

Building on visuals: Taking stock and moving ahead

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Abstract. This essay aims to encourage researchers to use visuals related to organizational life as an empirical material *per se.* Through an overview of visual analysis in management research, we underline methodological stakes to show how they matter in the main current theoretical frameworks. Without being exhaustive, we encourage researchers to develop visual analyses as they provide significant knowledge on multiple phenomena at the individual, organizational and, more globally, macro levels. Furthermore, we consider that with the rise of digital technologies the analysis and publication of this type of empirical research has become more achievable.

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INTRODUCTION

How to consider the Allegory of Good and Bad Government,1 the series of fresco panels painted by Ambrogio Lorenzetti located in Siena's Palazzo Pubblico? This masterpiece is not an illustration of some theoretical text or a "picture" of the reality of an era (Boucheron, 2013); these visuals have to be considered as visible things with power in themselves. Through visuals, Palazzo Pubblico conveys a strong political message. By painting, on one side, the effects of harmony of a government based on justice and virtues (good government) and, on the other side, the ravages and disasters resulting from the tyranny and contempt of justice (the bad government). Lorenzetti aims to show the reality of both forms of government. Thus, the visitor circulates in a visible, tangible and effective space through the visualization of the principles of government and the effects they have (Spitz, 2013). This example illustrates the importance of the visual dimension not only in the daily lives of individuals and organizations but also in contemporary society as a whole, which means it is more than a simple illustration of verbal discourse; everyday life and its cultural context have taken a "visual turn" (Mitchell, 2009). Based on the widespread presence of images, visuals can be described as the new "linguistic turn" (Rorty, 1992). The "visual culture", linked to the "visual turn", makes reference to a cultural construction of the visual, creating a visual society (Baudrillard, 1981; Debord, 1992; Mitchell, 2005).

Here, we define "visuals" as paintings, drawings, charts, diagrams and photography, including their component colours, perspectives, layouts or typography. Despite the fact that visuals are everywhere and impact the

1. We thank Bernard Leca for suggesting this example.

everyday lives of individuals and organizations, they have been studied primarily by the humanities and the social sciences to understand social phenomena, and management studies have yet to fully exploit their data through independent examination. Three main reasons could explain this situation. First, management studies tend to focus more on verbal rather than visual discourses (Bell & Davison, 2013; de Vaujany & Vaast, 2016) due to a specific focus on the data collection process, i.e. researchers tend to focus on questionnaires, interviews or written documents as data sources. Second, extant research on visuals lacks consistent methodology; consequently, "due to a lack of integrative efforts we are in danger of constantly reinventing our knowledge about the visual" (Meyer, Höllerer, Jancsary & van Leeuwen, 2013: 490). Third, most of the time, researchers use visuals that they create themselves as a methodological tool to analyse an organizational situation. Indeed, two approaches have been defined to categorize visual analysis in management (Bell & Davison, 2013): the theoretical and the empirical approaches. In the theoretical approach, the visual materials studied are produced by researchers, which involves dynamic collaboration between the producer of images and texts and the audience (e.g. Back, 2009). The theoretical approach may be related to art theory, fashion and dress or semiotics. This means that the researcher's approach will have an impact because the interpretation and use of visuals will not be the same (Banks, 2008). In contrast, the empirical approach uses pre-existing visual materials, aiming for transparency (see Finnegan, 2004). Empirical approaches are linked to content analysis and quantification of images.

This paper aims to gather research conducted in management studies to identify frameworks and methodologies. We hope to establish a foundation of consistency upon which researchers can build on the examination of visuals in their respective area of expertise. More precisely, our main idea is to consider the existence of visuals as a normal part of organizational life and to examine its potential impact on individuals, organizations and, more globally, on society. Our aim, then, is to consider visuals as empirical material *per se* rather than as a methodological technique to capture an organizational reality (see Kunter & Bell, 2006).

This paper is structured as follows. First, we develop general knowledge about visuals and their analysis. Next, we present conceptual frameworks in which visuals could appear as a fruitful empirical material. Then, we present different methods for analysing visuals that can be exploited in future research.

VISUALS AND MANAGEMENT RESEARCH

In some contexts, visuals, images and photographs are considered as synonymous, which is why we start with a conceptual clarification. In this first part, we emphasize the definition and implication of visuals as organizational discourse.

WHAT ARE VISUALS AND WHY DO THEY MATTER?

