

On Sculptural Aspects of Time and Space and Their Impact on Modeling and Conceptualizing Organizations

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Abstract

This paper aims at establishing a sculptural understanding of tempo-spatial relations in organizations that is grounded on the fluid transformation of organizational spaces as well as tempo-spatial structures in the organization. Therefore a number of aspects of organizational tempo-spatial structuration will be discussed in relation to different concepts and contexts of space theory that serve to establish a transformative and comprehensive perspective on organizational relations to time and space. In this respect the impact of tempo-spatial relations in organizing and ordering tasks and activities, in organizational sensemaking and in the construction of organizational reality will be discussed in order to form a dynamic perspective of time and space that allows for the continuous conception, negotiation and reconfiguration of organizations in present space and time. By establishing a fluid perspective on space and its associated temporal structures a dynamic approach for the construction of organizational reality, organizational environments as well as contexts and structures of the organization will be created. This perspective can serve to illustrate the continuous formation and transformation of organizations regarding their realization and manifestation in time and space, but can also explain the role and impact of tempo-spatial relations in the negotiation and transformation of organizational realities, with a special focus on the temporization and spatialization of organizations, organizational identities and organizational reality.

Introduction

In recent years organizational space has been an ever-evolving topic in organizational literature (Stewart R. Clegg & Kornberger, 2006b; Dale & Burrell, 2008; Hernes, 2004; van Marrewijk & Yanow, 2010a) and many authors have argued over time that more attention should be directed at the matter of space, spatiality and organizations (Kreiner, 2010; Orlikowski & Scott, 2008; Orlikowski, 2007; van Marrewijk & Yanow, 2010b; Yanow, 2010). There has been considerable interest in physical spaces occupied and transformed by the organization, which have commonly been referred to as „organizational spaces“ (van Marrewijk & Yanow, 2010b, p. 1). Also, interrelations between physical space and the social sphere have been discussed, widely employing the term „sociomateriality“ (Dale & Burrell, 2008; Dale, 2005; Orlikowski & Scott, 2008; Orlikowski, 2007). It seems obvious that the relation between organizations and their physical manifestation in space, but also their representation, analysis and structuration in abstract, imaginary or virtual spaces have been a central topic not only in organizational theory but also in everyday management (Gastelaars, 2010; Go & van Fenema, 2006; Kiniven, 2006; Mobach, 2010; van Marrewijk, 2010). Especially the design and application of multidimensional models of space, often constructed on the basis of Henri Lefebvre's concept for „the production of space“, have always held great promise for the comprehensive analysis and description of different organizational tasks, functions and operations, with special regard to the modeling of connections between social, physical and imaginary (or symbolic) aspects of the organization (Dale, 2005; Lefebvre, 1991; S. Taylor & Spicer, 2007; Watkins, 2005).

Scope of the Current Study

This paper aims at establishing a sculptural view on space, time and organizational spaces starting from a perspective of space theory that step by step approaches a fluid understanding of space and its impact on forming and transforming organizational spaces as well as contexts for social action and individual sensemaking. In a traditional perspective space and time have been understood as means to structure, compartmentalize and standardize human relations towards organizational reality as well as the creation of organizational structures and processes (Brocklehurst, 2006; Chanlat, 2006; Kosiol, 1962, 1978; F. W. Taylor, 1996). More and more it subsequently became obvious that space and the evolution of spatial relations in time through movement, positions, distance and proximity are not constant dimensions of human relations to reality, but that they are appropriated and continuously transformed in ongoing acts of sensemaking and process building in the organization (Hernes, Bakken, & Olsen, 2006; Kornberger & Clegg, 2004; Weick, Sutcliffe, & Obstfeld, 2005; Weick, 1995a, 1995b). Especially organizational identity processes will constantly be linked to the spatialization and temporization of organizational environments, organizational tasks and thus forms and concepts the organization itself (Albert & Whetten, 1985; Cornelissen, Haslam, & Balmer, 2007; Gioia & Thomas, 1996; Luckner, 2001). In this respect organizations can be understood as dynamic contexts for creating sensible environments and for renegotiating meaning, constructs of sensemaking, organizational realities, collective and individual identities as well as their respective relations to space and time (Derrida, 1978, 2008; Dutton & Dukerich, 1991; Dutton & Penner, 1993; Hernes, 2004). Space and time can therefore serve as ubiquitous and malleable media for conceptualizing and contextualizing organizational identities, collective action and individual sensemaking, all of which will be negotiated and realized in tangible, present space as a direct manifestation of organizational reality. Organizational spaces can thus be understood as tangible aspects for transforming and renegotiating space and spatiality in the organization (Dale, 2005; Gastelaars, 2010; Kornberger & Clegg, 2004; Kreiner, 2010). Also, these spaces will be influenced in the passing of time so that temporal structures can ultimately also be related to space and the transformation of spatial relations (Dale & Burrell, 2008; Lefebvre, 1991; Luckner, 2001; Orlikowski & Yates, 2002).

