

HOW TO PROMOTE ENTREPRENEURIAL IDENTITY THROUGH EDUTAINMENT EDUCATION?

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ABSTRACT

In recent years there has been a growing interest in Entrepreneurship Education and Training in Educational and Psychological Research and Entrepreneurial and Leadership Studies. Based on studies that show that human capital factors display modest correlations with entrepreneurial success, we will focus on the founder and innovator identity as two important explanatory factors of entrepreneurial success. This paper aims to analyze how the founder and innovator identity can be enhanced by the application of entertainment education. The present study provides the theoretical foundation for promoting entrepreneurial identity through edutainment education as an innovative approach to training and workplace experience. Integrating cherished objects, spaces and characters and narration within a virtual entrepreneurial learning context while interacting with others strengthens a sense of founder and innovator identity.

Keywords: Founder Identity, Innovator Identity, Edutainment, Virtual Reality.

INTRODUCTION

In recent decades, growing interest in Entrepreneurship Education and Training has been seen in Educational and Psychological Research and Entrepreneurial and Leadership Studies (Gibb, 1987). This increasing research was caused not least of all by the economic significance of entrepreneurship for state and society.

Over the past several decades the research program on Entrepreneurship Education and Training, whose focus is on pedagogical furthering of entrepreneurial competencies, has found a differentiation in the studies on furthering constitutive components of knowledge, skills and attitudes.

Studies have shown that traditional human capital factors, such as education, industrial and management experience have not played a substantial role, because of their modest correlations with entrepreneurial success (Stuetzer et al., 2013; Unger et al., 2011). However, varied work experience positively relates to entrepreneurial skills across a sample of start-up projects and new ventures. A 2017 study shows that relevant competencies of women entrepreneurs fall into various different categories: Based on a study of 306 women entrepreneurs (200 women entrepreneurs from Germany and 106 women entrepreneurs from Ireland), a structural equation model was developed. The results of this study reveal that, as a higher order latent construct, entrepreneurial competencies have a major impact on entrepreneurial success (0.559; $p \leq 0.001$) (Schneider, 2017a). Entrepreneurial competencies of

women entrepreneurs in Germany and Ireland are conceptualized by a set of six first-order factors, including functional task-related managerial skills, entrepreneurial characteristic adaptations of personal efficacy and orientations of competition, risk-taking and innovation, and a founder and innovator identity (Schneider, 2017a). The theoretical construct of entrepreneurial performance, which consists of the dimensions of economic, individual and societal performance, was expanded and enhanced with the dimensions of performance quality, customer satisfaction and productivity (Schneider, 2017a).

Against the empirical background that traditional human capital factors display modest correlations with entrepreneurial success, we will focus in the following on one important explanatory factor, identity. Entrepreneurial identity relates to the questions: “*Which entrepreneur am I?*” and “*Which entrepreneur do I want to be?*” (Poudel, 2014). The richness of perception of the entrepreneurial role, operationalized by identity of founder and identity of innovator, predicts ($\beta=0.385$; $p \leq 0.001$) entrepreneurial competencies in the above mentioned study (Schneider, 2017a).

To be analyzed is how identity can be enhanced by education and training. We will thereby use the approach of edutainment education, on the assumption that it is suitable to further entrepreneurial identity. From the perspective of educational science, learner success is additionally increased if the learner enjoys the learning process. Moreover, the learner can self-regulate the organization of learning, which is important for a target group that strongly needs to act flexibly and efficiently.

In the present study, the theoretical foundation is laid for furthering entrepreneurial identity through edutainment education as a complementary approach to training and workplace experience. We begin by defining the edutainment approach and refer to a theoretical foundation of identity development. After this we analyze the application of edutainment education to further identity. We conclude by arguing that the integration of objects and narration within a virtual learning environment constitutes reflected experience and supports a sense of identity.

