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The Value of a Rose: Rising above Objectivism and Subjectivism

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Keywords: Objectivism, Subjectivism

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The value of a rose: rising above objectivism and subjectivism

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After my conclusion in the previous PrimaVera working paper that objectivism does not provide a firm theoretical foundation for information management, the question probed in this chapter is whether or not subjectivism can offer a convincing alternative basis. Ultimately, the answer is negative because subjectivists rarely specifically pay attention to what is the bottom line for private and, increasingly, public organizations: the realization of economic value. Hence, there is no other way than to combine objectivism and subjectivism into a comprehensive, integrative approach to information management. However, as illustrated in this paper, the differences between both philosophical strands of thought are fundamental. In recent years, advocates of subjectivism and practice-based social theory as one of its main applications have taken a giant leap forward in transcending the split between the object and the subject by suggesting that we should focus our attention on social practices and object-centered sociality. Following their suggestion, I demonstrate what subjectivist, practice-based information management could be, which includes a new definition for our discipline. However, due to the neglect of economics in subjectivism, the divide between objectivism and subjectivism still exists. At the end of the paper, therefore, I present the concept of 'figure' and 'ground' from Gestalt psychology as a metaphorical aid for all of us to rise above this unproductive divide.

A Story

The noble game of cricket is played across the globe. Originated in the United Kingdom, British expatriates exported their cricket knowledge, partly implicit and partly codified in manuals and regulations, to countries such as India and Pakistan. As we now have the world championships of cricket, the knowledge transfer must have been successful. However, the new knowledge was respected in all countries - but Papua. Trobiand Papuas do play cricket, but have enacted the game in a unique way to make it their own. They have, for instance, abolished the dangerous habit of games needing winners and losers. With a history of headhunting and cannibalism, new conflicts arising over something as silly as a

game need to be avoided. Defensive batting is not appreciated as that would slow down the play and to make the game even more entertaining, each score is celebrated with a ritual dance. And one of the locals, dressed as a Western tourist and armed with wooden field glasses, is the mascot of both teams, presumably to mock the British inventor.

The point of this Papua story is that people interpret information to make sense of their worlds and adapt it to local circumstances. Codification can be helpful in 'transferring' knowledge, but people still impute their meanings on information. Searching for universal laws, objectivism cannot deal with human sense making, the possibility of interpretation differences among people, and context as the interpretative lens through which experiences are read. Subjectivism is built upon these notions.

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1. Introduction

Subjectivism is the philosophical tradition that has emerged in the twentieth century out of dissatisfaction with objectivism generally playing such a pervasive role in scientific theory. I use subjectivism as an umbrella term for all of those schools of thought and theories that depart from the idea that for knowledge development, we should focus on human beings and see them as acting on the world through sense making, and in that way modifying the context they live in. It is not my ambition to give a complete overview of subjectivist theories; that is a task too daunting. With the intention to present a number of basic subjectivist understandings and relate these to information management, I will instead follow the same approach as in the previous paper. As I used the neoclassical model of the perfect market to demonstrate the close relationship between objectivism and information management, I will now discuss so-called practice-based approaches to organizational phenomena as they have been developed in contemporary sociology and anthropology to illustrate what subjectivist information management could comprise. I consider neoclassical microeconomics and practice-based social theory to be representative applications of objectivism and subjectivism, respectively, shedding insightful light on both thought worlds.

Developed in hermeneutics, phenomenology, interpretative sociology and critical theory, subjectivism has particularly gained significance in sciences such as sociology, anthropology, psychology and semiotics. Subjectivism can also be found in the management and organization literatures, for instance in cognitive theories of organizations or social theories of organizational learning (Bonifacio *et al*., 2004). This is not to say that subjectivism has become the dominant strand of thought in many sciences. Rather, it is often taken as a respected alternative to objectivist thinking, which is also the case in the information and knowledge management literatures that, as discussed in the previous paper, are governed by objectivism. There is, however, a growing awareness that information and knowledge are social phenomena rather than economic objects.

No matter how obvious this may sound, the philosophical differences between objectivism and subjectivism have profound implications for every item mentioned in Table 1 that summarizes this paper in the same way as the Table in the previous paper. Both Tables are provided to assist readers in recognizing objectivism and subjectivism, in their own organizations and within themselves. As can be seen from both Tables, the differences between both philosophical traditions are fundamental. Comparing it with objectivism, subjectivism entails redefining the core concepts of information management, a new set of underlying assumptions, a reformulation of its domain, rationale, goal and definition, and a different perspective on management and organization. Subjectivism is a different world view, indeed.