Visual studies can be defined as the study of themes in images. For Mitchell (2005), if images "want" something, it is because they are not just a set of colours and shapes. Their complexity leads them to represent strong feelings and symbolism to the individual, as seduction, temptation, power or fear, giving them a potential power of influence. The difference between images and pictures is that images need material support to become pictures. The study of visuals comprises both images and pictures,

since images appear materially in pictures. Pictures are material objects; images may only be intellectual representations and can thus survive the material medium, including the numerical: "You can hang a picture, but you can't hang an image" (Mitchell, 2009). Here, we understand visual artefacts as pictures, photographs, paintings, charts, animations or drawings (Meyer et al., 2013). In particular, we understand pictures as "complex assemblages of virtual, material, and symbolic elements" (Mitchell, 2005: xiii), even if this definition remains questionable (Mitchell, 2005; Rose, 2001).

Visuals play an important part in contemporary everyday life, and so influence individuals' and organizations' behaviour, values and practices. Visual content matters, since it may lead to specific actions, making the effects of a phenomenon or representation visible in a material experience (Quattrone, 2015). Even if they are considered passive rather than active, visuals may work as depictions and, thus, say even more. Omitting visuals from management studies results in an incomplete understanding of everyday life and, consequently, an incomplete understanding of diverse phenomena. Visuals can illustrate the consequences of change in organization or society (Crary, 2009) and then act as proof. They bear specific information and influence the way people think, dream and represent reality and abstractions. The comparison of images with living organisms is a provocative idea because, clearly, visuals cannot be considered at the same level as flesh and bones. However, visuals are now as important as words and discourses to diffuse ideas, expressions or to represent society (Collette-VanDeraa & Kellner, 2007).

Using visuals, visualization is the shaping of diverse information (which itself may or may not be visual) to make it digestible, as for example in management control where visualization is used to comprehend production evolution and figures (Quattrone, 2017), which is illustrated by its figure 6, showing a management control dashboard divided in four areas composed only of graphs and colours. This aspect of visuals is also subject to examination, but we will not develop that theme here. In this reflection, we will develop thinking neither around design (Norman, 2013), nor animated images (Llewellyn, 2014) nor mental pictures (Gioia, Hamilton & Patvardhan, 2014), referring to the impression of images, places and people on individuals.

Visual analysis emerged late in management science history. Early research focused on discourses and practices where visuals were effectively ignored for many years, despite the knowledge they could give us, without restriction of field (strategy, accounting, finance or human resources). Indeed, visual research can be used for many purposes. For example, it is a means to observe and understand "the way in which organizational, professional, and personal identities are formed and communicated" (Meyer et al., 2013: 492) and the birth, death and representation of practices, performance and processes (Davison, McLean & Warren, 2012), especially in organizations (Bell, Warren & Schroeder, 2013). From a cultural study point of view, visual studies should be coupled with all other kinds of visuality because of the "centrality of vision in everyday experience and the production of meaning" (Lister & Wells, 2008: 63). Moreover, a call for interdisciplinarity has been made because findings in other areas may be useful in management studies to understand the power of visual media-often more useful than narratives are (Davison, 2015; Davison et al., 2012)—and that is why we will present here a range of visual studies useful to further research in management.

THE MATERIAL DIMENSION OF VISUALS

Visuals can be material, or not. Indeed, as previously explained, images are immaterial and can only exist in the mind; they become pictures when you hang them on the wall (Mitchell, 2009). The medium that bears the image is also part of the visual study because the material aspect of visuals through pictures is linked to its relationship with object: idol, fetish or totem. Moreover, there are "objectivist projections" that communicate or transmit beliefs (Mitchell, 2005: 163). We can observe this in the study of offending images, where individuals feel threatened and are capable of destroying the materiality of images they consider offensive. In considering the medium that diffuses the image, McLuhan and Fiore (2005) suggest that the medium itself, i.e. the support and related technology, is the message. Media extend human senses so people are able to perceive things they could not otherwise. In contrast, Mitchell (2005) regards the medium more as a social practice combining conventions and the use of appropriate tools. For example, PowerPoint became a medium of visual knowledge representation that bears and diffuses information during teaching or learning (Gabriel, 2008). In iconography, the medium has to be studied with the content and the meaning together to compare artistic intents and material features where every picture is a symptom of a psychic or a social cause (Panofsky, 1955). These insights show that visuals are not neutral or decorative; they need to be better understood because their construction, meaning and consequences influence audiences (Davison, 2010; Graves, Flesher & Jordan, 1996).