In the scope of this paper traditional perspectives concerning standardized, compartmentalized and structuralized approaches on space (and time) will be discussed in their relation to the temporization and spatialization of organizations (Chanlat, 2006; Kosiol, 1962, 1978; Schreyögg, 2003; F. W. Taylor, 1996). Thereafter, aspects of sensemaking will be addressed and their role in the dynamic reconfiguration of organizations and organizational contexts in relation to space and time will be described (Luckner, 2001; Weick et al., 2005; Weick, 1995a, 1995b). Finally, a dynamic perspective on space and time, with a special focus on the continuous simulation of tempo-spatial relations in the organization as well as in the creation of sensible environments will be established (Baudrillard, 1981, 1987; Deleuze & Guattari, 1977, 2005). In this context relations and linkages between spaces of possibility, potentiality, utopia or imagination and real, present space will be illustrated in order to establish a dynamic perspective on the construction of organizational realities in time and space and the concrete realization of organizational spaces and human spatial cognition in the here and now (Dobers, 2006; Foucault, 1986, 1995; Iser, 1993; Steyaert, 2006). Perspectives of postmodernity will be employed in order to highlight the continuous renegotiation, the ongoing tempo-spatial assemblage and the active manipulation of space and time as one of the basic processes of human worldmaking (Baudrillard, 1981, 1987; Deleuze & Guattari, 1977,

2005; Goodman, 1990; Grandy & Mills, 2004). It will be shown that space and time are permanently appropriated and manipulated in order to form and transform organizational realities, organizational identities as well as to construct organizational spaces as a tangible reference and focus of complex processes in the course of the production of space (Stewart R. Clegg & Kornberger, 2006a; Hernes et al., 2006; Lefebvre, 1991; Watkins, 2005). The constant manipulation of relations to time and space and the ongoing processes of form-giving in relation to present space and time can therefore be compared to an act of permanent sculpting that describes space and its transformation in the passing of time as fluid media for human orientation in the world as well as for the structuration and negotiation of collective realities and individual identities. Therefore this paper aims at making a conceptual contribution in order to highlight the malleable and sculptural nature of time and space and their potential impact on everyday sensemaking, the continuous sculpting of realities in organizations, the creation and transformation of organizational spaces as well as the design and implementation of research projects in organization studies and the social sciences.

Tempo-spatial Structures in Organizations

The basic structures and processes of the organization regularly hint at the creation and patterning of time and space in the organization (Kosiol, 1962, 1978; Orlikowski & Yates, 2002; Schreyögg, 2003; Weick, 1995a). This may be especially evident, when organizations are interpreted as contexts for the ordering and coordination of human interaction (Hernes, 2004). Derrida describes contexts as being derived from a moment of continuous presence so that, by the use of signs and symbols, complex models of the world and thus also of the organization can be created along with tempo-spatial structures that allow for the dimensioning and structuring of human reality (Derrida, 1978, 2008). In a similar notion Heidegger points towards the conceptualization and realization of human existence as well as the construction of human identities via time and space (Luckner, 2001). Also, the structure of possible realities and potential realizations of different states of the world are created and outlined in their relation to time and space so that possible future, present or past worlds can more or less apparently be incorporated in current perceptions of reality (Goodman, 1990; Wittgenstein, 2006). Wittgenstein (2006, p. 11) relates the perception and conception of a "Sachverhalt" to possible relations of elements in a space comprising all possible states of the world. The concrete realization derived from all potential or conceivable states of the world will in turn be mirrored in the named "Sachverhalt".

It seems obvious at this point, how the introduction of tasks, their analysis as well as the creation of structures and processes create time and space in relation to a more or less commonly shared worldview that ultimately lies at the basis of designing and structuring the organization (Kosiol, 1962, 1978). Weick's (1995a, 1995b) texts highlight how patterns of order and sensemaking are introduced in the organizational realm and contribute to the ongoing process of organizational sensemaking. The patterning of organizational interactions thus allows for the creation of sensible organizational environments and the construction of a system of potential realities that define and structure the tasks and operations of the organization (Kosiol, 1962, 1978; Luckner, 2001; Weick et al., 2005; Wittgenstein, 2006). The introduction of contexts and context-specific practices therefore also serves for purposes of introducing tempo-spatial structures as well as for renegotiating and recreating those very structures from a moment of total presence in time and space (Derrida, 2008; Hernes, 2004). Thus, organizational contexts as well as related tempo-spatial structures are subject to constant reconstruction, dynamic modeling and the redefinition of fluid relationships to the living environment (Hernes et al., 2006; Hernes, 2004; Luckner, 2001; Wittgenstein, 2006).

