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Renate Meyer and Markus Höllerer and Dennis Jancsary and Theo van Leeuwen

The visual dimension in organizing, organization, and organization research: Core ideas, current developments, and promising avenues

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The visual dimension in organizing, organization, and organization research: Core ideas, current developments, and promising avenues

Renate E. Meyer | WU Vienna University of Economics and Business, Austria & Copenhagen Business School, Denmark
Markus A. Höllerer | Australian School of Business, University of New South Wales, Australia
Dennis Jancsary | WU Vienna University of Economics and Business, Austria
Theo van Leeuwen | University of Technology, Sydney, Australia

Abstract. With the unprecedented rise in the use of visuals, and its undeniable omnipresence in organizational contexts, as well as in the individual's everyday life, organization and management science has recently started to pay closer attention to the to date under-theorized 'visual mode' of discourse and meaning construction. Building primarily on insights from the phenomenological tradition in organization theory and from social semiotics, this article sets out to consolidate previous scholarly efforts and to sketch a fertile future research agenda. After briefly exploring the workings of visuals, we introduce the methodological and theoretical 'roots' of visual studies in a number of disciplines that have a long-standing tradition of incorporating the visual. We then continue by extensively reviewing work in the field of organization and management studies: More specifically, we present five distinct approaches to feature visuals in research designs and to include the visual dimension in scholarly inquiry. Subsequently, we outline, in some detail, promising avenues for future research, and close with a reflection on the impact of visualization on scientific practice itself.

Keywords. Visuals; images; visual discourse; visual rhetoric; aesthetics; meaning; social semiotics; sociology of knowledge.

1 Introduction

Much has been written in recent times with regard to a shift towards social meaning and culture. Such emphasis is by no means limited to the study of organization and management, and has been described more broadly as a 'discursive' or 'linguistic turn' in social sciences (e.g., Rorty, 1967). Surprisingly enough, and despite a prominent line of research that addresses discourse (for an overview, see Phillips & Oswick, 2012), the *visual* mode of meaning construction has remained largely unexplored in organization and management research. While researchers have acknowledged that discourse encompasses verbal, as well as visual, representations (in discourse analysis in general, see, for instance, Fairclough, 1992; Wodak & Meyer, 2009; in discourse analysis in organization research, see, for instance, Cornelissen, Holt, & Zundel, 2011; Grant, Hardy, Oswick, & Putnam, 2004; Phillips, Lawrence, & Hardy, 2004), and early calls for a more

thorough integration of visual data into organizational research were voiced as long as more than 20 years ago (e.g., Meyer, 1991), the majority of research has almost exclusively focused on verbal text – to an extent that commentary has described the visual dimension as an 'absent present' in the scholarly endeavors of the field (Styhre, 2010b; see also Davison and Warren, 2009). However, other disciplines have more readily recognized the omnipresence of visual artifacts in modern societies that goes hand in hand with new information and communication technologies, and have been – for quite some time – acknowledging the fact that there is not only an increasing quantity but also a novel quality to the usage of 'visual language' (e.g., Kress & van Leeuwen, 1996; Mitchell, 1994). Consequently, various scholars in cultural and social sciences have claimed to witness what they label an 'iconic' (e.g., Boehm, 1994; Maar & Burda, 2004), 'imagic' (e.g., Fellmann, 1995), or 'pictorial' turn (e.g., Mitchell, 1994).

Organization and management science has only recently started to pay closer attention to the 'visualization' of and within its domain. Images and visual artifacts are not just add-ons to verbal texts, mere transmitters of information, or means of communication: They have become an elementary *mode* for the construction, maintenance, and transformation of meaning (e.g., Kress & van Leeuwen, 2001; Raab, 2008). It is the specific *performativity* of visuals and visual discourse – working differently from other modes of communication – that holds ample potential. Various scholars have taken up the challenge of including aspects related to visuality in their empirical research as well as – albeit to lesser degree – in theory-building. Still, efforts to 'domesticate' the visual are to date nevertheless rather fragmented and explorative: Despite a growing number of special issues in scholarly journals (for instance, in the *Accounting, Auditing & Accountability Journal* in 2009; in *Qualitative Research in Organizations and Management* in 2012), edited books (e.g., Bell, Schroeder, & Warren, 2013; Margolis & Pauwels, 2011; Puyou, Quattrone, McLean, & Thrift, 2012), and review articles (e.g., Bell & Davison, forthcoming; Kunter & Bell, 2006; Ray & Smith, 2012), a clear and broadly shared research agenda has, as yet, not emerged. What Pauwels (2010) criticizes for sociology is all the more true for our field: Due to a lack of integrative efforts, we are in danger of constantly 'reinventing' knowledge about the visual and its workings. We thus contend that it is important to consolidate the lessons learned, and to work towards an integrated research agenda within the domain of organization and management theory.

In order to initiate and support such efforts at integration, we feel the need for this review to be fairly broad. Instead of providing yet another guide to visual research methods or methodology in general (see, for instance, Margolis & Pauwels, 2011; Rose, 2007; Spencer, 2011; Stanczak, 2007), we aim to be extensive in our choice of literature. This, however, also makes it necessary to outline the boundaries of our endeavor explicitly. We intend to be comprehensive with regard to the visual artifacts covered (i.e., photographs, pictures, paintings, drawings, sketches, and other material forms of visuality, but also more abstract manifestations like color, typography, or charts)[1], as well as with regard to the different roles that visuals play in research designs and theory development. What cannot be the objective of such an article is to provide a comprehensive review of *all* existing research in terms of fields of application or phenomena studied. Rather, we focus on commonalities and differences between distinct approaches as well as on their unique contributions in order to make different traditions 'speak' to each other more clearly – and eventually to invite boundary-crossing and interdisciplinary research. We are convinced that such a take on the topic is the most fruitful for our purpose. One more limitation has to be mentioned: While we hope that this article is an inspiring resource for social scientists from a variety of disciplines, it primarily targets issues and applications relevant for organization

and management scholars. This implies that we take some liberty with regard to selected reference to concepts from other disciplines; we are well aware of the fact that a broad range of work exists outside our own discipline's domain that has been concerned with aspects of the visual.

Our article contributes to a stronger and more prominent integration of the visual in the empirical and conceptual research agenda of our field by bringing together various strands of research and pointing out a number of potentially fruitful avenues for future research. With regard to *empirical* aspects and the application of existing theories and concepts, we encourage future research to extend existing findings in terms of quantity, quality, and scope. So far, although a multitude of methodical tools has been proposed and successfully applied to a variety of phenomena, the field lacks consolidation as well as the systematic development and testing of ideas. Subsequently, we outline promising ways in which a *conceptual* consideration of the visual mode of discourse and meaning construction may help to refine and advance central constructs and mechanisms in our discipline. Integrating the visual mode will contribute to a better understanding of how actors make sense, process information, and organize knowledge in social categories. A focus on visuals can further illuminate the ways in which organizational, professional, and personal identities are formed and communicated. Visual rhetoric and visual framing are central parts of the strategic repertoire of culturally skilled entrepreneurs. Closer attention to the workings of visuals, therefore, can grant new insights into agenda-setting activities, strategic issues management, balancing of multiple stakeholders' expectations, impression management, or strategic responses to institutional pressures and complexity. Research may find that some forms of institutional work are based on specific types of multimodal (i.e., verbal and visual) communication, or that the usefulness of visual artifacts varies with regard to the translation and mediation of global ideas, or implies different diffusion trajectories. Visuality and visuals – as part of the cultural toolkit – turn the spotlight on visual and aesthetic legitimation strategies and visual or aesthetic codes of cultural systems or institutional spheres. Just like discourse in general, this represents a vast area of interest for critical approaches in management research. Concerning *theory extension*, we propose an interdisciplinary agenda and show how organization and management research could be inspired by insights from the domains of linguistics and semiotics, as well as from studies on spirituality and religion.

In the next section, we explore what is to be understood as the visual mode of meaning construction. We do so elaborating on how the visual mode is related to, and different from, the verbal one. Our subsequent review is accomplished in several steps. We start rather broadly by examining various disciplines from the humanities and social sciences, seeking methodological and theoretical inspiration for visual organization and management studies. In a next step, we thoroughly review various strands of research from several sub-disciplines of organization and management studies for their engagement with the visual dimension – both in terms of research design and theory-building. Eventually, we outline a future research agenda from an organization theory perspective. We conclude the article with a brief summary of its core arguments, and a reflection on the impact of visualization on scientific practice itself.

2 Exploring the visual mode of discourse and meaning construction

Here, we employ the term 'visual mode' in order to refer to a specific way of constructing and expressing meaning: It is created, transformed, transferred, and put into practice by either the use

of primarily visual objects and artifacts, or by integrating the visual and the verbal in such a way that neither can be fully understood without the other. The meaning of artifacts[2] is tied to the specific cultural contexts in which they are used; they represent visual manifestations of social knowledge and practice. Such visual manifestations do not only constitute a difference in *form* but – potentially – also in *content*. Thus, the visual mode of discourse and meaning construction, while sharing central features with other modes, shows distinct characteristics and therefore requires different treatment in scholarly analysis.

In order to conceptualize the visual construction of meaning, we take ideas from the sociology of knowledge as presented in the seminal work of Berger and Luckmann (1967; see also Schütz & Luckmann, 1973) as the point of departure, and complement this scholarly tradition with other relevant approaches that have been mainly concerned with the *performative nature* of the visual. Knowledge, according to Berger and Luckmann (1967: 1), can be defined as "the certainty that phenomena are real and that they possess specific characteristics". The task for the researcher, then, is to analyze how such certainty comes into existence, how specific 'realities' become taken as 'known' against competing versions, and how a particular body of knowledge is established as social reality. In order to be able to store and transfer knowledge, and to communicate about such reality, knowledge has to be objectified through the use of signs. Such signs, and the sign systems that organize their use, are "objectively available beyond the expression of subjective intentions 'here and now'" (Berger & Luckmann, 1967: 36). Thus, the created stock of knowledge is social, that is, it is distributed and shared across a particular community.

The dominant sign system of human society is language.[3] However, it has been stressed that it is by no means the only one (Meyer, 2008). In particular, visual artifacts are an equally important resource for the social construction of reality: Like words, and often in symbiosis with words, they materialize, organize, communicate, store, and pass on knowledge (Raab, 2008), and are objectified within social groups and communities in order to enable mutual and shared 'readings' (Raab, 2008). Such mutual understanding is, however, not guaranteed. Just as verbal language has to be learned in order to be intelligible, images are no mere 'windows' through which we observe the world (Mitchell, 2008), but constitute a complex system of symbolic signs (Kress & van Leeuwen, 1996). In this respect, the two modes – verbal and visual – resemble each other. Societies not only develop language to externalize the categories and classification schemes by means of which they differentiate and 'order' people, places, and things (Berger & Luckmann, 1967); they also develop ways of using visual signs to do exactly the same. While linguistic expression has been the dominant discursive mode in modern Western societies, in others the key system of inscription has been visual – and there is undeniable evidence that the visual is, once again, on the rise, also in the Western world. With this comes the emergence of new or consolidated visual ways to externalize classification schemes, realize statements of action and being, and signify degrees of social intimacy and distance (see also Kress & van Leeuwen, 1996). We therefore argue that verbal and visual language can both be used to realize the same fundamental systems of meaning that constitute our cultures, but that each might do so by means of its own specific forms, whether independently or, as is increasingly the case, in multimodal combination. A first proposition, thus, is that *the verbal and the visual mode of meaning construction both materialize, organize, communicate, store, and pass on social knowledge within particular communities. They both constitute complex systems of symbolic signs and are able to build up and organize zones of meaning.*

Apart from these more technical similarities, the verbal and the visual mode also share common features in regard to performativity and effect. Just as verbal language, visual manifestations not only express or represent reality, but also assist in constructing it: They are crucial elements of 'mirroring' as well as 'inventing' reality (Raab, 2008), by using shared symbols for persuasion (e.g., Messaris, 1997), and transporting specific (normative) ideas behind a veil of seemingly objective representation (Kress & van Leeuwen, 1996). In short, they serve the same aims of lifeworld-construction and legitimation. Consequently, a second proposition holds that *the verbal and visual mode of meaning construction both contribute to a society's social stock of knowledge and are, thus, part of an objectified social reality. The use of visual artifacts – similar to verbal text – serves to create, maintain, and defend particular forms of practice, and the particular forms of knowledge that underpin them.*

There are, however, also important differences. Verbal language is commonly regarded as more linear and sequential: The meaning of an utterance becomes accessible only through the particular sequence of words.[4] While speech and traditional writing, in this way, materialize as linear and successive sequences of meaningful units, visual artifacts are characterized by a certain 'immediacy' (Raab, 2008). They present themselves to the observer instantaneously, as a spatially arranged totality of meaningful parts. Although the design of a visual artifact may predispose viewers to a particular 'reading path' on the basis of the hierarchy of salience of its elements (Kress & van Leeuwen, 1996; van Leeuwen, 2005b; see also Holsanova, Rahm, & Holmqvist, 2006), perception still integrates these elements into a compositional whole, with the 'observing eye' oscillating between the totality and its parts. The increased use of visual elements in the design of texts, such as, for instance, bullet-pointed lists, flowcharts, or network graphs, allows written texts also to acquire an overall visual *Gestalt* that shapes and informs the meaning of the words it contains. *The visual mode of meaning construction*, we therefore further propose, *is characterized by a prevalence of holistic and immediate information, rather than linear and sequentially arranged information.*

It is often argued that verbal language and discourse are more strictly regulated, firmly organized, and, thus, limited in form and content according to internal rules. As Berger and Luckmann (1967: 38) put it, "I encounter language as a facticity external to myself and it is coercive in its effect on me. Language forces me into its patterns". Such insight is taken up by Kress and van Leeuwen (1996), but rather than perceiving it as an essential and universal characteristic of language, they argue that verbal text has *historically* been controlled more strongly than visual text, especially in the last few centuries, and that it is this kind of social regulation that produces a coercive effect. As the visual gains in importance in contemporary global culture, it will, they argue, also become more strongly regulated – albeit in different ways (for instance, through the constraints imposed by standard software used to create visuals, or through the classifications created by global image banks which increasingly control pictorial meaning in many forms of public communication). In their study on the global magazine *Cosmopolitan,* Machin and van Leeuwen (2007) note that the different versions of the magazine are visually homogenous and linguistically diverse, suggesting that the magazine's key values as a global brand are carried visually rather than verbally, while the verbal serves to diversify and localize the *Cosmopolitan* core messages.

In restricted domains, such as safety color codes and traffic signs, the visual has long been highly regulated. Such regulation of visual meaning, thus, is likely to increase as its role and relevance in constructing social reality grows. Accordingly, we speculate that the visual will gain in facticity and coerciveness in many domains, although in others ambiguity – and therefore the possibility

of denying ideological meanings – may persist for some time. The facticity and coerciveness of the visual is especially striking in the context of normative texts. Although certain kinds of signs possess explicit visual cues to encode whether a sign should be read as information, prohibition, or instruction (for instance, traffic signs), and although pictures may realize 'image acts' through gestures and facial expressions, many visual artifacts present themselves as interactively neutral, as pure information, even when they are used for purposes of instruction or regulation. Flowcharts, for instance, are often prescriptive, but, in contrast to purely verbal texts such as recipes, they never make their mandatory nature explicit. Their function as instruction is realized only in, and through, the interactive contexts in which they are embedded, or by the verbal expressions that may accompany them.

The facticity of visuals is further enhanced by the fact that argumentation disappears. Network graphs and mind maps, for instance, eradicate the diversity of logical conjunction which was introduced in the Enlightenment to improve the clarity of verbal reasoning (van Leeuwen, 2005a). Predication, too, is no longer explicit, eliminating the call for a response of either agreement or disagreement, something which every act of predication usually implies. Finally, the visual is capable of an accuracy and plenitude of description that verbal language cannot match, and the sense of facticity this lends to, for instance, technical drawings, charts, or floor plans, can carry over in visual texts that construct and prescribe much more abstract realities. A fourth core proposition, hence, is that *visual representation can objectify social arrangements and socially constructed realities through the absence of predication, explicit logical conjunction, and grammatical mood, and through its capacity for accurate and detailed depiction.*

Two further differences between visual and verbal language should be mentioned. First, aspects of visual artifacts are more difficult to ignore compared to aspects of verbal texts. When encountering a visually structured text, whether a picture, a magazine page, or a corporate report, the central message is immediately processed, and comes across instantaneously and memorably. Second, visual artifacts can 'individualize' communication. Even predominantly written visual texts, such as, for instance, PowerPoint slides or websites, contain a broad variety of typographic choices (see also van Leeuwen, 2006), decorative graphic elements, or abstractly textured backgrounds. All of these can, through their shape, color, or style, project identity and values, whether of an individual or an organization.

In summary, the visual mode of social reality construction – in particular through the manifest content of visual artifacts – implies greater facticity, eliminating predication and logical conjunction, disguising itself as information, rather than argument, and as an accurate map of the world rather than a construction of reality, thus enhancing its coerciveness (even though such coerciveness is never made explicit). At the same time, the visual mode enhances the potential to express identities and values through the latent dimension of visual artifacts (for instance, color, perspective, typography, or the decorative use of visuality). Such identities and values, expressed in a visual way, form a stable environment for the information presented that is taken in without being consciously noticed (van Leeuwen, 2011b). It also brings an additional aesthetic and affective dimension into communication. Finally, visuals communicate with an immediacy of reception and a memorable impression of the essence of the message – an essence that, in linear verbal texts, has to be assembled piece by piece over time. It is for these reasons that we argue that a consideration of the visual mode of discourse and meaning construction will augment our

understanding of contemporary organizational practices, and that it therefore has to play a prominent role in organizational and management research.

3 The roots: Traditions of addressing the visual dimension

While the inclusion of visuality and visuals has been comparatively sparse in organization and management research, scholars interested in visual organization studies have been able to draw on, and benefit from, the long and rich history of engaging with the visual in other disciplines within the humanities and social sciences. In the following, we briefly outline what we regard to be the most influential roots for the study of the visual through an organizational prism: anthropology, sociology, art history, social semiotics, communication and media studies, and psychology.

3.1 Anthropology and sociology

Early preoccupation of sociology with visuals has been rooted in ethnography and photo-documentation, with visual anthropology (e.g., Collier & Collier, 1986; Pink, 2001) playing an influential role. The idea of a distinct visual sociology – the use of visual data in sociological research (e.g., Banks, 2001; Chaplin, 1994; Grady 1996, 2001; Rose, 2007; Wagner 2002; for an overview, see Bolton, Pole, & Mizen, 2001; Pauwels, 2010) – became prominent through Becker's (e.g., 1974, 1998) photographic analyses of society, and gained considerable momentum over the past two decades. Such development has been primarily facilitated by a renewed interest in culture within the social sciences, as well as by the effects and impact modern information and communication technologies have had on society. It also directed the attention of organization and management scholars to work on visuality published by renowned sociologists such as Bourdieu (e.g., 1990, 2004) or Latour (e.g., 1986): While research based on Bourdieu has used visual artifacts to reconstruct, for instance, habitus (e.g., Sweetman, 2009), Latour has inspired researchers to take an actor-network-theory perspective (e.g., Latour, 2005). In another line of sociological work, Raab (2008) adapts the phenomenological sociology of knowledge of Berger and Luckmann (1967) to also explicitly include 'visual knowledge' (see also previous section).

A broad toolbox has been used for the study of visual culture. While photo-documentation techniques request the researcher to collect visual evidence actively via recordings (see the 'documenting approach' in the next section), other, non-participatory visual methods (i.e., content analysis, compositional interpretation, semiotics/semiology, or visual discourse analysis; see, for instance, Rose, 2007) are concerned with pre-existing visual artifacts and their social meaning. However, sociologists have not only used visuals to document social reality or analyze its traces in visual artifacts: In as early as the late 1950s, photo-elicitation techniques were established as a powerful tool that utilizes the visual dimension to gather information from interviewees in order to better understand social and cultural phenomena (e.g., Collier, 1957). Over the years, these techniques (for a review, see Harper, 2002) and other participatory methods, such as photo-voice (e.g., Rose, 2007), have constantly been expanded and improved (see the 'dialogical approach' in the next section).

3.2 Art history

Another important line of engagement with the visual dimension has been inspired by the study of art (e.g., Berger, 1972; Gombrich, 1960; Mitchell, 1980, 1994; Panofsky, 1939). Such research primarily aims at reconstructing and understanding the cultural meaning of visual artifacts, but is also concerned with the 'art of vision', i.e., the gaze of the critic and the audience (e.g., Freedberg, 1991). Although, as Bell and Davison (forthcoming: 9) note, the transfer of insights into visual organizational research is not always unproblematic, art theory and art history "seem natural companions to researching the visual", both in picture and film.

Visual analysis has, for instance, developed methodologies that build on the work of German art historians Panofsky and – to a lesser degree – Imdahl (see, for instance, Christmann, 2008; Müller-Doohm, 1997; Rose, 2007). While the 'iconology' of Panofsky originated within art history, further elaborations of his ideas are well established in sociology and the social sciences in general (see, e.g., Bohnsack, 2007, 2008; Müller-Doohm, 1993, 1997). Panofsky's (e.g., 1957) notion of habitus, for instance, strongly influenced Bourdieu (who explicitly mentions Panofsky's iconology as an important methodology). In contrast to Panofsky, who aimed at reconstructing the *Wesenssinn,* or habitus, of a particular historical epoch from multiple sources and genres, Imdahl stressed the unique properties and logics of the visual medium and its non-substitutable contribution to meaning (Bohnsack, 2008). This, consequently, led him to an analytical focus on form and composition. His 'seeing view' (e.g., Imdahl, 1995) has its point of reference not in the single and specific objects within an image, but rather in the composition of the image as a whole (Bohnsack, 2008).