The materiality of images resides in its form as distinct from its content, even if the two are linked, because the study of the form and the content (purpose) may be different and thus distort each other (Banks, 2008). Indeed, a change of form may imply a change in the visual's meaning and, hence, its interpretation by the audience, or it might even change the audience. In cultural studies, images are seen as a representation of meaning and sense; they must remain related to their social processes, their context of production and to a specific medium or place in the world (Lister & Wells, 2008). Nevertheless, the longitudinal perspective of some data makes this method difficult to apply, considering the evolution of conventions and the context. Moreover, in light of historical data and archives, they are inextricable from their context of production, collection and conservation (Dunleavy, 2005). The fragment of information they represent has then to be studied carefully and interpreted in a clear process. Indeed, all analysis has to take into account the context because. according to Rose (2014: 15), "visual materials are made to make sense depending on the context of their use", which can be used as a frame for understanding visual meanings (see also Banks, 2008). Observing the content is especially relevant, considering that "the significance of the photos is seen to rest on what is pictured" (Rose, 2014: 7). This is especially true of pictures, where content can represent both traces of what is/was visible and what is/was not (Ingraham, 2017; Mitchell, 2005; Rose, 2014). In order to construct these studies, then, visual analysis can build on different analytical concepts based on visuals.

MAIN CONCEPTS RELATED TO VISUALS

In this section, we develop some of the concepts related to visual analysis: semiotic, aesthetic and visual rhetoric. We do not aim to cover the visual theories exhaustively, but rather to highlight that visuals may be

analysed with specialized and various conceptual frameworks which can then be mobilized globally.

Semiotic analysis

Semiotic analysis focuses on understanding and meaning, from the production to codification and communication of signs. It was initially developed by Charles Peirce, Ferdinand de Saussure and especially Roland Barthes, who made semiotic structure well known in wider audiences through his famous book Mythologie (Barthes, 1970) which illustrates semiotic analysis of daily visuals. This approach discusses the representation of messages—often hidden—in signs and codes (Moriarty, 2005). It can be summarized by: 1) what is depicted, i.e. the denotation; and 2) what is expressed and represented, i.e. the connotation (van Leeuwen, 2008). In the second step, typification uses stereotypes and traditions of representation, except for specific individual representations, as it gives the audience keys to understand the meanings of visuals (van Leeuwen, 2008). Visuals of people and objects both matter, because both can bear attributes and a message (van Leeuwen, 2008). For example, Barthes (1964) interprets visuals from a pack of pasta, as shown in Figure 1 below.



Figure 1. Advertisement for pasta (Source: Barthes, 1964: 49).

In this example, he describes how the image represents the concept of *Italianity*. This concept is not Italy; it is the essence of represented elements that can be Italian, from spaghetti, tomatoes and onions to colouring (in this case, red).

In visual studies, what is here may be just as important as what is not here (Ingraham, 2017), as the absence may replace the presence in some situations (Giovannoni & Quattrone, 2017). However, this "grammar" is neither transparent nor universal yet the message must be understood by all audiences, despite the different knowledge backgrounds of individuals (Kress & van Leeuwen, 2006).

Moreover, Baudrillard (1981) sees society as full of signs, proliferating and disseminating, which also dominate individuals' worlds. Although first considered in their linguistic dimensions because they were inspired by Saussure, signs may be visuals and, then, have the same features. In particular, Baudrillard proposes that, in postmodern society, discrepancies exist between signs and their signifiers, which are not always real referents, only making reference to other signs. This is where the simulacrum appears: the implosion and the hyperreality where, finally, reality is replaced by the signs and where the signs do not mean anything because their initial reality has disappeared and everything is simulacrum -only veils on veils remain. This simulacrum produces another reality which is objectified in the reality and may then itself become real. The image, lento sensu, i.e. the sign, may be easily represented in the visual and, once recognized, helps to identify these discrepancies and is then used to establish whether coherence exists between signs and their referents or if they are mirroring something else, as Macintosh and Shearer (2000) found in their examination of the accounting profession.

Aesthetic dimension

Often unnoticed by the audience, aesthetics are crucial in media (Zettl. 2005). The aesthetic aspect of visuals was defined by Dake (2005: 3) through five dimensions: "a) visible, structural, and configurational in nature; b) largely implicit in apprehension; c) holistic in conveying meaning (not wholly translatable into parsed, discursive form); and d) cognitive in a generative sense, based on a unique type of visual logic." Even if aesthetics were mostly developed in art, philosophy and neurosciences (Dake, 2005; Lopes, 1996), they were subsequently developed in other humanities. Indeed, the aesthetic dimension of visuals is also related to an appreciation of beauty and is useful in producing knowledge about organizations because they are interrelated (Linstead & Höpfl, 2000). Aesthetics may also have been used to express opinion and criticism because they facilitate the gathering of collective emotions (Shrivastava & Ivanova, 2015) as art (Dutton, 2009). Sørensen (2014) confirms that aesthetics in organizations are a political dimension. Indeed, aesthetics may be considered as "a form of organizational knowledge" (Harter, Leeman, Norander, Young & Rawlins, 2008: 425) or a component of innovation (Eisenman, 2017).