As a consequence, the contexts of the organization, although they exist and persist over time and space, are always subject to continuous reconstruction in the dynamic modeling of different aspects, outlines and potentialities of organizational reality (Albert & Whetten, 1985; Dutton & Dukerich, 1991; Gioia & Thomas, 1996; Hogg & Terry, 2001).

As Hernes (2004) points out, the organization is characterized by the construction of relational contexts that can also be conceptualized as spaces and that emanate from a moment of ultimate presence in space and time (Derrida, 2008; Hernes, 2004). These spaces tend to be influenced and mirrored in the physical realm, reflecting and integrating potential realities, that are represented by the concepts, models, structures and processes shaped in the organization (Chanlat, 2006; Dale, 2005; Grandy & Mills, 2004; Hernes et al., 2006; Orlikowski & Scott, 2008). Also, abstract concepts of the organizational realm tend to be incorporated in tangible structures of the organization and generate interactions in the physical world that can be observed and analyzed (Dale & Burrell, 2008, 2010; Dale, 2005; Orlikowski & Scott, 2008; Orlikowski, 2007). It is subsequently possible to relate abstract conceptions of organizational reality to a present moment in time and space that lies at the heart of the dynamic modeling of the organization as well as of human tempo-spatial relations. Organizations and tempo-spatial structures in organizations are thus continuously modeled and reconfigured as well as they are related to a moment of permanent presence that allows for the mapping of potentiality structures, at the same time as systems and processes for the dimensioning and creation of organizational realities are being formed and transformed (Luckner, 2001). Finally, it also becomes clear that multiple spaces, tempo-spatial models and individual perspectives on time and space are ultimately integrated and mirrored in present space and time of human existence, where all possible states of the world along with all conceivable spaces of possibility are generated and ultimately reunited.

Sensemaking and its Relation to Space

Space in organizations also fulfills other important functions for individuals and social collectives that are closely connected to activities and processes of sensemaking, shaping human realities as well as physical environments (Luckner, 2001; Weick et al., 2005; Weick, 1995a, 1995b). As indicated above, space and time can be described as basic media for human orientation in the world and lie at the heart of planning and executing collective action (Chanlat, 2006; Stewart R. Clegg & Kornberger, 2006a; Hernes et al., 2006; Kosiol, 1978). Moreover, space regularly includes symbolic as well as imaginary aspects that allow for relating different facets of individual identity to spatial settings, which can not only be transformed and rearranged in order to produce meaningful versions of the world, but are also ultimately appropriated in the process of identity construction (Dutton & Dukerich, 1991; Dutton & Penner, 1993; Gioia & Thomas, 1996). Especially imaginary, creative and aesthetic aspects of generating and transforming space as well as spatial strategies and tactics connected to these aspects seem to make space instrumental to the creation and transformation of human relations to the living environment (Dale & Burrell, 2008; Dobers, 2006; Foucault, 1986; Steyaert, 2006). Therefore, Weick's (1995b) seven properties of sensemaking, which have mainly been defined for an organizational background and which include the foundation of sensemaking in identity construction, the retrospective nature of sensemaking, the enactment of sensible environments, the social dimension and the ongoing character of sensemaking, the focus on and by extracted cues as well as a drive towards probability rather than accuracy, can all be connected to the spatiality of human existence, which demonstrates how space can not only be used as a medium for creating possible and

factual environments, but also how it is regularly vested with meaning and engaged in processes of sensemaking.

At this point it seems evident that space forms a (more or less) constant, but malleable point of reference for the planning and organizing of human life and moreover serves as a fluid medium for creating patterns and processes of human sensemaking. Thus, it appears that present physical space is related to an infinite number of possible spaces, tempo-spatial models, worldviews as well as individual and collective perspectives on reality that are ultimately negotiated in and represented by real, present space. The present, tangible space of human existence may then serve as a prism and a medium used to represent, negotiate, contest and transform spatial realities, models of individual sensemaking and systems of collective meaning in the real world. As a consequence, it is possible to relate abstract, creative, social or utopian perspectives to specific tempo-spatial relations and tangible, present space, which may be addressed in research projects in organization studies and the social sciences (Foucault, 1986, 1995; van Marrewijk & Yanow, 2010b; Yanow, 2010). As the present, physical space of human life seems to be connected to a sheer unlimited number of potential, speculative or outright imaginary spaces, which are actively shaped and appropriated in collective sensemaking and individual identity construction, we may now ask, how spaces of potentiality, possibility and ultimately simulation may be realized and integrated in the process of producing and transforming space and organizational spaces.