Table 1 Pinpointing Subjectivism

Subjectivism's Constructing Interaction
Definitions 1 Information is a difference that makes a difference *to* a hearer or reader. 2 Knowledge is a set of distinctive evaluations. 3 Learning is constructing new truths, understandings and meanings to guide action that results from actively participating in social practices. 4 Communicaton is a symbolic process of producing, maintaining, repairing and transforming reality.
Information (and knowledge) management 1 The *domain* of information (knowledge) management is sociality-centered-around-informational-objects 2 The *rationale* of information (knowledge) management is the need to understand why people gather around informational objects. 3 The *goal* of information (knowledge) management is (better) supporting processes of communication, interaction, knowing and learning. 4 Information (knowledge) management is the theory and practice of shaping informational object-centered sociality while directing people's interaction towards organizational or societal goals.
Organizing principles 1 Organize for what people engaged in social practices actually do. 2 Support actual internal and external information behavior. 3 Support the actual ways in which people organize themselves. 4 Support multiple realities.
Core assumptions in subjectivism 1 Human behavior determines and is determined by the external world; people are part of the world. 2 Understanding, truth and meaning are relative to people's context and their mental frameworks. 3 Understanding, truth and meaning come from interaction with the environment and with other people. 4 Understanding, truth and meaning are intersubjective. 5 Meaning is always meaning to someone. 6 Intersubjectivity is relevant to every form of organization, as it enables collective action. 7 Truth and true knowledge are dependent on understanding. 8 Understanding is dependent on what people find meaningful and significant. 9 What people find meaningful and significant is reliant on their imagination, intuitions, emotions, values, beliefs, experiences and ambitions, and their objective knowledge.

10 These aspects of understanding guide us in our private and organizational lives; we rely on them.
11 For developing relevant knowledge, we should focus on the internal and external aspects of understanding.
12 People construct their relationships with objects; not the objects themselves.
13 Knowledge is developed by studying objects' interactional and inherent properties.
14 People are imaginatively and economically rational.
Additional assumptions in practice-based social theory
1 Objects constrain and enable human behavior; human agency constrains and enables objects.
2 Objects are contextualized tools for meaning, understanding and learning.
3 Intersubjective meanings determine why, how and to what degree objects are used.
4 Organizations are sets of varying social practices.
5 Social practices transcend the divide between objectivism and subjectivism.
6 Social practices consist of individuals embedded in those practices.
7 For developing knowledge, we should focus on what people actually do in social practices.
8 Focusing on social practices means seeing multiple realities.
9 Science should give up the claim to universal truth; alternative research methodologies are needed.
10 ICT is not a neutral medium.

2. What is Subjectivism?

As a philosophical tradition opposing objectivism, subjectivism stands for "supplying an alternative account in which human experience and understanding instead of objective truth" occupies central stage (Lakoff & Johnson, 1980: x). In objectivism, human behavior is the result of forces acting out in the external world that people cannot control and find difficult to comprehend. The motivating concern of objectivism is therefore to provide people with law-like, rational knowledge that will help them function successfully in the external world. Whereas objectivism is directed towards the external aspects of understanding, its internal aspects are the primary domain of subjectivism.

What motivates subjectivism is the awareness that understanding, truth, and meaning are relative to the cultural and physical context people live in as well as to their mental frameworks of how the world functions (Putnam, 1983). When contexts and people's mental conceptions seriously conflict with each other, there can be no objective, universally valid understandings, truths and meanings. On the other hand, understanding, truth and meaning are not strictly personal either. When meaning would be entirely

private, each individual understanding could be called a truth. In this case of extreme subjectivity, human sense making would be totally unconstrained. The imaginative sky would be the limit.

The abovementioned story of the Trobiand Papuas illustrates that the objectivist and extreme subjectivist views are both inadequate, at least for those aspects of reality that are related to human agency, such as information management. The meaning the Papuas have given to cricket is neither objective nor personal, but *intersubjective*. They have jointly made sense of the foreign game, which is now common knowledge. In their context, in their social practice, this common knowledge is true. The locality of this truth prevents them from participating in the world championships, but presumably they could not care less. Intersubjectivity is relevant to every form of organization, as it enables collective action in organizational units – a department, a management team, a network of professionals - on the basis of locally shared experiences and understandings (Weick, 1995).

The Papua example furthermore illustrates that truth and true knowledge are always dependent on how people experientially understand their worlds, which is dependent on what people find meaningful and significant to their lives. In turn, what people find important is not solely reliant on their rational objectivist knowledge, but also on their imagination, intuitions, emotions, values, beliefs, experiences and ambitions. As any Papua could explain, we are not only objectively rational, as economists would have it, but also "imaginatively rational" (Lakoff and Johnson, 1980). Sometimes we want something and 'go for it'. We imagine a dream and spend irresponsible amounts of time, energy and money pursuing it. And sometimes we do not share information simply because we do not like the other, even if that impairs our reputation.