Aesthetics work in tandem with the material objects that represent the visual, the viewer and the maker, creating a relationship (Dake, 2005). Concerning media, aesthetics are defined by the interrelation of light, colour, the dimension of space, and sound and time motion which together create a "meta-message" or background for interpretation (Zettl, 2005). For example, colours, a component of the aesthetic dimension of visuals, have been called to be considered in organization studies because their effects remain largely unknown (Beyes, 2017). Indeed, colours are considered as fundamentally informative (Zettl, 2005). Colours are employed in an aesthetic dimension and used to create a distinctive feature of an organization. For example, Elliott and Robinson (2014) developed colours as a web identity, and Rafaeli and Vilnai-Yavetz (2004) studied the impact of the green colour of public transportation in Israel on the sensory processes of different actors, including passengers, bus drivers and other employees, other people on the road, competitors, advertisers and special interest groups.

Visual rhetoric

The visual rhetoric perspective aims to analyse "the symbolic or communicative aspects of visual artefacts and understand the impact on viewers. [...] the actual image or object rhetors generate when [communicative artefacts] use visual symbols for the purpose of communicating" (Foss, 2004a: 304). Visual rhetoric is plural, and represents a "wide array of forms, ranging from text and screen design to pictures and illustrations, to the display of quantitative information" (Kostelnick, 2004: 215). Visuals are then used as a sign and it is considered a human intervention, involving conscious decisions (Foss, 2004b). With visuals, it is up to "the spectator, who projects a voice into the image, reads a story into it, or deciphers a verbal message" to interpret it, to put a visual on what can sometimes not be described by words alone (Mitchell, 2005: 140). Messages may be interpreted in different ways or even misinterpreted by audiences (Hooks, Steenkamp & Stewart, 2010). This may be explained by a misunderstanding of conventions used, even if, sometimes, designers may want to blur the lines (Kostelnick & Hassett, 2003).

Indeed, conventions are learned by readers through their socialization and everyday interactions; they "function as a language" (Kostelnick & Hassett, 2003: 228) and visuals have their own grammar which rules what is represented and how (Kress & van Leeuwen, 2006). So, according to audiences and the context of its diffusion and presentation, the visual meaning will change (Banks, 2008; Kostelnick & Hassett, 2003).

Visual rhetoric considers that visuals are structured with conventions, which can be pictorial, social, photographic or semiotic, where some visual codes become a language in their own right (Lister & Wells, 2008). According to Kostelnick and Hassett (2003: 2), visual code is a language full of conventions to be "meaning-making", which can be studied from textual, spatial and graphics perspectives. For example, visual conventions are expressed in accounting documents as the balance sheet (see Figure 2 below). A balance sheet is organized in the same way in many countries and to understand it you have to know what the relationship is between assets and liabilities and the criterion of liquidity. If you know the conventions, you will be able to find the information needed in the document, otherwise, you will not understand the information or its relevance. These conventions are not universal but are related to communities: each community has its own conventions, like the balance sheet for the accounting profession, and they have life cycles. The rhetorical dimension allows visuals to communicate information that would otherwise be hard to explain in words or numbers, as identity or values (Hooks et al., 2010). We can thus consider that visual rhetoric, through various conventions and codes, has the same role as practices or language. First, the spread of some beliefs can influence and frame people's behaviours and references. Visuals bear and create values too. For example, the picture of Dolly the sheep is more than just a picture of a cloned sheep; it is also the "icon of genetic engineering, with all its promises and threats" (Mitchell, 2005: 12).

ASSETS		LIABILITIES			
Long-term assets	-	€	Equity	-	€
Current assets	-	€	Current liabilities	-	€
Other assets	-	€	Long-term liabilities	-	€
Total Assets	-	€	Total Liabilities	-	€

Figure 2. A synthetized balance sheet by the authors.

Second, recognition of these conventions allows organizations and individuals to be in a community, to figure out interactions and to give signals expected in a given situation. Thus, considered as efficient as a "visual language", images and their dispositions are also used to diffuse a specific message to a specific audience (Kostelnick, 2004). For example, Lefsrud, Graves and Phillips (2015) used visual rhetoric as a base upon which to develop the role of communication in shaping organizational action, using the dialogues amongst stakeholders, the symbolic content and the affective component of visuals.

THEORETICAL FRAMEWORKS FOR VISUALS IN MANAGEMENT

Seen through the lens of visual culture, Elkins (2003) analysed the cultural component of visuals. This trend first started in the late 1950s in disciplines as varied as the arts, psychology, philosophy, anthropology, sociology or communication —the humanities in general (Barnhurst, Vari & Rodriguez, 2004)—and it prompted the creation of journals such as *Visual Studies* (Taylor & Francis), *Visual Communication* (SAGE) and the *Journal of Visual Culture* (SAGE), which institutionalized the research area. Moreover, several conceptual frameworks enrich themselves through visual analysis and, in turn, enrich our understanding of visuals. Here, we outline three theoretical frameworks in management where "visual language [...] offers manifold and distinct opportunities for actors to locally realign theorized and decontextualized ideas and concepts" (Höllerer, Jancsary, Meyer & Vettori, 2013: 141): the neo-institutional theory, the critical theories and the actor—network theory.