Space as Simulation?

This section mainly revolves around the question, which aspects of space will be deemed „real“, „simulated“, „modeled“ or maybe even “absurd” and how space and spaces will in fact be connected to the continuous construction of reality (Baudrillard, 1978, 1981, 1987). As Wittgenstein (2006, p. 11) points out, all possible states of the world are included in the “space of possibility”, which in turn excludes all impossible states of the world. Nevertheless this concept does not tell us exactly about the relations between “real”, “possible” and “impossible” spaces, which seem to coexist in a permanent state of re-negotiation and re-configuration. On the other hand it can (with near certainty) be confirmed that present spatial cognition and the physicality of real, tangible space might be the closest and most accessible hint at spatial reality, its forms and implications, because all other forms of spatial representation and conceptualization seem to be deduced from this primary form of spatial perception (Derrida, 2008; Lefebvre, 1991; Luckner, 2001; Wittgenstein, 2006). Moreover, tangible, present space is, at least in the physical world, the one main certainty that is always transformable, but never contestable. This also holds true for the organizational realm that can be interpreted as an abstract, but also as an imaginary, symbolic and certainly as a social context realized in space (Hernes, 2004; Lefebvre, 1991; Watkins, 2005). This context may also serve to organize and to integrate collective action as well as for relating collective versions of reality to individual sensemaking. On the other hand, all the spaces created or imagined in respect to the organization, are ultimately found to be represented and incorporated in present space and accessed by direct spatial cognition (Dale, 2005; Gastelaars, 2010; van Marrewijk, 2010; Yanow, 2010). As a consequence, we can ask for the role of abstract, imaginary, symbolic, analytic and even scientific models of space in dimensioning and modeling different aspects of reality and their relation to space and time.

The question thus arises, if abstract, imaginary or otherwise interpretive conceptions of space as well as different spaces of possibility and probability are mere simulations of reality and how these simulative aspects of the real may impact tangible, present space (Baudrillard,

1981, 1987). These aspects can easily be extended to the organizational realm, its strategic tools and analytic concepts that, above all, seem to serve as a means for conceptualizing and dimensioning possible, impossible, probable, real and unreal versions of the world (Dobers, 2006; Grandy & Mills, 2004; Kenis, Kruijen, & Baaijens, 2010; Kornberger, 2012). In the same sense it may be asked, if and how the abstract, imaginary or symbolic conception of possible realities will affect present, physical space and spatial cognition as well as human relations to the living environment (Dale & Burrell, 2008; Foucault, 1986; Kiniven, 2006; Steyaert, 2006). The connection between abstract, imaginary or symbolic spatial contexts (not to speak of all the additional dimensions that could be introduced) is a basically natural, but nevertheless problematic one that is largely neglected in discussions on space theory and organizational spaces (Watkins, 2005; Yanow, 2010). These interrelations and their implications will nevertheless have considerable impact on organizational research based on space theory, because they allow for the analysis of conceptual relations between tempo-spatial models, spatial practice, different contexts of the organization and physical organizational space. In order to ask, in which sense space may be used for simulating possible realities, one has to take the dynamic modeling of tempo-spatial relations into account and their role in the creation of possible worlds as well as their appropriation through discourse, pictures, concepts, etc. (Baudrillard, 1978, 1981; Goodman, 1990). Space and the modeling of tempo-spatial relations play a significant role in the sculpting, dimensioning and construction of possible future, past and present states of the world as well as their implications for tangible, present space (Luckner, 2001; Wittgenstein, 2006). The simulation of possible past, present and futures states of the world that coexist and create meaning, sensible environments and coherent worldviews in the here and now, subsequently create the forms and structures for understanding, realizing and transforming the here and now. The simulation of possible realities, possible spaces and tempo-spatial structures is therefore directly bound to the continuous construction of the real from the fringes of the unreal as well as the myriad of possibilities of imaginary, imaginable, probable and improbable future, present and past worlds (Goodman, 1990).