This imaginative rationality is elaborated in subjectivist literature by, for instance, relating ICT to hospitality (Ciborra, 2004), learning to identity (Wenger, 1998), information to power (Introna, 1997), and technological objects to sociality (Knorr-Cetina, 1997). In objectivism, these all too human aspects are silenced. In the objectivist search for economic rationality and disembodied truths, human beings are separated from the objects in their environment. The fundamental concern of subjectivism is to restore 'the balance' between the world of objects and subjects. We are part of the environment and as such, we change it and are changed by it.

Hence, in subjectivism, understanding, truth and meaning come from ongoing interaction with the physical environment and with other people. When developing knowledge relevant to practice, we should not focus so much on the inherent properties of objects, but rather on their *interactional* features (Lakoff & Johnson, 1980). Interactional properties are the intersubjective meanings given to objects that arise out people making sense of their world in situated processes of human communication and negotiation, reflecting what they believe is important to their private and organizational lives.

Returning to the example of roses (see the previous paper), objectivist knowledge represents a rose by its inherent properties, the characteristics of a rose that are independent of any human observer, such as thorns. However, nobody gives roses to a loved one because they have thorns, but because they are mutually understood as tokens of love. When both giver and receiver attach that symbolic meaning to roses, the message comes across. Objectivists are right when they claim that objects exist in an objective reality independently of human will and thought. However, we do not construct objects themselves - a rose is still a rose -, but our interactions with them (Tsoukas, 2005). Understanding, truth and meaning are therefore neither fixed nor entirely residing in objects, waiting to be 'conveyed' and 'extracted', but are dynamically and socially negotiated and constructed. Being a symbol of love is not an inherent property of roses, but an interactional property that has emerged from people's imagination. We learn to understand such meanings by engagingly interacting with the world. We learn by doing.

3. Constructing Interactions in Social Theory

Sociology is another science that has been plagued by objectivism dueling with subjectivism, both fighting over what should be taken as the basic domain of study: the object *or* the subject, structure *or* agency, social system *or* human conduct, the larger entity *or* the individual inhabiting that entity, whether that is the group, the organization or a technological infrastructure. In objectivist sociological theories such as functionalism and structuralism, the larger entity determines human behavior, whereas subjectivity, action and meaning are accorded primacy in, for example, subjectivist interpretative sociology. Both sides lived in parallel empires, seeing the other as the enemy.

In the last two decades, transcending objectivism and subjectivism into a *duality* has been a pivotal theme in sociology (Bourdieu, 1972; Giddens, 1984), which has resulted in new social theories such as activity theory (Engeström *et al*., 1999) and actor-network theory (Latour, 2005). A duality is "a single conceptual unit that is formed by two inseparable and mutually constitutive elements whose inherent tension and complementarity give the concept richness and dynamism" (Wenger, 1998: 66). As a result, the larger entity - the organization or an information system for example – is not seen anymore as merely putting constraints upon individual freedom and creativity, but also as providing harmony and coherence giving sense to potentially fragmented and dissenting human agency. Every organization or information system constrains *and* enables the behavior of its members and is, simultaneously, continually recreated and reshaped in and through the actions of its members. In short, the object and the subject co-constitute each other; they make each other possible.

Given that object and subject are mutually constitutive, we need to better understand how they interact with each other. How does an intranet (object) interact with its users (subjects)? How does a virtual world such as Second Life engage its millions of users to participate? Subjectivists suggest

viewing objects as contextualized tools for meaning, understanding and learning. They try to unravel what it is that people find meaningful and significant when they are constructing their social practices around objects. Objects become "affiliated objects" (Suchman, 2005), when they, for instance, help people build cohesiveness as a group and help create, sustain and value identity; when they stir people's imagination, creativity and, thus, enthusiasm; when they allow people to intersubjectively learn and develop situated knowledge by telling each other stories about their experiences; when they enable people to enact a part of the world, much in the same way as the Papuas have appropriated the cricket game.

All these affiliating processes turning 'cold', lifeless objects into social objects are captured in the notion of *sociality*: why do people shape their lives as they do and how is that shaping influenced by what they find meaningful and significant? Why do I share information with others and what precludes me for doing so? Knorr-Cetina (1997) has coined the term 'object-centered sociality' to indicate that people's lives increasingly occur around objects such as websites, games and social networking tools. The notion of sociality is helpful in explaining why they choose to do so and why some objects are more attractive than others.