NEO-INSTITUTIONAL THEORY

Neo-institutional researchers argue that discourse plays a fundamental role in the construction and definition of reality (Phillips, Lawrence & Hardy, 2004). Thus, it constitutes a fundamental pillar of the process of institutionalization. In this respect, visual representations constitute a form of discourse to be considered and they have been presented and studied recently as "visual text", which means imagery in a whole (photography, painting, drawing, diagram, etc.) as opposed to "verbal text" (Jancsary, Meyer, Höllerer & Boxenbaum, 2017). As quoted by Meyer et al. (2013: 590): "institutional theory [...] could add the visual dimension to existing lines of thought on legitimation, institutionalized vocabularies and accounts, logics and social identities, theorization, translation, or bricolage". The recommendations expressed here start by considering legitimacy. Visual rhetoric and its symbolic dimension have been studied to identify how they may give to an organization the legitimacy it required, or at least the appearance of legitimacy (Hrasky, 2012). Moreover, de Vaujany and Vaast (2013, 2016) observed through time the visual practice and the organization of space at Paris Dauphine University to translate its legitimacy and identify how it can be (re)appropriated. Their pictures show the Great Hall of this university and its use of space, the Latin quote above the main door and the organization of armchairs around different points.

Jancsary et al. (2017) call for an agenda to integrate visual research in neo-institutional theory, while promoting a coding method based on semiotic categories to extract as much understanding as possible from visuals. Indeed, visuals are part of institutions, as discourses and practices; they are reproduced and diffused and then taken for granted. In institutions and institutional orders, visuals can, then, be a keystone to change, stability, diffusion of beliefs and practices and as the organization of time and space. In this vein, and for example, the place of visuals, through the study of visual texts, has been analysed in the institutionalization process from a semiotic point of view (Meyer, Jancsary, Höllerer & Boxenbaum, 2017) and, in the case of Kodak, through the institutional entrepreneur to conceive and establish some events and phenomena (Munir & Phillips, 2005). At an organizational level, analysis of visuals, through visual inscriptions, has shown that they can lead to action and choice (Quattrone, 2015).

From the lens of institutional logics, defined as crossing organizations and representing a belief system guiding and organizing institutional order (Friedland & Alford, 1991; Thornton & Ocasio, 2008), visuals may also have a big part to play. Indeed, the dual dimension of logics—symbolic constructions and material practices (Friedland & Alford, 1991)—are both related to visuals. Today, discourses are at the core of the study of logics (Daudigeos, Boutinot & Jaumier, 2013; Dunn & Jones, 2010; Nigam & Ocasio, 2010), without considering the visuals and imageries aspect which may have the capacity to link local meaning to global practice (Höllerer et al., 2013). Moreover, tools of communication have recently been considered as a stream for change and/or stability of logics (Ocasio, Loewenstein & Nigam, 2015), and communication is known for its use of visuals to communicate values, ideas or models to various audiences, as in annual reports (Campbell, McPhail & Slack, 2009; Davison, 2010; Graves et al., 1996). Visuals have been considered as a way to bring together divergent positions in situations of complexity, as for example different rationalities (Höllerer et al., 2013). Visuals can be used to spread logics and their demands, using the notion of "imageries-topractice" to complete "vocabularies-to-practice" (Höllerer et al., 2013). One stream of the literature on visuals focuses on their capacity to communicate with audiences-the visual rhetoric-which could also be related to logics. Thus, one of the key interesting points on visuals with institutional logics is how visuals allow us to understand the diffusion, reinforcement or change of institutional logics.

CRITICAL SOCIAL THEORIES

Visuals are not meaningful objects but they are communicative tools that are used in the process of negotiating social values. A critical approach to visual analysis shifts attention from the images themselves to the social and political dimension of visual communication (Stocchetti & Kukkonen, 2011). This approach to visual analysis has its place in the critical management studies approaches (Alvesson & Willmott, 1992). Indeed, a critical approach to visuals could be an effective means of challenging a prevailing or conventional understanding of management and organizations. Here, the idea is to identify how best to contest the role of management in the contexts of work and consumption through the

analysis of visuals. The aim is also to challenge what is taken for granted (Adler, Forbes & Willmott, 2007). Rather than thinking about organizations solely as managerial entities, it is possible to consider "visual organizations", i.e. the ways in which organizational life, activities and context are presented in a collective visual consensus (Campbell, 2012). Organization is thus a centrifugal force: a framing of reality recursively produced, primarily through a visual medium, with varying degrees of success. While little has been done to adopt Derridean concepts to talking about visual organization, it offers much potential.

