark
e-mail: sso@sam.sdu.dk

A. H. Lassen
Centre for Industrial Production, Aalborg University, Fibigerstræde 16, 9220 Aalborg Ø, Denmark
e-mail: ahl@production.aau.dk

Down and Warren 2008; Stepherd and Haynie 2009; Hoang and Gimeno 2010). Undoubtedly, identity is a contested concept in the academic literature). However, according to Down and Warren (2008) in the fields of sociology and social psychology there is increasing consensus that identity is not a stable unit of the individual, but instead is constituted through ongoing interactions between individual resources and contextual discourses. Still, much research on identity in the context of entrepreneurship can be characterized by a modernist psychological view of self, which emphasizes that identity is a relatively stable core which determines behavior. An example of this is Sarasvathy's (2008) popular effectuation theory of entrepreneurship, which is increasingly used as a conceptual foundation for research in entrepreneurship (e.g. Goel and Karri 2006; Read et al. 2009).

Effectuation theory perceives the entrepreneurial process as being shaped from a set of given means which may be combined into a range of different possible effects. In this theory, the individual identity is traditionally perceived as one of the given pre-conditions, or means, which initiates the entrepreneurial process. Thus, in the entrepreneurial process, identity is perceived as a relatively stable pre-condition, which influences the way in which entrepreneurs organize their preferences and make decisions in the uncertain and ambiguous situation of entrepreneurship (Sarasvathy and Dew 2005). In this way, effectuation theory suggests that from the beginning of the entrepreneurial process individuals hold a relatively clear and coherent perception of who they are, and on the basis of this they act (Sarasvathy 2001). Effectuation theory does however also implicitly open up for the idea that identity may change during the entrepreneurial process as the individual encounters new people, gets access to new opportunities, and gains new resources. Nevertheless, the theory does not explicitly address the dynamics of how new and multiple meanings that stand out from the interactive effectuation process of entrepreneurship are constantly related to identity. This discussion is left unattended.

In this article we adopt an understanding of identity that parallels Weick's (1995) definition of identity as "… *person's sense of who he or she is in a setting*" (pp. 461), and it seeks to fill this gap of knowledge in regard to how identity unfolds in step with the entrepreneurial effectuation process. We use a narrative study of ten student entrepreneurs and ideas from social constructivist identity research as the basis for filling the gap. The integration of more careful and relational considerations of identity construction during the entrepreneurial process will add considerably to the understanding of diversity and dynamics of new venture creation. In particular, the article challenges and advances the established way of addressing identity in effectuation theory. First of all, our findings indicate that the entrepreneurial effectuation process constantly gives rise to identity work and that this work speaks back to the entrepreneurial process and thus affects how the entrepreneur perceives opportunities, generate resources, and approaches new people. In this manner, identity cannot be seen as a stable core that guides the enterprising individuals in the entrepreneurial effectuation process as a whole. Instead, it is an active, integral and influential part of the effectuation process. Secondly, we find that the contextual discourse in which the entrepreneurial effectuation process is embedded also affects how the enterprising individual senses identity. Thus, contextual influences also play an important role for how the entrepreneurial effectuation process unfolds. Thirdly, we find that identity work cannot be seen as coherence and single-minded as

assumed in effectuation theory. These three findings are left to be discussed in effectuation theory, which seems to hold a too narrow and simplified view of identity. From our analysis a supplementary framework on identity work in the effectuation process is extracted.

The article is organized around five sections: First, relevant ideas from entrepreneurship, effectuation, and modernist/social constructivist identity research are presented in order to underpin the topic and position of our research. Subsequently, the narrative methodology behind the research is introduced. Thirdly, the analysis and interpretations are presented, and fourthly, the supplementary identity framework is outlined. In a conclusion the implications of the framework are discussed.

Entrepreneurship, effectuation and identity

In this section we review recent contributions in entrepreneurship research which tie the entrepreneurial process to the identity discussion. Hereby, we position our research in relation to contemporary research, and identify central viewpoints on identity which will be beneficial to consider in relation to effectuation of entrepreneurship.

The modernist view on identity and entrepreneurship

As already mentioned by means of introduction, the modernist stand can be identified in many of the contributions that link entrepreneurship with identity and vice versa (e.g. Dobrev and Barnett 2005; Milton 2009). Such contributions view identity as a personality variable of human beings, and thus as a relatively stable core of a person that determines behaviour in line with the logic behind conventional trait research in entrepreneurship (e.g. Hornaday and Bunker 1970). For instance, Hoang and Gimeno (2010) study the causal link between the configuration of the entrepreneurial identity role and entrepreneurial persistence, and Mitchell and Shepherd (2010) the association between differences in entrepreneurs' self-image and perceptions/decisions about entrepreneurial opportunities. Finally, Stepherd and Haynie (2009) argue that the conflicts between the universal 'need to belong' and 'need to be different' are essential to explain the entrepreneurial identity. The conflict is considered controllable through the application of a set of management strategies. If not controlled, the conflict will be a threat to the entrepreneurial identity.

