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The Implications of the Linguistic Turn on IS

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ABSTRACT

The linguistic turn is one of the major shifts in philosophy and epistemology of the 20th century. All fields in the social sciences have been influenced by this trend. The goal of this paper is to suggest the implications of the linguistic turn for IS research. We use a Kantian epistemological framework in order to identify these impacts on the four aspects of research. First, the linguistic turn leads to a *research issue* more focused on language through interpretivism and social-critical theory. Second, it suggests an *objectivation process* based more on understanding than on explanation. Third, the *type of knowledge* tends to be influenced more by an “a posteriori” and descriptive knowledge, rather than an “a priori” and normative one. Fourth, the *conditions of possibilities* tend to move from causality to a search for meaning (and particular/singular judgments). Implications for research practice are further developed in the discussion.

Keywords

Linguistic Turn, discourse, hermeneutics, epistemology, Kant, IS research

INTRODUCTION

Philosophy experienced several turns during the 20th century. The first as these was the phenomenological turn initiated by authors such as Husserl and Heidegger. They encouraged researchers and philosophers to turn “to the things themselves” (Husserl, 1936). In order to do so, researchers had to include the “principle of phenomenality”, i.e., things do not exist independently from the observer (Heidegger, 1962, p. 28). This principle had a major impact on, for instance, the Burrell and Morgan (1979) typology which termed the principle of phenomenality improperly as “subjectivism” as opposed to “objectivism” (i.e. positivism).

The linguistic turn, expression created by Rorty (1967), occurred after the phenomenological turn and focused on language (Rorty, 1995). Language is defined as “the ability of the human race to structure sentences out of essentially arbitrary words which are themselves constructed from individually meaningless sounds” (Marshall, 1998, p. 359). The linguistic turn was the second major shift in philosophy and epistemology. The question of philosophers was no longer “who thinks?” but “who speaks?” (Stirn, 1998). In effect, human beings were viewed as “speaking animals” (Heidegger, 1962) and their language was not considered just as a tool—an instrument for communication. Rather, language was encouraged to be studied for its own sake, becoming itself an object of research.

Two phases can be distinguished within the linguistic turn. Before the Second World War, philosophers, such as Russell and Frege, focused on a mathematical and logical language. After the war other philosophers (specifically Wittgenstein) developed interest in natural or ordinary language (Récanati, 1986). Our paper focuses only on this second perspective: the implications of studying natural language in IS research.

Numerous fields in the social sciences (organizational studies, sociology, psychology, etc.) have already been profitably influenced by the linguistic turn (Alvesson and Kärreman, 2000). Therefore, there is no reason why IS should not also be similarly influenced. The goal of this paper is to suggest the implications of the linguistic turn for IS research. In the next

section, we give a presentation of the linguistic turn. The third section introduces our Kantian epistemological framework and the impacts of the linguistic turn on IS research.

PRESENTATION OF THE LINGUISTIC TURN

The different turns faced by philosophy during the 20th century are the result of a debate, initiated by Kant, regarding the conditions of possibility to access to knowledge and reality (1781). The linguistic turn is one of these shifts and it supposes that language is the only mean to access to reality: “*language may be the only reality we will ever know*” (Klein, 2004, p.128). The linguistic turn is also “*a central interest in language and discourse*” (Deetz ,2003, p.421). Before the 20th century, great philosophers dealt principally with the distinction between subject and object, and human subject was the main theme of research (Deetz, 2003). For instance, idealism that is a major philosophical trend until the 20th century, focuses on ideas and thoughts of individuals to understand how people can access reality. This view in which consciousness is central, was challenged by Wittgenstein (1922) who claimed that language is more important as it constitutes a limitation to our world: “*the limits of my language mean the limits of my world*” (§ 5.6). In this aphorism, Wittgenstein tried to show that individuals understand their world as long as they can express it with their language. What cannot be named or understood with language cannot be perceived as real. Wittgenstein is considered as a major figure in the linguistic turn because his works had a great influence on other philosophers and linguists. But the initiators of this turn are Frege (1879) and Russell (1903) who first recognized the primacy of language. Their mathematical and logical view of language was progressively replaced by the study of natural language with authors like Austin (1962), Searle (1969) and the “second Wittgenstein” (1953).