The continuing impact of aesthetics and art history (in particular, Panofsky's iconology) is clearly visible in contemporary sociological research methodologies (often combined with conceptual arguments borrowed from linguistics, semiology, or philosophy). Van Leeuwen (2001), for instance, has shown how the insights of art historians can be used for the analysis of symbolism in contemporary images. Other approaches drawing heavily on insights of art history include Bohnsack's (2007) documentary analysis of visual artifacts (also referring to the work of Mannheim and Foucault) or Müller-Dohm's (1997) structural-hermeneutical symbolic analysis that targets the interrelation of text and image. Iconology also features prominently in recent handbooks on visual research methods (see, e.g., Müller, 2011; Rose, 2007).

3.3 Social semiotics

French philosopher and literary theorist Barthes (e.g., 1972, 1980, 1982) has been a central reference for research on the visual (e.g., Davison, 2008; Hill & Helmers, 2004; Scott, 1994). The social semiotic approach builds on, and at the same time transcends, Barthes' 'semiological' approach (e.g., Kress & van Leeuwen, 1996, 2001): While the semiology of the Paris School has been primarily concerned with the 'lexis' or 'vocabulary' of visual design (i.e., with the denotative and connotative meaning of people, places, and objects depicted in visuals), social semiotics stresses the 'grammar' – i.e., the way in which the specific composition links visually (re-)presented people, places, and objects into a meaningful whole that is greater than the sum of its parts (Kress & van Leeuwen, 1996). To do so, they borrow formal concepts such as 'volume' and 'vector' from the visual theory of Arnheim (e.g., 1974, 1982), and semantic-functional categories such as 'actor', 'process', 'goal', and 'attribute' from Halliday's (1994) systemic-functional linguistics. The underlying assumption is that the signified belongs to culture rather than to specific semiotic modes (for instance, linguistic or visual, among others). Each semiotic mode

provides specific signifiers. The materiality and characteristics of these signifiers make a difference and inflect the signified. Different eras and cultures will develop divergent distributions between semiotic modes; these define what may be done with both linguistic and visual signs, and where either linguistic signs or visual signs may be more appropriate.

Kress and van Leeuwen (2001; see also van Leeuwen, 2005b) have shifted the emphasis from looking at the verbal and visual dimension separately to an integration of these two semiotic modes in multimodal text analysis. In Barthes' days, verbal text and images could be studied as having separate 'messages', which may then be conjunctively related (Barthes, 1977) – simply because texts were, in fact, structured this way (and some still are today). Since then, verbal text and images have become increasingly integrated, so that neither can be fully understood separately: The message only emerges in and through their interrelation. Influenced by speech act theory and Halliday's (1978) 'metafunctional' theory, social semiotics also understands knowledge as essentially related to action, and verbal as well as visual language as simultaneously realizing ideational *and* interactive meanings. Along this line, van Leeuwen (2008) – like Halliday (1978) – strongly argues for the primacy of social practice, and for viewing knowledge as the re-contextualization of social practice.

Finally, the discipline of social semiotics perceives itself as one that combines the study of semiotic resources with the study of their histories and use in specific cultural contexts; the latter also includes the normative discourses and practices that may influence or regulate the use of semiotic resources.

3.4 Communication and media studies

Another thriving area for research on visuals is the field of communication and media studies, where a dramatic shift from verbal to visual text has taken place throughout the last century – as also mirrored by a plethora of scholarly publications on this topic (for an overview, see, for instance, Barnhurst, Vari, & Rodríguez, 2004). Research on the visual in communication studies is itself inspired by a variety of traditions, and encompasses, thus, divergent streams. As inspiration for organization and management research, the line on performative and rhetorical power of visuals in the public media, enabling and supporting processes of reality construction and shared remembrance of events seems particularly relevant. Communication scholars have used the label of 'visual framing' to address these phenomena – inspired by Messaris and Abraham's (2001: 225) contention that messages "are received more readily in visual form" (for an overview of research on visual framing, see, for instance, Rodríguez & Dimitrova, 2011). The research agenda in this field has been particularly concerned with the visualization of critical events, such as issues of war (e.g., Parry, 2010; Schwalbe, Silcock, & Keith, 2008), terrorism (e.g., Fahmy, 2010), or disasters (e.g., Borah, 2009; Fahmy, Kelly, & Kim, 2007).

Also in the world of business, for- and not-for-profit alike, the contest over social meaning is increasingly fought through the use of visual media and rhetoric (Hill & Helmers, 2004). Organizations respond to – and at the same time draw from, and participate in – visual discourse on the global or local level; visual framing is thus crucial in managing the communication with key audiences, defending legitimacy, or strengthening a competitive position. With the advent of modern information and communication technologies, organizations' websites, for instance, constitute an increasingly important locus for managing reputation towards external audiences,

and organizational identities towards internal ones. Research in communication and media studies also sheds light on the emerging conventions of visual design (e.g., Knox, 2007); it provides fundamental insights on how globalized communication leads to an increasing institutionalization of visual cues and furthers the development of a particular 'global visual language' (e.g., Machin, 2004; Machin & van Leeuwen, 2003).

3.5 Psychology

Psychological perspectives emphasize the origin or the perception of the visual within an individual. On the one hand, psychological approaches have a long tradition in exploring the way the visual is consumed, perceived, and processed by the human brain (e.g., Arnheim, 1974) – or, more generally, "what the brain does when humans see objects" (Barnhurst *et al.*, 2004: 621) –, including both the way in which visuals affect viewers and the way in which viewers make sense of visuals. There is, for instance, a lively debate on whether visual and verbal cues are encoded and stored in the human memory in a qualitatively different way, and how information is then pooled in order to achieve their cognitive effect (Abraham & Appiah, 2006). A history of such cognitive research on vision is, for instance, provided by Yantis (2001); other prominent resources include the works of Livingstone (2002), Elkins (2000), or Massironi (2002), to name just a few. A particularly interesting stream of research is concerned with the specific persuasive or rhetorical effect of visual artifacts. Psychological theories on the rhetoric of images address the phenomenon from a different perspective than cultural studies (i.e., individual vs. culturally shared values and assumptions in persuasive communication). Hill (2004), for instance, stresses that images, compared to verbal text, contain more *vivid information* (i.e., information that is emotionally interesting and more concrete), and draw their persuasive power from this attribute. Psychological research in such tradition is important insofar as it helps to define what essentially characterizes the 'power of the visual' in terms of impact on individual perception, processing of information, and persuasive potential. In business studies, they have been applied and further developed, for instance, in research on marketing, advertising, consumer responses, or branding.

On the other hand, a tradition that deals with images and image-work from a psychoanalytical perspective does exist (e.g., Aaron, 2007; Hall, 1999; Pollock, 2006). These studies suggest deep psychological readings of visuals on the basis of, for instance, Freud, Lacan, or Kristeva (e.g., Matilal & Höpfl, 2009; Pollock, 2006). Psychoanalytical readings have informed methodological development (e.g., Vince & Broussine, 1996; Warren, 2012), and have not just been frequently applied to feminist and gender studies, as well as queer theory (e.g., Rose, 2007), but also, for instance, to visual research on hostile takeovers (Schneider & Dunbar, 1992).

3.6 Some less frequently walked paths

While the aforementioned fields are the ones most frequently referenced in visual studies in the fields of organization and management, there are no limits to what we can learn from disciplines outside our own. One of them is philosophy. Philosophical ideas have indirectly exerted great influence through their reception in psychology, sociology, linguistics, and art history. For example, images and visual metaphors (for instance, the 'gaze', or the panopticon as a 'seeing machine') play a central role in Foucault's writings (e.g., 1979) on the grand disciplinary regimes that have inspired a number of critical studies in management, albeit the visual aspect of his work

has not been fully explored yet. There is much to gain from engaging with the thoughts of other influential minds like Barthes (e.g., 1972, 1980, 1982), Sartre (e.g., 1940), Derrida (e.g., 1987, 1993), or Merleau-Ponty (e.g., 1964, 1968). Related to, but distinctly different from philosophy, we suggest that a closer look at the role visuals and visualization play in the domain of theology could be inspiring. We argue that research in this area could shed more light on, for instance, religious and spiritual symbolism in organizations and management, the spiritual aspects of visualization – but also on issues of taboo.

Finally, we suggest that the broad field that has been labeled 'visual culture studies' provides ample resources for management research. There has been quite some debate as to whether visual culture studies are indeed an independent discipline, or rather describe an interdisciplinary research agenda (e.g., Bal, 2003). It is certainly firmly built on insights from the disciplines described above – especially anthropology, sociology, and art history –, but unlike these it is grounded primarily in the specificity of its object domain: the complex visual communication systems of societies that are produced in social interaction. In such a way, visual culture studies go beyond 'classic' artifacts (photographs, images, paintings, drawings, or film, for example) and include, for instance, architecture, design, fashion, make-up and hairstyle, body decoration, or tattoos. Brown (2010) also contends that visual culture studies take a strongly political stance, treating perceptions as partial and guided by interest. Such research raises issues like the existence of a 'politics of vision' – and the need to reveal power through deconstruction.

3.7 Colonial past or collaborative future?

Organization and management research has always been inspired by – and therefore imported – conceptual ideas from related disciplines. Oswick, Fleming, and Hanlon (2011) convincingly argue that roughly two-thirds of the research conducted in management is rooted in theories borrowed from related disciplines. In fact, multi-disciplinarity was one of the core characteristics of organization research in its early days (see, for instance, Hinings, 1988; Meyer & Boxenbaum, 2010; Whetten, Felin, & King, 2009). For today's research agenda, Suddaby, Hardy, and Huy (2011: 237) note that such borrowing from other disciplines is a sign that "management theory has not yet lost its colonial roots".

However, not only does interdisciplinarity, as such, prevent a continuous 're-invention of the wheel'; much more than that, we would expect great advances and path-breaking innovations from the "amphibious entrepreneurs" (Powell & Sandholtz, 2012) who are well established in disparate social worlds, and are thus able to combine elements from multiple domains. The traditions outlined above have distinct strengths and, beyond having informed visual research in the past, they have great potential to inspire our field of scholarly inquiry in the future. A variety of *conceptual* notions (for instance, pointing out the ubiquitous presence of visuals as social and cultural artifacts; their aesthetic dimension; insights into processes of production, 'mise-en-scène', and consumption of visual communication; or related issues of power), *methodological* advice (for instance, a plea for multimodality and interdisciplinarity), a specific *methodical* toolbox (for instance, ethnographical designs, historical documentation, iconographical image analysis, or methods from qualitative sociological research), and attention to *phenomena* that are equally relevant for our discipline (such as the various ways the visual dimension imprints social, organizational, and managerial practices and norms, or enables and influences cognition, rhetoric, persuasion, and the strategic manipulation of both audience and meaning) could redirect various

strands of organization and management studies. We will return to the potential of these disciplines for theory extension in our suggestions for a future research agenda.

4 Visuality in organization and management studies: State of the art

Organization and management research has analyzed visuals and visuality from various theoretical perspectives, and with the help of a broad range of methodological designs and tools. There are several ways in which to review this literature. Pauwels (2010), for instance, presents an integrated framework covering the major decisions and challenges when doing visual research, such as production context, subject of research, visual media, analytical focus, theoretical foundation, methodological issues, and format of end product. Bell and Davison (forthcoming) discuss a variety of empirically driven, as well as theory-based, approaches, and Ray and Smith (2012) structure their review of the usage of photographs in organization studies according to the dimensions of production, analysis, and application to selected research areas. In advertising research, McQuarrie and Mick (1999) follow the development of engagement with visuals, and distinguish between archival, experimental, reader-response, and text-interpretive traditions.

We propose a different systematization: In the following, based on a thorough literature review examining high-quality academic journals in the domain of organization and management, we provide an overview of how visuals have been integrated into a variety of research designs in our field. We identify five ideal-typical approaches to the study of visuals. These approaches, we argue, can be differentiated by the role they assign to visual artifacts in their research design, and by the objectives, methodological assumptions, and methodical toolboxes implied in such roles. In the following, we discuss for each of these approaches central assumptions and examples from the corpus of literature.[5] Subsequently, we reflect upon our discussion by briefly highlighting potential synergies between approaches and by introducing different ways in which existing research has contributed to conceptual constructs and theory. In our review, we focus on organization research, but also include the broader field of management studies, in particular the disciplines of strategy, marketing, and accounting.

4.1 The status of visuals in the research design: Five different approaches

The status of visuals and the role visual artifacts play in research designs vary greatly across the literature we reviewed. The five identified approaches share some common assumptions about the visual mode of meaning construction, but nonetheless assign different roles to visual artifacts. The *archeological approach* and the *practice approach* both stress their status as a manifestation of culture whose meaning, relevance, and use are socially constructed by a particular community or society. While the archeological approach focuses on 'pre-existing' visual artifacts and data that the researcher can collect and interpret in order to reconstruct underlying meaning structures – much like verbal 'traces' –, the practice approach aims at analyzing the performative effect of visuals in situ, i.e., the construction, handling, and use of visual artifacts in social action and organizational practice. The *strategic approach* and the *dialogical approach* focus on the information processing and subsequent sense-making of actors in the field, and deliberately include, select, or create visuals to induce cognitive processes, albeit in different ways. The strategic approach focuses on the impact of visuals, both as triggers for individual cognitive processes like perception, remembrance, and evaluation, and as persuasive rhetorical devices working through

culturally established codes and symbols. Taking a dialogical approach, researchers incorporate visual artifacts into interview situations in order to give interviewees a more active voice and get closer to their life-worlds. Finally, the *documenting approach* harnesses the power of visuals to capture large amounts of information in a limited space in order to document and/or present more comprehensive accounts of data. Table 1 provides an overview and brief characterization.

Insert Table 1 about here

4.1.1 Visual artifacts as 'storage' of sedimented social knowledge: The archeological approach

Research in an 'archeological' tradition is primarily concerned with the systematic reconstruction of socially shared meaning and, consequently, the analysis of pre-existing visual artifacts in which such meaning is embodied. Visual artifacts, in this regard, serve as a 'cultural memory' – as the 'storage' or 'crystallization' of social knowledge. A central topic, therefore, is how exactly visuals are related to social reality, knowledge, and practice. According to Preston, Wright, and Young (1996), at least three distinct relationships exist (see also Davison, McLean, & Warren, 2012). First, visuals can be assumed to *reflect* (i.e., represent) social reality by transmitting unambiguous messages. Looking at visuals from this perspective leads to efforts at reconstructing their intended message(s). Second, accepting that visuals may also *mask* and/or *pervert* social reality by transporting ideological messages (see also Anderson & Imperia, 1992) provides the opportunity to go beyond authorial intent and reconstruct visual meaning on the more fundamental level of "society's deep structures of social classification, institutional forms and relationships" (Preston *et al.*, 1996: 113). Third, images may also be perceived as *constituting* social reality. This enables to challenge the intended message(s) by exploring and constructing alternative realities. Most existing studies in organization research blend notions of representation, construction, and masking of reality. They regard visuals as produced, as well as interpreted, in a specific cultural and historical context, thus making use of shared cues and symbols in order to be comprehensible. In this way, visual artifacts construct organizational reality (e.g., Kuasirikun, 2011), transport corporations' claims regarding truth, credibility, and authenticity (e.g., Graves, Flesher, & Jordan, 1996; Guthey & Jackson, 2005), and/or signal accountability (e.g., Breitbarth, Harris, & Insch, 2010; Davison, 2007; Höllerer, Jancsary, Meyer, & Vettori, forthcoming). Still, part of the messages conveyed through visuals is potentially unintended, and, consequently, opens up opportunities for the systematic reconstruction of implicit and taken-for-granted understandings and values (e.g., Dougherty & Kunda, 1990; Schroeder & Zwick, 2004; Hancock & Tyler, 2007). Existing archeological studies have analyzed visualization in different genres of corporate communication (for instance, annual reports, recruitment brochures, corporate websites, or advertisements), but also in mass media and business press, among others. Thematically, they have been applied to a variety of research fields and phenomena.

One line of archeological research is concerned with how visualization mirrors, but also creates and changes, broader meaning structures in organizations, fields, and society. Visual representations are powerful ordering instruments that "ignite the process of knowledge fabrication" (Quattrone, 2009: 89): They aid the organization of knowledge in a topical way and

are able to recall complex systems of knowledge through a minimal sign. Höllerer *et al.* (forthcoming), for instance, systematically analyze a large-scale sample of more than 1,600 images in stand-alone CSR reports of Austrian publicly-traded corporations in order to reconstruct the constellation of logics governing the discourse on corporate social responsibility (CSR). They argue that, just like vocabularies, the images contained in these reports give insights into the corporations' specific understandings and interpretations of CSR – and thus into the design of the business-society interface. Visualization, then, facilitates the mediation of oppositions at this interface in three ways: First, by translating abstract global ideas into concrete local knowledge, they aid in mediating spatial oppositions; second by linking the past, present, and future they bridge time; and third, by facilitating between different institutional spheres and their divergent logics they appease ideational oppositions and reduce institutional complexity. By reconstructing a number of argumentative positions from which corporations depict their social responsibility, Höllerer *et al.* (forthcoming) find that the images studied not only serve to create and theorize a locally resonant variant of CSR, but also attempt at enhancing corporations' credibility by portraying them as professional and trustworthy. Such bridging power of visuals has also been found for various other topics, such as the blending of tradition, religion, and modernity in corporate reporting (e.g., Kamla & Roberts, 2010), or the translation of generic rational myths within Israeli society into more specific and locally resonating high-tech rational myths (Zilber, 2006).

Rindova and Schultz (1998) point to visuals in the context of research on organizational and corporate identity. Visual cues, they argue, are more likely to work implicitly rather than explicitly, and visual communication aimed at the construction of corporate identities, thus, reduces the potential of direct contradictions with the lived experiences of organizational members and external audiences. The management of corporate identity and image through visualization in the context of a corporate merger strategy is addressed by Vaara, Tienari, and Irrmann (2007). In their study of several domestic and cross-border mergers, they find that visuals in advertising campaigns are meant to maintain notions of authenticity, distinctiveness, and self-esteem in the intentional – and somewhat artificial – creation of a 'Nordic' organizational identity. Other authors have researched the role of visuals in self-presentation and corporate branding (on visual and aesthetic branding, see also, for instance, Kornberger, 2010; Schroeder, 2012). Delmestri, Oberg, and Drori (forthcoming) use an international sample of universities to identify different types of icons and logos that reflect meaning attributed to universities and academic institutions. With universities simultaneously exposed to a global organizational logic of agentic and principled actorhood and national or local field-level logics, the authors argue that the variety of emblems and logos manifests such tension by representing acts of 'meaning refraction'. Not only images, but the general increase of design elements in annual reporting is the focus of McKinstry's (1996) study that points at the risk of visuals and design distracting attention from the core task of reporting: the display of information. He furthermore links the emergence of design elements to the use of annual reports as a public relations and communications tool addressing minority shareholders and a weakly informed general public. Capitalizing on the fact-like and representational attributes assigned to visuals, these may not only be used to shape desired features of an organization's presence, but also to alter the perception of its past. Foster, Suddaby, Minkus, and Wiebe (2011), for instance, illustrate how managers – through the use of nostalgic imagery – attempt to reshape an organization's history and invent traditions in order to

make the past consistent with their strategic vision or to support a firm-specific competitive advantage.

Taking a more critical stance, archaeological research has also been dedicated to how visuals and other aesthetic forms are used for the constitution of subjects and subjectivity, particularly with regard to issues of gender, race, and marginalized groups in general. Hardy and Phillips (1999) present a study on how field-level actors draw on societal-level discourse in order to constitute subject-positions, and how this, consequently, shapes actors' ability to develop effective discursive strategies. They draw on a content analysis of political cartoons in the press as the representation of societal discourse on immigration, arguing that such cartoons constitute refugees (for instance, as frauds or victims) by mirroring the societal-level assumptions on the immigration system (for instance, too lenient or too tough), the government (for instance, as incompetent or under pressure), as well as the public. Cartoons, they argue, provide particularly concise representations of discursive positions and political perspectives; by humorously creating imaginary worlds they "provide a discursive space 'outside' the discourse in question" (Hardy & Phillips, 1999: 13) and can over-accentuate and expose features of the social order they portray. In a similar way, visuals have been used in order to look into the constitution of specific gender roles in organizations (e.g., Anderson & Imperia, 1992; Benschop & Meihuizen, 2002; Duff, 2011; Hancock & Tyler, 2007; Kuasirikun, 2011). Such research, however, has not only been applied to the reconstruction of the subject-positions of marginalized groups. A different case is provided by Schroeder and Zwick (2004), who explore how contemporary images construct conflicting and contradictory conceptions of masculinity. Focusing on the construction of a rather powerful actor category, Dougherty and Kunda (1990) provide an account of how visuals allow for the reconstruction of implicit organizational 'theories' about customers. Usually, such research is conducted by critically interpreting the prevalence and characterization (for instance, pose, context, or behavior) of actors in visual artifacts. Particular attention has been given to the facticity created through the depiction of faces, primarily in research on the visual representation of top management (e.g., Davison, 2010; Guthey & Jackson, 2005). An alternative perspective on such 'face work' based on the ideas of French philosopher Levinas is fruitfully employed by Campbell, McPhail, and Slack (2009). The authors contend that faces not only 'depict' people, but also create virtual interactivity and closeness by establishing relationships between the spectator, the depicted person, and the commissioning agent. More recent research has also taken into account that such classification is the result of political processes. Lefsrud, Graves, and Phillips (2013), for instance, analyze advertisements by promoters and opponents of the Alberta oil sands to show how these actors rhetorically struggle to construct legitimate and illegitimate categories – and try to push each other into illegitimacy.

Visual artifacts are expressions of the cultural system in which they are produced: Archaeological research uses them as a 'window' to gain insight. At the same, visual artifacts create, transform, or stabilize particular 'versions' of reality. Archeological analyses are therefore suited to enhancing our understanding of the specific meaning structures that are created and maintained through visual means. Research designs can be of both quantitative and qualitative nature, although the majority of studies employ qualitative designs. Methods encompass content analysis, rhetoric analysis, framing analysis, semiotics, critical and deconstructive designs, or hermeneutics.