Therefore, it seems more than appropriate to search for structures, processes and principles that enable the dynamic modeling of tempo-spatial relations, which seem central for accessing, constructing and understanding human reality. From a perspective of space theory the construction of past, future and present states of the world as well as the modeling of linkages between these states also exemplify the continuous exercise of creating continuity between different “extasies of time” (“Extasen der Zeitlichkeit” (Heidegger as cited in Luckner, 2001, p. 148)), which are themselves related to particular worldviews, such as collective and individual perspectives on possible versions of reality (Dutton & Dukerich, 1991; Hernes et al., 2006; Hernes, 2004; Weick, 1995a, 1995b). In this context the simulation of space does not seem as a distant aspect of human existence or as an illusive characteristic of utopian identity, but as an everyday practice that is actively applied in order to establish continuity and meaning in the passing of time. The simulation of reality that is mentioned by Baudrillard (Baudrillard, 1981, 1987) thus appears to be a common process that is central to the continuous construction of reality that serves to establish connections between physical, abstract, imaginary or symbolic spaces in the interplay of different past, present or future version of the world. The simulation and integration of possible realities and their impact on space and time can be identified a central functions in the dynamic reconfiguration and transformation of reality as well as the spaces it occupies. Searching for impact of simulative models of time and space in their connection to the creation of human reality, Baudrillard himself indicates, what can be expected as a consequence of the continuing and ever intensifying simulation of the real:

“Simulation is no longer that of a territory, a referential being, or a substance. It is the generation by models of a real without origin or reality: a hyperreal. The territory no longer precedes the map, nor does it survive it. It is nevertheless the map that precedes the territory - precession of simulacra - that engenders the territory, and if one must return to the fable, today it is the territory whose shreds slowly rot across the extent of the map.” (Baudrillard, 1981, p. 1)

In fact, human approaches to space and time as well as their various modes, methods and modalities allow us and at the same time force us to reconstruct and continually renegotiate our relation to time and space as a function of our very existence in the world (Luckner, 2001; Wittgenstein, 2006). Hence, people employ more or less complex systems that enable them to map, represent and model tempo-spatial relations in more or less controlled settings and by the use of more or less sophisticated tools (Go & van Fenema, 2006; Grandy & Mills, 2004; Lefebvre, 1991). Since the early days of capitalism the basic structures and processes of organizations can be interpreted as systems of tempo-spatial control and coordination, thereby changing, creating and aligning worldviews, work-flows as well as work-related identities (Brocklehurst, 2006; Chanlat, 2006; Foucault, 1995; F. W. Taylor, 1996). These systems do not only serve as instruments for controlling time, space and the movement of bodies, but may also introduce tempo-spatial order, territorialize social relations and shape hierarchies in the creation of modern institutions (Dale & Burrell, 2008; Foucault, 1995; Giddens, 1997; Kosiol, 1962, 1978). Hence, even complex models of organizing and also the most sophisticated tools for organizational design, strategic management and organizational research are ultimately based on the fundamentals of tempo-spatial relations that have been outlined above and that extend from present, physical space to imaginary, abstract, symbolic or virtual conceptions of the world (Bellas, 2006; Dale, 2005; Grandy & Mills, 2004; Mobach, 2010; Panayiotou & Kafiris, 2010; Zhang, Spicer, & Hancock, 2008). As a consequence all possible simulations of the world can ultimately be traced back to a present moment in time and space, from which they emanate, in which they are modeled and integrated with factual reality and human presence in the here and now.

From Simulation to Heterotopic Space

There are two major insights that can be drawn from a perspective of tempo-spatial simulation, used as a means for modeling and ultimately creating reality in space and time. First, simulating and modeling human relations towards time and space as well as creating and shaping links between different levels and dimensions of abstract, imaginary, virtual or practical spaces appears to be an everyday practice in collective sensemaking and personal identity construction (Dale & Burrell, 2008; Hernes et al., 2006; S. Taylor & Spicer, 2007; Weick, 1995b). Second, all aspects of continuous simulation ultimately refer to a present moment in space and time, where abstract conceptions of reality originate and different spatial contexts and relations are regularly created, integrated and modified (Derrida, 1978, 2008; Luckner, 2001). This fact also prevents space or spatial conceptions from disintegrating or vanishing in hyperreal simulations of space, because even the most abstract spatial models ultimately refer to and emanate from basic human cognition in the here and now (Baudrillard, 1981; Luckner, 2001). This also implies that tempo-spatial structures will be dynamically modeled through the nomadic construction of continuous, tempo-spatial assemblages that refer to a permanently changing reality as well as its manifestation and dimensioning in space and time (Deleuze & Guattari, 1977, 2005, 2006). Possible realities in time and space are, on the

other hand, established, formed and transformed through the conception and modeling of continuous and fluid tempo-spatial relations. Also, the notion of a continuous assemblage of tempo-spatial relations highlights the present moment in time as the very instance that implicates, integrates and embodies different potential realities, along with varying tempo-spatial conceptions of the world, and relates them to present, physical space. It is this continually present moment in time and space, from which abstract, imaginary, symbolic and simulated spaces ultimately emerge.