IMPLICATIONS OF THE “LINGUISTIC TURN” FOR EPISTEMOLOGY OF IS RESEARCH

There are many definitions of epistemology. From the original Aristotelian meaning of “discourse on science”, it evolved toward the “falsification of hypotheses” (Popper, 1972). Indeed, Popper viewed knowledge as provisional until proven false. Piaget (1967) developed his view of epistemology in opposition to the principle of falsification. He asserted that knowledge is incremental, so when a threshold is reached, the threshold conducts to greater knowledge. The above views of epistemology are different from Husserls’ one (1936) who argued that science forgets to take into account social and human aspects like feelings, values and meanings. However, regardless of ones’ epistemological view, epistemology forms the basis of all scientific research. For this reason, a researcher should always take a conscious epistemological position before performing research. In this paper, we adopt an epistemological approach that is widely recognized in science (especially by Popper, Piaget, Einstein, and Husserl) as one of the most influential: Kant’s *Critique of Pure Reason* (1781). Kant proposed the four following questions to address any kind of research (figure 1):

- What is my research issue?
- How do I perform the objectivation process?
- What is the origin of my knowledge?
- What are the conditions of possibility of my research?

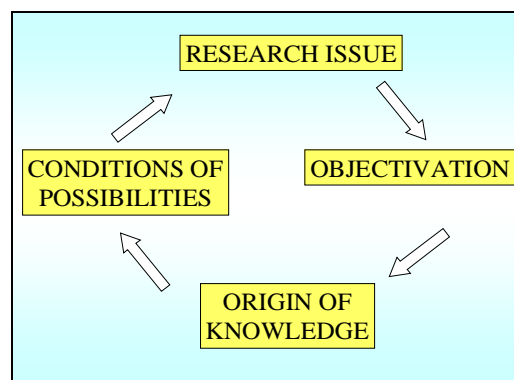


Figure 1. Four aspects of research

These questions constitute our framework to study the influence of the linguistic turn on IS research (Table 1) and reveal implications for the use of the linguistic turn in future IS research practice. Actually, we decided to use this framework to introduce the linguistic turn because it provides four relevant directions to study epistemology and so it enables us to present several aspects for the implications. Nevertheless, language was not Kant’s principal theme of research. The criteria, modalities, and related authors arranged in Table 1 (Monod, 2002, 2003, 2004) are discussed in the following pages.

Aspect of research	Criteria	Components	Authors
Issue	Research philosophies	Positivism / Interpretivism / SCT	Chua
	Sociological paradigms	Order / Conflict Objectivity / Subjectivity	Burell and Morgan
	Organizational inquiry	Consensus / Dissensus Elite / Emergent	Deetz
	Type of action	Instrumental / Substantive / Communicative / Argumentative	Habermas
	Hermeneutical interpretation	Psychological / Contextual	Schleiermacher
Objectivation	Explanation / Understanding	Explanation / Understanding	Dilthey
	Nomothetic / Ideographic	Nomothetic / Ideographic	Windelband
	Concepts / Intuitions	Concepts / Intuitions	Kant
Type of knowledge	Experience/ Reason	Experience / Reason	John Locke
	Normative / Descriptive	Normative / Descriptive	Max Weber
	A priori / A posteriori	A priori / A posteriori	Kant
Conditions of possibility	Quantity	Universal / Particular / Singular	
	Quality	Reality / Negation / Limitation	
	Relation	Inherence / Causality / Interaction	
	Modality	Possibility / Existence / Necessity - contingency	

Table 1. Framework for identifying criteria of the four aspects of research

The following sections will introduce the impacts of language for each of the four Kantian questions.

Research Issue

Determining the research issue is the first step in a research project, and corresponds to the set of problems that are to be solved. After analysing the debate in our field of study, we should try to determine an unsolved and interesting question. According to Kant, the research issue should also be a critique of dogma because “science stands between dogmatism and skepticism” (Kant, 1781,, p. 774).