4.1.2 Visual artifacts as performative material objects: The practice approach

While scholarly work pursuing an archeological approach aims at the reconstruction of relevant cultural contexts and meaning structures through the detailed interpretation of visual artifacts as types of text, the practice approach enables their study in situ. Consequently, visual artifacts do not only serve as carriers of social (or subjective) meaning, but are also objects to be constructed, employed, and manipulated in various processes of organizing. In contrast to the archaeological approach, thus, research is not so much interested in the sedimented social meaning(s) and structure(s) that visual artifacts embody than in the processes of 'inscribing' such meaning, the 'careers' that such artifacts have in organizational contexts, and consequently, in the actions that they trigger, enable, or prevent – i.e., the practice approach is interested in what visual artifacts actually 'do'. In line with traditions that emphasize micro-processes (for instance, process theories, strategy-as-practice, action research, actor-network-theory, or institutional work), research focusing on 'visualize-ing' draws heavily on ethnographic research designs.

A growing amount of literature addressing visuality in interaction processes is inspired by actor-network-theory (e.g., Latour, 2005) and science and technology studies (e.g., Knorr-Cetina, 1981; Latour & Woolgar, 1979; Star & Griesemer, 1989). Justesen and Mouritsen (2009) build on Latour's (1986) concept of translation and present an account of how visualizations (in their work mainly 3-D visualizations and pictures) act as 'mediators', connecting different entities and activities. Visualizations, they argue, become 'super-real' due to their capacity to travel between annual report, design, marketing, construction, and accounting, and to engage and organize a variety of actors and their activities within and outside the organization. Based on their analyses of annual reports, sales material, semi-structured interviews and fieldwork, they illustrate how different kinds of visualization interact. In particular, they find that while photographs invoke the past by referring to the time in which the photographed object existed, 3-D simulations materialize the future. Other studies highlight the role of visuals in processes of creation, negotiation, and transmission of knowledge. Ewenstein and Whyte (2007, 2009), for instance, study the use of visual artifacts in architectural practice. Through detailed observation of design work, they explore the aesthetic knowledge of organizational actors and its application in design projects. They claim that visual objects mediate interaction between epistemic communities within organizations; they initiate iterative, dialogical processes through which knowledge is both developed and shared. In a similar way, Henderson (1995) argues that visual representations are a component of the social organization of collective cognition and, thus, aid the construction of practice-situated and practice-generated knowledge. In her study on the 'political career' of a design prototype, she concludes that visuals are 'boundary objects', 'plastic' enough to adapt to local needs, but also recognizable enough to retain a global identity. Thus, they develop distinct meanings in different social worlds (Star & Griesemer, 1989), and are able to mobilize those who would employ them in design or production processes. Such an impact of visual artifacts on processes of organization and negotiation in work contexts is also reinforced by, for instance, Yakura (2002), who finds that visualized timelines allow organizational and occupational subgroups to negotiate and manage time. In this way, they are tools for overcoming 'pluritemporalism'.

Scholars have also addressed the performative power of visuals with regard to the political processes involved in the construction of individual and organizational identities. While Rafaeli and Pratt (1993) discuss the role of dress for a variety of organizational aspects, such as compliance, legitimacy, image, impression management, and utilization of human resources, Pratt and Rafaeli (1997) study how organizational members attempt to gain power and assert control

through advocating a particular dress code. Stressing that dress is a powerful symbol of organizational values, they find that debates among subgroups revealed an underlying conflict over social identities. The authors explicitly introduce and briefly discuss prior research that conceptualizes the communicative properties of clothing in order to better understand identity construction in organizational contexts. With a similar focus on organizational dress, Humphreys and Brown (2002) assess the role of the Islamic headscarf in the dynamics of collective identity maintenance and challenge in an all-female Turkish university department, and Dellinger (2002) examines the occupational and organizational dress norms of men and women working as editors and accountants at a pornographic magazine, exploring how such norms influence definitions of acceptable and unacceptable sexuality at work. Building on the thoughts of Benjamin, Adorno, and Lefebvre, issues of power and resistance have also been brought up by researching corporate architecture as spaces of domination, where processes of aesthetic regulation and resistance can be observed (e.g., Burrell & Dale, 2003; Wasserman & Frenkel, 2011). Such resistance is also discussed by Bell (2012), who, in her study on 'organizational memory' and 'organizational death', suggests that understanding visual representations as discursive resources enables organizational actors to challenge dominant organizational narratives with alternative versions without explicitly opposing them. Thus, the use of visual resources may be seen as providing opportunities for more subtle resistance, and as an empowering practice for marginalized actor groups.

Other research in this approach has stressed the role of visuals as objects to be employed in processes of strategizing. Material visual artifacts may serve as occasions for sense-making in organizational and managerial contexts (Heracleous & Jacobs, 2008). In a similar vein, Kaplan (2010: 343), argues that PowerPoint, as a technology, supports strategic knowledge production by enabling discursive practices involved in the constitution of the epistemic culture of the organization, namely "collaboration to negotiate meaning and cartography to adjudicate interests". PowerPoint – as part of the "epistemic machinery of strategy" (Kaplan, 2010: 344) – enables and facilitates the 'travel' of facts. While it is prone to over-simplification, objectification, and politicization, it also opens up spaces for meaning negotiation. Visual 'maps', in general, are important tools for strategizing as "the art of strategy lies both in the combination of frameworks, images or maps and the choice of their focus" (Cummings and Wilson, 2003: 4).

Practice approaches to the study of visual discourse are characterized by their explicit focus on social processes and action, and on the meaning assigned to visuals in their 'natural' context, i.e., their actual handling and use in organizational practice. Accordingly, research designs predominantly encompass ethnographic case studies with data from observations and interviews – complemented by secondary data – which are analyzed and interpreted through detailed coding, and subsequently lead to theory building. Through its focus on the creation and use of visual artifacts in social interaction, the practice approach alleviates the common criticism against research on visual discourse that it does not adequately account for the specific processes and contexts of production and reception of the artifacts it studies.

4.1.3 Visual artifacts and their effects on audiences: The strategic approach

Work with a strategic take on visuals is instrumental to the extent that it is interested in their potential to elicit desired responses from audiences. This is often analyzed in comparison to, or in combination with, verbal language. The strategic approach builds predominantly on psychological theories and insights. However, some studies also consider semiotics and linguistics in their

theoretical frameworks. In management studies, its main application has been in the domain of marketing and consumer studies. More recently, the persuasive potential of visuals in various instances of claims-making has gained much wider attention in organization and management research.

One stream of studies in this tradition is primarily interested in the immediate impact of visuals on cognitive processing. Visuals, they suggest, enhance information encoding, storage, and retrieval. Established constructs are attitude, elaboration, belief, liking, recall, and assessment. A central objective of this line of research is to assess and understand better the degree to which verbal and visual texts have different – complementary or contradictory – effects. Often this is achieved through the design and use of complex experiments for the testing of hypotheses. Visual material employed in such research designs is both natural and artificially created. A broad range of examples of empirical studies can be found, not surprisingly, in the field of advertising and branding dealing with consumer choice. They include, for instance, Mitchell and Olson's (1981) early study on how pictures can be used to convey a specific belief, or Edell and Staelin's (1983) research on how the presence of a dominant picture in print advertisements alters consumers' cognitive activity. Houston, Childers, and Heckler (1987) further investigate how picture-word inconsistency in advertisements influences memorability; Lurie and Mason (2007) develop a number of propositions concerning the effect of visualization on the decision-making of marketing managers and consumers. The authors suggest that visualization tools may improve efficiency, reduce costs, help uncover new insights, make data more accessible, and increase customer satisfaction. Mandel and Johnson (2002) show that visual aspects such as color and texture can 'prime' information, leading to changes in choice and decision making on the part of recipients. Outside the domain of marketing, Cho, Phillips, Hageman, and Patten (2009) find that media richness is positively correlated with certain dimensions of trust, and Smith and Taffler (1996) demonstrate the usefulness of schematic faces as decision tools in the communication of financial information: They conclude that visual information is processed more quickly than traditionally presented information, with no substantial loss of accuracy.

A more recent stream within the strategic approach argues that visuals are a persuasive rhetorical device – in many cases more powerful than verbal language (e.g., McQuarrie & Mick, 1999; Scott & Rajeev, 2003). Researchers in marketing and advertising who study visual rhetoric build on earlier work in their domain that explores how visuals are cognitively processed by a target audience; however, they deviate from traditional views by arguing that visual communication is a learned, culture-specific, and purposive activity. Visuals do not automatically trigger reactions, but need to be understood in terms of their incorporated meaning in order to elicit responses. They are thus part of a system of symbols that is culturally embedded, requires active sense-making on the part of the audience, and functions as a fully nuanced 'writing system' analogous to language (Scott, 1994; Scott & Vargas, 2007). Consequently, research has proposed a typology of 'visual rhetorical figures' (e.g., Phillips and McQuarrie, 2004), arguing that visuals can be used to communicate and persuade just like words and verbal argumentation. Experimental designs are often supported by in-depth interviews and interpretive techniques (e.g., McQuarrie & Mick, 1999; Scott & Vargas, 2007): Researchers purposefully use selected visuals to test how audiences' responses are shaped by different features of the visual artifact. For instance, McQuarrie and Mick (1992) inquired how the combination of verbal wordplay and visual images influences whether an advertisement is liked, brand attitude, and the recalling of advertisement headlines. In later studies, the authors show that rhetorical figures – especially metaphors – are not only

embodied in verbal text, but also, and in particular, in visuals. The persuasive potential of visuals may be considered even higher, partly because visual tropes are more implicit and complex than verbal ones, especially under conditions of incidental exposure (McQuarrie & Mick, 1996, 2003; for a review, see also McQuarrie & Phillips, 2005; Bulmer & Buchanan-Oliver, 2006). Phillips (2000) finds that while higher levels of verbal comments alongside images in an advertisement increase comprehension, they decrease liking. She concludes that visuals derive their persuasive effects especially from their implicitness, ambiguity, and openness. However, not only does this openness or ambiguity make them so persuasive, it also makes it difficult to hold the producers of images accountable for a conveyed message. McQuarrie and Phillips (2005), thus, suggest that images are purposefully used to transport advertising messages that cannot be verbalized for legal reasons.

The strategic approach enhances our knowledge of the particular impact of visual artifacts on the perception among a 'literate' audience. It firmly grounds such perception and de-coding of visual information in cognitive psychology, thus providing a solid foundation for other visual research that, so far, has often tended to simply take for granted the strong impact of visuals on cognition and sense-making. With regard to methods, studies rely mostly on sophisticated experimental designs; however, as the cultural aspect of interpreting visuals becomes more and more emphasized, these are increasingly complemented by semiotic analyses of the visual material and by accompanying in-depth interviewing techniques. Insights from this approach are a very promising way of studying the persuasiveness of visual rhetoric and therefore provide a promising potential for theory elaboration and advancement in approaches that build on the 'consumption' side of visuals outside the domains of marketing and consumer research. By focusing on the manipulative potential of visual artifacts, they may contribute to more critical discourse studies, as they point to and elaborate on the hegemonic effects of visual communication, and open the way for a thorough discussion of visual rhetorical strategies under different socio-historical conditions.

4.1.4 Visual artifacts as a form of 'communication' between researcher and field: The dialogical approach

While in an archaeological and practice approach, it is primarily the researcher who interprets visual artifacts that occur 'naturally' (or their handling, respectively), researchers in a dialogical approach use visuals to engage in a conversation with actors in the field, i.e., visuals are either brought into or constructed during a research interview in order to elicit different and richer responses from the interviewee, and to gain insights into their life-worlds, experiences, and identities. Apart from photography, a broad range of visual artifacts has been used (e.g., Harper, 2002; Meyer, 1991; Vince & Warren, 2012). Such visuals can either be created by field members themselves or selected by the researcher (Ray & Smith, 2012).

Despite its potential, empirical work in this tradition is still rather scarce, and examples are often limited to brief empirical illustrations in primarily methodological papers. So far, such research designs are mainly found in research on the construction of social spaces and identity. With regard to studies relying on participant-led photography, Warren (2002), for instance, conducts an ethnographic study on the website design department of a global IT firm in order to help respondents express their aesthetic experiences of 'human-being at work'. She argues that the use of photography for her research purposes offers a more 'sensually complete' methodology, helping participants express their aesthetic experiences regarding their relationships with the

physical surroundings in an office environment. In a similar vein, Slutskaya, Simpson, and Hughes (2012) use photo elicitation in a research project on working class men who perform work that is commonly seen as distasteful and/or degrading. Conducting 40 in-depth interviews with male butchers about their 'dirty' work on the basis of self-taken photographs, they argue that participant-led photography is particularly useful in contexts where participants consider themselves "non-emotional and self-restrained" (Slutskaya *et al.*, 2012: 20) and, thus, makes possible more expressive and detailed accounts of daily work. In their study, they find that the physicality of the setting, strong nostalgic themes about how the profession changed for the worse, and a desire to convey the specific aesthetics of the trade, are at the core of butchers' self-identity discourse. Such visual narratives are also featured in Shortt and Warren's (2012) study on work identity in four different hairdressing salons. Participant-taken photographs that capture meaningful elements of daily work express four broader themes: self-portraits, spaces, unexpected and unusual objects, and images taken 'by accident' that all reveal different aspects of identity construction. Outside of a professional work context, Venkatraman and Nelson (2008) research the impact of space on behavior, in particular how spaces are appropriated and made meaningful by actors. They analyze how young, urban Chinese consumers 'twisted' the meaning of the physical, material setting of Starbucks through the enactment of their experiences, roles, and identities. The authors argue that photo-elicitation reveals how participants imbue a commercial setting with a 'home-like' quality in order to counteract the crowded spaces they usually live and work in.

Using free-hand drawings instead of photography, Vince & Broussine (1996) provide a sophisticated study on organizational change and identity. Asking how organizational members comprehend and act for or against collective emotional experiences that underlie the organizational hierarchy in times of change, they identify three central mechanisms: paradox, defense, and attachment. Methodologically, the authors tackle these psychodynamic aspects of organizational change by asking middle managers to draw pictures that express their feelings about change in the organization; they then take notes, and finally reflect on their drawings in groups. The authors argue that such images bridge the gap between the private and the collective, and thus catalyze the revelation of the unspoken. Externalizing their feelings through drawings enabled managers to deal with emotions in a more conscious and reflective way, leading to learning and development. In contrast to – and complementing – work on individual and professional identities and identification, Stiles (2011) instead looks at disorganization processes, disidentification, and ideological fragmentation. By asking respondents in large, research-oriented business schools to draw personality images of their organizations and interpret them in the process of drawing, he found identity fragmentation in several aspects: individual identity, institutional identity, and also in the role of organizational leaders.

The dialogical approach contributes to organization and management research quite differently from other approaches. It is contended that visual artifacts used in interviews evoke deeper elements of human consciousness than do words (Harper, 2002) – as well as a broad range of emotions. Photographs, images, and drawings may also help participants to express themselves when verbal discussion of a topic is uncomfortable (e.g., Slutskaya *et al.*, 2012), culturally restricted (e.g., Venkatraman & Nelson, 2008), or interviewees are less capable of verbal articulation. In addition, inviting participants to select or create their own visuals signals trust and lowers the power-distance between researcher and participant and grants participants more 'voice' in the overall research process (Warren, 2005). Consequently, participant-created visual artifacts

seem particularly well-suited to situations where a researcher does not want to force informants into his or her cognitive framework (see also Meyer, 1991).

4.1.5 Visual artifacts as a specific form of field notes: The documenting approach

The documenting approach to visuals is the least common in organization and management research, but looks back on a long tradition in visual anthropology and ethnography (e.g., Collier & Collier, 1986). Much like the dialogical approach, visuals are seen not only as a data source to be interpreted, but rather as an integral tool in the research process itself. More specifically – and different from the dialogical approach – visual artifacts are created by the researcher for a documentary purpose. They are used in order to either enrich data from other sources and enable a more sensually complete capturing of organizational life (see also Kunter & Bell, 2006; Ray & Smith, 2012), to render interpretations more transparent and facilitate the holistic presentation of results (e.g., Czarniawska, 2010), or to present findings, for instance, in the form of photo essays (e.g., Preston & Young, 2000).

Only a few researchers in our field have harnessed the advantages of systematically documenting and analyzing their research in a visual way so far. An exemplar for this kind of research is a study by Buchanan (1998) who reconstructs the patient trail, from referral to a specialist through admission, treatment, and discharge, in a hospital. The author's work is built on a multi-method design, comprising document analysis as well as prolonged observation sessions, 'mystery shopping', and several open-ended interviews. Verbal as well as visual data were collected, with visual information being considered by the taking of about 150 different photographs of the complete process. Later, these photographs were also used in photo-elicitation sessions, by presenting and discussing them with various staff groups. In his methodological paper, Buchanan (2001) elaborates extensively on the use of visual methods for his research endeavor. In addition to the benefits of enabling richer conversations with field-level actors (i.e., creating the prerequisites for a dialogical approach), he points out that photo-documentation allows deeper insights into organizational processes, helps capture details of the research setting that were not revealed during oral interviews, and serve as a tool to confront field-level actors with aspects of organizational processes that they are not personally involved in. Researcher-taken photographs take on a slightly different role in Czarniawska's (2010) study of an urban recovery program. Conceptualizing city management as an 'action net' – i.e., "a set of actions accomplished within a seamless web of interorganizational networks, wherein city authorities constitute just one point of entry and by no means provide a map of the whole terrain" (Czarniawska, 2010: 420) – she follows the chain of 'translations' from a political decision to actual events in the city. She finds that translations are made difficult, if not impossible, on the one hand by political manipulations of accounts, and on the other hand by the general opacity of technical accounts. Alongside other forms of data collection, she conducts a photo-reportage of the traces of various events connected to this project in order to visually account for changes. In concluding, she issues a call to researchers to act as translators that are able to cross barriers of various discourse communities.

The documentary approach prompts researchers to not only study visual artifacts in the field, but also to integrate them in designing and conducting research. Researchers documenting their impressions visually should, however, be aware of the selective and performative nature of such 'visual field notes'. Just as verbal text, images do not capture an 'objective' account of organizational reality. The subjective choices made by the researcher in taking the images (i.e.,

set-up, lighting, angle, framing, among others) create, rather than represent, organizational reality. Nonetheless, visuals in addition to verbal language and text may enable a more holistic documentation of observations than verbal field notes alone. Finally, empirical findings – particularly when researching visual discourse – are often difficult to present and discuss with words alone.

4.2. Summary and reflection

We have conducted our literature review by identifying and discussing five distinct methodological approaches, each of which assigns a particular role to visual artifacts in the research process and adds to a better understanding of visualization and visuals in organization and management research in its own specific way. Highlighting central features of each approach, we discussed their major strengths for different research endeavors, and provided a discussion of typical scholarly studies. In structuring our literature review thus, however, we have not yet pointed to potential cross-fertilization between and integration of these approaches. We therefore wish to point out that much benefit lies in such systematic bridging of methodological traditions: Research on the role of visual discourse in organizations can, for instance, be substantiated through (quasi-)experimental designs investigating the impact of visual manifestations on individual perception and sense-making, or through case studies that combine archeological, dialogical, and practice approaches to provide a comprehensive image of the role of specific visual artifacts in organizational contexts. Notable examples of such 'bridging' work are, for instance, Buchanan's (2001) study on business process reengineering in a hospital, or McQuarrie and Mick's (1999) investigation of the impact of stylistic elements in advertising.

In addition, comprehensive research domains and complex issues are best addressed from multiple approaches' perspectives. In our state of the art, topics such as identities and identity work, persuasion, organizational aesthetics, affect and emotionality, or power and politics have been fruitfully explored in all five approaches. Each approach adds a different facet, broadening our understanding of the mechanisms and processes involved. Going even further, we suggest that a comprehensive analysis of such issues and domains requires a research agenda that systematically integrates and triangulates between methodologies and approaches. Research elaborating on *aesthetical aspects* and the aesthetical nature of organizations, for example has been explored within several approaches. This tradition – grounded in organizational symbolism – often builds on the seminal work of Strati (e.g., 1992, 1999) and Gagliardi (e.g., 1990, 2006), and has received considerable attention over the last decades (see also Hjorth & Steyaert, 2009; Linstead & Höpfl, 2000; or the special issues of *Organization* and *Human Relations* in 2002).[6] 'Aesthetic awareness' is promoted as a legitimate form of understanding organizational life (e.g., Strati, 1992). Organizations, then, are not only defined by their instrumental and utilitarian aspects, but, first and foremost, by sensory and aesthetic experiences (Gagliardi, 2006). Issues related to organizational aesthetics have been researched, for instance, from an archaeological approach, providing insights into the particular aesthetic codes used in discourse (e.g., Hancock & Tyler, 2007; Sørensen, 2010); a practice approach, pointing at the role of aesthetic artifacts in organizational interaction (e.g., Ewenstein & Whyte, 2007; Wasserman & Frenkel, 2011); and a dialogical approach, elaborating the aesthetic experiences of organizational members (e.g., Warren, 2002). A comprehensive discussion of the methodological implications of studying organizational aesthetics is provided, for instance, by Warren (2008).

Studies within and across all of these five distinct approaches, thus, make important contributions to organization and management research; they do so by adding to existing knowledge and theory in different forms. On a first level, established concepts from various areas of organization and management theory are *applied* using visuals as primary or supplementary data in the empirical research design. Applications provide novel research designs, add to the explanatory power of existing concepts and theorizations and, due to compatibility with previous work and the ability to build on a solid body of conceptual knowledge, are particularly helpful in establishing and/or fostering the 'visual agenda' in organization and management research. On a second level, existing concepts are *elaborated* and advanced by including the visual mode as an alternative and distinct mode of meaning construction. Such research is concerned with how the specific nature of visual discourse and the distinctiveness of the visual mode of meaning construction alter our understanding of key concepts in organization and management theory, and aims at elaborating and advancing existing theory by 'stretching' the scope of traditional constructs. Finally, on a third level, organization and management theory is *extended* by importing concepts from other disciplines, mostly by going back directly to the roots of visual research in the hope that this turns out "to be productive in that it may prompt alternative insights and may provide a novel schematization and inferences for theorizing" (Cornelissen & Durand, 2012: 152). We will use this classification to discuss – in the following section – promising avenues for future research on all three levels.