LITERATURE REVIEW

Edutainment and Entrepreneurship Education

Edutainment education has developed since the early 1990s, but the employment of this approach in “*educating entrepreneurs*” is still a missing link (Ahmadi et al., 2017). Edutainment, referred to as entertainment-education (E-E), is an integrated approach of educating and informing people. An edutainment program purposely designs and implements a media message to entertain and educate, in order to “*increase audience knowledge about an educational issue, create favorable attitudes, and change behavior*” (Singhal & Rogers, 1999). While Edutainment relates to the integration of different purposes, namely entertaining and educating, entrepreneurship education focuses on the object of education, namely entrepreneurship: Jones & English (2004) defined entrepreneurship education as “*a process of providing individuals with the ability to recognize commercial opportunities and the insight, self-*

esteem, knowledge and skills to act on them” (Jones & English, 2004). We will integrate both approaches to strengthen the entrepreneurial identities of founder and innovator.

Although in 2005 Tufte (2005) already presented three generations of entertainment education, ranging from individual behavioral to societal change to empowerment of people, not very much literature is available on edutainment in the context of entrepreneurship.

A literature review of the few available edutainment studies in the context of entrepreneurship illustrated the following types of studies:

1. Methods of entrepreneurial teaching using the “*Edutainment*” approach (Ahmadi et al., 2017 in affective learning; Chazerand, & Geeroms, 2008, play)
2. Didactic function of edutainment methods (Tasnim & Yahya, 2013; game)
3. Impact evaluations (e.g. Barsoum, et al., 2016; Bjorvatn, et al., 2015) youth entrepreneurship reality TV in developing countries.
4. Introduction of a matrix of practices for entrepreneurship education based on practice theory (Neck et al., 2014: helping students develop a method of thinking and acting as entrepreneurs, implying edutainment).

A line of development in research on Edutainment within the context of Entrepreneurship education can be traced on the basis of these few studies: Only when edutainment methods in entrepreneurship education are identified and described can their didactic function be analyzed and their impact evaluated. In looking for a research program, initial approaches of a theory are being developed based on the didactic of Entrepreneurship Education (Neck et al., 2014). Thus, for example, Neck et al. (2014) find, on the foundation of praxis theories, fundamental learning practices within Entrepreneurship education: Practices of empathy creation, experimentation, and play. The latter is part of the Edutainment education approach.

Fritz (1997) distinguishes 5 forms of Edutainment, which occur between Education (learning and education) and Entertainment (fun, pastime and amusement): Teach-Tale Tainment, Tooltainment, Infotainment, Simtainment, und Skilltainment. Of these, we will focus on Teach-Tale Tainment and Simtainment. Teach-Tale Tainment pursues the pedagogical goal of acquiring abilities with the aid of a story. In the form of Simtainment, situations and contexts are informatively and playfully dramaturgically simulated. At present, however, only a few studies have been made on how to further entrepreneurial identity with the aid of narration and simulation (Schneider, 2017b).

Identity and Identity Development

Studies of identity, which have a long research history (Erikson 1950; 1968), are of psychological and philosophical provenience. The concept of identity will be presented on the basis of these disciplinary perspectives. From an etymological viewpoint, the term identity comes from the Latin word *īdem*, *īdem*, ‘*the same*’.

According to Erikson, a “*sense of identity provides the ability to experience one’s self as something that has continuity and sameness and to act accordingly*” (Erikson, 1950). Identity is characterized by a dynamic of differentiation and identification: the need to set boundaries

between self and others, and the need to integrate oneself into and identify with a whole (Erikson, 1950; 1968). Identity as a psychological concept refers to an individual's self-relevant attributes (Markus & Wurf, 1987). The self may be understood as a mental representation of one's own person and personality (Gecas, 1982; Ibarra, 2005; Kihlstrom et al., 1992; Markus & Nurius 1986; Markus & Wurf, 1987).

From a philosophical perspective, on the basis of a theory of mind, Metzinger (1999) regards the element of identity, alongside of consciousness and the stock of experience, as constitutive of a psychological self-concept. Identity, or the self, *"unifies all subjective states as my states and is simultaneously constituted by them"* (Metzinger, 1999). Metzinger (1999) proposed that an external self-representation such as a propositional representation can be related to as an internal self-representation. The producer of both kinds of representations, internal and external, is the same, is identical. Both representational systems, internal and external, are identical. That means that all mental states that display this phenomenal mine-ness (Meinigkeit) constitute subjective identity (Metzinger, 1999).