Put differently, subjectivists do not perceive ICT and technology in general as neutral media that simply transfer objects from producers to consumers, as objectivists contend. On the one hand, technology is seen as providing and sometimes imposing a context that implicitly structures social practices by encoding how content should be interpreted, such as, for instance, in ERP systems. On the other hand, technology adoption always entails negotiation among the various groups involved – managers, designers, users - in which process they all inscribe the technology with their own meanings, and 'finish the design' (Bijker *et al*., 1987). Once again, the co-constitutive nature of objects (in this case technology) and subjects (all stakeholders in negotiation) is emphasized.

Subjectivist information management means understanding social practices and object-centered sociality. Creating an information management identity upon such understandings requires more than knowing objects' inherent properties, as objectivists tell us. Apart from, for instance, knowing what the inherent possibilities and impossibilities of technologies are - what technologies in and of themselves can and cannot do – information managers should be aware of their interactional features to learn how the intersubjective meanings people attach to objects determine why, how and to what degree these objects are actually used.

In contemporary sociology and practice-based social theory, focusing on *social practices* is seen as the way to rise above the traditional divide between objectivism and subjectivism. Social practices are structured spaces where individuals intersubjectively interact with the larger social enablers and constraints (Giddens, 1984). Each organization or department consists of many such practices. For example, my work at the university relates to research, teaching and administrative practices. All

practitioners involved in such organizational practices intersubjectively decide their own truths, understandings and meanings in relation to the entire organization as the constitutive structure. In its turn, the organizational perspective on reality is determined in negotiation among these practices in co-constitution with the larger environment.

4. Conceptual Implications: Communication, Information, Knowledge and Learning

After this brief introduction of subjectivism as a philosophical tradition and of practice-based social theory as an increasingly influential application of this tradition, the question rises what the implications of subjectivism are for information management. What is or could be subjectivist information management?

In the upcoming sections, I will first present subjectivist definitions for information management's core concepts communication, information, knowledge and learning. Illustrating the fundamental differences with objectivism, I will then draw some implications for (information) management and organization before I will continue with subjectivist interpretations of the domain, rational, goal and definition of information management.

Reflecting the ambition to theorize on dynamic individual and social processes, subjectivists prefer verbs, not nouns. They favor words such as understanding, sense making, informing, knowing and learning. In this way, they simultaneously differentiate themselves from objectivists and their static concepts as well as avoid the often mechanistic discussions about the nature and content of data, information and knowledge and their sequencing. Although there are attempts to define these notions in such a way that both objectivist and subjectivist perspectives are accommodated (Bates, 2005). Likewise, the notions of 'information management' and 'knowledge management' are seldom used, because subjectivists frequently protest against the implied views on information and knowledge-as-objects, and against the suggested implication that information and, in particular, knowledge can or should be managed. To be sure, the notions of information and knowledge management originated from objectivist minds. Moreover, thousands of years of philosophical debate have not resulted in clear, undisputed definitions of knowledge. On the contrary, epistemology or the science of 'how people come to know' is and has always been a respected branch of philosophy. With all of these deliberations in mind, I will nevertheless present definitions of information management's core concepts, not to hint at any definitive conclusions, but rather to illustrate what subjectivist information management is or could be.

Communication

In objectivism, communication consists of singular information exchanges between people maintaining anonymous relationships. Human interaction and communication are stripped down to what is considered

its essence – the transaction of disembodied objects. In this 'informational' approach to communication, discrete objects are transferred from an active sender to a passive receiver, the conduit metaphor that is relevant *only* when the meaning of the words exchanged is fixed and not amenable to any human interpretation and sense making.

Subjectivists underline that truths, understandings and meanings are anything but fixed in real life, and are instead dependent upon situated processes of human interaction and negotiation. People's mental frameworks, their unarticulated common knowledge and their context determine what is considered to be true, how they understand their contexts and which meanings are constructed, all co-constitutively related to the larger world.

As soon as words and language become intrinsically part of human sense making, implying that interpretation differences among people do occur, a broader and less linear perspective on communication and interaction is required. Subjectivism embraces the possibility of divergent sense making behavior, seeing such divergences as inescapable facts of life. A subjectivist definition of communication and interaction that takes this possibility explicitly into account is: "a symbolic process whereby reality is produced, maintained, repaired and transformed" (Carey, 1989: 23). Communication and interaction are about generating intersubjective meanings, mutual understandings and non-anonymous, socially binding relationships. Meanings are not just exchanged, but intersubjectively constructed in interaction with the world, as the Trobiand Papuas have constructed the game of cricket. In their enactment of the British game, they have adapted it to what they believe is important to their lives, in their spatial-temporal context, expressing and reinforcing their group identity.