5 Towards a future research agenda

The previous sections have shown that, at present, the use of visuals in organization and management research is rather eclectic, and conducted from a wide variety of perspectives. While excellent ideas have been introduced, rarely have they been applied in a systematic way, or advanced substantially. Moreover, little debate exists across disciplinary domains. What we specifically miss is a 'common body of knowledge' that allows researchers to build upon, and extend, the findings of others. Reviews aiming at the integration of extant literature – like this one – are a first step in such a direction. What is required, however, for the generation of generalizable results and theory advancement is further and deeper acknowledgement of the workings of the visual mode of discourse and meaning construction, and an agreed upon 'language' to talk about visuals in the context of our research, if not some sort of agreement on epistemological and/or methodological foundations.

Ultimately, focusing research in our field on visuals and visuality will be an interdisciplinary endeavor, and we therefore call for research integrating organization and management studies with various other scholarly domains. Interdisciplinary research that takes the visual dimension seriously should co-configure specific disciplines, each with a specific yet interdependent role. Organization and management theory, in this respect, will identify conceptual constructs and empirical phenomena to be investigated in relation to visuality. A wide range of issues is conceivable here. Basically, we assume that the majority of organizational processes and practices exhibit a visual dimension. Thus, the ubiquity of visuality stretches across functions within management, such as marketing, organization, human resource management, strategy, accounting, or also finance, and important research fields like, for instance, organizational change, mergers, alliances, innovation, entrepreneurship, design, corporate political activity, reputation, and responsibility, to name just a few. All of these could be investigated with a visual perspective in

mind. Interdisciplinarity is required to place these issues in their broader theoretical and historical context; key disciplines here include sociology, anthropology, linguistics, history as well as philosophy.

It is obviously impossible to enlist, and explore, all these potential areas for research within the confines of this article. In order to sketch a future research agenda, we deliberately select several aspects, and illustrate how the visual dimension can fruitfully contribute to the advancement of our discipline. We do so by implicitly linking back to our classification of contributions from above and will first expand on how aspects of visuality should inform research designs; we will then discuss several examples of how visuals could affect core conceptual constructs; finally, we will outline how reaching out to adjacent disciplines may extend the fundamental questions organization and management studies ask.

5.1 More breadth, more depth

First and foremost, we need more quantity. While research on visuals has gained significant momentum over the last years, the field is still far from realizing its full potential. If visualization has become an omnipresent feature of social and organizational life, the inclusion of visual data in empirical analyses *must be the norm rather than the exception*. A large part of communication and discourse in, about, and around organizations (for instance, corporate disclosure, websites, media, advertisements, corporate magazines, architecture, or office design) includes some kind of visualization; our understanding of organizations and the contexts they are embedded in would profit immensely from a stronger integration of the visual dimension.

As pointed out above, there is a strong need for simultaneously investigating verbal *and* visual discourse, as well as their *mutual influence*. Although in semiotics and linguistics (e.g., Kress, 2010; Kress & van Leeuwen, 2001) the multimodality of contemporary discourse is broadly acknowledged, organization and management research has – apart from few studies mainly in advertising – rather neglected such interplay of verbal and visual text. A lot of potential, thus, rests in the development of methodological designs that are able to integrate and/or contrast these two modes of communication and discourse. Such multimodal analysis should focus on core 'texts' and, by including both modes, ensures that the central issues of investigation are well reflected in the data and the methods of analysis. In this way, empirical work can be carried out with an eye on its relevance for the advancement of important conceptual constructs.

Research on all levels, and employing *divergent types of methodologies*, seems necessary. In particular, we see much promise in research that transcends the individual and organizational level, and generates results on higher levels, such as industries and fields, as well as in *multi-level research*. Such designs would require the development of visual methods that are able to deal with larger amounts of data. Also, just as for discourse analysis in general (Phillips & Oswick, 2012), we expect this to be an area where mixed methods will be most rewarding: For example, in order to complement discourse analysis, ethnographic research can document the process of the creation of texts, and allow insights into how they are embedded in organizational practices. In addition, it can reveal which norms govern the use of visual and multimodal semiotic resources, which beliefs social actors hold about the meanings and effects of such resources, and what kinds of affectivity and emotionality they invest in them. Ethnographic research may lead to further discourse analysis in order to study, for instance, how negotiations between actors are

'resemiotized' (Iedema, 2001, 2003) in jointly created documents or rhetoric, or which normative discourses may have influenced or regulated participants' practices and attitudes. Discourse analysis can show what happens in texts, but not necessarily adequately answer the question of why.

It is also important to conduct research that is explicitly concerned with the comparison of *different types of visual artifacts*. While photographs, paintings, drawings, flowcharts, but also more material forms like architecture and organizational dress, might have a lot in common, they can be assumed to have distinct functions and uses in meaning construction. So far, we know little about such differences. Future research might also enhance our understanding in terms of depth, focusing on specific aspects of visuality, such as, font, color, or texture (e.g., Djonov & van Leeuwen, 2011; van Leeuwen, 2011a).

We also invite research that investigates which *genres of visual communication* are used for which communicative purposes (for social-semiotic approaches to 'genre', see, for instance, van Leeuwen, 2005b; Bateman, 2008). Here, a first step could be to chart the kinds of practices that involve visual communication within given organizations, and the kinds of visuals used in these practices, and to find out whether, and if so, why, participants see these visuals as suitable. Research could then show how these genres 'do their work', that is, how they function as a mode of (inter-)action. Such studies will advance both organization and management theory *and* visual theory, for instance by creating a functional vocabulary for visual genres, especially with regard to newer kinds of visual material. Changes in types of visualization and communicative genres often materialize shifts in social practices and the more fundamental foundations of social order.

5.2 Core concepts of organization and management theory through a visual prism

With theory elaboration in mind, we need studies that aim at a systematic identification and integration of the distinct workings of visuality into core theories and conceptual constructs currently shaping the broader agenda in organization and management research. Considering the omnipresence of visuals, this should yield vast potential for future scholarly inquiry.

From an epistemological and theoretical perspective, the visual mode of discourse and meaning construction is – as an object of investigation – relevant for a wide range of research fields, but especially for all theoretical constructs that build on sense-making and are engaged with meaning – that is, for all interpretive perspectives that accord with the broader 'cultural turn' in organization and management research (e.g., Suddaby, Elsbach, Greenwood, Meyer, & Zilber, 2010; Weber & Dacin, 2011). In organization theory this includes, for instance, institutional theory, the resource dependency view, actor-network-theory, structuration theory, the negotiated order approach, sense-making from a Weickian perspective, or most process-based theories. The visual dimension could provide new insights into the central constructs and social mechanisms they build upon.

While *actor-network-theory* and the *negotiated order approach* have already started to integrate visuality into core concepts of their perspectives and are, thus, represented in our state-of-the-art, others could still extend their occupation with the visual mode. *Institutional theory*, for example, could add the visual dimension to existing lines of thought on legitimation, institutionalized vocabularies and accounts, logics and social identities, theorization, translation, or bricolage. Visuals can also be assumed to influence the speed and trajectories of diffusion as well as foster or thwart in

manifold ways the success of institutional work. Effective use of visual rhetoric may distinguish successful entrepreneurs from unsuccessful ones, and the mediating capacity of visuals and the ambiguity inherent in their interpretation could provide a specific way of dealing with institutional complexity. From the perspective of the *resource dependency view*, apart from illuminating the workings of visuals in legitimation and strategic responses to pressures (i.e., interests shared with institutionalism), it would be particularly interesting to see, for instance, how visualization is conducive to the establishment or challenge of power imbalances, enables or prevents post-merger integrations or learning in inter-firm networks, or is an integral part in the valuation of coalition participants' contributions and the constitution of competitive advantages. When Pfeffer (1982) argues that management is primarily an expressive and symbolic action, visuals certainly are a central mechanism. Also in Luhmann's *systems theory*, while communication is the basic element that accounts for the autopoiesis of social systems, and meaning is essential to the system's functioning, visuals and visuality are basically absent. Here, the connectivity, or the structural coupling between psychic and social systems, are both immediate areas where visuality could be explored. Similarly, the differentiated societal subsystems (i.e., economy, law, politics, religion, science, or art) – each with its specific rationality, code, medium and language – may categorize and value visual signifiers rather differently.

Below, we will briefly comment on selected conceptual constructs and topics that seem particularly promising and relevant within an interpretative tradition. We discuss three broad areas: First, we outline how the visual dimension can contribute to a better understanding of sense-making processes and thus strengthen the micro-foundations of our discipline; second, we discuss how visuality and multimodality may enrich the strategies and action repertoires of culturally skilled actors; and third, we draw attention to the potential of analyzing visuals as part of the cultural toolkit provided by the socio-historical and cultural contexts in which sense-making, strategic, entrepreneurial, or institutionalized activity occurs.

5.2.1 Processes of sense-making: Attention, interpretation, and decisions

Incorporation of visuality seems essential in micro-level constructs and phenomena. In particular, we point to processes of sense-making (e.g., Gioia & Chittipeddi, 1991; Weick, 1995) and the related constructs of attention, cognition, categorization, and identity. Sense-making, according to Weick, Sutcliffe, and Obstfeld (2005: 409), "involves turning circumstances into a situation that is comprehended explicitly in words and that serves as a springboard into action". Such explicit focus on 'words' indicates that – although it has long been acknowledged that sense-making involves the construction of plausible images (Weick *et al.*, 2005) and that leadership means managing myths and symbols (Smircich & Morgan, 1982) – the visual has so far been under-represented in literature on sense-making. We propose a number of paths for future research.

First, we stress the importance of visual cues for studies focusing on managerial and organizational *attention* and *situated cognition*. Simon (1947) contends that decision-making is both a function of the allocation of attention and structural influences. This view has been extended and further elaborated by, for instance, Ocasio (2011; see also Nigam & Ocasio, 2010) in the form of an 'attention-based view of the firm', linking individual information processing to structure, and focusing on how organizations distribute as well as regulate decision makers' attention. Other researchers have introduced the concept of 'situated cognition' (e.g., Elsbach, Barr, & Hargadon, 2005) as the construction of transitory and bounded perceptual frameworks in the interaction of

individual cognitive schemata and the social and physical context. We, thus, call for research dedicated to questions of how visuality in organizations impacts on individual, managerial, and, consequently, organizational attention, and how it provides contextual cues for the construction of cognitive schemata and perceptual frameworks. Such research could, for instance, look at the ways in which visual artifacts may influence issue selling (e.g., Dutton & Ashford, 1993). Conversely, future studies could also consider how material and visual layouts materialize the attention-structure of a specific organization or organizational unit. It would also be a worthwhile endeavor to consider more thoroughly how visual cues in the everyday use of managerial instruments guide attention by selectively presenting information, and, thus, support – but also constrain – decision-making (for the case of, for instance, PowerPoint slides, see Kaplan, 2010). Contemporary managerial practice across different functional areas relies extensively on visual information, like charts, tables, and diagrams that represent an artificial, selective representation of organizational reality. Such visual 'prostheses' support sense-making and subsequent decision-making through the proposition of causal as well as temporal relationships between different organizational and environmental features and events. In this way, visual artifacts help 'enact' (e.g., Weick, 1995) the organization, its environment, and their various points of contact and interrelationships.

Second, and relatedly, we propose that the inclusion of the visual mode is a fertile strategy for research on *categorization* and *cognitive maps*. Scholars have pointed out that typifications and categorizations make cognitive frameworks available (DiMaggio, 1987), define boundaries for inclusion and exclusion (Lamot & Molnár, 2002), and provide a basis for valuation (Espeland & Stevens, 1998). Such categories and classification schemes are not only developed on the basis of verbal language; communities also use visual signs to 'lump and split' (Zerubavel, 1996). Visuals are important means through which socially constructed categories are presented as 'facts' and experienced in our encounter with the material world. Future scholarly work could, for instance, take into account how organizations, intentionally or unintentionally, visually communicate category membership in a variety of visual genres (architecture, corporate art, organizational dress norms, interior design, corporate communication, advertising, among others). We also call for research that assesses the perception side of visual classification. Visual cues supposedly have an enormous impact on the external classification of organizations by its various audiences. We particularly encourage researchers to tackle the more emotional aspects of categorization and classification, as emotional issues have been strongly neglected in the past, especially in institutional research (see, for instance, Voronov & Vince, 2012). Visual research is particularly well-suited to filling this gap, as visual artifacts have repeatedly been found to transport and elicit strong emotional responses.

Whole systems of concepts and/or categories have been proposed to constitute 'cognitive maps' (Fiol & Huff, 1992). Such insights have been used, for instance, with regard to semantic network analysis (e.g., Carley, 1993). We encourage future work to extract cognitive maps not only from verbal text but also from visual representations. While verbal text allows for the assessment of semantic distances between concepts and categories in written text, visual artifacts would allow for a far more qualitative understanding of closeness and distance. The reconstruction of visual cognitive maps would, for instance, build on existing insights on image composition in order to include what Kress and van Leeuwen (1996) call the 'grammar'. This would mean that links between visual concepts could be qualified with regard to proximity in space, interaction with the viewer, power distance, and so on. Such visual modeling of the duality of structure and culture

also calls for novel methodological designs that mix interpretive and quantitative approaches to meaning reconstruction. Research along these lines could address multimodality and compare verbal cognitive maps with visual ones, providing insights, for instance, into the interrelationships between individual managerial sense-making and organizational design and strategy, but also the material layout of organizations. Research could also link workers' cognitive maps to issues of motivation, for instance, with regard to the design of working spaces.

Third, while a focus on visuals has already yielded inspiring work on organizational identities, we also see much potential in bringing together research on *social identities* (Rao, Monin, & Durand, 2003) with the notion of the *socially embedded 'gaze'* (e.g., Berger, 1972; Foucault, 1979; Kress & van Leeuwen, 1996; Lacan, 1998), or, more specifically, the 'professional gaze' (Styhre, 2010a, 2010b). In this perspective, the practice of looking is a deeply embodied and pre-reflective involvement with the surrounding world: spontaneous, bodily, reversible, temporal, and processual (Belova, 2006), but also necessarily socialized and embedded in pre-existing social relations. Perceptions, thus, are partial and guided by interests; power relations are inherent in each 'way of seeing' (Brown, 2010; Styhre, 2010b). Building on Foucault, the 'gaze' is a disciplinary technique – disciplining both the viewer and the viewed – and constitutive of professions (for instance, the 'medical gaze'). For Styhre (2010b), distinctive 'epistemologies of vision' exist, meaning that vision is a professional 'skill', requiring long-term formal training and education, as well as work experience. Social identities would, then, imply that in addition to specific vocabularies (Meyer, Egger-Peitler, Höllerer, & Hammerschmid, forthcoming), verbal and visual alike, also a particular 'way of looking' has to be performed. Such a gaze guided by interest – while being inherently political – constitutes a micro-practice woven into the macro-order of things (Foucault, 1979).

5.2.2 Cultural entrepreneurship and strategic action

The visual mode of discourse and meaning construction can also illuminate strategic communication and action. Recent research has drawn attention to the narrative dimension of innovation and entrepreneurship, as well as to the social skills that culturally embedded actors require (Fligstein, 2001). Visual rhetoric and visual framing techniques are essential parts of the strategic repertoire of cultural entrepreneurs, both to normalize innovations and to qualify their distinctiveness. We therefore see great potential in future research that engages with the role of visuals in strategic communication. Recently, a growing body of literature on *cultural entrepreneurship* has stressed that entrepreneurs utilize cultural accounts in order to create legitimacy for new ventures (e.g., Lounsbury & Glynn, 2001; Martens, Jennings, & Jennings, 2007; Johnson, 2007; Navis & Glynn, 2010). Such research, to date, has focused primarily on verbal narratives and framing techniques. In a similar vein, the formation of nascent collective identities (e.g., Wry, Lounsbury, & Glynn, 2011) is solely explained by stories and verbal accounts, although it is acknowledged that "entrepreneurial narratives can be shared through a variety of modes" (Martens *et al.*, 2007: 1109). The workings of visual artifacts in this context – for instance in iconizing a collective identity, or visually and emblematically representing a story line – might add significant explanatory value. In line with existing research on the visual creation of credibility, we argue that visual accounts are a particularly suitable tool for demonstrating capability, persuading audiences, and acquiring reputation and legitimacy. Entrepreneurs have a broad variety of visual artifacts at their disposal that may be used in different ways in order to accompany verbal narratives. In this way, we suggest that most of the central propositions of

Lounsbury and Glynn (2001) could be extended to include visual discourse. For instance, visuals are well-suited to communicate values and norms through shared symbolism. Furthermore, as visual communication is more ambiguous and plastic than verbal accounts, they are able to create cultural resonance with the expectations of diverse audiences, even if they are fragmented and/or contradictory. The alleged facticity and immediacy of visual artifacts may also be used to support truth claims about external legitimation and credentials, third-party endorsements and affiliations, as well as an entrepreneur's successful track record.

Closer attention to the workings of visuals will also grant important insights into *strategic claims-making, framing, theorization, translation,* but also into *agenda-setting, issues management,* or *impression management.* For social movement research (for an overview, see Schneiberg & Lounsbury, 2008), visuals represent an increasingly interesting field of study: For purposes of mobilization, activist groups have for a long time relied on provocative visuals in order to enhance their verbal appeals, but more recently also utilize visual aspects of modern communication and social media. Adding to the broad literature on framing in form of 'visual frames', research would be warranted, for instance, on topics like mobilization of consent (e.g., Meyer, 2004) or frame alignment (e.g., Snow, Rochford, Worden, & Benford, 1986), the role of visual and multimodal discourse as 'framing cues' (e.g., Gamson & Lasch, 1983), an assessment of the potency of different types of visual artifacts in performing the core framing tasks (Benford & Snow, 2000), and, particularly, on how visual and multimodal discourse can – arguably more than other media – evoke strong emotions, both positive and negative alike (e.g., Hill, 2004). Another important line of work that deserves to be revisited with a visual research agenda in mind is the theorization and diffusion of ideas and concepts (e.g., Strang & Meyer, 1993). Strang and Soule (1998) point out that it is not practices that flow, but theorized models and their framings – which renders the role of visualization in these processes immediately obvious: Visualization and multimodal communication can be as decisive for the speed and success of diffusion as are verbal accounts and frames, especially when ideas and concepts spread 'over contested terrain' (e.g., Fiss & Zajac, 2004, 2006; Meyer & Höllerer, 2010; Purdy & Gray, 2009). Thus, not only is theorization very likely multimodal, visuality is also an important mode of translating global practices into local settings.

Work contributing insights into *visual rhetoric* seems to be a particularly promising field for future research. Such work can advance the growing literature on rhetoric in and around organizations, including critical approaches (e.g., Alvesson & Kärreman, 2000; Grant, Hardy, Oswick, & Putnam, 2004; Green, 2004; Sillince, 1999; Suddaby & Greenwood, 2005). Visual rhetoric is, for instance, linked to issues of power and accountability: Acknowledging the observation that in Western cultures verbal text has traditionally been controlled more strongly than visual text, visual images should be a domain where subtle resistance and subversion in the face of overwhelming powers can thrive. However, this feature of the visual makes it, at the same time, difficult to hold organizations accountable for the imageries they produce. Messaris (1997) contends that, in advertising, claims that would be unacceptable when made verbally are, as a consequence, produced visually. Such insights have far-reaching implications for organization and management studies on a broader scale. Sillince (1999) stresses that implicit claims and arguments are often more persuasive than explicit argumentation, and their subtlety may, thus, be particularly powerful. As visual rhetoric is able to slip underneath the 'radar of control', it can provide a distinct way of strategically creating 'robust action' (Leifer, 1988; Padgett & Ansell, 1993), producing multivocality in order to maneuver an organization's identity between different audiences' demands (Pratt & Foreman, 2000), or dealing with institutional plurality and

complexity (Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011). The ability to 'invoke' without explicitly arguing can enhance or soothe the competition between different institutional logics, or be involved in the creation of hybridity. Visuals therefore can be assumed to play a central role in response strategies to institutional demands (Oliver, 1991; Pache & Santos, 2010). In a similar vein, research may find that some forms of institutional work (e.g., Lawrence & Suddaby, 2006) are based on specific types of multimodal communication.

Related to this, much work has recently been devoted to discursive and rhetorical legitimation strategies (e.g., Suddaby & Greenwood, 2005), often building on the classification of van Leeuwen and Wodak (1999; see, for instance, Vaara, Tienari, and Laurila, 2006; Vaara & Tienari, 2008; Lefsrud & Meyer, 2012). Each of the five strategies – naturalization, authorization, rationalization, moralization, and narrativization – may also be accomplished with the use of visual artifacts, and especially via multimodal communication. It can be assumed that an inclusion of the visual 'evidence' actors provide will open novel insights into legitimation – and potentially reveal new impression management techniques. Thus, a promising field of future research will be concerned with the way in which visual communication can be employed for persuasive or rhetorical purposes in all types of advocacy. Apart from the overall role of visuals in the workings of these strategies, it would be well worth investigating what differences we find with regard to different types of visuals – for example, one could intuitively expect that naturalization would draw more strongly on photographs, while rationalization would chiefly utilize graphs and figures –, and in respect of manifest (i.e., sujet, action, among others) and latent contents (i.e., 'atmosphere', connotations, or symbolism).

5.2.3 Cultural embeddedness, legitimacy, and organizational culture

Communities develop specific symbol systems to externalize the categorical schemes by which they construct reality and organize zones of meaning. In every cultural system a structural correspondence exists between values and beliefs, and the forms and images that materialize them (see also Gagliardi's [2006] 'aesthetic code' of a cultural system). Visuals are part of these cultural toolkits (e.g., Swidler, 1986; DiMaggio, 1997) and should, thus, be integrated into research on macro-level – societal or field-level – constructs and phenomena. In particular, we draw attention to the visual aspects of institutional logics, the cultural imprinting of organizations, to issues of organizational culture and cross-cultural management, and to legitimacy and related concepts like image, reputation, or status.