How this mine-ness of mental states or respectively subjective identity arises is described with the aid of a model that Ibarra (2005) introduced, with reference to Baumeister (1986). Ibarra states, *"that possible selves are added, subtracted, redefined and adjusted in practice, as people alter their [work, K.S.] activities, modify their social networks and interpret life events through the lens of changing possibilities"* (Ibarra, 2005). Ibarra draws on Baumeister (1986) and Linde (1993) to derive these identity producing behaviors from well-established characteristics of identity: the ability of the self to be conscious of itself, (i.e., reflexivity), its interpersonal nature, and the continuity of the self over time (Ibarra, 2005). In the following, we will focus on furthering these characteristics of identity.

FURTHERING IDENTITY THROUGH THE EDUTAINMENT EDUCATION APPROACH

The creation of an edutainment approach that furthers identity development in women entrepreneurs is a two stage process: in the first stage, we work out mechanisms to explain ability, in the second stage we describe a proven intervention that furthers these mechanisms and embed it in an edutainment approach.

Theoretical Foundation

The ability of the self to be conscious of itself: A person's self-knowledge must be inferred from acting. This process of deducing self-knowledge will be explained in more detail. The focus is on how centered consciousness arises.

Based on the self-model theory of subjectivity (Metzinger, 1999), a system begins *"to model itself mentally and embed the data structure arising through this process in its inner picture of reality. The mental space created by the system thereby undergoes a centering"* (Metzinger, 1999), the already mentioned mine-ness (Meinigkeit). A user fixated model

develops. The function of self-models is *“to center the dynamic, constantly changing data structures”* (Metzinger, 1999,). The self-model is not to be characterized as truth, but rather aims at similarity, and therefore Metzinger calls such a model an analog representation (Metzinger, 1999). On the basis of intentionality, identity or mine-ness can be experienced. In the philosophical sense, intentionality means that a mental state is directed at an object, a person thinks about an object. *“Psychological subjectivity arises in that a relation is added to an intentional content of mental representations”* (Metzinger, 1999). It is my experience, my conviction or my pain that I experience.

From a psychological perspective, the mental representation of one's own person can be conceived as a knowledge structure that is part of working memory (Kihlstrom et al., 1992). The working memory not only has the function of storing information, but also allows for the manipulation of this information. In the working memory, the knowledge structure of the self interacts with information about the spatio-temporal context of the respective situation and with pre-existing knowledge structures that are stored in memory and activated by perception and thinking. *“This connection, which defines the self as the agent or experiencer of some ongoing event, may be the key to consciousness, because it represents that sense of possession that is crucial for the experience of conscious awareness”* (Kihlstrom et al., 1992). In other words: Consciousness occurs when the representation of the event, the so called *“fact node”*, and the representation of oneself, the so called *“self-node”*, come into contact (Kihlstrom et al., 1992).

Or put in philosophical terms: An external self-representation (in propositional format) is employed to refer to an internal *“self-representation”* (Metzinger, 1999). All those states are mental and in principle subject to introspection, i.e., can in principle become objects of a voluntarily initiated and purposive process of internal awareness (Metzinger, 1999). Introspective statements are not testable propositions, they are subjective (Metzinger, 1999). These data structures are mental, *“precisely because they possess the disposition to become conscious”* (Metzinger, 1999).

A case of how a person's self-model is explained as followed by Metzinger (1999): *“With people the phylogenetic fundament of the self-model probably consists in the corporal scheme, thus in a spatial model of the bio-system that construes it. Later mental models are added to it of more abstract characteristics of the organism, for example its interests, which step-by-step enrich the self-model and are more or less plastic. Eventually a cognitive intellectual self-model has developed in people”*. The self-model comprehends a person's knowledge of himself. This knowledge is not represented in propositional form, but rather displays this self-centering (Metzinger, 1999).

“Like all mental models, self-models have no variables, no logical form and no grammar. The knowledge they create is non-discursive knowledge. If that is correct, then the experientially unavoidable respective model of the self represents an inner form of knowledge that linguistically cannot or at least can only be partially and inadequately expressed” (Metzinger, 1999). The psychological subject's perspectival inner space is produced by a different type of information processing and representation, namely through internal analog representation and

public self-referencing. Nevertheless, human organisms also make use of external representational systems to acquire information about themselves.

Drawing on Metzinger (1999), two forms of self-reference are specified with different consequences: (a) linguistic soliloquizing and (b) psychic self-attribution. These different forms produce a linguistic and mental representation of the system by itself (Metzinger, 1999).