From a perspective of permanent change and dynamic tempo-spatial modeling space, spatial concepts and tempo-spatial structures can thus be defined as the results of continuous, tempo-spatial assemblage that are perceived in the form of milieus, patterns, structures and consistencies that characterize human perception of space and time (Deleuze & Guattari, 1977, 2005, 2006). These assemblages can subsequently be manipulated, redirected and redimensioned in the process of individual and collective sensemaking as well as in the course of multidimensional, multirelational referencing between different instances in time and space. Therefore, tempo-spatial assemblages can also be understood as artifacts of our dynamic relation to time and space and can be willfully sculpted in dimensioning, creating, modeling and analyzing aspects of human existence in their relation to time and space. Organizations can thus be understood as dynamic contexts for the creation and configuration of multidimensional tempo-spatial assemblages that are used for structuring, negotiating and integrating possible versions of reality and their manifestation in time and space (Deleuze & Guattari, 2005; Hernes, 2004). Tempo-spatial structures in the organization may moreover be defined as rhizomatic forms of multidimensional, multirelational assemblages that are accessible via planes of consistency that are not only formed in every instance of observation, analysis and representation, but that can be extended and transformed by continuous reconstruction and permanent modeling as a function of creating realities, worlds and worldviews that lie at the heart of individual and collective processes of sensemaking (Deleuze & Guattari, 1977, 2005; Goodman, 1990). As a consequence it can be stated that organizations as well as human perspectives on (organizational) reality will ultimately manifest in the perception and properties of “sonorous space” (Deleuze & Guattari, 2005, pp. 479, 481; Munro & Jordon, 2013, p. 1502), which is accessed by immediate spatial cognition and can be observed and analyzed in its emergence and transformation via the structures and fluid forms of “smooth space” (Deleuze & Guattari, 2005, p. 481; Munro & Jordon, 2013, pp. 1498, 1502) in the short term as well as via the structures, spaces of buildings and places of the organization in the long term (Bellas, 2006; Kenis et al., 2010; Mobach, 2010; van Marrewijk & Yanow, 2010b; van Marrewijk, 2010; Yanow, 2010).

What can, moreover, be observed with regard to tempo-spatial patterns and structures are systems of reference that are established and transformed in the process of sensemaking, which are related to and inscribed in physical space and which can subsequently be represented and deconstructed by analytic assemblages based on approaches derived from space theory, such as Lefebvre’s concept on the production of space (Deleuze & Guattari, 2005; Lefebvre, 1991; Weick, 1995b). Also, these systems of reference and the emergence of tempo-spatial structures can be reproduced, reified or reconstructed by using various techniques, like multi-sensory sculpting or cognitive mapping, so that relationships between physical, analytic, imaginary, symbolic or virtual spaces can be drawn, illustrated and explored (Ackermann, Eden, & Cropper, 1992; Christensen & Olson, 2002; Eden, 2004; Sims & Doyle, 1995; von Wallpach & Kreuzer, 2013). In society as well as in organizations, particularly with regard to their manifestation in physical space, systems of closures and openings are frequently used in order to introduce consistencies, continuity and structures in tempo-spatial relations (Dale & Burrell, 2008; Foucault, 1986, 1995; Kornberger & Clegg,

2004). These are regularly connected to various aspects of individual or collective sensemaking as well as imaginary, symbolic or interpretive aspects of reality (Dale, 2005; Lefebvre, 1991; Panayiotou & Kafiris, 2010). Also, these systems of closures and openings, along with programs for tempo-spatial organizing, are widely considered to lie at the basis of the emergence of social institutions (at least in modern states of western conception) (Dale & Burrell, 2008; Foucault, 1995; Giddens, 1997). Finally, the said regimes of systematic order and interaction are regularly applied to relate certain abstract, imaginary, symbolic or otherwise interpretive aspects of human existence to spatial reality, in order to connect them to tempo-spatial structures and processes as well as to social practices via rites and rituals of everyday life (Bourdieu & Wacquant, 2006; Bourdieu, 2009; Dale & Burrell, 2008; Foucault, 1986; Giddens, 1997; Orlikowski & Yates, 2002). These aspects also allow for the connection of utopian conceptions of reality to practical settings, physical contexts and human actions that can be controlled and shaped in time and space (Dobers, 2006; Kornberger & Clegg, 2004; Kornberger, 2012; Steyaert, 2006).