This broader view on communication negates the objectivist-economic inclination to artificially divide communication processes into information supply and demand. Moreover, it would be a fallacy to see the information supply side as the natural realm of objectivism and the information demand or use side as subjectivism's dominion. In meaningful communication, people constantly switch between asking and responding, making and giving sense, verbally and non-verbally. In this regard, mediating human communication by ICT or any other artifact *dis*connects us, feeding the impression that information supply and demand can be divided into divorced domains, and managed separately. Neither object nor subject can be isolated from reality, however, and both are interactionally bound to incessant, dynamic processes that call reality into being. Furthermore, the subjectivist view on communication and interaction brings back into focus all those interactional properties that people attach to objects, which are unscrupulously assumed away in objectivism for purposes of economic rationality and quantification. As the earlier example suggests, the popularity of the virtual world Second Life cannot be explained solely by its inherent, technological features. Arguably, its attractiveness is predominantly explained by having succeeded in turning technological objects into social, affiliative ones. People choose Second Life to

become part of their lives for varied reasons and in that process; they constitute the technology and at the same time they are constituted by it.

Information

The emphasis by subjectivists on situated sense making and interpretation in relation to larger entities also affects their views on information. Information is typically defined as "a difference that makes a difference" (Bateson, 1972), which always implies a difference *to* a hearer or reader. Many signals – data – reach us every day and those that pass our perceptual filters have to be interpreted to make sense to us. What surprises us in this sense making process, in smaller or larger ways, is called information; it is the constructed 'difference' that in-forms us. Next, subjectivists emphasize that these same signals or data can be interpreted in multiple ways. People differ in their goals and ambitions, they have different mental frameworks of perception, sense making and evaluation, and they live in varying cultural, social and institutional contexts. Would Papuas also see roses as symbols of love? For all these reasons, divergent understandings might result from the same data. Even the same person might arrive at other meanings in other times or contexts.

This definition of information differentiates subjectivism from objectivism once again. Aiming at universal, objective truths, objectivists have excluded divergent sense making behavior from their repertoire. Consequently, they cannot meaningfully distinguish between data, information and knowledge. From a supply-side perspective, a newspaper can be called a data, information or knowledge system. Knowledgeable journalists have crafted their articles, so why could not we say a newspaper is a knowledge system? From a demand-side view, such naming does not make any 'difference' and, hence, is not informative. The newspaper is still a newspaper and whether or not it 'makes a difference' can be left only to the discretion of the reader. Hence, it is impossible to predefine what the right information for the right person is and at what time and in which format that should be delivered, as is assumed in the objectivist definition of information management. We can provide people with "structured data" (Boland, 1987); what they do with it can only be partly suggested by others. For the same reason, what information economists call information – everything that can be digitized (Shapiro and Varian, 1999) - subjectivists would describe as data.

Another difference between objectivism and subjectivism relates to the economic theory of uncertainty. In more recent developments in economics, information – data really – is defined as reduction in uncertainty (Babe, 1994). Here, information is attributed the role of increasing rationality in human decision making. If all information would be available, there would be no uncertainty anymore. However, people are usually not capable of processing all information required for rational decision making and are therefore boundedly rational at best (Simon, 1976). Furthermore, people are inclined to

use information opportunistically (Williamson, 1975); they appropriate information in ways that suit their social practices (Putnam, 1983); they always ask for more information, and then not use it (Feldman & March, 1981); for justification purposes, they gather information after the decision has been made (Weick, 1995); the medium can affect the form and content of a message (Trevino *et al*., 1990); yes, even how people are dressed can be important to how they use information (Fiske, 1991). Information is a much more complex phenomenon than economists can handle.

Irrespective of an adequate subjectivist definition of information being available, it can finally be said that data are hardly problematized in the social sciences. There is an unsurpassed body of literature on the sociology of knowledge (Berger & Luckmann, 1966) that is not even remotely matched by a similar interest in data or information. As in economics, data are apparently assumed to be there, mysteriously pouring down from heaven. Therefore, not only should the gathering, acquiring, refining, storing, preserving and dissemination of data be considered part of information management's job (which is usually the case; see the previous chapter), but we should also be paying attention to the generation of data.

Knowledge and learning

In objectivism, knowledge consists of representations abstracted from practice that are cognitively stored in human minds, while learning is perceived as absorbing objective information. The experiential knowledge manifest in social practices emerging from social interaction and negotiation, however, is fundamentally unlike the representational knowledge that we have of the world's objects. Saying that truth, understanding and meaning are intersubjectively constructed implies that knowledge not only resides in individual minds, but also in people's relationships. There is a reality beyond individuality, intersubjectively constructed.

Consequently, knowledge cannot be solely defined in terms of its individual, cognitive dimension. Economists' methodological individualism needs to be extended with a social, interactional dimension, a need subjectivists underline by using the word *knowing* instead of knowledge (Choo, 2006). In academic jargon, a pluralist epistemology is required which recognizes that individual knowledge is inextricably related to the social practices that are created and sustained in communities, networks and organizations. Individual knowledge obtains its significance only by knowing the habits, norms, values and dynamics of the context in which it is situated.