As such, modernist studies aim to identify universal characteristics of the entrepreneurial identity, classify the identity, and from an instrumental perspective discover how identity may hold an important key to a variety of entrepreneurial outcomes and thus also the potential to improve the likelihood of entrepreneurial success and efficiency (Alvesson et al. 2008). However, modernist studies pay little attention to the changeable aspect of the entrepreneurial identity. This creates a somewhat problematic issue considering the fact that as early as in 1985, Gartner argued that entrepreneurship is not a universal process performed by identical entrepreneurs (Gartner 1985) with a fixed state of psychological being (Gartner 1988).

Identity in effectuation theory

Effectuation theory is a theory of improvising and change. It represents an alternative to the dominant causation way of thinking in entrepreneurship research. It breaks with the assumption of pre-existing opportunities, markets, etc. and instead focuses on how entrepreneurs deal with the ongoing challenge of designing entrepreneurship when limited means are available, the situation is unpredictable and pre-existing goals are absent. In causation thinking, rational decision-making is assumed possible and desirable through a focus on a predefined plan, complete information, as well as an overview of alternatives/consequences to a profit-maximizing effect (a successful company). Rather than being 'effect-dependent', effectuation theory is 'actor dependent'. It takes as its starting point a set of individual-related given means, of which identity is one: '*Entrepreneurs begin with three categories of "means": they know who they are, what they know, and whom they know—their own traits, tastes, and abilities; the knowledge corridor they are in; and the social networks they are a part of*' (Sarasvathy 2001: 250). Given these means the entrepreneur asks: What can I do with these means? (Sarasvathy 2008), and based on this begins a process of small steps in which the actor interact with others to gain access to resources he is not in control of. From here stream new goals that give the actor a new perspective on what he can do, as well as new means that affects the actors perceptions of 'who am I', 'what I know' and 'whom I know', and new cycles of step-wise effectuation can again begin.

     However, in the existing effectuation theory little consideration is given to the explicit discussion of how identity unfolds and changes throughout the entrepreneurial effectuation process. In the instances where identity is addressed explicitly, Sarasvathy (2008) refers to the phenomenon as a relatively unalterable characteristic of human beings which they bring into the entrepreneurial process. E.g. Sarasvathy and Dew (2005) deal with the logic of identity, as oppose to the logic of preferences, and argue that identity guides the individual in situations where the outcome of action is unknown, whereas preference-based decision-making works in situation where there exists a causal link between action and outcome. This places the effectuation theory of entrepreneurship within the modernist view.

     Though sharing many traits with the modernist view on identity, Sarasvathy's (2001) effectuation theory implicitly also to certain extent opens up the idea that identity is not a fixed core. This is done as the theory opens a doorway to the idea that identity is influence by the events of the entrepreneurial process, hereunder the social interaction. This is further supported by the fact that Sarasvathy (2001) underlines that identity is not a common construct similar in all entrepreneurs; various types of successful entrepreneurs exist and are influenced by complex contingencies of markets, people, strategic alliances, firms, societies, etc. in which the individual is interwoven. Yet, effectuation theory still primarily talks about identity as coherent and relatively stable over time.

The constructivist view on identity and entrepreneurship

Recent research on identity in entrepreneurship can be positioned under the social constructivist ontology, and it pin-points aspects that may be advanta-

geous to enrich and broaden up effectuation theory's conception of identity. This research underlines that identity is open, full of explorative and multiple meanings, ongoing and made from actions and interactions of everyday life (e.g. Down and Reveley 2004). The findings from this identity research highlight the fact that identity is not just a phenomenon constructed from how individuals define themselves, but in the interactions with the expectations, roles, routines and meanings of the social context. This realization makes Downing (2005) focus on the co-production of individual and collective identity in entrepreneurship; Warren (2004) study women entrepreneurial identities based on the tripled nexus of individual reflexivity, social dynamics and communities of practices; and Watson (2009) conclude in his research on identity work that identity construction involves '… *a coming together of inward/internal self-reflection and outward/external engagement*' (pp. 267).

Seen in this light it is no surprise that this research highlights that social legitimacy is essential to the emergence of entrepreneurship; the social context plays a crucial role for evaluating the value and authenticity of the entrepreneur and opportunity, and thus whether they are valid and appropriate for the context. Yet, as Lounsbury and Glynn (2001) find, while the stories of the entrepreneur have to be socially legitimate, they also have to express his or her individual unique identity. Moreover, the identity construction and the struggle for reaching social legitimacy is an ongoing process, which Ibarra and Barbulescu (2010) find involves the enterprising individual use of the feedback from the social interaction to constantly change, support or abandon the sense of self. A positive feedback makes the individual keep moving along the track he has already chosen, where a negative feedback is likely to make the enterprising individual seek alternative stories of himself and his process. After all, the feedback reveal to the individual who he is not (Jones et al. 2008). It has to be emphasized that regardless of the action taken by the entrepreneur in the identity construction process, it is essential to understand that the action also affects the context, and thus a dual interactive relationship exist between context and individual in the social constructivist way of understanding identity construction.

In this way, the social constructivist view on identity is in contrast to both the modernist and effectuation theory's view on identity as a relatively stable pre-condition which supports the entrepreneur in making decisions in the uncertain situation of entrepreneurship. Instead, social constructivist represents the notion of identity as a process of becoming (Alvesson et al. 2008) where the individual identity is negotiated through and within the sense-making systems of the surrounding context (Down and Warren 2008).