Let us, drawing on Metzinger (1999), take the example of the linguistically soliloquizing self-attribution of psychic characteristics in *"I am now somewhat confused"*. In this sentence there is a self-reference, because this utterance contains an indexical expression of the word *"I"*, which means that in its content this statement refers to the uttering person and her self-model (cf. Metzinger, 1999). With reference to a mental model, which arises from a proposition with indicators of the state of confusion, a self-model is constructed: *"Accordingly there is an internal representation of my state of confusion constructed by my brain which was embedded in my current self-model"* (Metzinger, 1999). Through this embedding of the mental model in the self-model, subjective experience arises, respectively my own experience. This self-ascription influences a person's psychic state (Metzinger, 1999). As soon as a person embeds the mental model in the self-model, there is a mental event that leads to a change of something in the person. The self's soliloquizing speech act is directed at the changed self-model and the associated changed phenomenal content of self-consciousness. The subject use of the first person pronoun thereby refers to subjective experience. *"Through this 'soliloquizing' speech act, the current content of the self-model activated by my brain immediately changes: I experience myself now as one speaking with himself, who directly ascribes a psychological characteristic to himself"* (Metzinger, 1999).

In regard to the example, when the sentence *"I am now somewhat confused"* is thought a mental model is created. This means that a series of mental models of a propositional representation is temporally suitably activated, *"which in an analog format imitates the production of external linguistic representations"* (Metzinger, 1999). Normally these mental models are also already automatically embedded in the self-model. Thereby on the phenomenal level the subjective experience occurs, *"I myself am thinking right now that I am somewhat confused"* (Metzinger, 1999). A system meta-representationally once again forms mental representations, simulations and presentations in order to make them in that way into conscious states (Metzinger, 1999). If, for example, there is a characteristic such as *'being confused'* which is objectively represented by indicators and was already automatically integrated into the self-model, once again meta-representationally represented by the brain, then there arises on the experiential level the quality of mine-ness (Meinigkeit) (Metzinger, 1999). Through meta-representation, a person experiences as her own a conscious inner experience or convictions.

While in the first example self-reference is present which leads the speaker to ascribe a characteristic to himself, in the second case no self-reference is present, because thinking cannot refer. Much more, this thinking, the mental representation of the system by itself, leads to the subjective experience of thinking about itself in a specific manner. *"The self-reference serves the*

subject's inner-psychic orientation" (Metzinger, 1999). Both forms of referring to oneself, reflexivity and self-reference, constitute the self's ability to be conscious of itself.

The functionality of a self-model, here a self-model as innovator and founder, is displayed in optimal behavior in relation to the environment (Metzinger, 1999).

The ability of the self to be continuous: The effort to master experiences, to integrate them and view them as meaningful is the essence of the ego, the "*I*" or self (Loevinger, 1966; 1976; 1998). Following McAdams (2001), identity formation occurs above all on the level of Life Narratives. Life Stories are a person's episodic self-representations.

Identity represents the quality of the "*Me*". From a personality-psychological viewpoint, the self's ability to be continuous mirrors the ability of the "*I*" or ego to bring various stories together in a greater narrative context, in order to give life meaning (McAdams, 1996). A life story can equip the "*Me*" with unity and life purpose (McAdams, 1996).

The life story represents the characteristic way in which the "*I*" arranges elements of the "*Me*" in a temporal sequence (McAdams, 1996). In the story of one's own life, the "*I*" as subject tells of its own experience and thereby constructs the "*Me*" as object or respectively self (McAdams, 1996). The "*I*" is the narrator, the "*Me*" the story's protagonist.

By narrating her story, a person becomes the object of her own thinking and gains a perspective from which to contemplate herself, others and the world (Wiener & Rosenwald, 1993).

Beyond this, narration of a personal story has an integrative and continuity endowing function for the self. According to McAdams, the theoretical perspective starts from the insight (McAdams 1996) that a person generates inner-psychic coherence and continuity by developing a suitable autobiographical story. Through a personal story a person can integrate random, disconnected experiences (McLean et al., 2007): *"By binding together disparate elements within the Me into a broader narrative frame, the selfing process can make a patterned identity out of what may appear, at first blush, to be a random and scattered life. The I can provide an integrated telling of the self as a more or less followable and believable story"* (McAdams, 1996). Experiences are of greater value if linked to a story. The unity that is first created in the story is not yet present in the experience (Widdershoven, 1993).