A typical definition of knowledge or knowing that fits these requirements is a "set of distinctive evaluations", which is "a toolkit of distinctions the […] actors have ready-to-hand to facilitate and shape their rational and agentic practice as they construct and reconstruct their context" (Spender and Scherer, 2007: 24). As a prerequisite for action, knowing enables us to distinguish good from bad, tasteful from

distasteful, and all those other distinctions that inform our sense and decision making. It interactionally emerges from learning. A matching definition of learning is the construction of new truths, understandings and meanings to guide action (Berger and Luckmann, 1966) that results from actively participating in social practices (Wenger, 1998). Communication, interaction, knowing and learning 'in action' are the dynamic processes that generate and are generated by the social practices in which they occur.

These views of knowing and learning question the popular divide between tacit and explicit knowledge (Nonaka and Takeuchi, 1995). Once again, the artificial split between the supply and demand sides of information and knowledge generates confusion. Calling data in a database, groupware system or intranet explicit knowledge more than suggests that the tacit and explicit dimensions of knowledge can be isolated from and 'converted' into each other. Objectivists assume that knowledge can be fully captured in objects and that these objects have meaning in themselves. These assumptions can only lead to disappointments as to what can be realistically expected from technologies. Technologies do not construct meaning; they distribute data that patiently await human sense making, no more, no less. As intended by Polanyi (1962), the inventor of these notions, tacit and explicit knowledge mutually constitute each other. They can be conceptually distinguished, but never separated, neither in theory nor in practice.

In short, information and knowledge are human and social phenomena in subjectivism that cannot be separated from 'producers' and 'consumers'. Nonetheless, economists do have a point when they say that codification and objectification are needed for deriving economic value from information and knowledge. Information and knowledge are sometimes best seen as objects to be traded on markets. I will return to this point later in this chapter.

5. Organizational implications: Practice-based Organizing and Managing

The subjectivist definitions discussed above lead to very different answers about how communication, information, knowledge and learning could or should be organized and managed. Although subjectivists are much less specific and united in this regard, I see four main organizing principles at work.

Firstly, compared with objectivism, subjectivism moves our attention away from the larger entity to the organization's social practices and the "individuals-embedded-in-practice" (Tsoukas, 2005). Academics call this move the ontological shift. In objectivism, people are separated from the world, because the environment is considered to consist of distinct objects that exist independently from human agency. As a result, objectivists prefer to talk about *the* organization, *the* business processes or *the* information architecture, and tend to underestimate the active role people play in making these objects work. In subjectivism, people *are* part of the world, immersed as they are in mutually constitutive social practices. Objects and subjects dynamically interact and make each other possible. What is an information

system without its designers, managers and users? Transcending the divide between objects and subjects, the individual-engaged-in-practice should therefore be our focal point of attention. Information management can help support the communication and interaction processes through which these individuals generate their social practices and, in that way, their organizations and societies.

The second implication of subjectivism for theory and practice is methodological. On the basis of what knowledge do we base our interventions in organizational practice? The deceivingly simple message of practice-based social theory is that we have to build our organizing knowledge on what people actually do when they realize social practices, rather than on theories abstracted from practice, such as the perfect market model discussed in the previous chapter. The bright mirror held in front of us is that without in-depth knowledge of social practices, we are unable to effectively manage such practices or to construct useful theory. Subjectivists invite information managers to have a look in the same bright mirror and focus on people's actual information behavior.

For studying actual information behavior, we need different methodologies from the ones which are applied in objectivist model-theoretic approaches or in top-down organizational policies and strategies that are based on such approaches. Ethnographic and participant observer methodologies are prime candidates, because they allow us to gain rich understandings of "organization as it happens" (Schatzki, 2006) and use the knowledge thus gained to better support social practices. Virtual ethnography is a recent development in research methodology that extends the traditional notion of context as being physical and local with the idea of connectivity between distributed people and systems (Hine, 2000).

The third implication of subjectivism for managing and organizing is that focusing on actual information behavior in social practices opens the door to the many other forms of interaction that people increasingly use to shape their information behavior, within or exceeding the boundaries of the organization they work for. Market-like exchange is not denied in subjectivism, but complemented with such other forms of organizing as "intensional networks" (Nardi et al., 2002), "actor-networks" (Latour, 1996), "networks of strong and weak ties" (Granovetter, 1973), and "knots" (Engeström *et al*., 1999), to mention a few of the headings mentioned in literature. Examples are people flocking around the many social networking tools available such as Del.icio.us. The implication for information management is that new balances have to be found between internal and external information systems in search of enhanced support for the organization's members. When it comes to their communication, interaction, knowing and learning behavior, the boundaries of organizations increasingly become artificial.