All semiotic modes are situated in *particular social, cultural, and ideological contexts*. Different eras and cultures, but also different life-spheres will engender culturally distinct forms of organizations and entrepreneurial action. This influence is at least partly mediated and supported by the development and institutionalization of distinct distributions between semiotic modes that define what can be done with linguistic and visual signs. The cultural and socio-historic context also defines what type of linguistic and/or visual sign may be appropriate for which types of practice. This has important implications not only for intercultural or historical research, but also for a variety of theories within organization and management studies. The currently most prominent concept that elaborates the macro-level context of sense-making and institutionalized activities is that of institutional logics (e.g., Friedland & Alford, 1991; Thornton, Ocasio, & Lounsbury, 2012). Similar ideas can be found in other theories dealing with the meso- and macro-level meaning structure of contemporary societies. Examples of this are negotiated order theory that uses the

concept of 'social worlds' (e.g., Clarke, 1991) being inhabited by different reference groups sharing symbolic codes, or systems theory that differentiates societal subsystems, each with its specific rationality, code, and language. The importance of cultural toolkits for justification, agreement, and disagreement is also stressed by convention theory (e.g., Boltanski & Thévenot, 1991). Different polities provide the basis for a variety of 'common worlds', each with its own 'higher common principle', 'model tests', and expressions of 'judgment', constituting 'relations of worth'. The embeddedness of cognition and strategic action in such macro-level meaning structures has been extensively discussed with regard to verbal language, for instance, in research on legitimate accounts and framings (e.g., Creed, Scully, & Austin, 2002; Meyer & Höllerer, 2010), institutionalized vocabularies (e.g., Suddaby & Greenwood, 2005), and especially vocabularies of motive (e.g., Burke, 1989; Mills, 1940; for an overview, see Loewenstein, Ocasio, & Jones, 2012). In analogy to accounts and vocabularies, Höllerer *et al.* (forthcoming) argue that different institutional logics are also characterized by a specific 'visual language', that is, specific sets of legitimated imageries – 'legitimate visual accounts' or 'imageries-of-practice'. We encourage future research to discuss the role of visuals and visuality in these traditions more explicitly and systematically. Institutional regimes, as well as 'social' or 'common' worlds, might place different degrees of importance on the visual as a communicative and constitutive mode. Also, each logic or world supposedly promotes and legitimates different forms of visual expression: in convention theory, for instance, the 'inspired' world could be assumed to encourage the use of artful, creative, and unconventional visual artifacts in justifications and 'tests', while justifications in the 'domestic' world may rely more on the display of visual status symbols that express tradition and hierarchy.

The impact of broader cultural contexts and structures also permeates the organization itself. We thus encourage revisiting research on the visual aspects of *organizational culture* and *cross-cultural management*. Research linking organizational culture and institutional processes and constructs (see, for instance, a dialog in the *Journal of Management Inquiry* in 2012; Pedersen & Dobbin, 2006) would benefit from including visuality and aesthetics on all layers of organizational culture, particularly its deeply symbolic and taken-for-granted aspects that mirror the institutional context. Novel methodology in the area of visual research (in particular within the dialogical and strategic approaches discussed above) has facilitated the unearthing and eliciting of such deep-seated emotional and aesthetic parts of an organization's shared stock of knowledge. 'Aesthetic awareness' (e.g., Strati, 1992) has been elaborated as a particular form of understanding organizational life as sensory and aesthetic experience (Gagliardi, 2006). We see particular merit in research that generates a better understanding of situations in which cultures clash. Future research could, thus, systematically attend to questions of how aesthetical awareness facilitates or hinders cross-cultural mergers and acquisitions, how visual communication could aid efforts at post-merger integration, or how multi-national corporations deal with (i.e., integrate or segregate) the divergent visual and aesthetic traditions in the different cultures in which they operate, or how cultural mismatches between organizations and the institutional environments they are embedded in can exist over an extended period of time.

At the interface between organizations and their broader socio-historic environments, *legitimacy* is a central concept in several theories of the field, e.g., institutional theory, resource dependency view, structuration theory, or population ecology approach. According to Berger and Luckmann (1967: 64), "the edifice of legitimation is built upon language and uses language as its principal instrumentality". Although they explicitly refer to verbal language, visual language has equal importance on all levels of legitimacy they discuss. In organization and management research,

Suchman (1995; see also Deephouse & Suchman, 2008) has defined legitimacy as a generalized ascription of appropriateness within a social system and distinguishes between three types – pragmatic, cognitive, and moral. We propose that each of these legitimacy types is associated with a distinct visual register. Additionally, the legitimating effect of aesthetics (see, for example the triad of truth, goodness, and beauty in Platonian philosophy) is clearly undertheorized in our discipline (see also the 'aesthetic code' in the work of Gagliardi, e.g., 2006). Such visual or aesthetic legitimation might be more intuitive, largely unconscious, and holistic, based on *Gestalt* or aesthetic sentiments; it could emerge largely unnoticed, and, consequently, would not have to rely on objectified criteria such as utility, appropriateness, or taken-for-grantedness. Whether the legitimating effect of aesthetics is subsumable under pragmatic, moral, and cognitive legitimacy, or constitutes a distinct type, thus, would also be worthwhile exploring. We also call for more research that addresses questions of how the visual representation and communication of an organization – particularly provocative (i.e., deliberately non-legitimate or even illegitimate) presentations – influence the perceived legitimacy of an organization. Similarly – and strongly connected to research on social movements – we also encourage research to more systematically address how non-legitimacy and illegitimacy are construed visually. It could be expected that non-legitimacy may result in invisibility, while illegitimacy would produce visual representations of the disputed category. We also invite more systematic research on related key concepts in organization and management theory like status (e.g., Podolny, 2005), or reputation (e.g., Deephouse & Carter, 2005). Future research could, for instance, discuss how status is displayed, employed, and assessed visually, how corporate reputation 'spillovers' are managed visually in cases of corporate mergers and acquisitions, or how both status and reputation are strategically manipulated by the visual construction of time, i.e., visualizations of the corporation's past and its envisioned future.

5.3 Forward to the roots: An interdisciplinary visual research agenda

Organization science has seen much theorizing about how new constructs and theories come into existence. Analogies, metaphorical, and/or counter-factual thinking from more or less distant domains have been pointed out as promising devices to generate novel conceptual representations and to enhance our understanding of organizational phenomena – provided that there is sufficient similarity between the domains thus connected (e.g., Boxenbaum & Rouleau, 2011; Cornelissen & Durand, 2012; Durand & Vaara, 2009). Novel concepts have come primarily from the various disciplines that we discussed above as the roots of visual organization and management studies. Below, we briefly draw attention to two exemplary areas that are, from our point of view, particularly inspiring. Disciplines that allow for analogies drawn from research on language (i.e., linguistics, rhetorics, semiotics) seem obvious 'candidates' to be similar enough to enrich visual studies in organization and management. The second domain – studies of religion and spirituality – seems more distant at first sight, but has recently also started to attract a growing number of scholars from our field.

Novelty is, in such contexts, of course a blurry classification, and boundaries are more related to different degrees of 'familiarity' than to exogeneity versus endogeneity of sources of inspiration: Once several concepts from a neighboring domain have been 'domesticated', every newly imported construct from the same domain seems more like an elaboration rather than an

extension or radically new inference (Cornelissen & Durand, 2012; Okhuysen & Bonardi, 2011). The two domains discussed below are in different stages of such 'incorporation'.

5.3.1 Incorporating visual language

If the visual mode constructs, legitimizes, contests, and transforms reality in a similar way to verbal language, insights gained from language studies should be close enough to lend themselves to conceptual inferences. However, there still seems much work to be done to make the visual mode of meaning construction an 'equal' in discourse analysis. A potential route, thus, emphasizes the similarities between verbal and visual language, and makes inferences from core linguistic and semiotic categories and constructs to the study of visual artifacts in organizational contexts. In such a vein, linguistics, rhetorics, and semiotics lead the way for studies of the visual. To state a few examples: A focus on lexis, i.e., on the 'visual vocabulary', could aim at categorizing the 'content' (connotative and denotative) of visuals in different organizational contexts, while a grammatical approach, as provided by Kress and van Leeuwen (1996), would emphasize how this vocabulary is combined, i.e., it would stress the compositional structure. This can shed light on the significance of the way information is distributed across, for instance, pages and screens; the way in which visual texts can construct reality 'narratively' or 'conceptually', and, if the latter, either classify, or analyze and describe; and the way in which images can signify their own validity, whether in terms of naturalistic, abstract, or sensory criteria. Analyses along these lines can link visual resources and their particular semiotic potentials to the uses to which they are put in specific organizational practices. Combining linguistic and practice elements, research should, in our view, also focus on usage, and inventorize organizational practices which are, in whole or in part, performed by means of visual or multimodal forms of discourse. The nature of these practices will be shaped by a complex array of factors, including the actors involved, the relations between them, the actions that constitute the practice itself, including the time when, and the space – real or virtual – where they are performed, as well as the purposes and legitimations ascribed to the practice. At the same time, these practices need to be studied for the way they (re-)contextualize other practices, thereby constructing, maintaining, or changing knowledge about such practices. Such research will pay attention both to the dimension of socially constructed knowledge and to the dimension of social action, as well as to the relation between these two. On the basis of a classification of organizational practices, it could then be theorized about which kinds of visual or multimodal semiotic resources are being used in which practices, under which conditions, how, and to what effect.

Another way of creating explicit and systematic analogies from verbal language could be the investigation of 'image acts' (for instance, with regard to regulation, standardization, and institutionalization), or the analysis of usage and persuasive capacity of visual tropes and visual rhetorical figures, for example, 'visual metaphors', 'visual metonymies', 'visual synecdoches' (e.g., Durand, 1970; Forceville, 1996; McQuarrie & Mick, 1996), or 'visual topoi' (e.g., Höllerer *et al.*, forthcoming). Weaving further the insight that visual artifacts have a mediating and bridging role with regard to incongruent ideas, we suggest that visual stylistic devices could also include oxymorons, paradoxes, and irony (see, e.g., Burke, 1989) to produce this effect. Overall, research on visual tropes can equally inspire organization and management research, as does current work on verbal tropes (e.g., Cornelissen, 2005; Sillince & Barker, 2012). Differently from verbal language, however, the 'factual' appearance of the visual makes the argumentation disappear

without making its mandatory or normative nature explicit. This absence of predication impedes counter arguments or logical objections. Visual and multimodal disputes are, thus, a very interesting area of research that is of eminent relevance in all instances when organizations engage in negative campaigning and controversial corporate political advocacy. Moreover, we suggest further research that helps us to better understand how, for example, the elements of Toulmin's (2008) model of reasoning – claims, grounds, and warrants – are staged in multimodal rhetoric, or applies Habermas' (1984) theory of communicative action to visual or multimodal communication. An emphasis on legitimating rhetoric, for instance, fits the concept of 'teleological, strategic action' (see Habermas, 1984). Yet should 'moral evaluation' play a role in the legitimation of specific organizational practices, such a model would not be adequate, and a study of values *as* values rather than as strategic arguments, might have to modify assumptions about the all-pervasiveness of self-interest and lead to a better construction of the social in modern organizations.

5.3.2 Integrating insights from studies on religion and spirituality

A less obvious but – on closer inspection – nonetheless extremely fruitful source for interdisciplinary cross-fertilization could be research on spirituality, myth, and religion. The religious and spiritual aspects of work, occupation, and management have, during the last decades, gained considerable attention and led to an independent line of scholarly inquiry (see, for instance, Tracey, 2012; see also the Management, Spirituality, and Religion Interest Group of the Academy of Management). The influence of spiritual ideas is also increasingly considered in research on the field and societal level. Starting from Friedland and Alford's (1991; see also Thornton *et al.*, 2012) discussion on the inter-institutional system and its divergent logics, it is suggested that religion is one of the most influential reference systems and has a considerable impact on how we understand contemporary organizations and management. As Greenwood, Díaz, Li, and Lorente (2010) remark, we still know relatively little about the concrete influence of non-market institutions on contemporary organizations, including, but not limited to, religion. Overall, existing research implies that spiritual and religious thinking is involved in a broad variety of organizational phenomena and mechanisms, encompassing the micro-, meso- and macro-level. However, regarding religious and spiritual visual symbolism in organizations, existing research has been rather sparse, and, additionally, has been primarily concerned with Western, and, in particular, Christian notions of religion. With increasing globalization – and glocalization (e.g., Drori, Höllerer, & Walgenbach, forthcoming) –, this prompts researchers to develop a global visual literacy also with regard to religious and spiritual symbolism, as symbols from different religious and mystical traditions tend to become blended in discourse in and around organizations.

A religious, or theological, prism will also shed new light on the performative and constitutive role of visual artifacts. Religion has, over the millennia, retained a rather uneasy relationship with visualization. Paying closer attention to issues of taboo and the ban of images highlights discursive and organizational spaces that lack or defy visualization. If visualization is co-constitutive of the reality it depicts, non-visualization (or, in the extreme case, the explicit prohibition of visualization) can provide important insights into topics such as negation, repression, censorship, and the social construction of the invisible. However, aniconism also reminds us that the spiritual and the divine are often supposed to be out of grasp of human artistry and imagination. We have little knowledge on whether, and how, such visual taboos are

translated into organizational settings. The 'invisibility' of issues, objects, and people could hint at deep-seated taboos on the level of the organization, but also on the field or societal level and its institutional structure. But there are also other possible explanations when regarding this through a theological lens: The abandonment of visual proof is, for instance, often equated with strong faith and firm beliefs, and lack of visualization could, therefore, point at a deep level of institutionalization, just like the lack of verbal discourse on a particular issue (see, for instance, Green, 2004). On the other hand, as visualization helps to create and maintain a specific version of the social world and its meaning structures, visuals also serve as hegemonic devices, firmly promoting specific ideologies, and constituting particular subject positions. Niches of non-visualization, then, could also be theorized as spaces of free imagination that retain opportunities for alternative realities.

6 'Doing science' as visual practice?

Eventually, these observations also inform a call – directed at us as scholars – to be aware of our own role in the creation and transformation of a 'visual society'. Social sciences do not exist 'outside' the phenomena they claim to explain. Rather, they draw their rhetorical resources from a shared social stock of knowledge, and also feed back their results and insights. In this respect, as Pauwels (2005: vii) points out, visual representations are by no means an add-on to popularize scientific reasoning, but are a substantial part of scientific discourse. With this in mind, we wish to encourage a more reflective and conscious use of visuality in 'doing science' in general.

First, we should aim at actively making use of the potential of visual representations to enable better research processes and results. This starts at the stage of designing projects, and continues during the phase of data collection (for instance, participant-led photography, photo-elicitation, and other methods outlined above). The vital role of visualization in data analysis, then, seems obvious: We have a plethora of means at hand to look at data in form of tables, graphs, diagrams, networks, and more formal and sophisticated forms of visualization that assist in making sense of patterns within data (e.g., Tufte, 1997). Similarly, visualization provides vast potential for presenting scientific results: It is an ideal way of reducing complexity and making the interpretive processes of researchers transparent for the audience. However, the issue of how to address visuality in verbal terms has only been insufficiently addressed (for a notable exception, see, for instance, Steyaert, Marti, & Michels, 2012). The institutionalized academic publication format is predominantly verbal. Even when visual material plays a vital part in the analysis, we need to resort to verbalization in order to present our findings. "Analysis", as Yanow (2006: 57) stresses, "then, is already one step removed from immediate experience […]." As we have not yet developed a common 'language' to talk about visuals, it is not clear how much insight is 'lost in translation'. Scholars have dealt with this issue differently: from a complete verbalization of their visual data (e.g., Phillips & Brown, 1993), the exemplary reproduction of visuals (e.g., Scott & Vargas, 2007), the presentation of a selection of images to support verbal arguments (e.g., Czarniawska, 2010), to the extreme of strongly reducing verbal text in favor of a more visual storyline (e.g., Hjorth & Steyaert, 2006; Preston & Young, 2000). Future endeavors might be dedicated to identifying the optimal presentation of visual research (e.g., Steyaert *et al.*, 2012). Existing literature also points at several other challenges related to visual research (e.g., Bell & Davison, forthcoming; Ray & Smith, 2012). For instance, when using photography in data collection, issues of reactivity and consent have to be considered. Similar to – or even more than

in – interview situations, individuals might behave in unauthentic ways as their action is recorded. Also, issues of anonymity might arise in the case of photographic data. Furthermore, there are issues with regard to publication policies of the discipline's key academic journals, such as space constraints or unavailability of color print; copyright issues often make it difficult to provide the reader with examples from the data. With publishing visual research being a rather recent phenomenon, only a few guidelines, templates, or best practices exist. Because of such difficulties, visual research is sometimes almost 'invisible', as researchers, on an anecdotal basis, report the use of visuals in their research designs but skip the related methodical information or illustrative examples.

Second, apart from these more pragmatic concerns, we should be well aware of the potential 'dark sides' of visualization in science. If we accept that visualization – when masked as facticity – advances and supports ideologies (e.g., Kress & van Leeuwen, 1996; Mitchell, 1994), that "certain epistemic possibilities are bound up with the way that things are represented in/to the world" (Scott & Orlikowski, 2012: 83), that imagery is a sophisticated form of persuasion (e.g., Hancock, 2005; Messaris, 1997), stabilizing relations of power and dominance (e.g., Phillips & Brown, 1993) and constituting a form of control through 'visual consensus' (Campbell, 2012) – thus securing acquiescence to 'regimes of truth' (Hancock, 2006) –, we also need to consider the field and role of academia in these processes. While the verbal rhetoric of science has been the object of critical studies for some decades (e.g., Gross, 1990; Latour & Woolgar, 1979), we are – with the increasing proliferation of visual material in both the social and natural sciences – in need of a similar debate for the *visual* rhetoric of science. Scott and Orlikowski (2012) emphasize that the academic analytical gaze is never neutral and usually charged with interests and values. This, they argue, is particularly consequential, as scientific images are no mere ideational constructions but provide frameworks for action. Nonetheless, no other gaze proclaims more professionalism and impartiality than science (Lefsrud and Meyer, 2012). Therefore, questions like what exactly constitutes the scientific way of seeing, what characterizes its particular performativity, how it is legitimized, could guide further reflections on the scientific politics of vision.

7 Concluding remarks

The turn towards culture, meaning, and discourse that has engulfed research on organization and management has been increasingly enhanced by a distinct focus on visual forms of meaning construction – with the 'visual turn' in social sciences eventually reaching the shores of our discipline. Scholars have realized that visual artifacts – often in mutual interplay with verbal texts (i.e., in multimodal form) – have become an elementary resource for the construction, maintenance, and transformation of institutions, practices, and knowledge. However, despite a growing number of contributions from an impressive variety of conceptual and methodological perspectives, neither a clear and broadly shared 'body of knowledge' has emerged yet, nor has a common 'language' of how to talk about visuals been established. Consequently, although the performative and persuasive power of imagery seems widely acknowledged, the specific underlying and related mechanisms remain largely undertheorized. Very much in line with other observers of this development, we thus contend that it is, at this stage, crucial to consolidate and make a joint effort towards developing a fertile future research agenda.

We commenced by theorizing on the visual mode of meaning construction, mainly from the perspectives of the phenomenological sociology of knowledge and social semiotics. Comparing

the distinct performativity of visuals to that of verbal text, we argued its relevance for the construction and transmission of social meaning. Subsequently, we presented a number of disciplines outside organization and management science that have a long history of incorporating visuals. Such methodological and theoretical roots have served, and will continue to do so, as an inspiration for innovative inferences into our own field. At the core of this article, we presented an extensive review of work concerned with the role and importance of visuality that has been published in core scholarly outlets of our field. Upon discussing this work, we suggested distinguishing five distinct ways in which visuals can feature in research designs, and particularly stressed the contributions of visuality for theory elaboration and theory extension. Subsequently, we outlined what we think could be core starting points for a promising research agenda: In addition to calling for more breadth and depth of visual research, we discussed ways in which the visual mode of discourse and meaning construction could illuminate core conceptual constructs from a wide variety of theoretical perspectives from within our own discipline, and presented ideas on how inferences from other disciplines could further inspire organization and management science. Finally, we briefly reflected on implications of such insights on our own research: Not only is the visual mode of communication an important object of study, it also has the potential to change *how* science is conducted and its results are presented.

Endnotes

[1] We do, however, exclude research on the moving image (i.e., recorded films and animations) from this article, as we feel that – while this literature is undoubtedly relevant to organization and management studies – such an endeavor is in need of its own review. Equally, we are not concerned first and foremost with the physicality and materiality of the environment in and around organizations, as such issues have been reviewed recently, and extensively, by, for instance, Elsbach and Pratt (2007).

[2] We will refer to all manifestations – material and virtual alike – as *visual artifacts*.

[3] In this article, we will refer to what Berger and Luckmann (1967) simply call 'language' as 'verbal language' in order to differentiate the term from a more comprehensive understanding of language that also includes visual manifestations. In the same way, we differentiate 'verbal text' from a more holistic notion of 'text'; finally, an analogous argument holds true for 'discourse'.

[4] This point is also stressed by various interpretative approaches to the analysis of verbal texts that explicitly focus on the sequence of words in order to reconstruct meaning, such as, for instance, several variants of hermeneutical analyses (see, for instance, Oevermann, Allert, Konau, & Krambeck, 1979; Lueger, Meyer, Sandner, & Hammerschmid, 2005).

[5] It seems important to hold that we assign scholarly work to the five different approaches on basis of the role visuals play for the research design (i.e., not necessarily the overall research objective). In some cases, the description is rather short, and we therefore make inferences from the information provided. In exceptional cases where approaches are clearly mixed, we categorize studies according to the most salient features, and make the mixed approach explicit.