The components of the story, the setting, the initiating event, the internal response, the attempt, the consequences and the reaction, are brought in a cohesive chain; good stories form a network of causal chains, they are coherent. In poorly told stories, the elements lack continuity. (Stein & Policastro, 1984). By setting an aim, various goals are brought into a unity, the implicit meaning can be made explicit. *"... in telling stories we try to make sense of life"*. (Widdershoven 1993). By telling stories of founding or innovating, entrepreneurs can identify inherent structure and meaning and create continuity: *"Narrative is the natural mode of expression to match the inherent structure of personal experience"* (Barresi & Juckes, 1997), for a person's intentionality is also the core of every story (McAdams, 2001), which is a retrospective interpretation of action.

Ability to generate the self interpersonally: Studies show the role played by interpersonality in the development of work role identity (Ibarra, 2005). Ibarra (2005) developed

a model that includes pathways of forming work role identities through relationships. These are information and support, identification, and social validation and comparison (Ibarra, 2005).

Interacting with new people allows entrepreneurs to get support, expand relevant information or even skills and knowledge and open up new options of acting as founder or innovator. Studies have found that new reference groups contribute to generating new work role identities (Ibarra, 2005).

The identification with other persons represents a way to create and test a possible self. (Ibarra, 2005). Bandura's theory of social learning (Bandura, 1969) hypothesizes that a person learns new behavior by observing and imitating the behavior of a role model able to perform desired behavior. From this new behavior, such as, for example, that of innovating the entrepreneurial product, self-reflexivity can arise. Moreover, modeling has the potential to identify with the role model (Ibarra, 2005).

If a person has access to a new reference group which has become part of the person's social network, this group provides him with social standards and values as points of reference for comparison (Ibarra, 2005).

POSSIBILITIES TO FURTHER FOUNDER AND INNOVATOR IDENTITY THROUGH EDUTAINMENT EDUCATION

The technology of virtual reality contributes to building up a learning environment for identity construction. Following Bers (2009), identity construction environments engage learners in the design of meaningful contexts. The technology of virtual reality combines edutainment with education. Learners can immerse themselves in an artificial surrounding containing avatars interacting with each other (Bers, 2009). Simtainment, and Teach-Tale Tainment are the edutainment forms that will be used in a theoretically based sense here.

Referring to our theory, we assume that the virtual context is a learning setting which allows a person not only to reflect on his identity, but also to generate a coherent and socially validated story with continuity endowing function for the self through interacting with others as avatars. In virtual reality, the learner engages in reflection and action while interacting and creating her autotopography. *"...virtual autotopographies give materiality and concreteness to intangible aspects of the self"* (Bers, 2009).

With the aid of avatars, a person creates objects, characters and spaces and communicates with others through a chat system (Bers, 2009). An avatar is a graphic representation of the user. Following Turkle (1984), the avatar serves as a second self. The means of acting through an avatar enables a person to watch herself acting, and allows her to distance herself and already create a meta-representation.

Objects have the function to engage learners in introspection (Bers, 2009). By putting cherished objects, spaces and characters in the role as a founder in a virtual autotopography, persons can learn in a projective manner about their founder identity (Bers, 2009). Reflecting on which cherished objects, characters and spaces to put in virtual entrepreneurial environment goes together with self-reflection by learners: Putting cherished objects, such as for example strategic

thinking, into virtual entrepreneurial environments activates this self-model in the working memory, as the cherished object stands for an intangible part of the self (Bers, 2009). The model of the self that linguistically cannot be adequately expressed is produced by a different type of information processing and representation, a projective process: Through memorizing the cherished objects the self-representation becomes object of a process of internal awareness. At the same time, an external self-representation, as in our case the conceptual meaning of the value of strategic thinking is employed in order to refer in an internal self-representation to the meaning that this value has for the person and to center this in the self (ego, I). The value of strategic thinking that is represented through its specific characteristics and was already automatically integrated in the self-model, acquires through meta-representational representation, as for example through conscious reflection on its personal meaning, mine-ness (*“Meinigkeit”*) on the experiential level.