From a theoretical standpoint, the critical scope of Barthes' work can be considered a basis for critical examination through visual analysis (Aiello, 2006). For example, the distinction between denotation and connotation is a way to consider connotation as a superimposed layer of meaning (Aiello, 2006). Barthes (1964) also considers that the denoted image naturalizes the connoted image. He ascribes this naturalization to the mystification that turns the bourgeois cultural norm into universal law (Barthes, 1970). The critical goal here is to wrestle with the meanings established by the bourgeois norm, which he defines as "the essential enemy" (Barthes, 1970: 9). Clearly, Barthes's critical ends are political.

ACTOR-NETWORK THEORY

Initially, Actor-Network Theory (ANT) was conceived to explore the diffusion process of technical and scientific innovation in society (Callon & Ferrary, 2006). Successful diffusion of an innovation relies on more than its features alone, but also on its supports, related discourses and representatives (Akrich, Callon & Latour, 1988). Actors do not appropriate, and do not directly implement, institutionalized forms and organizational practices in the same way. Actors have the power to change and adapt them through a process of translation (Czarniawska & Sevón, 1996). They almost become publishers of practices and institutionalized forms that come to them and adapt to their local context (Sahlin-Anderson, 1996). Of course, translations are biased and the result of the translation depends on the actors' choices (Geraldi & Arlt, 2015). According to Midalia (1999: 28), visuals are "never innocent or neutral reflections of reality. As the world itself suggests, they re-present reality for us: that is, they offer not a mirror of the world but an interpretation of it". Quattrone (2009) illustrated it studying with the ANT the emergence of accounting through textbooks and their visual impact.

ANT focuses explicitly on the actions of visualizations. For Latour (1986: 8), visual aids make "present absent things". Latour focuses particularly on two-dimensional graphical materials ("inscriptions"), characterized by materiality, combinability and mobility that make new translations possible (Latour, 1987, 1999). Moreover, he suggests that the power of visuals to communicate could be enough to persuade audiences from different places and times that their messages have a similar meaning (Latour, 1986). This highlights the use of visuals for ranking, as noted by Pollock and D'Adderio (2012) for example, because, as visualization, visuals influence the shaping and diffusion of information and thus affect how that information is perceived.

Visuals are used to illustrate how culture sees the world. Hence, it seems that visuals have a place in the ratio of power and that they are a tool of diffusion in a network. They may be used to diffuse discourses and messages from representatives and they may help develop certain situations. In which case, visuals may be used to enact change, as done by Czarniawska (2010) for example, who used photo reportage in her

study of a city project through the concept of translation. The figures of her article track the changes that happened. Her objective was to report on a city and its complexity. She chose visual data to show what was done, how it was done and what was left. Visuals act as proof as, here for example, the photography illustrates the story behind the absent bicycle path signage. Investigating the role and impact of visuals may be a way to evaluate their real power, and how that power is concretely used by actors.

METHODOLOGICAL CONSIDERATIONS

Even if visual methods have been used in anthropology and sociology for decades, their use in management studies is more recent (Banks, 2008). Visual research has been accused of lacking "reliable and valid methods for understanding, evaluating, and reporting visual data" (Newton, 2005: 159). Criticism from a methodological standpoint has been heeded and both qualitative and quantitative methods related to visuals have subsequently improved, as evidenced in Jancsary et al.'s (2017) research. We concede that empirical data founded on visuals can bring higher methodological challenges, but we suggest that these challenges are a small price to pay to reveal the rich complexity of the social world through visuals. "Visual analysis methods" are part of the visual culture and are defined as all the methods that study visual materials and that generate evidence other methods cannot produce (Rose, 2014). Moreover, they are supported by different methodological books covering all the humanities (Banks 2001, 2008; Kress & van Leeuwen 2006; Mannay 2016; Margolis & Pauwels 2011; Rose 2001).

We consider that quantifying techniques, deconstruction, aesthetic inquiry and multimodal methods are different ways to look deeper into visuals in order to obtain new results.