Research “Philosophies”

According to Chua (1986), the IS field has its own debate that focuses principally on the opposition between three streams: positivism, interpretivism and social-critical theory (SCT). Positivism researchers, especially since the Vienna Circle, usually argue that language is neutral and should reflect the world. For instance, Popper (1972) states: “to speak clearly is to speak in a way that words do not have any importance”. This is consistent with the positivist assumption that a researcher does not have any influence on the world, so his/her position remains as neutral as language. For a long time, the mainstream in IS research has been positivism, what can explain why Lyytinen (1985) acknowledged that language and communication were

not widespread in the IS field. But other trends improperly named “philosophies” (Chua 1986) (and that are actually simply trends) gained footing, especially in Europe—namely interpretivism and SCT. Interpretivism and SCT recognize the intrinsic meaningfulness of the social world, and therefore endorses linguistic approaches to research IS.

In regard to language, positivism assumes that language is neutral (axiomatic), interpretive studies focus more on language through the idea of meaning (Ricoeur, 1981), and social-critical studies consider it as a discourse (Bourdieu, 1991). We argue that the linguistic turn can encourage the growing acceptance of interpretivism and SCT in IS by influencing the epistemological nature of IS research to more fully embrace linguistic-based analyses as epistemologically valid.

Sociological Paradigms

The interpretive stream includes the study of language and meaning. For instance, interpretivism uses the textual metaphor to study the emotional states of individuals (Monod, 2003). The language perspective is also studied in the paradigms of “neo-humanism” and “social relativism” (Burrell and Morgan, 1979).

Hermeneutical Interpretation

Schleiermacher (1810), who laid the basis of interpretation, distinguished a “grammatical interpretation”, which focuses on the context of language, and a “psychological interpretation”, which focuses on the thinking of the author. The linguistic turn deals with both interpretations: language cannot be studied independently from its author and its context.

The name for this research approach is hermeneutics, the science of textual interpretation. This approach was first applied to religious texts, but is now well used in social sciences. It seems that texts contain hidden meanings which hermeneutics can uncover (Gadamer, 1976). This method has already been applied to IS research. As a matter of fact, Klein and Myers (1999) present “the hermeneutic circle” as the most fundamental principle for interpretive research: the need to study the interaction of the whole and the parts to understand a text. Wittgenstein (1953) introduces the language games in order to explain how language works. Hermeneutics is an example of a linguistic approach that has already positively influenced IS research by allowing IS researchers to more accurately analyze textual artifacts in the context of the operating or information system environment.

Type of Action

In the same vein, SCT fits with the linguistic turn. First, this stream which has as its chief aim the emancipation of people, studies meanings of social relations and—within our field—meanings of information systems (Hirschheim, Klein and Lyytinen, 1995). Meaning is also one of the principal goals of the linguistic turn. Second, SCT analyses the language itself viewed as a way to reach the goal of emancipation. Habermas (1984) and Deetz (1996) are two major figures who studied language in SCT. Habermas showed that language is not only a means for communication (the instrumental view of communication), but also a help to reach understanding and to establish shared meanings between individuals, the communicative action, given that words have power (Habermas, 1984).

Because, language can be written or spoken, discourse analysis represents another possible method for the linguistic turn. According to pragmatists, and more particularly Austin (1962), spoken language can be an action. This is called “speech acts” or performative utterances to express the fact that “words can do things” such as threaten, promise, or command. The power of language to effectuate action suggests that SCT researchers pay special attention to textual or linguistic artifacts when evaluating IS-related social issues.

Organizational Inquiry

Deetz argued that “emergent” communication within organizations be assessed because in organizations the speech of all stakeholders is important. This represents both an interpretive and dialogical type of organizational inquiry (Deetz, 1996). Blaikie asserts that organizational issues are especially amenable to interpretive or linguistic research approaches:

“Interpretivists are concerned with understanding the social world people have produced and which they reproduce through their continuing activities. This everyday reality consists of the meanings and interpretations given by the social actors to their actions, other people’s actions, social situations, and natural and humanly created objects. In short, in order to negotiate their way around their world and make sense of it, social actors have to interpret their activities together, and it is these meanings, *embedded in language*, that constitute their social reality” (2000 p. 115).