[6] Research on aesthetics is not limited to visuality, but also provides interesting interconnections to studies on materiality in organizations. The relationship between design, aesthetics, and innovation is a growing field that offers substantial insights on how aesthetic and symbolic properties of product design result in competitive advantage and are used as a strategic resource (e.g., Dell'Era & Verganti, 2007; Ravasi & Stigliani, 2012). Aesthetic design elements support value creation (e.g., Rindova & Petkova, 2007) and create emotional 'spillover' effects from products to organizations (e.g., Rafaeli & Vilnai-Yavetz, 2004). Also, as Hargadon and Douglas (2001) have shown, aesthetic properties, rather than functional ones, often decide about the fate of innovations.

References

Aaron, M. (2007). *Spectatorship: The power of looking on.* London: Wallflower Press.

Abraham, L., & Appiah, O. (2006). Framing news stories: The role of visual imagery in priming racial stereotypes. *Howard Journal of Communications, 17*(3), 183-203.

Alvesson, M., & Kärreman, D. (2000). Taking the linguistic turn in organizational research: Challenges, responses, consequences. *Journal of Applied Behavioral Science, 36*(2), 136-158.

Anderson, C. J., & Imperia, G. (1992). The corporate annual report: A photo analysis of male and female portrayals. *The Journal of Business Communication, 29*(2), 113-128.

Arnheim, R. (1974). *Art and visual perception: A psychology of the creative eye.* Berkeley *et al.*: University of California Press.

Arnheim, R. (1982). *The power of the center.* Berkeley *et al.*: University of California Press.

Assael, H., Kofron, J., & Burgi, W. (1967). Advertising performance as a function of print ad characteristics. *Journal of Advertising Research, 7*(2), 20-26.

Bagnoli, A. (2009). Beyond the standard interview: The use of graphic elicitation and arts-based methods. *Qualitative Research, 9*(5), 547-570.

Bal, M. (2003). Visual essentialism and the object of visual culture. *Journal of Visual Culture, 2*(1), 5-32.

Banks, M. (2001). *Visual methods in sociological research.* Thousands Oaks *et al.*: SAGE Publications.

Barnhurst, K. G., Vari, M., & Rodríguez, Í. (2004). Mapping visual studies in communication. *Journal of Communication, 54*(4), 616-644.

Barthes, R. (1972). *Mythologies.* London: Cape.

Barthes, R. (1977). *Image, music, text.* London: Fontana Press.

Barthes, R. (1980). *La chambre claire.* Paris: Le Seuil.

Barthes, R. (1982). *L'obvie et l'obtus.* Paris: Le Seuil.

Bateman, J. A. (2008) *Multimodality and genre.* London: Palgrave Macmillan

Becker, H. S. (1974). Photography and sociology. *Studies in the anthropology of visual communication, 1*(1), 3-26.

Becker, H. S. (1998). Visual sociology, documentary photography, and photojournalism: It's (almost) all a matter of context. In J. Prosser (Ed.), *Image-based research: A sourcebook for qualitative researchers* (pp. 84-96). London: Falmer Press.

Becker, W. S., & Burke, M. J. (2012). The staff ride: An approach to qualitative data generation and analysis. *Organizational Research Methods, 15*(2), 316-335.

Bell, E. (2012). Ways of seeing organisational death: A critical semiotic analysis of organisational memorialisation. *Visual Studies, 27*(1), 4-17.

Bell, E., & Davison, J. (forthcoming). Visual management studies: Empirical and theoretical approaches. *International Journal of Management Reviews.*

Bell, E., Schroeder, J. E., & Warren, S. (Eds.). (2013). *The Routledge companion to visual organization.* London *et al.*: Routledge.

Belova, O. (2006). The event of seeing: A phenomenological perspective on visual sense-making. *Culture and Organization, 12*(2), 93-107.

Benford, R. D., & Snow, D. A. (2000). Framing processes and social movements: An overview and assessment. *Annual Review of Sociology, 26*(1), 611-639.

Benschop, Y., & Meihuizen, H. E. (2002). Keeping up gendered appearances: Representations of gender in financial annual reports. *Accounting, Auditing & Accountability Journal, 27*(7), 611-636.

Berger, J. (1972). *Ways of seeing.* London: British Broadcasting Corporation and Penguin Books.

Berger, P. L., & Luckmann, T. (1967). *The social construction of reality: A treatise in the sociology of knowledge.* New York: Anchor Books.

Boehm, G. (1994). Die Wiederkehr der Bilder. In G. Boehm (Ed.), *Was ist ein Bild?* (pp. 11-38). Munich: Fink.

Bohnsack, R. (2007). Die dokumentarische Methode in der Bild- und Fotointerpretation. In R. Bohnsack, I. Nentwig-Gesemann & A.-M. Nohl (Eds.), *Die dokumentarische Methode und ihre Forschungspraxis* (pp. 69-91). Wiesbaden: VS Verlag für Sozialwissenschaften.

Bohnsack, R. (2008). The interpretation of pictures and the documentary method [64 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 9*(3), Art. 26, http://nbn-resolving.de/urn:nbn:de:0114-fqs0803267.

Boje, D., & Smith, R. (2010). Re-storying and visualizing the changing entrepreneurial identities of Bill Gates and Richard Branson. *Culture and Organization, 16*(4), 307-331.

Boltanski, L., & Thévenot, L. (1991). *On justification: Economies of worth.* Princeton *et al.*: Princeton University Press.

Bolton, A., Pole, C., & Mizen, P. (2001). Picture this: Researching child workers. *Sociology, 35*(2), 501-518.

Borah, P. (2009). Comparing visual framing in newspapers: Hurricane Katrina versus tsunami. *Newspaper Research Journal, 30*(1), 50-57.

Bourdieu, P. (2004). The peasant and photography. *Ethnography, 5*(4), 601-616.

Bourdieu, P. (1990). *Photography: A middle-brow art.* Cambridge: Polity Press.

Boxenbaum, E., & Rouleau, L. (2011). New knowledge products as bricolage: Metaphors and scripts in organization theory. *Academy of Management Review, 36*(2), 272-296.

Bramming, P., Hansen, B. G., Bojesen, A., & Olesen, K. G. (2012). (Im)perfect pictures: Snaplogs in performativity research. *Qualitative Research in Organizations and Management: An International Journal, 7*(1), 54-71.

Breitbarth, T., Harris, P., & Insch, A. (2010). Pictures at an exhibition revisited: Reflections on a typology of images used in the construction of corporate social responsibility and sustainability in non-financial corporate reporting. *Journal of Public Affairs, 10*(4), 238-257.

Brown, J. (2010). Accounting and visual cultural studies: Potentialities, challenges and prospects. *Accounting, Auditing & Accountability Journal, 23*(4), 482-505.

Bryans, P., & Mavin, S. (2006). Visual images: A technique to surface conceptions of research and researchers. *Qualitative Research in Organizations and Management: An International Journal, 1*(2), 113-128.

Buchanan, D. A. (1998). Representing process: The contribution of a re-engineering frame. *International Journal of Operations & Production Management, 18*(12), 1163-1188.

Buchanan, D. A. (2001). The role of photography in organization research: A reengineering case illustration. *Journal of Management Inquiry, 10*(2), 151-164.

Bulmer, S., & Buchanan-Oliver, M. (2006). Visual rhetoric and global advertising imagery. *Journal of Marketing Communications, 12*(1), 49-61.

Burke, K. (1989). *On symbols and society.* Chicago: University of Chicago Press.

Burrell, G., & Dale, K. (2003). Building better worlds? Architecture and critical management studies. In M. Alvesson, & H. Wilmott (Eds.), *Studying management critically* (pp. 177-196). London *et al.*: SAGE Publications.

Carley, K. (1993). Coding choices for textual analysis: A comparison of content analysis and map analysis. *Sociological methodology, 23*, 75-126.

Campbell, D., McPhail, K., & Slack, R. (2009). Face work in annual reports: A study of the management of encounter through annual reports, informed by Levinas and Bauman. *Accounting, Auditing & Accountability Journal, 22*(6), 907-932.

Campbell, N. (2012). Regarding Derrida: The tasks of visual deconstruction. *Qualitative Research in Organizations and Management: An International Journal, 7*(1), 105-124.

Chaplin, E. (1994). *Sociology and visual representations.* London *et al.*: Routledge.

Cheema, A., & Bagchi, R. (2011). The effect of goal visualization on goal pursuit: Implications for consumers and managers. *Journal of Marketing, 75*, 109-123.

Cho, C. H., Phillips, J. R., Hageman, A. M., & Patten, D. M. (2009). Media richness, user trust, and perceptions of corporate social responsibility. *Accounting, Auditing & Accountability Journal, 22*(6), 933-952.

Christmann, G. B. (2008). The power of photographs of buildings in the Dresden urban discourse: Towards a visual discourse analysis [29 paragraphs]. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 9*(3), Art. 11, http://nbn-resolving.de/urn:nbn:de:0114-fqs0803115.

Clarke, A. E. (1991). Social worlds theory as organizational theory. In D. Maines (Ed.), *Social organization and social process: Essays in honor of Anselm Strauss* (pp. 119-158). New York: Aldine.

Collier, J. (1957). Photography in anthropology: A report on two experiments. *American Anthropologist, 59*(5), 843-859.

Collier, J., & Collier, M. (1986). *Visual anthropology: Photography as a research method.* Albuquerque: University of New Mexico Press.

Cornelissen, J. P. (2005). Beyond compare: Metaphor in organization theory. *Academy of Management Review, 30*(4), 751-764.

Cornelissen, J. P., & Durand, R. (2012). More than just novelty: Conceptual blending and causality. *Academy of Management Review, 37*(1), 152-154.

Cornelissen, J. P., Holt, R., & Zundel, M. (2011). The role of analogy and metaphor in the framing and legitimization of strategic change. *Organization Studies, 32*(12), 1701-1716.

Creed, W. E. D., Scully, M. A., & Austin, J. R. (2002). Clothes make the person? The tailoring of legitimating accounts and the social construction of identity. *Organization Science, 13*(5), 475-496.

Cummings, S., & Wilson, D. (2003). Images of strategy. In S. Cummings & D. Wilson (Eds.), *Images of strategy* (pp. 1-40). Malden *et al.*: Blackwell.

Czarniawska, B. (2010). Translation impossible? Accounting for a city project. *Accounting, Auditing & Accountability Journal, 23*(3), 420-437.

Davison, J. (2004). Sacred vestiges in financial reporting: Mythical readings guided by Mircea Eliade. *Accounting, Auditing & Accountability Journal, 17*(3), 476-497.

Davison, J. (2007). Photographs and accountability: Cracking the code of an NGO. *Accounting, Auditing & Accountability Journal, 20*(1), 133-158.

Davison, J. (2008). Rhetoric, repetition, reporting and the 'dot.com' era: Words, pictures, intangibles. *Accounting, Auditing & Accountability Journal, 21*(6), 791-826.

Davison, J. (2009). Icon, iconography, iconology: Visual branding, banking and the case of the bowler hat. *Accounting, Auditing & Accountability Journal, 22*(6), 883-906.

Davison, J. (2010). [In]visible [in]tangibles: Visual portraits of the business élite. *Accounting, Organizations and Society, 35*(2), 165-183.

Davison, J. (2011). Barthesian perspectives on accounting communication and visual images of professional accountancy. *Accounting, Auditing & Accountability Journal, 24*(2), 250-283.

Davison, J., McLean, C., & Warren, S. (2012). Guest editorial: Exploring the visual in organizations and management. *Qualitative Research in Organizations and Management: An International Journal, 7*(1), 5-15.

Davison, J., & Warren, S. (2009). Imag[in]ing accounting and accountability. *Accounting, Auditing & Accountability Journal, 22*(6), 845-857.

Deephouse, D. L., & Carter, S. M. (2005). An examination of differences between organizational legitimacy and organizational reputation. *Journal of Management Studies, 42*(2), 329-360.

Deephouse, D. L., & Suchman, M. C. (2008). Legitimacy in organizational institutionalism. In R. Greenwood, C. Oliver, K. Sahlin-Andersson & R. Suddaby (Eds.), *The SAGE handbook of organizational institutionalism* (pp. 49-77). Thousand Oaks *et al.*: SAGE Publications.

Dell'Era, C., & Verganti, R. (2007). Strategies of innovation and imitation of product languages. *Journal of Product Innovataion Management, 24*(6), 580-599.

Dellinger, K. (2002). Wearing gender and sexuality 'on your sleeve': Dress norms and the importance of occupational and organizational culture at work. *Gender Issues, 20*(1), 3-25.

Delmestri, G., Oberg, A., & Drori, G. (forthcoming). The unbearable lightness of university branding: Cross-national patterns. *International Studies of Management & Organization.*

Derrida, J. (1987). *The truth in painting.* Chicago: University of Chicago Press.

Derrida, J. (1993). *Memoirs of the blind: The self-portrait and other ruins.* Chicago: University of Chicago Press.

DiMaggio, P. J. (1987). Classification in art. *American Sociological Review, 52*(2), 440-455.

DiMaggio, P. J. (1997). Culture and cognition. *Annual Review of Sociology, 23*, 263-287.

Djonov, E., & van Leeuwen, T. (2011). The semiotics of texture: From tactile to visual. *Visual Communication, 10*(4), 541-564.

Dougherty, D., & Kunda, G. (1990). Photograph analysis: A method to capture organizational belief systems. In P. Gagliardi (Ed.), *Symbols and artifacts: Views of the corporate landscape* (pp. 185-206). Berlin: de Gruyter.

Drori, G. S., Höllerer, M. A., & Walgenbach, P. (forthcoming). The glocalization of organization and management: Issues, dimensions, and themes. In G. S. Drori, M. A. Höllerer & P. Walgenbach (Eds.), *Global themes and local variations in organization and management: Perspectives on glocalization.* New York *et al.*: Routledge.

Duff, A. (2011). Big four accounting firms' annual reviews: A photo analysis of gender and race portrayals. *Critical Perspectives on Accounting, 22*(1), 20-38.

Durand, J. (1970). Rhétorique et image publicitaire. *Communications, 15*, 70-93.

Durand, R., & Vaara, E. (2009). Causation, counterfactuals and competitive advantage. *Strategic Management Journal, 30*(12), 1245-1264.

Dutton, J. E., & Ashford, S. J. (1993). Selling issues to top management. *Academy of Management Review, 18*(3), 397-428.

Edell, J. A., & Staelin, R. (1983). The information processing of pictures in print advertisements. *Journal of Consumer Research, 10*(1), 45-61.

Elkins, J. (2000). *How to use your eyes.* New York *et al.*: Routledge.

Elsbach, K. D., Barr, P. S., & Hargadon, A. B. (2005). Identifying situated cognition in organizations. *Organization Science, 16*(4), 422-433.

Elsbach, K. D., & Pratt, M. G. (2007). The physical environment in organizations. *The Academy of Management Annals, 1*, 181-224.

Eppler, M. J., & Platts, K. W. (2009). Visual strategizing. The systematic use of visualization in the strategic-planning process. *Long Range Planning, 42*(1), 42-74.

Espeland, W. N., & Stevens, M. L. (1998). Commensuration as a social process. *Annual Review of Sociology, 24*, 313-343.

Ewenstein, B., & Whyte, J. (2007). Beyond words: Aesthetic knowledge and knowing in organizations. *Organization Studies, 28*(5), 689-708.

Ewenstein, B., & Whyte, J. (2009). Knowledge practices in design: The role of visual representations as 'epistemic objects'. *Organization Studies, 30*(1), 7-30.

Ewing, M. T., Pitt, L. F., & Murgolo-Poore, M. E. (2001). Bean couture: Using photographs and publicity to re-position the accounting profession. *Public Relations Quarterly, 46*(4), 23-30.

Fahmy, S. (2010). Contrasting visual frames of our times: A framing analysis of English- and Arabic-language press coverage of war and terrorism. *International Communication Gazette, 72*(8), 695-717.

Fahmy, S., Kelly, D., & Kim, Y. S. (2007). What Katrina revealed: A visual analysis of the hurricane coverage by news wires and U.S. newspapers. *Journalism & Mass Communication Quarterly, 84*(3), 546-561.

Fairclough, N. (1992). *Discourse and social change.* Cambridge: Polity Press.

Fellmann, F. (1995). Innere Bilder im Licht des imagic turn. In K. Sachs-Hombach (Ed.), *Bilder im Geiste: Zur kognitiven und erkenntnistheoretischen Funktion piktorialer Repräsentationen* (pp. 21-38). Amsterdam *et al.*: Rodopi.

Fiol, M., & Huff, A. (1992). Maps for managers: Where are we? Where do we go from here?. *Journal of Management Studies, 29*(3), 267-285.

Fiss, P. C., & Zajac, E. J. (2004). The diffusion of ideas over contested terrain: The (non)adoption of a shareholder value orientation among german firms. *Administrative Science Quarterly, 49*(4), 501-534.

Fiss, P. C., & Zajac, E. J. (2006). The symbolic management of strategic change: Sensegiving via framing and decoupling. *Academy of Management Journal, 49*(6), 1173-1193.

Fligstein, N. (2001). Social skill and the theory of fields. *Sociological Theory, 19*(2), 105-125.

Forceville, C. (1996). *Pictorial metaphor in advertising.* London: Routledge.

Foster, W. M., Suddaby, R., Minkus, A., & Wiebe, E. (2011). History as social memory assets: The example of Tim Hortons. *Management & Organizational History, 6*(1), 101-120.

Foucault, M. (1979). *Discipline and punish: The birth of the prison.* New York: Vintage Books.

Freedberg, D. (1991). *The power of images: Studies in the history and theory of response.* Chicago: University of Chicago Press.

Friedel, T. L. (2008). (Not so) crude text and images: Staging native in 'big oil' advertising. *Visual Studies, 23*(3), 238-254.

Friedland, R., & Alford, R. R. (1991). Bringing society back in: Symbols, practices, and institutional contradictions. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 232-263). Chicago: University of Chicago Press.

Gagliardi, P. (2006). Exploring the aesthetic side of organizational life. In S. R. Clegg, C. Hardy & W. R. Nord (Eds.), *Handbook of organization studies* (2nd ed.). Thousand Oaks *et al.*: SAGE Publications.

Gagliardi, P. (Ed.). (1990). *Symbols and artifacts: Views of the corporate landscape.* Berlin: de Gruyter.

Gamson, W. A., & Lasch, K. E. (1983). The political culture of social welfare policy. In S. E. Spiro & E. Yuchtman-Yaar (Eds.), *Evaluating the welfare state: Social and political perspectives* (pp. 397-415). New York: Academic Press.

Gioia, D. A., & Chittipeddi, K. (1991). Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal, 12*(6), 433-448.

Gombrich, E. H. (1960). *Art and illusion. A study in the psychology of pictorial representation.* Princeton: Princeton University Press.

Grady, J. (1996). The scope of visual sociology. *Visual Sociology, 11*(2), 10-24.

Grady, J. (2001). Becoming a visual sociologist. *Sociological Imagination, 38*(1-2), 83-119.

Grant, D., Hardy, C., Oswick, C., & Putnam, L. (Eds.). (2004). *The SAGE Handbook of Organizational Discourse.* London *et al.*: SAGE Publications.

Graves, O. F., Flesher, D. L., & Jordan, R. E. (1996). Pictures and the bottom line: The television epistemology of U.S. annual reports. *Accounting, Organizations and Society, 21*(1), 57-88.

Green, S. E., Jr. (2004). A rhetorical theory of diffusion. *Academy of Management Review, 29*(4), 653-669.

Greenwood, R., Díaz, A. M., Li, S. X., & Lorente, J. C. (2010). The multiplicity of institutional logics and the heterogeneity of organizational responses. *Organization Science, 21*(2), 521-539.

Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. (2011). Institutional complexity and organizational responses. *The Academy of Management Annals, 5*, 317-371.

Gross, A. G. (1990). *The rhetoric of science.* Cambridge: Harvard University Press.

Guthey, E., & Jackson, B. (2005). CEO Portraits and the autheticity paradox. *Journal of Management Studies, 42*(5), 1057-1082.

Habermas, J. (1984). *The theory of communicative action (Vol 1)*. Cambridge: Polity Press.

Hall, S. (1999). Introduction: Looking and subjectivity. In J. Evans & S. Hall (Eds.), *Visual culture: The reader* (pp. 309-314). London *et al.*: SAGE Publications.

Halliday, M. A. K. (1978). *Language as social semiotic*. London: Edward Arnold.

Halliday, M. A. K. (1994). *An introduction to functional grammar* (2nd ed.). London: Edward Arnold.

Hancock, P. (2005). Uncovering the semiotic in organizational aesthetics. *Organization, 12*(1), 29-50.

Hancock, P. (2006). The spatial and temporal mediation of social change. *Journal of Organizational Change Management, 19*(5), 619-639.

Hancock, P., & Tyler, M. (2007). Un/doing gender and the aesthetics of organizational performance. *Gender, Work and Organization, 14*(6), 512-533.

Hardy, C., & Phillips, N. (1999). No joking matter: Discursive struggle in the Canadian refugee system. *Organization Studies, 20*(1), 1-24.

Hargadon, A. B., & Douglas, Y. (2001). When innovations meet institutions: Edison and the design of the electric light. *Administrative Science Quarterly, 46*(3), 476-501.

Harper, D. (2002). Talking about pictures: A case for photo elicitation. *Visual Studies, 17*(1), 13-26.

Heckler, S. E., & Childers, T. L. (1992). The role of expectancy and relevancy in memory for verbal and visual information: What is incongruency? *Journal of Consumer Research, 18*(4), 475-492.

Heisley, D. D., & Levy, S. J. (1991). Autodriving: A photoelicitation technique. *Journal of Consumer Research, 18*(3), 257-272.

Henderson, K. (1991). Flexible sketches and inflexible data bases: Visual communication, conscription devices, and boundary objects in design engineering. *Science, Technology, & Human Values, 16*(4), 419-447.

Henderson, K. (1995). The political career of a prototype: Visual representation in design engineering. *Social Problems, 42*(2), 274-299.

Heracleous, L., & Jacobs, C. D. (2008). Crafting strategy: The role of embodied metaphors. *Long Range Planning, 41*(3), 309-325.