QUANTIFYING VISUALS

First, consider a more quantifiable method: content analysis. It handles what is represented in visuals by counting, comparing and crosstabulating the frequency of identifiable visuals (Rose, 2001). The focus is thus on the size and order of images, comparative questions about issues, representation of personalities, positive/negative aspects, light, colours, perspective and historical changes (Rose, 2001; Bell, 2008). So, coders define variables with values for these variables (e.g. a "variable" could be size, and its values could be "full page", "half-page", etc.). Together, these variables produce a composition of the visual: an elaborate spatial organization to communicate to an audience (Foss, 2004b) which must be interpreted by researchers (Rose, 2001). Moreover, this quantification of qualitative data should be repeatable by other researchers or on other sets of data to emphasize the relative neutrality and objectivity of the researcher (Rose, 2001). Automatic image analysis software, such as Digimizer, helps in this regard as it is repeatable and can be used on large amounts of data. However, with the development of digital technology and associated use of more elaborate methods, the reliability of using multiple methods on large sets of data from different sources is questionable.

DECONSTRUCTION

More recently, critical management studies have reintroduced the concept of *deconstruction* as a radical rethinking of language and signs (Campbell, 2012). Derrida (1983) tries to establish a set of rules to develop

a deconstructive "method": "[deconstruction] was in no way meant to be a system but rather a sort of strategic device, opening onto its own abyss, an unclosed, unenclosable [non clôturable], not wholly formalizable ensemble of rules for reading, interpretation and writing" (Derrida, 1983: 40, in Jones, 2004). Even if, in general, Derrida's work has been preoccupied with written texts and the use of his work for the investigation of images is rare, the need for development of a critical approach to investigate visuals has become essential. Derrida's thinking invites us to consider images seriously as philosophical artefacts because "[t]he organisational image is the aesthetic ambassador for the organisation; it visualises it and gives aesthetic value to it" (Campbell, 2012: 106). In that context, deconstruction poses powerful questions of such images. The aim of deconstruction is to reveal the "hidden" meaning by "dredging" an image, i.e. "sifting the sediment up and disturbing it" (Campbell, 2012: 112). For example, Kates (1999) deconstructs a Toyota car advertisement representing an image of a gay family by "re-reading the advertisement" and by exposing alternative meanings by "privileging the absences of a cultural text" (Kates, 1999: 25). Indeed, in its appendix, we can observe a Toyota advertisement for the SECA Ultima car, showing a gay couple with two dogs, in front of their home, going in their car with a picnic bag. Kates argues that this presentation is, in fact, a heterosexualization of homosexuality, presenting as it does a respectable, middle class, sexually conservative, white and, therefore, palatable version of homosexuality.

AESTHETIC INQUIRY

The study of non-textual material can also lead to the study of emotions, hidden sentiments, moods, etc. contained in the visuals. Aesthetic inquiry (a qualitative methodology), for example, goes through emotional analysis via pleasing and displeasing feelings (Shrivastava & Ivanova, 2015). It is also a path to explore the aesthetic dimension of visuals and their meaning and impact on individuals and organizations (Strati, 1992). Differing from a conventional discourse analysis, the aim here is to understand how visuals produce certain effects on the audience (Genette, 1999), rather than studying the meaning.

Through the analysis of 200 images, Shrivastava and Ivanova (2015) studied how artistic representations in photographs, slogans and placards of the Occupy Wall Street (OWS) movement protests in Montreal, New York and around the world articulated corporate legitimacy challenges. The authors used images to identify what the OWS protesters wanted corporations and governments to be or to do. The aim was to understand the rhetorical, metaphorical and symbolic content of images. For example, they identified images that metaphorically invoke anger/shame, ridicule, irony, caricature, humour, authenticity and moral shock. Their figure 1 is a reproduction of an AdBusters' advertisement, showing a ballerina standing on the Wall Street's raging bull with in the background a crowd demonstrating aggressively.

MULTIMODAL METHODS

Digital technologies may indeed be a useful resource in the study of visuals. The notion of multimodal methods emerged only recently and aims to study a phenomenon from different points, such as body movements or the simultaneous evolution of visuals and discourses in time and space (Streeck, Goodwin & LeBaron, 2011). These methods could also accommodate video data: a visual form of data used throughout

contemporary society on the Internet, phones, and in social media (Jarzabkowski, LeBaron, Pratt & Fetzer, 2017). The point here is to consider the dynamic dimension of reality and to transcribe it empirically.

Furthermore, multimodal methods could be employed in a wide range of communicative dimensions, like a metatheory that uses multimedia (Kress & van Leeuwen, 2001) and then integrates text and visuals. Indeed, Zilber's (2017) paper in *Research in Sociology of Organizations* focused on multimodal methods and called for the use of "strong" multimodal research to better understand the simultaneous space and non-linguistic aspects of reality or artefacts (de Meideiros Oliveira, Islam & Toraldo, 2017; Zilber, 2017), where the whole can be used to illuminate human interaction and behaviour (Norris, 2004).