Because organization and social meanings are embedded in language, IS researchers investigating organizational IS phenomena can gain added analytical power by employing linguistic methods.

Objectivation Process

The question of objectivation deals with the exteriority of the object and its independence from the researcher. This question is analysed in linguistics, the science of language. There has been a long debate between realists, who consider that language is the “mirror of reality”, and nominalists who think that words are approximate and limited and so cannot reflect reality.

Explanation/Understanding

Even if philosophers don't agree on the exteriority of language, there is a better consensus on the role of language in understanding. Indeed, language is viewed as a way to reach understanding: “*the proper understanding of societies, social institutions, identities, and even cultures may be viewed as discursively constructed ensembles of texts*” (Alvesson and Kärreman 2000, p. 137). As the world is comparable to a book, the only way to study it and get access to reality will be through language (Gadamer, 2000). Accordingly, the linguistic turn implies for IS research an objectivation process more focused on understanding than on explanation. The distinction between understanding and explanation was made by Dilthey (1883) who asserted that the natural sciences tend to explain phenomena whereas social and human sciences help to understand phenomena.

Concepts/Intuitions

Furthermore, “*verstehen or interpretative understanding is based on intuition and empathy.*” (Whimster 2002, p. 63). Therefore, the understanding process requires an intuitive researcher. Though concepts are still important, they are not the principal way to develop theories and research. Intuitions and insights help the researcher in her/his interpretation and comprehension of the world (Zhao, 2002). As the study of language relies on an interpretive understanding of texts and discourses, intuitions particularly suit the work of the researcher. Indeed, the researcher uses intuition when interpreting with her/his “preconceptions” and by projecting. According to Gadamer (2000), “*A person who is trying to understand a text is always projecting. He projects a meaning for the text as a whole as soon as some initial meaning emerges in the text. Again, the initial meaning emerges only because he is reading the texts with particular expectations in regard to a certain meaning*” (p. 267). As a result, IS researchers who embrace the linguistic turn cannot stay neutral, but develop an active role of interpretation based on their intuitions.

Nomothetic/ Ideographic

In 1857, Windelband distinguished two approaches to study the world: (1) nomothetic methods, which aim to identify general laws and (2) ideographic methods, which are intended to highlight specific instances or relationships. Focus on language relies on ideographic methods because we try to “establish the truth of singular events” (Whimster, 2002, p. 63). An implication for IS research would therefore involve a greater emphasis on single cases for those studies employing linguistic theories or methods.

Type of Knowledge

A priori/A posteriori

In this third category, Kant looked at the origin of knowledge in order to determine if it comes from our experience (a posteriori knowledge) or from our reason (a priori knowledge).

Actually, this debate is also present in linguistic and analytical philosophy. Chomsky (1957), a linguist, held that language is innate (an “a priori” knowledge) whereas his detractor Skinner (1970) believed that language is acquired and is therefore “a posteriori” knowledge (Marshall, 1998).

Experience/Reason

Empiricists, whose main figure is John Locke, assert that all knowledge is produced by experience and can be tested empirically. This view is generally opposed by rationalists who consider knowledge to be independent from experience. Poststructuralists, who have contributed much to linguistic theories, argue that meaning and language are dependent from their conditions of production (Universal Encyclopaedia of Philosophy, 1990). An additional way in which language relates to experience is cited by Wittgenstein (1922), who asserted that words have meaning only when they are used. His “language

games” constitute ways to test language empirically. Therefore, the use of language analysis by IS researchers will be “derived from experience”.

Normative/Descriptive

Knowledge can be further categorized as either normative or descriptive, as defined by Weber (1949). Descriptive science contents itself with describing and presenting ideas whereas normative science establishes norms and defines what science should be. Linguistics is a descriptive science in contrast to grammar, which is normative (Saussure, 1916). Actually, most analytical philosophers describe language, its use, or its construction, rather than seek to establish a norm. As a result, IS researchers that use linguistic theories will perform descriptive studies rather than normative ones.