The above created insight into the contemporary debate of identity in entrepreneurship literature, and it illustrates how the theory of effectuation contains a highly appropriate logic of dynamics, but fails to implement this logic in the discussion of the identity. This generates a simplified view of the influence of identity on the entrepreneurial process, and underlines the importance of the aim of this article. In the following we will describe how we approach the generation of a more enrich and dynamic view on identity in entrepreneurship as a supplementary perspective on effectuation.

Methodology

The aim of this section is to introduce the methodological background of our research First we introduce the empirical foundation of our research, and then it is illustrated how we from a narrative approach understand this foundation.

Ten student entrepreneurs

Acknowledging the value of supplementing Sarasvathy's (2001) effectuation theory with deeper concerns of identity construction, we use ten novice and emerging student entrepreneurs who are in the middle of creating a new business along with their university studies as the medium for knowledge construction. This unit of analysis has been purposely selected, as identity theory prescribes that identity reflection is most significant amongst young people, who are in the middle of preparing their entry into adulthood (Erikson 1968), and find themselves in an in-between and confusing process of defining 'who am I' and 'who am I going to become' (Moshman 2005). Additionally, the entrepreneurial situation for university students differs fundamentally in very interesting ways from the situations of the serial expert entrepreneurs, in which Sarasvathy's effectuation theory was first grounded (Sarasvathy 1998). Student entrepreneurs are characterized as being individuals with little, if any, business knowledge, few relations and little experience in how to act and make sense of the entrepreneurial process. As a result, they cannot be assumed to hold a stable sense of identity that can guide their entrepreneurial actions when entering the entrepreneurial process. As such, student entrepreneurs represent an optimal sample group for the study of how identity construction unfolds in the entrepreneurial effectuation process.

Table 1 provides an overview of the ten student entrepreneurs on whom our research is based. The ten students worked actively on creating their own companies

Table 1 Overview of story-tellers

Student entrepreneur	Discipline	Sem.	Business idea	Entre. active 1 year after
Morten	E	10	System to analysis of offshore constructions	No
Alexander	E	8	Automatic self-monitor system for home patients	Yes
Thomas	E	10	Design company	No
Jens	E	8	Different web sites offering different products for free	Yes
Mads	E	10	Adapting the concept of role play (The story-teller) to computer games	No
Esben	B	6	E-commerce and own shop: Import and sale of fitness products	Yes
Anne	B	9	Consultancy company: SMEs and internationalization	Yes
Michael	B	9	Consultancy company: Online questionnaire survey/communication	Yes
Brian	B	8	Production of a new all-embracing TV-magazine	No
Peter	B	8	Production of a new line of fitness clothing in China	No

(idea development, search for resources etc.). The table shows whether the ten students were business (B) or engineering (E) students; the semester they initiated the entrepreneurial process; their business idea; and finally if 1 year after the first interviews were conducted they were consistently engaged in entrepreneurial activity. We have changed the names of the story-tellers for reasons of anonymity.

A narrative approach

The ways in which the students make sense of and negotiate identity throughout the entrepreneurial process can be understood through the concept of narrative. Identity can be viewed as the students' story of themselves (Polkinghorne 1988); they use various, dynamic and contextualized story-lines to craft their sense of self. At the same time, Down (2006) notes that narrative research offers "... *a significant new horizon on our sense of what sort of people entrepreneurs can be, and the different ways we might go about thinking and talking about them*" (p. 4).

As we interviewed novice and emerging student entrepreneurs, we did not capture narratives in the conventional perception of the term in which the narrative has a clear opening, plot, and ending. Instead, we captured fragmented stories in the process of becoming narratives. Being in an introductory, novel and fluctuating process in their lives and at the same time having to deal with entrepreneurship, the students told fragmented stories. Yet, it is from such stories we can step into and learn ways to understand identity sense-making in the entrepreneurial effectuation process.

To overcome the rationalised pictures of narrating, to gain further insights into identity construction in student entrepreneurship, and to nuance the findings from the interviews, the research was added longitudinal snapshots. The students were interviewed repeatedly, with a 1-year gap, during 2005 and 2006. The duration of each interview was 1 to 2 h, and the interviews were aimed at making story-telling in preference to question-response.

To convey the most prevalent and idiosyncratic themes across the ten stories, we went through a qualitative coding process, which proceeded in three steps. First, the aim was to reach an overall understanding of the recorded interviews through writing memos that revealed our immediate reflections, interview transcription and finally initial text interpretation of each student story. Subsequently, we went through a process of selective coding to identify the main themes across the stories (Titscher et al. 2000). Many different themes emerged, yet, in this paper, we have chosen to portray the most common themes of the interviews, being how emerging student entrepreneurs make sense of identity in the entrepreneurial effectuation process. The third step was to critically reflect on the stories, activating existing theory and adding theoretical plots to the stories. The results of this three-stepped process are discussed below.

Discussion

In this section we turn to our interpretation of what characterizes the ten students' processes of constructing entrepreneurial identities, which we later relate to the

perception of identity in effectuation theory. The section is structured based on a chronological logic beginning with the very first instance entrepreneurship became a part of the students' sense-making processes.