Specifically, multimodal methodology could be used in the analysis of visuals in several ways. For example, in an organizational context, to examine all the identity's dimensions, i.e. verbal, visual are embodied, but there are also routines, innovation, organizational structure, adaptation, institutional demands and conflicts, etc. Multimodal methodology is complex and is subject currently to further investigation and improvement. It will benefit from more reflective thinking to identify new configurations that facilitate analysis of both qualitative and quantitative data.

CONCLUSION

This call to integrate more visuals in management studies is no more than a suggestion. Indeed, some works have already started exploring specifically the visual dimensions of various phenomena. However, the current lack of framing around this theme limits its global consistency and, thus, its overall robustness. Visual studies are not yet institutionalized, but this brief review to underline what has been done thus far and suggest what could be done in future opens new avenues for research in management.

In the interests of further development and more in-depth study, visuals need: 1) the support of usable frameworks and the integration of visuals in their reasoning; 2) clear and carefully designed methods for visual analysis and related research; and 3) journals that support the publication of papers with visual data, i.e. accommodation of all kind of formats linked to visuals. In this regard, the academic journal M@n@gement would be an ideal outlet; being totally online, it offers an excellent opportunity to include visuals without worrying about formatting issues such as size, colours, etc. (for examples, see Bureau, 2013 or Delacour & Leca, 2011).

Of course, several questions about the use of visuals in management remain. First, visual analysis could be accused of relativism from an epistemological standpoint. Due to the current lack of an established or consistently structured method and in acknowledging the role of individual perception, the precise meaning derived from visuals can be considered somewhat of a "carte blanche" (Campbell, 2012: 107). Despite the fact that visual methods are more complex to establish, tools and methods already exist and, with broader use, they will only become more robust and easier to implement. For example, Sørensen's (2010) comparison of Italian Renaissance painter Caravaggio's two versions of the Conversion of Saint Paul (1600/1601) with Mintzberg's model of organization can be a source of further investigation. In its figure 2, the Conversion of Saint Paul turned around is supposed to have a common visual organization with the "six basic parts of the organization". Even if the aim of these visual comparisons is to show how organization is produced

in art through "aesthetic landscaping" and how these artistic reproductions convey certain images of the appropriate modern entrepreneurial self and regimes of organization (Sørensen, 2014), it is possible to remain sceptical.

This critique also relates more to the use of a specific method like deconstruction than the specificity of visuals. As Jones (2004: 45) points out about the deconstruction of texts: "[b]y opening up questions of interpretation and showing how certain texts can be read differently from how they were in the past, some are left with the impression that Derrida assumes that all texts can be read in any way that one likes".

By focusing on the "hidden", non-visible message, the question of the audience's capabilities, personal characteristics, analytical skills, etc. become central. Moreover, reflexivity appears to be an important element in research, i.e. the capacity of individuals to recognize how their analysis is influenced by their social positions through the associated use of power-invested language and convention in constructing and conveying the observed objects (Alvesson & Sköldberg, 2000; Woolgar, 1988).

Second, it is necessary to relate the visual dimension to epistemological considerations. In a positivist view, reality is imposed on actors, and discourses (including visual) vehicle this reality to different audiences. By being objective, these discourses are received in the same way by each individual. In a constructivist view, it is possible to consider that social reality is constructed by individuals. First, they act and externalize their subjectivity. Then, these subjectivities are objectified and typified by language (including visuals) to become self-evident. Here, visuals are decisive elements of "mirroring" as well as "inventing" reality (Raab, 2008). They transmit specific ideas behind "a veil of seemingly objective representation" (Meyer et al., 2013: 494) and contribute to materializing, organizing, communicating, storing and passing on knowledge (Raab, 2008). Therefore, due to this performative dimension of visuals, the results of such analysis should be considered with care.

Third, visual communication is fundamentally different from verbal communication due to the immediate, multisensory impact that comes from viewing an image that combines rationality with emotionality (Bell & Davison, 2013; Spencer, 2011). Indeed, emotions influence individuals' rationality because they are constitutive of reasoning (O'Neill & Lambert, 2001; Simon, 2000) and can be studied from a visuals perspective, considering facial expressions and body language, for example, that communicate emotions visually (Boedker & Chua, 2013). If, as does Hochschild (2003), we consider emotion as a sense, it is then connected to cognition. So, emotions through visuals may be used as a tool to influence perception and thus be used as a means to compel action, depending on the emotions being mobilized (Welpe, Spörrle, Grichnik, Michl & Audretsch, 2012). For example, the advertising campaigns of non-governmental organizations often use "emotional" visuals (see Figure 3).



Figure 3. WWF advertising campaign, "Licensed Content".

If the emotions behind the visuals are studied using techniques like aesthetic inquiry, as presented above, then the effects on the emotions of the audience when confronted with specific visuals remain under-studied.

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