Conditions of Possibility

The conditions of possibility are the last category of our Kantian framework. They correspond to the limitations of a research study as Kant asserts that our knowledge is inevitably limited. Kant uses four sub-categories to assess the conditions of possibility: quantity, quality, relation and modality. All type of knowledge should rely on these conditions of possibility.

Quantity	Quality	Relation	Modality
Universal	Affirmative	Categorical (inherence)	Problematic (possibility)
Particular	Negative	Hypothetical (causality)	Assertoric (existence)
Singular	Infinite	Disjunctive (community)	Apodictic (necessity)

Table 2. Kant’s conditions of possibility regarding the logical functions in all judgments

Quantity

Quantity refers to the validity of a judgment. Most authors who study language such as Gadamer, Habermas, and Wittgenstein assert that “*there is no universal truth, only truth relative to the social surround of a person’s world*” (Whimster, 2002, p. 63). Consequently, the linguistic turn tends to formulate particular or singular judgments, which is contrary to the standard hypothetico-deductive approach which seeks universal and generalizable findings. Espousing a linguistic-influenced epistemological approach would therefore allow an IS researcher to study an unique or singular IS phenomenon without reference to its generalizability.

Quality

Quality deals with the existence of a judgment. We may either claim that something exists or that something does not exist. As for the singular judgment in quantity, Kant suggests that there is a way to go beyond the claim of existence or non-existence by considering the conditions of possibility. This approach brings to light the foundations and assumptions of a judgment claim into clear view. The point relevant to Information Systems is that most research attempts to show the evidence of a concept (e.g., IS strategy, IS impact, performance) rather than challenge its existence as a possible illusion or to consider its conditions of possibility.

Relation

Typically, causal relations are sought in IS research. However, analytical philosophers and linguists are not so much interested in causality between elements, but rather in objects’ meaning through texts or discourses. Therefore, analytical philosophers and linguists use final or formal causes instead of efficient or material causes. Indeed, Aristotle identified four types of causes: efficient and material causes refer to action and causality, whereas final and formal causes refer to a search for meaning (Monod, 2002). Furthermore, language can be viewed as a social and interactive medium of communication (Alvesson and Kärreman, 2000; Wittgenstein, 1953). Therefore, the relation of interaction is applied to language. By studying language, we also look at its proprieties which refer to an inherent relation.

Modality

Modality is perhaps the most linked to language. Our sentences are usually “assertoric” because they claim the existence of something or “apodictic” because we are attracted by logical reasoning, i.e. the quest for causes and effects. The point is that little attention has been paid to “problematic” judgements that seek for the possibilities of phenomena.

The linguistic influences the conditions of possibilities by suggesting a shift from universal to particular and singular judgments, from affirmative to negative and infinite claims, from inherence and causality relations to disjunctive (community) relations, and from judgements based on existence and necessity to problematic judgements investigating the possibilities of phenomena.

DISCUSSION

Though the linguistic movement presents new perspectives for IS research, we cannot ignore that a focus on language involves some limitations. Indeed, by studying language exclusively, this movement forgets to take into account “no language” situations. For instance, silences or omissions in written or spoken language should also be investigated and interpreted by the researcher. Furthermore, linguistic analysis cannot be applied to all types of research because there are some for which we need to look directly at the objects (without derivation through language). According to Plato, “*How real existence is to be studied or discovered is, I suspect, beyond you and me. But we may admit so much that the knowledge of things is not to be derived from names. No; they must be studied and investigated in themselves.*” (Plato, 439b) Nevertheless, behavioural analysis like observation can be a good way to triangulate one’s data and overcome these difficulties. Finally, it is important to note that a single word can have different meanings for different individuals. This is why the context and the thinking of individuals have to be interpreted together with the written word. Actually, words and their formulation into texts are not neutral but have meaning: “*Language use, in any social context, is active, processual, and outcome oriented*” (Alvesson and Kärreman, 2000, p142).