Referring to the virtual entrepreneurial context, this learning setting not only allows a person to reflect upon her founder identity, but also to generate a coherent and socially validated story about cherished objects, spaces and characters through interacting with others as avatars. At the same time, as parts of the self, these objects have narrative attributes. Identity is constructed *“by the objects placed in the virtual autotopographies and the narrative attributes given to them ...”* (Bers, 2009). In a story, the learner narratively verbalizes the meaning a value, here the strategic thinking value, has for her. The narration fosters thinking in terms of personal significance. A self-attribution is not only a linguistic soliloquizing self-attribution, but also has the quality of self-reference, since this utterance refers in its content to the uttering person and her self-model. Through this narrative written act in the virtual space, from the first person perspective, the current content of the self-model activated by the brain also immediately changes: In the form of an avatar, a person now also experiences herself as one who in the story ascribes to herself strategic thinking as a personal characteristic.

When interacting with other entrepreneurs or other stakeholders via chats about the significance, learners gain information and support, and are challenged to engage in conversations about the significance of the object, here the strategic thinking, with other avatars. Interacting with other people enables entrepreneurs to obtain support and expands their information stock and entrepreneurial know-how. The new network partners of the reference group provide a person with social standards in terms of strategic thinking within this virtual reality (Ibarra, 2005). The mechanism of identification with other persons contributes to creating a possible self (Ibarra, 2005). According to Bandura’s theory (Bandura, 1969) of social learning, entrepreneurs not only learn new entrepreneurial propositions, but also learn to know and imitate the self-model of other successful entrepreneurs.

In terms of strengthening innovator identity, putting cherished objects, characters and spaces into a virtual spatio-temporal entrepreneurial environment creates a new constellation of a cherished entrepreneurial environment that still does not exist. Creating an innovative entrepreneurial surrounding by cherished objects, characters and spaces in a virtual environment furthers the process of self-reflection as innovator, because the internal self-representation of this

newly composed environment is employed to refer to the conceptual meaning of the value of the innovative surrounding and to center this in the self (ego, I).

DISCUSSION

In the present study, the theoretical foundation is laid for furthering entrepreneurial identity through edutainment education. Against the empirical background that the founder and innovator identity can be conceived as important explanatory factors of entrepreneurial success, the promotion of identity is crucial for entrepreneurship education. Identity, or the self as a mental representation of one's own person and personality, unifies all subjective states as my states, which have continuity and sameness to act accordingly.

Based on the well-established characteristics of identity, the ability of the self to be conscious of itself, to be interpersonal and continuous, the mechanisms to explain these abilities will be analyzed to describe a proven intervention that furthers these mechanisms and embeds them in an edutainment approach.

Both forms of referring to oneself, reflexivity and self-reference, constitute the self's ability to be conscious of itself. Consciousness occurs when the representation of the event, the so called "*fact node*", and the representation of oneself, the so called "*self-node*", come into contact. Such mental representation takes place when an external self-representation is referred to an internal self-representation. The model of the self that linguistically cannot be adequately expressed is produced by a different type of information processing and representation, a projective process: Through memorizing personally cherished objects, spaces and characters of a founder the self-representation becomes object of a process of internal awareness as cherished objects represent part of the self. Besides this process, acting as an avatar who is a graphic representation of the user already creates a mental representation and contributes to becoming conscious of one's own person and personality.

The ability of the self to be continuous can be furthered by narrating a story about cherished objects which has an integrative and continuity endowing function for the self. By developing a suitable story as an avatar, a person generates inner-psycho coherence through significance making and continuity.

CONCLUSION

Following the model of developing work role identities through relationships, information and support, identification, and social validation and comparison play a crucial role for education. The opportunity and necessity to interact with other avatars and stakeholders in a virtual environment enables a person to acquire information and support, social validation through social standards as reference points for their aspects of the self, and to identify with other successful entrepreneurs. Forming a new entrepreneurial virtual environment by a constellation of cherished objects, spaces and characters also furthers the process of self-reflectivity and significance making as an innovator.

The technology of virtual reality can help create a learning environment for identity construction of founders and innovators. The individual person creates a personal autotopography which refers to the cherished innovative objects, characters and spaces in a newly composed virtual enterprise. The integration of objects, characters and spaces in combination with narration and interaction supports a sense of identity.

COMPETING INTERESTS

The author declares that she has no competing interests.

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