The beginning of an entrepreneurial sense of self

Listening to the voice of the students, we learn about their stories of the circumstances these young people's regular student lives at first have been interrupted by entrepreneurial sense-making processes. The circumstances are complex and emerging from a wealth of different interactions, experiences, and events involving their up-bringing, friends, mentors, traineeship, university supervisors, project work, teachers, fellow students, etc. Yet, when considering the stories the students in retrospect, to give meaning to how they at first begin to sense themselves as entrepreneurs, it becomes possible to divide the students into two groups, being a belief-driven and an action-driven group of sense-makers (Weick 1995).

The belief-driven students explain that they have for a long time had a belief in themselves as entrepreneurs and that the entrepreneurial action is a proactive way to externalize this sense of self; entrepreneurship is acts of self-expression. Esben: '*I have always had the desire to become an entrepreneur… (…) I actually think it is something, which you become aware of very early in life (…), as you seek something unique in your personality* (…) *I think my dad has been walking around with the dream of becoming an entrepreneur, but never really dared to do it. Thus, at home, it was always talked about as something huge when somebody did it… they dared to take risk, they contributed positively to society. It was something to go for and admire, and then if I wanted to make my father happy, I had to do it* (…) In contrast, the action-driven students describe the entrepreneurial interruption as an unexpected shock or surprise emerging from interactive coincidences. Mads: '*It was a big surprise that we—two students of engineering—were to become entrepreneurs; something completely unexpected and a bit frightening.*' Morten explains how he has been pushed into entrepreneurship: "*Actually, it was our supervisor, who began to push us. He said: Do you know that you have invented something? It may be that you should consider starting a company?*" *We smiled at him in the beginning, but we began to play with the thought (…) He convinced us that it was the right route to travel and that there was a business potential (…) I believe that in the beginning we could see a big potential, but not an actual business idea. We could see that we had a neat tool, but that was more or less it*".

Thus, at first glimpse the way the students narrate about the entrepreneurial interruption is in line with Bhave's (1994) differentiation between internal and external triggering of entrepreneurship. As such, it is of essential importance in order to grasp the entrepreneurial identity processes of students to understand how students in retrospect make sense of the entrepreneurial interruption. After all, the ways individuals make sense of the past, affects the present and the future (Weick 1995).

Yet, moving deeper into the student stories the interruption is far more part of life-long everyday processes, which unfold from the interrelation between belief-driven and action-driven processes; they are not two dichotomies different from each other. This is shown from the fact that the students in their stories clearly

struggle with clarifying the specific role played by respectively belief and interaction in regard to how they were first interrupted by entrepreneurship, or they simply tell about how they both played an important role. Alexander: *"I have always been dreaming of being on my own… at least, this has been my ambition, since I began my studies. As I have thought it, the most realistic model is that you go out and work for a couple of years and form a network. However, if you get the opportunity when you are inexperienced, then, it is just a matter of doing it"*. Alexander gets the opportunity during his 8th semester project. The supervisor suggests that the students further develop one of their ideas. The students do so, and after handing in the project for evaluation, two of the students in a group of five are hired as research assistants by the university to further develop the idea. From this process the prototype of a home monitoring measuring device emerges, which is eventually named "*Simple Simon*". In general, the prototype that the two students end up with has the potential to target various audiences (diabetics, patients taking blood-thinning drugs etc.). The main idea behind "Simple Simon" is that it can enhance the efficiency, quality, and lower costs of home monitoring, since the measuring device by mobile phone technology sends blood tests directly and regularly from the patient's devise to the hospital personnel. With all this data in hand, the hospital personnel get an opportunity to follow the patient closely, making more precise diagnoses, and preventing blood clots.

Another example of how entrepreneurial emergence is driven by belief as well as interaction becomes apparent in what at first glimpse seems as belief-driven stories, which in fact are stories of how series of smaller interruptions streaming from social interactions and sense-making processes have crystallizing into an entrepreneurial belief in 'Who am I'. Anne's story is an illustrative example in which a line of social interactions during her childhood and adolescence (self-employed parents, moving away from home early in life, working as a tourist guide, etc.) form an independent sense of self. With further interactions (becoming friends with young entrepreneurs, receiving an invitation for a business plan competition, a traineeship period, etc.) she begins to sense an entrepreneurial belief in 'Who am I'. Thus, Anne gradually sees new angles of herself in step with the actions she takes, the commitment she makes, and her interaction with her social and institutional frames. She puts it this way: "*I have always believed that you really had to reinvent the soup plate before you could regard yourself as an entrepreneur… it hads to be super extreme brilliant before you could get success. Yet, in reality it is another way… by knowing more people who are entrepreneurs everything becomes more tangible. (…) Then I also have what it takes to become an entrepreneur*" (App. 2)

Question: Who am I as an entrepreneur?