Hill, C. A. (2004). The psychology of rhetorical images. In C. A. Hill & M. Helmers (Eds.), *Defining visual rhetorics* (pp. 25-40). New York *et al.*: Routledge.

Hill, C. A., & Helmers, M. (Eds.). (2004). *Defining visual rhetorics*. New York *et al.*: Routledge.

Hinings, C. R. (1988). Defending organization theory: A British view from North America. *Organization Studies, 9*(1), 2-7.

Hjorth, D., & Steyaert, C. (2006). American psycho/European schizo: Stories of managerial elites in a hundred images. In P. Gagliardi & B. Czarniawska (Eds.), *Management, education and humanities* (pp. 67-97). Cheltenham: Edward Elgar.

Hjorth, D., & Steyaert, C. (Eds.). (2009). *The politics and aesthetics of entrepreneurship*. Cheltenham: Edward Elgar.

Höllerer, M. A., Jancsary, D., Meyer, R. E., & Vettori, O. (forthcoming). Imageries of corporate social responsibility: Visual re-contextualization and field-level meaning. *Research in the Sociology of Organizations*.

Holsanova, J., Rahm, H., & Holmqvist, K. (2006). Entry points and reading paths on newspaper spreads: Comparing a semiotic analysis with eye-tracking measurements. *Visual Communication, 5*(1), 65-93.

Houston, M. J., Childers, T. L., & Heckler, S. E. (1987). Picture-word consistency and the elaborative processing of advertisements. *Journal of Marketing Research, 24*(4), 359-369.

Humphreys, M., & Brown, A. D. (2002). Dress and identity: A Turkish case study. *Journal of Management Studies, 39*(7), 927-952.

Iedema, R. (2001) Resemiotization. *Semiotica, 137*(1/4), 23-46.

Iedema, R. (2003) Multimodality, resemiotization: Extending the analysis of discourse as multi-semiotic practice. *Visual Communication 2*(1), 29-57.

Imdahl, M. (1995). Ikonik. Bilder und ihre Anschauung. In G. Boehm (Ed.), *Was ist ein Bild?* (pp. 300-324). Munich: Fink.

Jeong, S.-H. (2008). Visual metaphor in advertising: Is the persuasive effect attributable to visual argumentation or metaphorical rhetoric? *Journal of Marketing Communications, 14*(1), 59-73.

Johnson, V. (2007). What is organizational imprinting? Cultural entrepreneurship in the founding of the Paris Opera. *American Journal of Sociology, 113*(1), 97-127.

Justesen, L., & Mouritsen, J. (2009). The triple visual. Translations between photographs, 3-D visualizations and calculations. *Accounting, Auditing & Accountability Journal, 22*(6), 973-990.

Kamla, R., & Roberts, C. (2010). The global and the local: Arabian Gulf States and imagery in annual reports. *Accounting, Auditing & Accountability Journal, 23*(4), 449-481.

Kaplan, S. (2010). Strategy and PowerPoint: An inquiry into the epistemic culture and machinery of strategy making. *Organization Science, 22*(2), 320-346.

Kates, S. M. (1999). Making the ad perfectly queer: Marketing 'normality' to the gay men's community? *Journal of Advertising, 28*(1), 25-37.

Knorr-Cetina, K. (1981). *The manufacture of knowledge: An essay on the constructivist and contextual nature of science.* Oxford: Pergamon Press.

Knox, J. S. (2007). Visual-verbal communication on online newspaper home pages. *Visual Communication, 6*(1), 19-53.

Kornberger, M. (2010). *The brand society: How brands transform management and lifestyle.* Cambridge *et al.*: Cambridge University Press.

Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication.* New York *et al.*: Routledge.

Kress, G., & van Leeuwen, T. (1996). *Reading images: The grammar of visual design.* London *et al.*: Routledge.

Kress, G., & van Leeuwen, T. (2001). *Multimodal discourse: The modes and media of contemporary communication.* London: Hodder Education.

Kuasirikun, N. (2011). The portrayal of gender in annual reports in Thailand. *Critical Perspectives on Accounting, 22*(1), 53-78.

Kunter, A., & Bell, E. (2006). The promise and potential of visual organizational research. *M@n@gement, 9*(3), 177-197.

Lacan, J. (1998). *The four fundamental concepts of psychoanalysis: The seminars of Jacques Lacan, Book XI.* New York *et al.*: W. W. Norton.

Lamot, M., & Molnár, V. (2002). The study of boundaries in the social sciences. *Annual Review of Sociology, 28*, 167-195.

Latour, B. (1986). Visualization and cognition: Thinking with eyes and hands. In H. Kuklick & E. Long (Eds.), *Knowledge and society: Studies in the sociology of culture. Past and present.* (pp. 1-40). London: Jai Press.

Latour, B. (2005). *Reassembling the social: An introduction to actor-network-theory.* Oxford: Oxford University Press.

Latour, B., & Woolgar, S. (1979). *Laboratory life: The social construction of scientific facts.* Beverly Hills: SAGE Publications.

Lawrence, T. B., & Suddaby, R. (2006). Institutions and institutional work. In S. R. Clegg, C. Hardy, T. B. Lawrence, & W. R. Nord (Eds.), *The SAGE handbook of organization studies* (pp. 215-254). London *et al.*: SAGE Publications.

Lefsrud, L., & Meyer, R. E. (2012). Science or science fiction? Professionals' discursive construction of climate change. *Organization Studies, 33*(11), 1477-1506.

Lefsrud, L., Graves, H., & Phillips, N. (2013). *Dirty oil, ethical oil: Categorical illegitimacy and the struggle over the Alberta oil sands.* Working Paper. University of Alberta.

Leifer, E. M. (1988). Interaction preludes to role setting: Exploratory local action. *American Sociological Review, 53*(6), 865-878.

Linstead, S., & Höpfl, H. (2000). *The aesthetics of organization.* London *et al.*: SAGE Publications.

Livingstone, M. (2002). *Vision and art: The biology of seeing.* New York: Harry A. Abrams.

Locke, J., & Lowe, A. (2012). Process flowcharts: Malleable visual mediators of ERP implementation. In F.-R. Puyou, P. Quattrone, C. McLean & N. Thrift (Eds.), *Imagining organizations: Performative imagery in business and beyond* (pp. 99-125). New York *et al.*: Routledge.

Loewenstein, J., Ocasio, W., & Jones, C. (2012). Vocabularies and vocabulary structure: A new approach linking categories, practices, and institutions. *The Academy of Management Annals, 6*, 41-86.

Lounsbury, M., & Glynn, M. A. (2001). Cultural entrepreneurship: Stories, legitimacy and the acquisition of resources. *Strategic Management Journal, 22*(6-7), 545-564.

Luckmann, T. (2002). *Wissen und Gesellschaft: Ausgewählte Aufsätze 1981-2002.* Konstanz: UVK.

Lueger, M., Sandner, K., Meyer, R., & Hammerschmid, G. (2005). Contextualizing influence activities: An objective hermeneutical approach. *Organization Studies, 26*(8), 1145-1168.

Lurie, N. H., & Mason, C. H. (2007). Visual representation: Implications for decision making. *Journal of Marketing, 71*(1), 160-177.

Maar, C., & Burda, H. (Eds.). (2004). *Iconic Turn: Die neue Macht der Bilder.* Köln: DuMont.

Machin, D. (2004). Building the world's visual language: The increasing global importance of image banks in corporate media. *Visual Communication, 3*(3), 316-336.

Machin, D., & van Leeuwen, T. (2003). Global schemas and local discourses in Cosmopolitan. *Journal of Sociolinguistics, 7*(4), 493-512.

Machin, D., & van Leeuwen, T. (2007). *Global media discourse: A critical introduction.* London *et al.*: Routledge.

Mandel, N., & Johnson, E. J. (2002). When web pages influence choice: Effects of visual primes on experts and novices. *Journal of Consumer Research, 29*(2), 235-245.

Margolis, E., & Pauwels, L. (Eds.). (2011). *The SAGE handbook of visual research methods*. Los Angeles *et al.*: SAGE Publications.

Martens, M. L., Jennings, J. E., & Jennings, P. D. (2007). Do the stories they tell get them the money they need? The role of entrepreneurial narratives in resource acquisition. *Academy of Management Journal, 50*(5), 1107-1132.

Massironi, M. (2002). *The psychology of graphic images: Seeing, drawing, communicating*. Mahwah: Lawrence Erlbaum.

Matilal, S., & Höpfl, H. (2009). Accounting for the Bhopal disaster: Footnotes and photographs. *Accounting, Auditing & Accountability Journal, 22*(6), 953-972.

McKinstry, S. (1996). Designing the annual reports of Burton PLC from 1930 to 1994. *Accounting, Organizations, and Society, 21*(1), 89-111.

McQuarrie, E. F., & Mick, D. G. (1992). On resonance: A critical pluralistic inquiry into advertising rhetoric. *Journal of Consumer Research, 19*(2), 180-197.

McQuarrie, E. F., & Mick, D. G. (1996). Figures of rhetoric in advertising language. *Journal of Consumer Research, 22*(4), 424-438.

McQuarrie, E. F., & Mick, D. G. (1999). Visual rhetoric in advertising: Text-interpretive, experimental, and reader-response analyses. *Journal of Consumer Research, 26*(1), 37-54.

McQuarrie, E. F., & Mick, D. G. (2003). Visual and verbal rhetorical figures under directed processing versus incidental exposure to advertising. *Journal of Consumer Research, 29*(4), 579-587.

McQuarrie, E. F., & Phillips, B. J. (2005). Indirect persuasion in advertising: How consumers process metaphors presented in pictures. *Journal of Advertising, 34*(2), 7-20.

Merleau-Ponty, M. (1964). *The primacy of perception*. Evanston: Northwestern University Press.

Merleau-Ponty, M. (1968). *The visible and the invisible*. Evanston: Northwestern University Press.

Messaris, P. (1997). *Visual persuasion: The role of images in advertising*. Thousand Oaks *et al.*: SAGE Publications.

Messaris, P., & Abraham, L. (2001). The role of images in framing news stories. In S. D. Reese, O. H. Gandy, Jr. & A. E. Grant (Eds.), *Framing public life: Perspectives on media and our understanding of the social world* (pp. 215-226). New York *et al.*: Routledge.

Meyer, A. D. (1991). Visual data in organizational research. *Organization Science, 2*(2), 218-236.

Meyer, R. E. (2004). *Globale Managementkonzepte und lokaler Kontext: Organisationale Wertorientierung im österreichischen öffentlichen Diskurs*. Wien: WUV.

Meyer, R. E. (2008). New sociology of knowledge: Historical legacy and contributions to current debates in institutional research. In R. Greenwood, C. Oliver, K. Sahlin-Andersson & R. Suddaby (Eds.), *The SAGE handbook of organizational institutionalism* (pp. 519-538). Thousand Oaks *et al.*: SAGE Publications.

Meyer, R. E., & Boxenbaum, E. (2010). Exploring European-ness in organization research. *Organization Studies, 31*(6), 737-755.

Meyer, R. E., Egger-Peitler, I., Höllerer, M. A., & Hammerschmid, G. (forthcoming). Of bureaucrats and passionate public managers: Institutional logics, executive identities, and public service motivation. *Public Administration*.

Meyer, R. E., & Höllerer, M. A. (2010). Meaning structures in a contested issue field: A topographic map of shareholder value in Austria. *Academy of Management Journal, 53*(6), 1241-1262.

Mills, C. W. (1940). Situated actions and vocabularies of motive. *American Sociological Review, 5*(6), 904-913.

Mitchell, A. A., & Olson, J. C. (1981). Are product attribute beliefs the only mediator of advertising effects on brand attitude? *Journal of Marketing Research, 18*(3), 318-322.

Mitchell, W. J. T. (1980). *The language of images*. Chicago *et al.*: University of Chicago Press.

Mitchell, W. J. T. (1994). *Picture theory. Essays on verbal and visual representation*. Chicago *et al.*: University of Chicago Press.

Mitchell, W. J. T. (2008). *Bildtheorie*. Frankfurt: Suhrkamp.

Mouritsen, J., Larsen, H. T., & Buck, P. N. D. (2001). Intellectual capital and the 'capable firm': Narrating, visualising and numbering for managing knowledge. *Accounting, Organizations and Society, 26*(7-8), 735-762.

Müller, M. G. (2011). Iconography and iconology as a visual method and approach. In E. Margolis & L. Pauwels (Eds.), *The SAGE handbook of visual research methods* (pp. 283-297). London *et al.*: SAGE Publications.

Müller-Doohm, S. (1993). Visuelles Verstehen. Konzepte kultursoziologischer Bildhermeneutik. In T. Jung & S. Müller-Doohm (Eds.), *'Wirklichkeit' im Deutungsprozeß: Verstehen und Methoden in den Kultur- und Sozialwissenschaften* (pp. 438-457). Frankfurt: Suhrkamp.

Müller-Doohm, S. (1997). Bildinterpretation als struktural-hermeneutische Symbolanalyse. In R. Hitzler & A. Honer (Eds.), *Sozialwissenschaftliche Hermeneutik* (pp. 81-108). Opladen: Leske + Budrich.

Navis, C., & Glynn, M. A. (2010). How new market categories emerge: Temporal dynamics of legitimacy, identity, and entrepreneurship in satellite radio, 1990-2005. *Administrative Science Quarterly, 55*(3), 439-471.

Nicolini, D. (2007). Studying visual practices in construction. *Building Research & Information, 35*(5), 576-580.

Nigam, A., & Ocasio, W. (2010). Event attention, environmental sensemaking, and change in institutional logics: An inductive analysis of the effects of public attention to Clinton's health care reform initiative. *Organization Science, 21*(4), 823-841.

Ocasio, W. (2011). Attention to attention. *Organization Science, 22*(5), 1286-1296.

Oevermann, U., Allert, T., Konau, E., & Krambeck, J. (1979). Die Methodologie einer 'objektiven Hermeneutik' und ihre allgemeine forschungslogische Bedeutung in den Sozialwissenschaften. In H.-G. Soeffner (Ed.), *Interpretative Verfahren in den Sozial- und Textwissenschaften* (pp. 352-434). Stuttgart: Metzler.

Okhuysen, G., & Bonardi, J. P. (2011). The challenges of theory building through the combination of lenses. *Academy of Management Review, 26*(1), 6-12.

Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review, 16*(1), 145-179.

Oswick, C., Fleming, P., & Hanlon, G. (2011). From borrowing to blending: Rethinking the process of organizational theory building. *Academy of Management Review, 36*(2), 318-337.

Pache, A.-C., & Santos, F. (2010). When worlds collide: The internal dynamics of organizational responses to conflicting institutional demands. *Academy of Management Review, 35*(3), 455-476.

Padgett, J. F., & Ansell, C. K. (1993). Robust Action and the Rise of the Medici, 1400-1434. *American Journal of Sociology, 98*(6), 1259-1319.

Page, M. L., & Gagiotti, H. (2012). A visual inquiry into ethics and change. *Qualitative Research in Organizations and Management: An International Journal, 7*(1), 72-85.

Panofsky, E. (1939). *Studies in Iconology: Humanistic themes in the art of the renaissance.* New York: Oxford University Press.

Panofsky, E. (1957). *Gothic architecture and scholasticism: An inquiry into the analogy of the arts, philosophy, and religion in the Middle Ages.* New York: World Publishing.

Parker, L. D. (2009). Photo-elicitation: An ethno-historical accounting and management research prospect. *Accounting, Auditing & Accountability Journal, 22*(7), 1111-1129.

Parry, K. (2010). A visual framing analysis of British press photography during the 2006 Israel-Lebanon conflict. *Media, War & Conflict, 3*(1), 67-85.

Pauwels, L. (2005). Introduction: The role of visual representation in the production of scientific reality. In L. Pauwels (Ed.), *Visual cultures of science: Rethinking representational practices in knowledge building & science communication* (pp. vii-xix). Hanover, New Hampshire: Dartmouth College Press.

Pauwels, L. (2010). Visual sociology reframed: An analytical synthesis and discussion of visual methods in social and cultural research. *Sociological Methods & Research, 38*(4), 545-581.

Pedersen, J., & Dobbin, F. (2006). In search of identity and legitimation: Bridging organizational culture and neoinstitutionalism. *American Behavioral Scientist, 49*(7), 897-907.

Pfeffer, J. (1982). *Organizations and organization theory.* Boston: Pitman.

Phillips, B. J. (2000). The impact of verbal anchoring on consumer response to image ads. *Journal of Advertising, 29*(1), 15-24.

Phillips, B. J., & McQuarrie, E. F. (2004). Beyond visual metaphor: A new typology of visual rhetoric in advertising. *Marketing Theory, 4*(1/2), 113-136.

Phillips, N., & Brown, J. L. (1993). Analyzing communication in and around organizations: A critical hermeneutic approach. *Academy of Management Journal, 36*(6), 1547-1576.

Phillips, N., Lawrence, T. B., & Hardy, C. (2004). Discourse and institutions. *The Academy of Management Review, 29*(4), 635-652.

Phillips, N., & Oswick, C. (2012). Organizational discourse: Domains, debates, and directions. *The Academy of Management Annals, 6*, 435-481.

Pink, S. (2001). *Doing visual ethnography.* London *et al.*: SAGE Publications.

Podolny, J. M. (2005). *Status signals: A sociological study of market competition.* Princeton: Princeton University Press.

Pollock, G. (2006). *Psychoanalysis and the image: Transdisciplinary perspectives.* Malden *et al.*: Blackwell.

Powell, W. W., & Sandholtz, K. W. (2012). Amphibious entrepreneurs and the emergence of organizational forms. *Strategic Entrepreneurship Journal, 6*(2), 94-115.

Pratt, M. G., & Foreman, P. O. (2000). Classifying managerial responses to multiple organizational identities. *The Academy of Management Review, 25*(1), 18-42.

Pratt, M. G., & Rafaeli, A. (1997). Organizational dress as a symbol of multilayered social identities. *Academy of Management Journal, 40*(4), 862-898.

Preston, A. M., Wright, C., & Young, J. J. (1996). Imag[in]ing annual reports. *Accounting, Organizations and Society, 21*(1), 113-137.

Preston, A. M., & Young, J. J. (2000). Constructing the global corporation and corporate constructions of the global: A picture essay. *Accounting, Organizations and Society, 25*(4-5), 427-449.

Purdy, J. M., & Gray, B. (2009). Conflicting logics, mechanisms of diffusion, and multilevel dynamics in emerging institutional fields. *Academy of Management Journal, 52*(2), 355-380.

Puyou, F.-R., Quattrone, P., McLean, C., & Thrift, N. (Eds.). (2012). *Imagining organizations: Performative imagery in business and beyond.* New York *et al.*: Routledge.

Quattrone, P. (2009). Books to be practiced: Memory, the power of the visual, and the success of accounting. *Accounting, Organizations and Society, 34*(1), 85-118.

Raab, J. (2008). *Visuelle Wissenssoziologie: Theoretische Konzeption und materiale Analysen.* Konstanz: UVK.

Rafaeli, A., & Pratt, M. G. (1993). Tailored meanings: On the meaning and impact of organizational dress. *Academy of Management Review, 18*(1), 32-55.

Rafaeli, A., Vilnai-Yavetz, I. (2004). Emotion as a connection of physical artifacts and organizations. *Organization Science, 15*(6), 671-686.

Rao, H., Monin, P., & Durand, R. (2003). Institutional change in Toque Ville: Nouvelle cuisine as an identity movement in French gastronomy. *The American Journal of Sociology, 108*(4), 795-843.

Ravasi, D., & Stigliani, I. (2012). Product design: A review and research agenda for management studies. *International Journal of Management Reviews, 14*(4), 464-488.

Ray, J. L., & Smith, A. D. (2012). Using photographs to research organizations: Evidence, considerations, and application in a field study. *Organizational Research Methods, 15*(2), 288-315.

Rindova, V. & Petkova, A. P. (2007). When is a new thing a good thing? Technological change, product form design, and perceptions of value for product innovations. *Organization Science, 18*(2), 217-232.

Rindova, V., & Schultz, M. (1998). Identity within and identity without: Lessons from corporate and organizational identity. In D. A. Whetten, & P. C. Godfrey (Eds.), *Identity in organizations: Building theory through conversation* (pp. 46-55). Thousand Oaks *et al.*: SAGE Publications.

Rodríguez, L., & Dimitrova, D. (2011). The levels of visual framing. *Journal of Visual Literacy, 30*(1), 48-65.

Rorty, R. (Ed.). (1967). *The linguistic turn: Recent essays in philosophical method.* Chicago *et al.*: University of Chicago Press.

Rose, G. (2007). *Visual methodologies: An introduction to the interpretation of visual materials* (2nd ed.). Los Angeles *et al.*: SAGE Publications.

Sartre, J.-P. (1940). *L'imaginaire: Psychologie phénoménologique de l'imagination.* Paris: Gallimard.

Schneiberg, M., & Lounsbury, M. (2008). Social movements and institutional analysis. In R. Greenwood, C. Oliver, K. Sahlin & R. Suddaby (Eds.), *The SAGE handbook of organizational institutionalism* (pp. 650-672). London *et al.*: SAGE Publications.

Schneider, S. C., & Dunbar, R. L. M. (1992). A psychoanalytic reading of hostile takeover events. *Academy of Management Review, 17*(3), 537-567.

Schroeder, J. E. (2012). Style and strategy: Snapshot aesthetics in brand culture. In F.-R. Puyou, P. Quattrone, C. McLean & N. Thrift (Eds.), *Imagining organizations: Performative imagery in business and beyond* (pp. 129-151). New York *et al.*: Routledge.

Schroeder, J. E., & Zwick, D. (2004). Mirrors of masculinity: Representation and identity in advertising images. *Consumption, Markets and Culture, 7*(1), 21-52.

Schwalbe, C. B., Silcock, W., & Keith, S. (2008). Visual framing of the early weeks of the U.S.-led invasion of Iraq: Applying the master war narrative to electronic and print images. *Journal of Broadcasting & Electronic Media, 52*(3), 448-456.

Schütz, A., & Luckmann, T. (1973). *The structures of the life-world.* Evanston: Northwestern University Press.