It now seems obvious that the relations between utopian and heterotopic spaces can be used in order to introduce and inscribe meanings, social hierarchies, power structures and other forms of social order into space and thus influence implications for individual existence and collective action by manipulating tempo-spatial relations from an imaginary, utopian perspective that is central to creating social meaning and tempo-spatial order and that is ultimately mirrored in physical space as well as spatial practice (Bourdieu, 2009; Foucault, 1986, 1995; Markus, 2006; Panayiotou & Kafiris, 2010). As a consequence, the interaction between utopian and heterotopic spaces can be seen as a tool readily available for the negotiation of spatial reality in reference to different spaces of probability and possibility. Present, physical space appears to be vested with imaginary and often outright utopian aspects that at the same time lie at the basis of rendering space intelligible, interpretable and meaningful (Foucault, 1986; Iser, 1993). The dimensioning and modeling of space and tempo-spatial relations from an utopian, imaginary perspective finally does not appear as a very abstract and far-fetched projection, but forms the basis of tying order, structure, social hierarchy and meaning to real world situations and individual life worlds (Foucault, 1986; Iser, 1993; Luckner, 2001; Wittgenstein, 2006). It is this link between utopian spaces, physical reality and spatial structure that is regularly used in everyday life for forming and transforming conceivable models of the world and building social institutions. Finally, rites and rituals frequently signal and accompany transitions between different tempo-spatial zones, the transformations of roles, social identities and conceptions of reality in time and space and tie them to practical social settings that structure and guide human existence in the social realm (Andrieu & Boetsch, 2008; Foucault, 1986; Mayrhofer & Iellatchitch, 2005; Mayrhofer, 1993; Orlikowski & Yates, 2002; Orlikowski, 2007). In fact, space and time are continuously constructed via processes of sensemaking, collective action as well as continuous (often ritualized) interaction and are thus, mostly without explicitly being recognized, actively employed in shaping, creating and modeling versions of human reality.

As stated above, it appears to be evident that human tempo-spatial relations are primarily bound to a moment of continuous presence in space and time, from which abstract, creative, imaginary or virtual conceptions of reality ultimately emanate and which also prevents tempo-spatial models to dissolve in sheer hyperreal simulation. Also, human presence in the here and now allows for a sculptural access to tempo-spatial relations, models, structures and interactions that are continuously formed and transformed as a natural part of human existence in relation to time and space. Sculptural aspects thus seem to be the defining qualities of real space as well as derivative spaces, constructed in explaining, creating or interpreting human life-worlds. As a consequence and especially with regard to organizational

spaces, different aspect of sculpturation largely characterize the modeling, transformation and form-giving in tangible, physical space as well as in the spatialization and temporization of human life-worlds that unfold in space and time. Finally, a perspective of continuous sculpturation and ongoing tempo-spatial modeling highlights a fluid conception of space, time and tempo-spatial relations, in which stability and consistency are expressed as mere instances in a process of permanent change and a dynamic approach on the appropriation of space and time in the task of organizing human existence. At this point it becomes clear that spaces of possibility and probability, tempo-spatial structures and patterns as well as different forms of analytic, interpretive, imaginary or utopian spaces are largely bound to similar principles of structuring, creation and transformation that can be found in tangible, physical space. The sculptural properties of present, physical space can thus be applied to conceptual approaches towards space, space theory and organizational spaces as well as the formation, creation and transformation of human life worlds in connection to time and space. Sculpturality and the properties of fluid space may thus serve as a starting point to create, change and organize organizational spaces, organizational structures and processes as well as organizational worldviews connected to collative identity and organizational sensemaking. Additionally, a sculptural approach to space and time finally highlights that organizational strategies, organizational sensemaking and the design of organizational life-worlds directly impacts our understanding of our immediate spatial environment and the world we create to live in.

Conclusion

The implications of the continuous reformulation and remodeling of space and spaces as well as their impact on relating spaces of possibility, tempo-spatial simulations and structures to real, tangible space hint at the importance of time and space as fluid media for the construction and realization of organizations in the process of organizational sensemaking and organizational identity construction (Dale & Burrell, 2008; Dale, 2005; Gastelaars, 2010; Hernes et al., 2006; Weick, 1995b). The fluid nature of human relations to time and space and the impact of tempo-spatial relations on the temporizations and spatialization of collective and individual identities may be interpreted as an act of continuous sculpting or a means of continuous form-giving in the process of creating sensible environments as well as comprehensible realities (Goodman, 1990; Luckner, 2001). In this context relations to time and space, especially in the form of tempo-spatial structures, are continuously used in order to organize, structure and create human worldviews, possible realities as well as individual and collective identities (Brocklehurst, 2006; Chanlat, 2006; Dutton & Dukerich, 1991; Dutton & Penner, 1993; Weick et al., 2005; Weick, 1995a). Also, in the organizational realm time and space are constantly appropriated in creating, ordering and structuring organizational environments and organizational contexts in order to render tasks, operations and strategies conceivable and manageable in everyday management and organizational decision-making (Stewart R. Clegg & Kornberger, 2006a; Grandy & Mills, 2004; Kornberger, 2012; Orlikowski & Yates, 2002). Because the process of “worldmaking” (Goodman, 1990, p. 20) that is described by Goodman is a continuous one, the constant human influence on space and time can be compared to a continuous act of sculpting of possible realities, possible relations in time and space as well as their impact on present space and time. In organizations tempo-spatial structures can thus serve as means to create, order and develop organizational perspectives on the world and to relate them to organizational identities, organizational processes and structures as well as to possible contexts and environments of the organization (Hernes et al., 2006; Hernes, 2004; Kosiol, 1962; Luckner, 2001). Time and space can thus be understood as sculptural media that are constantly used in order to construct, negotiate and