The students who from the beginning of the entrepreneurial process sense themselves as entrepreneurs may be expected to act in accordance with the identity logic as it has been presented in effectuation theory. They believe so strongly in themselves as being entrepreneurs that this sense of self can be used as a guide to order preferences in the unknown entrepreneurial process. However, common to all the ten students is that when the students begin to act as entrepreneurs, they are

thrown into a situation in which known cues of conduct and understandings of the world are challenged. Although Warren (2005) finds that students do not buy into the stereotype of the entrepreneurs as a hero with supernatural powers, but are able to give realistic accounts of life as an entrepreneur, it comes forward from the ten stories that entrepreneurship life is not what the student had expected. As a result they talk about themselves as confused, uncertain and insecure identity explores, who in line with Ibarra and Barbulescu's (2010) findings, search for alternative ways to sense themselves as entrepreneurs/non-entrepreneurs. Brian: "*My dream of becoming an entrepreneur is less significant today than it was previously. It is no longer, in any ways, all-important. Before it was like, an entrepreneur was simply want I had become… I did not want to get a job. Now, it is more like that it could be really cool, but I have also become more realistic. I have educated myself. Thus, I can see some opportunities in becoming an employee*". The entrepreneurial action undoubtedly challenges the students' view of themselves as entrepreneurs. Mads notes: "*We are completely new in this area. To start a new company is like moving into a new world. I am an engineer. For me everything has to be systematic and logical. But what is going on is widely chaotic and totally confusing (…)* "*We are not done with building our identities… specifying them further*".

The entrepreneurial identity sense-making is further complicated by the fact that the students experience studenthood and entrepreneurship as being two hardly compatible worlds. Mads continues: "*We expect it to be a long and hard journey to change our role from student to entrepreneur. The academic way of thinking and the entrepreneurial one are two completely different things. In our academic works, there is no room for commercialization. It is a remark on the side. There are methodologies and rules to follow, and if you deviate you have to explain why. Professors and teachers influence us a lot. We respect them. But I remember one time in class a student asked: How will this thing look like when it is fully developed, and how will you market it? The reaction from the professor was that it was an odd thing to ask about*". Moreover, the students experience that they have too little time to make sense of how to combine 'student' and 'entrepreneur', and thus make sense of who they can be as entrepreneurs.

Thus, it is from these complex hybrid situations of multiple identities, which often arise in times of change in which new and old meet (Hatch and Schultz 2002), the students spin new stories of identity related to the question, who am I as an entrepreneur, and is entrepreneurship really me? Morten also re-considers his entrepreneurial identity construction: "*The danger for us new graduates is that it often takes a long time before it* [entrepreneurship] *becomes something. We would rather not be in that situation a year from now and find out that it does not become something. And then get out among the new graduates and compete for a job*".

The finding that the entrepreneurial act produces questions of 'who am I as an entrepreneur, and is entrepreneurship really me?' has to be seen in the light of the fact that the students hold little knowledge about the relevance of their competences, and thus their value outside the boundaries of the university—as employees or entrepreneurs. Thus, they do not know what the "outside world" expects of them, or who they have the potential to become in this world. It gives them doubts about whether they can master the entrepreneurial identity, and what it means to be an entrepreneur. As a result, the student talk about the entrepreneurial activity not as a

process leading to a specific goal in terms of a life as an entrepreneur. Rather they place focus on the identity construction process in itself; as a process that opens opportunities for the students to learn about who they are as entrepreneurs, and whether or not entrepreneurship is really their sort of thing. Peter: '*It was also a spare time job which I could use to find out if I want to become an entrepreneur… or at least just get some words attached to what I want to become*'. Thus, the students talk about the entrepreneurial identity construction as a type of career experiment to learn about potential future career identities.

Interaction: the search for meaning

To learn about what it means to them to become entrepreneurs, the students along with the entrepreneurial effectuation process initiate a wealth of different activities. For instance, they look for information on the Internet, read articles about entrepreneurs, and get inspiration from lectures and television. However, most students reach out to others in their search for meaning. Anne:. *"It is hard to be student and at the same time entrepreneur, because you are insecure and believe that there are only one, two, or three people out there in the world, who can tell you what to do … you just have to ask the right questions. After all, this is how it works at the university. Therefore, your start-up process also becomes a process in which you ask others what to do to be accepted and survive as an entrepreneur. You do not have the necessary knowledge and self-confidence to decide the direction to take on your own. I actually think it is self-confirmation you are looking for"*.

Being young and insecure about 'who am I as an entrepreneur', they worry about what others think of them, and they hope the feedback from these significant others can provide meaning to their emerging entrepreneurial identity building and give them confidence in this identity. Mads: "*I fear that we cannot convince people that we actually are a business, which is worth considering. It is difficult to make others understand that you have value, when you are not sure yourself that it is the case. When you are young and inexperienced in business creation then you are insecure about, whether the market will receive you positively (…) We are a bit afraid of that we do not have what it takes to execute our idea. Yet, we have to test our idea by showing it to others and hope for positive feedback or some ideas as to how we can improve ourselves as entrepreneurs, to find out whether this is the case or not. This is also frightening.*

The reliance on the feedback from others highlights the importance of understanding entrepreneurial identity-making from a perspective that unites the intra-personal processes of identity with social and discourse related processes as it has been suggested by social constructivist identity research. Many of the students turn to significant others (uncles, business networks, fellow students, etc.), who have entrepreneurial experiences in order to learn about 'who they can be' within the world of entrepreneurship. Naturally, the students also turn to the university context, and this context is the most important career-preparing context for university student (Lannegrand-Willems and Bosma 2006). They try to engage their teachers and supervisors in their entrepreneurial activities, they participate in entrepreneurial courses at the university, and when possible they make use of their entrepreneurial projects as cases in their academic work. In this way, the students use themselves

as tools for meaning-making. They engage in dialogue with various people within and outside the university context to reach an insight and get feedback on 'who they are as entrepreneurs', and whether being an entrepreneur is something for them or not. As a result, the student entrepreneurial processes constantly move into new unexpected directions depending on the ongoing social interaction of everyday life, which they are a part of, constantly act towards, and are enacted through. It continuously makes the students discover new angles of themselves as entrepreneurs.