IMPLICATIONS FOR IS RESEARCH

The linguistic turn has several implications for IS research. First, the linguistic turn can modify the nature of the research question towards an issue more focused on language. On one hand, the linguistic turn invites researchers to look closer to words and their etymology. Definition of concepts should be rigorous in order to get the precise meaning of words. On the other hand, questions linked to spoken or written communication should be considered. Therefore, IS researchers can use post-structuralist theories that rely on a linguistic tradition. Some of the more famous theorists in this area are Foucault, Ricoeur, and Derrida. They all assert that “we cannot step outside of language or discourse” (Marshall, 1998). However, the study of concepts should be made with a critical approach in order researchers to create new concepts (Deetz, 1996). Deetz (2003) points out that the simple fact of studying text or discourse is not enough to fully embrace the linguistic turn. Indeed, he encourages researchers to use text and discourse not as a finality, but as a mean to “see the specific ways the world is produced” (p. 425). For instance, Schultze and Leidner (2002) classified IS research regarding four types of discourse (normative, interpretive, critical and dialogic). Though there was an analysis of language, the paper’s aim was to give an overview of knowledge management research and identify new “theoretical perspectives” (p. 230).

Second, the linguistic turn implies a particular set of methodologies for IS research. Generally, to produce knowledge researchers use a methodology. The methodologies coherent with the “linguistic turn” are principally the ones that facilitate the comprehension of language. Therefore interpretive methods like hermeneutics, narrative approaches or language games particularly suit to the linguistic turn. The linguistic turn implies that the origin of knowledge is in the language itself. So, a researcher will learn and understand his/her world by studying language artifacts like texts or discourses. Nevertheless, the linguistic turn, which is closely linked to hermeneutics, invites the researcher to adopt a multi-perspective view. Therefore, Deetz (2003) thinks that researchers who embrace the linguistic turn can combine different methodologies (i.e. statistics, interviews etc.) to get a richer comprehension of a phenomenon, as long as the object of research stays a “social production.” This supports the multi-methodologies research proposed by Mingers (2001). To account for a social production means that the researcher should take into account the influence of his/her interaction with a subject on the research’s object, what refers to the third interpretive principle of Klein and Myers (1999). Researchers should also allow consensus in the creation of their object (Deetz, 1996).

CONCLUSION

We have shown through a Kantian framework the implications of the linguistic turn for IS research. First, we asserted that streams like interpretivism and SCT in many instances may be more conducive to studying an IS *research issue linked to language*, because these “philosophies” include the study of language and meanings. Second, the *objectivation* process

implies an active IS researcher that will use her/his intuition to understand observed phenomena. Furthermore, the linguistic turn implies an ideographic process. Third, we showed that the *type of knowledge* of an IS research study will rely more on a posteriori knowledge, experience, and description. Fourth, the linguistic turn influences the formulation of the conditions of possibilities by suggesting a shift from the universal to the particular and singular judgments, from affirmative to negative and infinite claims, from inherence and causality relations to disjunctive (community) relations, and from judgements based on existence and necessity to problematic judgements investigating the possibilities of phenomena.

Additionally, we don't claim that the linguistic turn is more suitable than other approaches. Actually, we simply provide different implications to researchers who could be interested in applying linguistic assumptions in their studies. This overview can be seen as a limitation of our paper. Therefore, this research needs to be developed, for instance by focusing more on some of our model's categories. Another limitation is that we didn't discuss the implications of the different views of language, as proposed by Lyytinen (1985).

The linguistic turn, though now nearly a half a century old, continues to offer unique and practicable research approaches to IS research. By employing a linguistic-influenced epistemological methodology, IS researcher can gain significant insights into organizational attitudes and behaviors towards information systems that otherwise would be difficult to obtain. Further, the linguistic turn effectively promotes language itself as an object of study, allowing IS researchers to focus on verbal and written artifacts surrounding information systems. Through the lens of the linguistic turn, IS researchers can gain new insights into the complex interplay between organizational and technological phenomena that is information systems.

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