The last implication of practice-based social theory relates to the sharpest distinction between objectivism and subjectivism: do we see and pursue only one 'objective truth' or do we recognize and organize for multiple realities? For information management: do we only offer 'one size fits all' solutions or are we (also) much more fine-grained in our support of varying social practices? What do we do, so to

speak, with the Papuas in our organization (and are we not all Papuas at times?). Organizing for 'one truth' goes hand in hand with, for example, the aspiration to apply ICT for standardizing and controlling business processes. The prime motivation is management control. However, as soon as we begin talking about constructing information to make sense, learn and make decisions (Choo, 2006), such standardization and control of meaning and understanding starts chafing. Subjectivists aim to support rather than control multiple realities, appreciating that we all need to construct intersubjective truths in negotiation with the larger structures we live and work in. And that is what subjectivist information management is all about – support.

6. Conceptual Implications: Information Management's Domain, Rationale, Goal and Definition

Summarizing this chapter so far, the following shifts in perspective differentiate objectivism from subjectivism:

- from transaction to interaction;
- from inherent properties to interactional properties;
- from information objects to information as a difference;
- from information exchange to communication;
- from knowledge to knowing;
- from learning as absorption to learning as construction;
- from the larger entity to social practices;
- from model-theoretic approaches to practice-based approaches;
- from the market to all forms of organizing;
- from one objective truth to multiple realities;
- from control to support.

All of these perspective shifts amount to a need to reformulate information management's domain, rationale, goal and definition. The *domain* of subjectivist, practice-based information management, I propose, is sociality-centered-around-informational-objects, whether the objects are databases, documents, intranets, websites, virtual games, archives, libraries, information infrastructures or any other informational object. Its identity is built upon knowledge of the inherent properties of objects – what these objects can and cannot do in and of themselves -, and their interactional properties – the meanings people attach to these objects.

The *rationale* of subjectivist information management is that we need to understand what it is that people – managers, employees, designers, customers and so on – find meaningful and significant that makes them gather around such objects. Such illuminations are needed for information managers to aspire

to the *goal* of (better) supporting processes of communication, interaction, knowing and learning through which people co-constitutively create their social practices around informational objects by providing them with facilitating technological and non-technological objects and assistance. In the next chapter, Choo (2007) demonstrates how information management can help organizational groups increase their intersubjective use of information in decision making processes, making these processes less dependent upon individual subjectivity.

Finally, as management always entails exerting directed influence towards chosen goals, information management can be *defined* as the theory and practice of shaping informational object-centered sociality while directing people's interactions towards organizational or societal goals. How this function of information management can be best organized – in separate departments or otherwise - is clearly highly relevant to practice, but cannot be dealt within this chapter.

So, subjectivist information management goes beyond the rational, objectivist management of information objects, regardless of whether they are called commodities, resources or assets. It signifies processes of communication, interaction, knowing and learning, which relate to people constructing intersubjective truths, understandings and meanings, which in turn relate to what people find crucial to their organizational and private lives.

This definition of information management is so all-embracing that a word of modesty as to the manageability of these human social processes should be added. As systems of interpretation specifying what people should and should not do, organizations are "organizers of information" (Douglas, 1986) that guide human sense making, whether that guidance is intentional or not (Moran and Ghoshal, 1999). Organizations are "formative contexts" (Ciborra and Lanzara, 1994) that not only make sense, but also give sense (Weick, 1995). Nevertheless, human sense making flags constraints to management and organization. In a quest for identity (Wenger, 1988) and economy (Boisot, 1998), people participate in all kinds of social practices, both formal and informal, and create meanings for themselves, mediated or unmediated by their employer. Moreover, on any topic, many different meanings are dynamically produced worldwide and compete for acceptance. For both reasons, organizations can only *indirectly* affect the generation of meanings by facilitating processes of communication, interaction, knowing and learning and by providing a formative context in which the potential value of these processes can be realized. In this sense, information management cannot *manage* meaning; it can only help people construct intersubjective truth, understanding and meaning in relation to organizational goals, whether they are for example, employees or customers visiting the organization's website.

Lastly, if subjectivist information management is defined as I have outlined, what then is subjectivist knowledge management? As with the case of objectivism, I do not see much difference, but for a different reason. Mainstream economists cannot usefully distinguish between information and

knowledge, because sooner or later, they turn these rich concepts into disembodied objects in search of economic value. Subjectivists do distinguish information from knowledge in a meaningful way, but see information as but one means in the generation of knowledge and sociality. This distinction, however, does not make any difference for the nature and content of information or knowledge management. From a pragmatic point of view, information or knowledge managers are engaged in precisely the same line of work.