Scott, L. M. (1992). Playing with pictures: Postmodernism, poststructuralism, and advertising visuals. *Advances in Consumer Research, 19*(2), 596-612.

Scott, L. M. (1994). Images in advertising: The need for a theory of visual rhetoric. *Journal of Consumer Research, 21*(2), 252-273.

Scott, L. M., & Rajeev, B. (Eds.). (2003). *Persuasive imagery: A consumer response perspective.* Mahwah: Lawrence Erlbaum.

Scott, L. M., & Vargas, P. (2007). Writing with pictures: Toward a unifying theory of consumer response to images. *Journal of Consumer Research, 34*(3), 341-356.

Scott, S. V., & Orlikowski, W. J. (2012). Imagining technology in organizational knowledge: Entities, webs, and mangles. In F.-R. Puyou, P. Quattrone, C. McLean & N. Thrift (Eds.), *Imagining organizations: Performative imagery in business and beyond* (pp. 83-98). New York *et al.*: Routledge.

Shortt, H., & Warren, S. (2012). Fringe benefits: Valuing the visual in narratives of hairdressers' identities at work. *Visual Studies, 27*(1), 18-34.

Sillince, J. A. A. (1999). The organizational setting, use and institutionalization of argumentation repertoires. *Journal of Management Studies, 36*(6), 795-830.

Sillince, J. A. A., & Barker, J. R. (2012). A tropological theory of institutionalization. *Organization Studies, 33*(1), 7-38.

Simon, H. A. (1947). *Administrative behavior: A study of decision-making processes in administrative organizations.* Chicago: Macmillan.

Slutskaya, N., Simpson, A., & Hughes, J. (2012). Lessons from photoelicitation: Encouraging working men to speak. *Qualitative Research in Organizations and Management: An International Journal, 7*(1), 16-33.

Smircich, L., & Morgan, G. (1982). Leadership: The management of meaning. *The Journal of Applied Behavioral Science, 18*(3), 257-273.

Smith, M., & Taffler, R. (1996). Improving the communication of accounting through cartoon graphics. *Accounting, Auditing & Accountability Journal, 9*(2), 68-85.

Snow, D. A., Rochford, E. B., Jr., Worden, S. K., & Benford, R. D. (1986). Frame alignment processes, micromobilization and movement participation. *Amierican Sociological Review, 51*(4), 464-481.

Spencer, S. (2011). *Visual research methods in the social sciences: Awakening visions.* New York *et al.*: Routledge.

Stanczak, G. C. (Ed.). (2007). *Visual research methods. Image, society, and representation.* Los Angeles *et al.*: SAGE Publications.

Star, S. L., & Griesemer, J. R. (1989). Institutional ecology, 'translations' and boundary objects: Amateurs and professionals in berkeley's museum of vertebrate zoology, 1907-39. *Social Studies of Science, 19*(3), 387-420.

Steyaert, C., Marti, L., & Michels, C. (2012). Multiplicity and reflexivity in organizational research: Towards a performative approach to the visual. *Qualitative Research in Organizations and Management: An International Journal, 7*(1), 34-53.

Stiles, D. R. (2011). Disorganization, disidentification and ideological fragmentation: Verbal and pictorial evidence from a British business school. *Culture and Organization, 17*(1), 5-30.

Strang, D., & Meyer, J. W. (1993). Institutional conditions for diffusion. *Theory and Society, 22*(4), 487-511.

Strang, D., & Soule, S. A. (1998). Diffusion in organizations and social movements: From hybrid corn to poison pills. *Annual Review of Sociology, 24*(1), 265-290.

Strati, A. (1992). Aesthetic understanding of organizational life. *Academy of Management Review, 17*(3), 568-581.

Strati, A. (1999). *Organizations and aesthetics.* London *et al.*: SAGE Publications.

Styhre, A. (2010a). Knowledge work and practices of seeing: Epistemologies of the eye, gaze, and professional vision. *Culture and Organization, 16*(4), 361-376.

Styhre, A. (2010b). *Visual culture in organizations: Theory and cases.* London *et al.*: Routledge.

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *The Academy of Management Review, 20*(3), 571-610.

Suddaby, R., Elsbach, K., Greenwood, R., Meyer, J. W., & Zilber, T. B. (2010). Organizations and their institutional environments – bringing meaning, values, and culture back in: Introduction to the special resarch forum. *Academy of Management Journal, 53*(6), 1234-1240.

Suddaby, R., & Greenwood, R. (2005). Rhetorical strategies of legitimacy. *Administrative Science Quarterly, 50*(1), 35-67.

Suddaby, R., Hardy, C., & Huy, Q. N. (2011). Where are the new theories of organization? *Academy of Management Review, 36*(2), 236-246.

Sweetman, P. (2009). Revealing habitus, illuminating practice: Bourdieu, photography and visual methods. *The Sociological Review, 57*(3), 491-511.

Swidler, A. (1986). Culture in action: Symbols and strategies. *American Sociological Review, 51*(2), 273-286.

Sørensen, B. M. (2010). St. Paul's conversion: The aesthetic organization of labour. *Organization Studies, 31*(3), 307-326.

Thornton, P. H., Ocasio, W., & Lounsbury, M.. (2012). *The institutional logics perspective: A new approach to culture, structure and process.* Oxford: Oxford University Press.

Toulmin, S. E. (2008). *The Uses of Argument* (updated ed.). New York: Cambridge University Press.

Tracey, P. (2012). Religion and organization: A critical review of current trends and future directions. *The Academy of Management Annals, 6*, 87-134.

Tufte, E. R. (1997). *Visual explanations: Images and quantities, evidence and narrative.* Cheshire: Graphics Press.

Tufte, E. R. (2001). *The visual display of quantitative information* (2nd ed.). Cheshire: Graphics Press.

Unnava, H. R., & Burnkrant, R. E. (1991). An imagery-processing view of the role of pictures in print advertisements. *Journal of Marketing Research, 28*(2), 226-231.

Vaara, E., & Tienari, J. (2008). A discursive perspective on legitimation strategies in multinational corporations. *Academy of Management Review, 33*(4), 985-993.

Vaara, E., Tienari, J., & Irrmann, O. (2007). Crafting an international identity: The Nordea case. In L. Lerpold, D. Ravasi, J. van Rekom, & G. Soenen (Eds.), *Organizational identity in practice* (pp. 215-231), London *et al.*: Routledge.

Vaara, E., Tienari, J., & Laurila, J. (2006). Pulp and paper fiction: On the discursive legitimation of global industrial restructuring. *Organization Studies, 27*(6), 789-813.

van Leeuwen, T. (2001). Semiotics and iconography. In T. van Leeuwen & C. Jewitt (Eds.), *Handbook of visual analysis* (pp. 92-118). London *et al.*: SAGE Publications.

van Leeuwen, T. (2005a). *Introducing social semiotics*. London *et al.*: Routledge.

van Leeuwen, T. (2005b). Multimodality, genre and design. In S. Norris & R. H. Jones (Eds.), *Discourse in action: Introducing mediated discourse analysis* (pp. 73-94). London *et al.*: Routledge.

van Leeuwen, T. (2006). Towards a semiotics of typography. *Information Design Journal + Document Design, 14*(2), 139-155.

van Leeuwen, T. (2008). *Discourse and practice: New tools for critical discourse analysis*. Oxford: Oxford University Press.

van Leeuwen, T. (2011a). *The language of colour: An introduction*. London *et al.*: Routledge.

van Leeuwen, T. (2011b). The semiotics of decoration. In K. L. O'Halloran & B. A. Smith (Eds.), *Multimodal studies: Exploring issues and domains* (pp. 115-131). London *et al.*: Routledge.

van Leeuwen, T., & Wodak, R. (1999). Legitimizing immigration control: A discourse-historical analysis. *Discourse Studies, 1*(1), 83-118.

Venkatraman, M., & Nelson, T. (2008). From servicescape to consumptionscape: A photo-elicitation study of Starbucks in the new China. *Journal of International Business Studies, 39*(6), 1010-1026.

Vince, R., & Broussine, M. (1996). Paradox, defense and attachment: Accessing and working with emotions and relations underlying organizational change. *Organization Studies, 17*(1), 1-21.

Vince, R., & Warren, S. (2012). Participatory visual methods. In C. Cassell & G. Symon (Eds.), Q*ualitative organizational resarch: Core methods and current challenges* (pp. 275-295). London *et al.*: SAGE Publications.

Vásquez, C., & Cooren, F. (2012). Imagining passion in action: An analysis of translation and treason. In F.-R. Puyou, P. Quattrone, C. McLean & N. Thrift (Eds.), *Imagining organizations: Performative imagery in business and beyond* (pp. 191-212). New York *et al.*: Routledge.

Voronov, M., & Vince, R. (2012). Integrating emotions into the analysis of institutional work. *Academy of Management Review, 37*(1), 58-81.

Wagner, J. (2002). Contrasting images, complementary trajectories: Sociology, visual sociology and visual research. *Visual Studies, 17*(2), 160-171.

Warren, S. (2002). 'Show me how it feels to work here': Using photography to research organizational aesthetics. *ephemera, 2*(3), 224-245.

Warren, S. (2005). Photography and voice in critical qualitative management research. *Accounting, Auditing & Accountability Journal, 18*(6), 861-882.

Warren, S. (2008). Empirical challenges in organizational aesthetics research: Towards a sensual methodology. *Organization Studies, 29*(4), 559-580.

Warren, S. (2012). Psychoanalysis, collective viewing and the 'social photo matrix' in organizational research. *Qualitative Research in Organizations and Management: An International Journal, 7*(1), 86-104.

Wasserman, V., & Frenkel, M. (2011). Organizational aesthetics: Caught between identity regulation and culture jamming. *Organization Science, 22*(2), 503-521.

Weber, K., & Dacin, T. (2011). The cultural construction of organizational life. *Organizaton Science, 22*(2), 286-298.

Weick, K. E. (1995). *Sensemaking in organizations*. Thousand Oaks *et al.*: SAGE Publications.

Weick, K. E., Suthcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science, 16*(4), 409-421.

Whetten, D. A., Felin, D., & King, B. G. (2009). The practice of theory borrowing in organizational studies: Current issues and future directions. *Journal of Management, 35*(3), 537-563.

Wodak, R., & Meyer, M. (Eds.). (2009). *Methods of critical discourse analysis*. London *et al.*: SAGE Publications.

Wry, T., Lounsbury, M., & Glynn, M. A. (2011). Legitimating nascent identities: Coordinating cultural entrepreneurship. *Organization Science, 22*(2), 449-463.

Yakura, E. K. (2002). Charting time: Timelines as temporal boundary objects. *Academy of Management Journal, 45*(5), 956-970.

Yanow, D. (2006). Studying physical artifacts: An interpretive approach. In A. Rafaeli & M. G. Pratt (Eds.), *Artifacts and organizations: Beyond mere symbolism* (pp. 41-60). Mahwah *et al.*: Lawrence Erlbaum.

Yantis, S. (Ed.). (2001). *Visual perception: Essential reading*. London: Taylor & Francis.

Zerubavel, E. (1996). Lumping and splitting: Notes on social classification. *Sociological Forum, 11*(3), 421-433.

Zilber, T. B. (2006). The work of the symbolic in institutional processes: Translations of rational myths in Israeli high tech. *Academy of Management Journal, 49*(2), 281-303.

About the authors

Renate E. Meyer (renate.meyer@wu.ac.at) is Professor of Public Management and Governance at WU Vienna University of Economics and Business, Austria, and Permanent Visiting Professor at Copenhagen Business School, Denmark. She has published widely in the areas of organization and management studies and is currently Chair of the European Group for Organizational Studies (EGOS). Her research focuses on framing, meaning structures, social identities, and changing governance structures in the private and public sectors.

Markus A. Höllerer (markus.hoellerer@unsw.edu.au) is Lecturer in Organization Theory at the Australian School of Business, University of New South Wales, in Sydney, Australia. His research interests include the dissemination and local adaptation of global managerial concepts, in particular the heterogeneous theorizations and local variations in meaning, as well as the relationship between different bundles of concepts and their underlying governance and business models. With a recent focus on processes of glocalization, his research is also concerned with visual and discursive framing.

Dennis Jancsary (dennis.jancsary@wu.ac.at) is Post-doctoral Researcher at the Institute for Public Management at WU Vienna University of Economics and Business, Austria. His recent work is organized around qualitative and interpretative research strategies of analyzing verbal and visual rhetoric in the construction and reproduction of power, authority, and legitimacy, specifically the use of argument and persuasion.

Theo van Leeuwen (theo.vanleeuwen@uts.edu.au) is Professor of Media and Communication and serves as Dean of the Faculty of Arts and Social Sciences at the University of Technology, Sydney, Australia. He has published widely in the areas of critical discourse analysis, multimodality and visual semiotics. His books include: 'Reading images: The grammar of visual design', 'Multimodal discourse: The modes and media of contemporary communication' (both with Gunther Kress), 'Speech, music, sound', 'Introducing social semiotics', 'Global media discourse' (with David Machin), 'Discourse and practice: New tools in critical discourse analysis', and 'The language of colour'.

Appendix: Figures and Tables

	Archeological	Practice	Strategic	Dialogical	Documenting
Relevance of visuals	Visuals are artifacts that 'store' and 'transmit' the social knowledge of a specific community or society and, thus, retrospectively allow for a reconstruction of the meaning structures they materialize	Visuals are socially meaningful material objects that are created, employed, and manipulated in organizational contexts, making them a constitutive part of social practices	Visuals are symbolic devices that exert influence and impact on audiences' perception and evaluation of reality; they are a means of persuasion	Visuals are 'triggers' that speak to deeper elements of human consciousness and, thus, elicit richer information from interview partners – and/or more egalitarian forms of communication	Visuals are a form of capturing the researcher's 'perspective' on a phenomenon, conserving it in a particularly rich way. They are, thus, well-suited means of documentation and presentation of such perspective
Nature of data	Natural	Natural	Natural or artificial	Artificial, sometimes natural	Artificial
Producer	Field actors	Field actors	Field actors or researcher	Field actors, sometimes researcher	Researcher
Interpreter	Researcher	Field actors	Field actors and/or test persons	Researcher and/or field actors	Researcher
Research focus	Content and/or meaning of visual elements of discourse; reconstruction of the meaning structures in which the visual artifact is embedded	Use and handling of visual artifacts in practice	Impact of visual artifacts on audience	Sense-making of interview partners	Content and/or meaning of visual artifacts

Conceptual focus	*Identity and image* (e.g., Boje & Smith, 2010; Davison, 2011; Ewing, Pitt, & Murgolo-Poore, 2001; Foster *et al.*, 2011; Guthey & Jackson, 2005; McKinstry, 1996; Vaara *et al.*, 2007); *visual branding* (Delmestri *et al.*, forthcoming; Schroeder, 2012); *categorization and subject positions* (e.g., Anderson & Imperia, 1992; Benschop & Meihuizen, 2002; Campbell *et al.*, 2009; Dougherty & Kunda, 1990; Duff, 2011; Friedel, 2008; Hancock & Tyler, 2007; Hardy & Phillips, 1999; Kuasirikun, 2011; Lefsrud *et al.*, 2013; Schroeder & Zwick, 2004; Sørensen, 2010); *construction, translation, maintenance, and change of meaning* (e.g., Davison, 2004; Hancock, 2006; Höllerer *et al.*, forthcoming; Kamla & Roberts, 2010; Preston *et al.*, 1996; Quattrone, 2009; Zilber, 2006); *legitimacy, credibility, authenticity, ideology, truth, and power* (e.g., Breitbarth *et al.*, 2010; Davison, 2007; Graves *et al.*, 1996; Guthey & Jackson, 2005; Höllerer *et al.*, forthcoming; Phillips & Brown, 1993)	*Translation* (for instance, visuals as 'boundary objects') (e.g., Henderson, 1991; Justesen & Mouritsen, 2009; Locke & Lowe, 2012; Mouritsen, Larsen, & Buck, 2001; Nicolini, 2007; Yakura, 2002); *coordination, negotiation, and mobilization* (for instance visuals as 'conscription devices' or 'spokes objects') (e.g., Henderson, 1995; Vásquez & Cooren, 2012; Yakura, 2002); *knowledge creation and transmission* (e.g., Ewenstein & Whyte, 2007, 2009; Henderson, 1995); *power, politics, and regulation* (e.g., Rafaeli & Pratt, 1997; Wasserman & Frenkel, 2011); *strategy processes and strategizing* (e.g., Eppler & Platts, 2009; Heracleous & Jacobs, 2008; Kaplan, 2010); *identity enactment* (e.g., Dellinger, 2002; Humphreys & Brown, 2002; Rafaeli & Pratt, 1997); *organizational memory* (e.g., Bell, 2012); *power and resistance* (e.g., Bell, 2012; Wasserman & Frenkel, 2011)	*Emotion, liking, and trust* (e.g., Cho *et al.*, 2009; McQuarrie & Mick, 1992; Phillips, 2000; Scott & Vargas, 2007); *memory and recall* (e.g., Heckler & Childers, 1992; Houston *et al.*, 1987; McQuarrie & Mick, 1992; Unnava & Burnkrant, 1991); *information transmission and processing* (e.g., Edell & Staelin, 1983; Mitchell & Olson, 1981; Smith & Taffler, 1996); *decision-making* (e.g., Lurie & Mason, 2007; Mandel & Johnson, 2002); *goal pursuit* (e.g., Cheema & Bagchi, 2011); *persuasion and rhetoric* (e.g., Jeong, 2008; McQuarrie & Mick, 1999; McQuarrie & Phillips, 2005; Phillips, 2000; Scott, 1994; Scott & Rajeev, 2003; Scott & Vargas, 2007)	*Empowerment and voice* (e.g., Slutskaya *et al.*, 2012; Warren, 2005); *identity work* (e.g., Bryans & Mavin, 2006; Shortt & Warren, 2012; Slutskaya *et al.*, 2012; Vince & Broussine, 1996); *construction of spaces* (e.g., Venkatraman & Nelson, 2008; Warren, 2002); *organizational change and emotions* (e.g., Vince & Broussine, 1996); *aesthetic sense-making and sense-giving* (e.g., Warren, 2002; Venkatraman & Nelson, 2008); *disorganization and disidentification* (e.g., Stiles, 2011); *pedagogy and learning* (e.g., Page & Gagiotti, 2012)	*Business process reengineering* (e.g., Buchanan, 1998); *translation* (e.g., Czarniawska, 2010); *globalization* (e.g., Preston & Young, 2000)
Typical visual artifacts	Primarily photographs and composite visuals (photograph/picture and text), but also artificially created images, schematic	Schematic drawings, plans, computer aided visualizations, timelines, but also clothing/dress	Composite visuals (photograph/picture and text), abstract visualization (graphs, charts)	Photographs, drawings, sketches	Photographs, drawings

	visuals, drawings, cartoons, and visual art images				
Methods of data collection	Collection of archival material from a broad range of genres and media	Observation, interviews, secondary data collection	Creation and collection of visual artifacts; various experimental designs; in-depth interviews	Participant-created photographs, drawings, or similar	Process mapping, photo reportage
Methods of data analysis	*Content analysis* (Anderson & Imperia, 1992; Assael, Kofron, & Burgi, 1967; Benschop & Meihuizen, 2002; Breitbarth *et al.*, 2010; Delmestri *et al.*, forthcoming; Duff, 2011; Kuasirikun, 2011, Dougherty & Kunda, 1990); *rhetorical analysis* (Davison, 2010; Foster *et al.*, 2011; Graves *et al.*, 1996;), framing analysis (Höllerer *et al.*, forthcoming); *deconstruction* (Campbell, 2012; Kates, 1999; Scott, 1992); *semiotics* (Davison, 2011; Friedel, 2008; Hancock, 2005; Schroeder & Zwick, 2004; Zilber, 2006); *critical analysis* (Boje & Smith, 2010; Davison, 2009; Kamla & Roberts, 2010; Phillips & Brown, 1993); *hermeneutics* (Hancock, 2005, 2006)	*Ethnographic case studies* (Dellinger, 2002; Ewenstein & Whyte, 2007, 2009; Henderson, 1991, 1995; Heracleous & Jacobs, 2008; Kaplan, 2010; Locke & Lowe, 2012; Pratt & Rafaeli, 1997; Vásquez & Cooren, 2012; Yakura, 2002)	*Statistical analysis* (Cheema & Bagchi, 2011; Cho *et al.*, 2009; Edell & Staelin, 1983; Houston *et al.*, 1987; Jeong, 2008; McQuarrie & Mick, 1992; 1999 2003; McQuarrie & Phillips, 2005; Phillips, 2000; Smith & Taffler, 1996; Unnava & Burnkrant, 1991); *rhetorical analysis* (McQuarrie & Mick, 1992, 1999, Phillips & McQuarrie, 2004; Scott & Vargas, 2007)	*Photo-elicitation* (Parker, 2009; Shortt & Warren, 2012; Slutskaya *et al.*, 2012; Warren, 2002); *'auto-driving'* (Heisley & Levi, 1991; Ventrakaman & Nelson, 2008); *'snaplogs'* (Bramming, Hansen, Bojesen, & Olesen, 2012); *psycho-analytical readings* (Vince & Broussine, 1996); *other image-centered co-operative interpretation designs* (Bagnoli, 2009; Meyer, 1991; Page & Gagiotti, 2012; Warren 2005)	*Photo elicitation* (Buchanan, 2001); *'staff ride'* (Becker & Burke, 2012); *photo essay* (Preston & Young, 2000)
Amount of data	Rather small amounts of data due to the strongly qualitative nature of most research designs	Not in the discretion of the researcher; amount is decided on by the actors in the field	Amount of data varies; rather large quantities of data in purely experimental designs; smaller quantities when interviews and rhetorical analysis are used	Amount of data varies widely; in case of participant-led photography, large amounts of photographic data might be produced (not all data is used for interpretation)	Discretion of the researcher; depends on the role of images (complete documentation vs. capturing of particularities)

Table 1: Status of visuals in the research design: Five distinct approaches