“real-ize” organizations as well as their impact on present time and space (Giddens, 1997; Lefebvre, 1991).

In order to summarize the aspects outlined above it can be stated that time and space are fundamental to the ordering and structuring of the organizational realm as well as organizational environments, while differentiating and integrating possible, probable, impossible and “real” versions of the world (Goodman, 1990; Kosiol, 1962, 1978; Weick, 1995a). Moreover, space and time are actively used and appropriated in organizational sensemaking and can thus be understood as tools to form and transform aspects of organizations identity and organizational reality (Albert & Whetten, 1985; Grandy & Mills, 2004; Orlikowski & Yates, 2002; Weick et al., 2005; Weick, 1995b). The question thus arises, in which respect organizational perspectives on space and time can be deemed “real” and in which instant they will be “real-ized”. In this context, Lefebvre’s concept of the production of space may explain the interaction between spatial practice, representation of space as well as symbolic or imaginary spaces (Lefebvre, 1991; S. Taylor & Spicer, 2007; Watkins, 2005). Also, the simulation of space may point to the implications and mechanics of different modes, methods and functions of spatial sculpting in the present moment in time and space, from which abstract, imaginary or simulative tempo-spatial models ultimately emanate (Baudrillard, 1981, 1987; Luckner, 2001). It is thus the continuous construction and the constant remodeling of different tempo-spatial perspectives as well as their integration in present time and space that characterize them both as fluid media for negotiating, reconfiguring and transforming human relations to the real world (Deleuze & Guattari, 1977, 2005, 2006). The rhizomatic evolution and transformation of tempo-spatial structures as well as the ongoing and nomadic conception of space and time finally point to a fluid and sculptural relation towards time and space that is actively applied in architecture, in organizational strategy building as well as in research concerning organizational space (Bellas, 2006; Grandy & Mills, 2004; Kornberger, 2012; Mobach, 2010; van Marrewijk & Yanow, 2010b; Yanow, 2010). Immediate spatial perception and the properties of “smooth space” (Deleuze & Guattari, 2005, p. 481; Munro & Jordon, 2013, pp. 1498, 1502) can be understood as direct indicators of these sculptural influences on present space and time that can form the basis on research on organizational spaces and the evolution of tempo-spatial structures (Deleuze & Guattari, 2005, 2006; Munro & Jordon, 2013; van Marrewijk, 2010; Yanow, 2010).

Finally, it can be stated that a mechanic compartmentalized view on time, space and tempo-spatial structures does neither seem to live up to the current discourse on time and space in organizations, nor to human tempo-spatial experience or the role of tempo-spatial relations in the creation and transformation of human life-worlds and human identity. This paper thus advocates a fluid perspective on time, space and tempo-spatial structures (constructed in this case via approaches of space theory) as well as a sculptural approach on human tempo-spatial relations that are actively used in order to shape and structure human realities. The established perspective also allows to understand time, space and tempo-spatial structures as means to map, model and manipulate the organizational realm that can be used and appropriated in strategy-building, organizational design, organizational theory as well as in the planning and implementation of research projects in organization studies and the social sciences. Moreover, a static understating of tempo-spatial relations as well as a dynamic perspective on time and space will both be supported by the approach established above as they are both subject to different means and methods of structuring, temporizing and territorializing perspectives on organizational reality. Time and space can thus be presented as the necessary basis for establishing relations to human life-worlds, interpreting organizational sensemaking as well as to forming and transforming collective and individual identities. Besides, time and space

will actively be appropriated in order to shape, transform and “real-ize” perspectives on organizational reality. Finally, a perspective of space theory allows to present time, space and tempo-spatial structures as possible media and a welcome basis for the design and implementation of research projects in organization studies and the social sciences. Herein a number of options and possibilities for future research and conceptual evolution can be found that may be addressed by further studies in the field of organizational space as well as in organizational research and space theory in general. It is hoped that the current paper thus serves as an inspiration to spark further interest in the multifaceted nature of time and space as well as their multiple relations to different aspects of organization studies and organizational theory.

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