7. Discussion and Conclusion: Rising Above The Divide

In the previous paper, I posed the question whether or not objectivism and economics provide an adequate foundation upon which information management could build its identity. My answer was negative, because objectivists are unable to satisfactorily incorporate realistic conceptions of communication, information, knowledge and learning into their rigorous models of the world. In this section, I first ask the same question with regard to subjectivism: have we found a convincing alternative foundation for information management? I then present the overall conclusion relating to information management and the divide between objectivism and subjectivism.

Likened to objectivism, subjectivism offers additional and often superior insights to information managers. It illustrates how human beings understand reality, including all of their limitations in this regard, and gives in-depth insights in the organizational dynamics involved. Moreover, it does not reduce objects to themselves, but see them as contextualized tools for meaning, understanding and learning. To return to the title of this paper: the rose is the object, its economic value is the price, but getting it from that one special person can be priceless. The *real* value of a rose is in people's interaction, neither in the rose itself nor in its price. It is in the symbolic meaning people imaginatively attach to objects. Economics cannot capture the gap between the symbolic and economic value of objects, although 'closing the gap' is precisely the dedication of one-to-one marketing, for example. Subjectivism includes this "higher truth" (Lakoff & Johnson, 1980). Insight into this "higher truth", in people's imaginative rationality can help information managers improve the use and design of informational objects.

However, subjectivism is not without its disadvantages. It lacks a single coherent framework and well-established paradigm such as, for instance, the model of the perfect model in microeconomics that could support organizations in organizing their information and knowledge. Instead, there are many heterogeneous and disconnected approaches, which are difficult to turn into reliable, actionable knowledge. Furthermore, subjectivist theories are often accused of a lack of theoretical rigor, are descriptive rather than prescriptive, are poor on practical implications, and are therefore more difficult to 'sell' to managers or politicians (Bonifacio et al., 2004).

Most importantly, however, subjectivists rarely specifically focus their attention on what is the bottom line for private and, increasingly, public organizations: the realization of economic value. As a result, they downplay that information and knowledge have to be codified and objectified to result in economic value. My conclusion is therefore that subjectivism also does not offer a sufficient basis for information managers, because economics is part and parcel of their organizational life. Even though subjectivism has recently taken a giant leap forward in transcending the Cartesian split between object and subject by emphasizing social practices and object-centered sociality, the inglorious divide still exists. How can we rise above it?

Regarded superficially, objectivism and subjectivism exist in opposition. They look like dueling rivals. Objectivism is geared towards the external aspects of human understanding and aims at supporting people with objective knowledge to operate successfully in the external world. Subjectivism is directed more towards the internal aspects of understanding and aspires to illuminate the irreducible complexity of the social processes involved. As a result, both perspectives miss the motivating concern of the other. Yet, both relate to how humans come to understand (Lakoff & Johnson, 1980), so we would benefit if we could combine the two strands of thought, one way or the other.

Given that information management is governed by objectivism, I hold that for information management to increase the economic value it adds to the organizations in which it is embedded, it should paradoxically incorporate that line of thinking that largely ignores economics: subjectivism. For information management to become a discipline dealing with the capacity to combine and compromise objectivism and subjectivism, the dualism between these two philosophical traditions needs to be re-conceptualized into a duality, expressing that both traditions require, enable and enrich each other.

Figure 1 demonstrates what it means to see objectivism and subjectivism as a duality. What do you see first? A white vase on a black background or two faces on a white background?

Figure 1 An ambiguous picture

This example illustrates the concept of 'figure' and 'ground', as it has been developed in Gestalt psychology (King, 2005). This concept implies that we are all inclined to foreground a dominant shape (figure) and relegate our other concerns to the background (the ground) when confronted with ambiguity.

I use this concept of foregrounding and backgrounding as a metaphor underlining that we all tend to favor one interpretation over the other. Some of us prefer objectivism and others subjectivism, and use this preference as the interpretative lens through which the world is selectively enacted. The figure-ground concept also accentuates, however, that the world is not objectively 'out there', but constructed while making sense of ambiguous situations. Finally, this concept indicates that the whole is more than the sum of its parts. Irrespective of what our preferences are, foregrounds cannot exist without backgrounds, and vice versa. They are mutually constitutive and should therefore never be separated.

Seeing objectivism and subjectivism in duality entails knowing that the value of both can be enhanced by combining them. It implies that the information manager knows when to foreground the one while holding the other in the background. In management meetings, for instance, objectivism might be foregrounded, whereas observing actual information behavior in social practices might be an occasion to foreground subjectivism. Whatever the occasion, however, integrative information management implies that the one should always inform the other.

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