Cues of meaning

Through various actions and interactions the students constantly get tangible and non-tangible feedback from the social context. The feedback can be perceived as cues of meaning, which guide the students in how to see themselves as entrepreneurs, and whether entrepreneurship is something for them. The feedback—or the lack of it—they receive from the university context takes up a lot of space in the student stories. Esben talks about the reactions from lectures when he told them about his entrepreneurial activities: *"I really did not get any response from them. I was frustrated about it… a little bit sad that they did not, in any way, come and asked me about it… or tried to be engaged in what I did. Thus, this is also why I thought that it was not a part of their world, that you can be an entrepreneur. I was something distant from them, and therefore they were not interested in hearing about my business".*

This and similar experiences make the students feel that to become an entrepreneur involves a radical act of breaking with the established and institutionalized and homogenizing structures of universities. Anne: *"You are very much a part of the university when you are at the university. Here we are all more or less the same. The only thing they think of is how you adapt to the industry—How do you find your place in an existing organization. I think that is tough luck. How do I fit in?*

Especially, the causation content of the courses, the focus on large established organizations, as well as the promotion of job-taking career identities (lawyer, doctor, accountant, etc.) at the university, give the students the impression that becoming an entrepreneur is an act that is not viewed as appropriate at universities. In fact, with reference to Goffman (1959), the students talk about the entrepreneurial act as pushing a movement from a social self to an individual and lonely self. Alexander: *"As an entrepreneur you stand a little bit alone. All fellow students are ready to go out and start a career in a large established organization".*

However, being young it is very important for the students to keep on belonging to the university context, which is supported by the research of Adams and Marshall (1996). As a result they feel and act as a minority group, and carry out face saving activities by concealing their entrepreneurial activities to the context. Brian: *By definition I guess I am an entrepreneur (…) I like to perceive myself as an entrepreneur. But to use the word entrepreneur in front of other people… I won't reach that point for a while… I do not think so"* . Esben: '*What would they* (his study group) *think if I told them that I had started an Internet Shop selling diet supplements? It was a hidden start-up process'.* The student entrepreneurial identity

concealment frees the students from externally making use of the entrepreneurial identity, and instead they seem preoccupied with acts of attaching their sense of self to the student identity which is a well-established, accepted and inherent identity of the university context. This institutionalized story of themselves is more legitimated, and being accepted by others they get more room backstage to shape an alternative entrepreneurial story of themselves. In general, the cues of meanings that unfold from the students' interaction with themselves, others and enactment through others take on many shapes: for instance the shape of resources, knowledge, opportunities, constraints, etc.

Besides being concrete tangible inputs to enhance their entrepreneurial activities, it appears from the interview material that these entities should not just be understood as physical utilities. The students also talk about the socially generated feedback as symbolic cues which signal to them whether they follow a meaningful track in their identity effectuation, or if they have to make re-adjustments or even abandon the entrepreneurial identity construction. Said differently, the feedback gives the student content, meaning and direction to their entrepreneurial identity making. In line with Ibarra and Barbulescu (2010) we find that positive feedback from the audience makes the students retain present stories of themselves as entrepreneurs, whereas negative feedback makes them explored new ways to sense themselves as entrepreneurs. Thus, from the social feedback, the students' entrepreneurial identity process in fact becomes an inner learning process emergent from social interaction. As an example, Alexander receives financial resources from interacting with a Swedish firm. Obviously, the financial support facilitates concrete opportunities in terms of cultivating his company. At the same time, in terms of his identity building, the resources also make Alexander feel that he is doing something correct; a feeling of enhanced self-confidence, which makes him want to continue his entrepreneurial actualization. Moreover, being confronted with the large resource-strong company leads Alexander to reflect upon the idea that maybe he is not, after all, ready to become an independent entrepreneur, as he still has much to learn.

Clarification: Who am I as an entrepreneur

The continuous feed-back places the students in a process of constantly updating, revising and changing existing understandings of "Who am I as an entrepreneur?", or reproduce current self-understandings, which again opens up for a new perception of what to do next; new entrepreneurial acts. Although identity is never fully developed, the student stories indicate that they in the entrepreneurial process experience a movement towards greater coherency and internal awareness in their sense of identity as entrepreneurs, and their ability/inclination to label themselves as entrepreneurs. Another interesting finding is in line with Ronstadt's (1988) corridor principle in entrepreneurship, being that the entrepreneurial identity formation process seems to have a consuming effect on the students over time. Mads: '*It is like, when you are walking around thinking about becoming an entrepreneur, and also trying to become one, it gets harder to think about becoming something else. It is like entrepreneurship gradually becomes you*'.

A framework on identity sense-making

In order to add structure to our empirical findings, we in this section present Fig. 1, which is a visual illustration of the points made in our analysis above. The figure proposes the students' identity process as five mutually dependent sub-processes which in total show the essential ingredients of how we have found that identity (multiple, interactive and changing) unfolds in the entrepreneurial effectuation process.
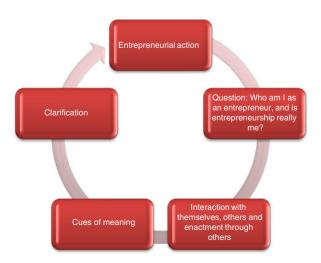
The framework illustrates the entrepreneurial identity process as an explorative sense-making process with close association between entrepreneurial actions and beliefs of identity. In other words, the framework shows that in the entrepreneurial process identity and entrepreneurial acts emerge together.

The departure of the identity process is some sort of entrepreneurial action, which interrupts the students in their everyday activities and makes them reconsider and question their sense of self. To find out who they are—or are not—as entrepreneurs they interact with others and institutional discourses. At the same time, they are also enacted through the others and the discourses from feedback mechanisms (cues of meaning), which give the students further knowledge on how to form their entrepreneurial identities, the content of these identities, who they are as entrepreneurs, and whether entrepreneurship at all is their sort of thing; a clarification which constantly takes place, and continuously shapes and gives rise to future entrepreneurial actions.

Conclusion and implications for effectuation theory

The purpose of the article is to fill the gap of knowledge in regard to how identity unfolds in step with the entrepreneurial effectuation process, and thereby address some of the weaknesses in Sarasvathy's (2001) effectuation theory by bringing in new conditions, being constructivist ideas of identity and the empirical setting of

Fig. 1 Identity sense-making framework

university students. In this section we discuss and conclude on the ways in which our study has challenged and added to effectuation theory.

First of all, our study suggests that it is necessary to alter the logic of identity which is associated with effectuation theory. This logic illustrates identity as a relatively coherent and stable precondition of the entrepreneurial effectuation process that supports the potential entrepreneur in ordering preferences and make decisions in the uncertain and ambiguous process of entrepreneurship. In contradiction to this, we found that as individuals begin to act as entrepreneurs, they also come to reflect upon who they are/are not as entrepreneurs. This breaks with the ideas of identity as a given pre-mean of effectuation that guides the acts of individuals in the entrepreneurial process. Instead, identity is constantly changed throughout the process as the result of the entrepreneurial action. Moreover, enterprising individuals experience this process as full of fears, risk, struggles and resistance, which affects how they proceed in the process. Thus, the entrepreneurial effectuation process is not just a matter of effectuating resources, stakeholder commitment, organizations, etc., it is also a process of identity construction. In fact, some individuals may even see the very purpose of the entrepreneurial effectuation as being to experiment with and learn more about 'Who am I', as it was the case in the student stories.

Secondly, our study contributes with insights on how identity is influenced in the entrepreneurial process through processes of intra-individual and inter-individual interaction within institutional discourses. It suggests that effectuation theory can be improved from not primarily addressing identity from an individual level. Instead, the theory has to open up for the constant and complex interactions between the different layers of reality from which identity emerges. Especially, in situations of intense change, uncertainty and ambiguity, individuals seemingly turn to significant others and their context in their search for cues of meaning to make sense of the new situation. Extending effectuation theory with the interactions between different layers of reality, and in this way binding identity to a complex social whole, would make effectuation theory even more dynamic compared to causation theory.

Finally, we learn from our study that identity is multiple and not coherent, and that this influences how the entrepreneurial process unfolds. When becoming interrupted by entrepreneurship, individuals are confronted with the challenge of creating something new, which may be difficult to translate or transfer in the light of old practices, discourses and meanings. When old meets new, multiple and hybrid identities may be created, as it was the case in student entrepreneurship. Being split between different senses of self which are hard to combine in positive ways, individuals can be expected to be further confused and stressed in the entrepreneurial effectuation process.

In conclusion, based on a study of ten student entrepreneurs we find evidence of the fact that a more social constructivist view on identity is valuable to support effectuation theory as it make us appreciate the complex, multiple, dynamic and ongoing construction of identity in the entrepreneurial effectuation process. Such perspective makes effectuation theory a more complete and relevant theory which to a higher extent reflects the dynamics of entrepreneurial processes. We propose an alternative framework on identity sense-making as a way to integrate dynamic and constructivist conceptualization of identity in effectuation theory. However, there is still much work to be done in terms of further integrating the suggested identity

framework with effectuation theory. So far, we propose that our framework can be used as a foundation for further research in the area, and from a practical level it can serve as a guide to entrepreneurship educators and counselors on how to understand and place more emphasis on the individual identity-related issues that unfold in the entrepreneurial effectuation process.

References

Adams, G. R., & Marshall, S. K. (1996). A developmental social psychological of identity: understanding the person-in-context. *Journal of Adolescence, 19*, 429–442.

Alvesson, M., Ashcraft, K. L., & Thomas, R. (2008). Identity matters: reflections on the construction of identity scholarship in organization studies. *Organization, 15*(9), 5–28.

Bhave, M. P. (1994). A process model of new venture creation. *Journal of Business Venturing, 9*, 223–242.

Dobrev, S. D., & Barnett, W. P. (2005). Organizational roles and transition to entrepreneurship. *Academy of Management Journal, 48*(3), 433–449.

Down, S. (2006). *Narrative of enterprise: crafting entrepreneurial self-identity in a small firm.* Cheltenham: Edward Elgar.

Down, S., & Reveley, J. (2004). Generational encounters and the social formation of entrepreneurial identity: "young guns" and "old farts". *Organization, 11*(2), 233–250.

Down, S., & Warren, L. (2008). Constructing narratives of enterprise: clichés and entrepreneurial self-identity. *International Journal of Entrepreneurial Behavior, 14*(1), 4–23.

Downing, S. (2005). The social construction of entrepreneurship: narratives and dramatic processes in the co-production of organizations and identities. *Entrepreneurship Theory and Practice, 29*(2), 185–204.

Erikson, E. H. (1968). *Identity youth and crisis.* New York: W. W. Norton & Company.

Gartner, W. B. (1985). Conceptual framework for describing the phenomenon of new venture creation. *The Academy of Management Review, 10*(4), 696–706.

Gartner, W. B. (1988). Who is the entrepreneur? Is the wrong question. *American Journal of Small Business, 12*(4), 11–32.

Goel, S., & Karri, R. (2006). Entrepreneurs, effectual logic, and over-trust. *Entrepreneurship Theory and Practice, 30*(4), 477–493.

Goffman, E. (1959). *The presentation of the self in everyday life.* Harmondsworth: Penguin.

Hatch, M. J., & Schultz, M. (2002). The dynamics of organizational identity. *Human Relations, 55*(8), 989–1018.

Hoang, H., & Gimeno, J. (2010). Becoming a founder: how founder role identity affects entrepreneurial transition and persistence in founding. *Journal of Business Venturing, 25*(1), 41–53.

Hornaday, J. A., & Bunker, C. S. (1970). The nature of the entrepreneur. *Personnel Psychology, 23*, 47–54.

Ibarra, I. H., & Barbulescu, R. (2010). Identity as narrative: prevalence, effectiveness, and consequences of narrative identity work in macro work role transitions. *Academy of Management Review, 35*(1), 135–154.

Jones, R., Latham, J., & Betta, M. (2008). Narrative construction of the social entrepreneurial identity. *International Journal of Entrepreneurial Behaviour and Research, 14*(5), 330–345.

Lannegrand-Willems, L., & Bosma, H. A. (2006). Identity development-in-context: the school as an importance context for identity development. *Identity: An International Journal of Theory and Research, 6*(1), 85–113.

Lounsbury, M., & Glynn, M. A. (2001). Cultural entrepreneurship: stories, legitimacy, and the acquisition of resources. *Strategic Management Journal, 22*, 545–564.

Milton, L. P. (2009). Unleashing the relationship power of family firms: identity confirmation as catalyst for performance. *Entrepreneurship Theory and Practice, 32*(6), 1063–1081.

Mitchell, J. R., & Shepherd, D. A. (2010). To thine own self be true: images of self, images of opportunity and entrepreneurial action. *Journal of Business Venturing, 25*, 138–154.

Moshman, D. (2005). *Adolescent psychological development: rationality, mortality and identity.* New Jersey: Lawrence Erlbaum Associates.

Polkinghorne, D. (1988). *Narrative knowing and the human sciences.* Albany: State University of New York Press.

Read, S., Song, M., & Smit, W. (2009). A meta-analytical review of effectuation and venture performance. *Journal of Business Venturing, 24*, 573–587.

Ronstadt, R. (1988). The corridor principal and entrepreneurial time. *Journal of Business Venturing, 3*(1), 31–40.

Sarasvathy, S. (1998). Ph.D.-thesis: How do firms come to be?: Towards a theory of the prefirm. Carnegie Mellon University.

Sarasvathy, S. D. (2001). Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review, 26*(2), 243–263.

Sarasvathy, S. D. (2008). *Effectuation: Elements of entrepreneurial expertise*. Cheltenham: Edward.

Sarasvathy, S. D., & Dew, N. (2005). Entrepreneurial logics for a technology of foolishness. *Scandinavian Journal of Management, 21*, 385–406.

Stepherd, D., & Haynie, M. J. (2009). Birds of a feather don't always flock together: identity management in entrepreneurship. *Journal of Business Venturing, 24*, 316–337.

Titscher, S., Meyer, M., Wodak, R., & Vetter, E. (2000). *Methods of text and discourse analysis*. London: Saga.

Warren, L. (2004). Negotiating entrepreneurial identity—communities of practice and changing discourse. *Entrepreneurship and Innovation, 5*(1), 25–35.

Warren, L. (2005). Images of entrepreneurship: still searching for the hero. *Entrepreneurship and Innovation, 6*(4), 221–229.

Watson, T. J. (2009). Entrepreneurial action, identity work and the use of multiple discursive resources: the case of a rapidly changing family business. *International Small Business Journal, 27*(3), 251–274.

Weick, K. E. (1995). *Sensemaking in organizations*. Thousand Oaks: Saga.