

Getting to the Heart of the Situation: The Phenomenological Roots of Situatedness

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ABSTRACT

In organization theory and information systems, the notion of the "situated" context within which change and other developments take place has become a popular "alternative" stance to the more functional/positivist view of organizations and technologies. In knowledge management, it is said to be about "situated knowledge"; in innovation and learning, "situated change"; in media studies, "situated cultures" are the focus; and in planning and Artificial Intelligence it is "situated action". Use of the situatedness concept started in American-based research, drawing on a concept that was originally developed by continental phenomenologists such as Edmund Husserl and Martin Heidegger. "Situated" is the translation of the German term "befindlich", which refers to both the situational circumstances of action and the emotional disposition of how you feel in them. However, in the current revival of the concept, the emotional heart of the phenomenological definition has been lost. This paper seeks restore that heart through the systematic comparison of two cases: a classic study of situated action in the 1980s by Lucy Suchman of the human-machine interactions around a photocopying machine endowed with an expert system; and recently-published notes from Heidegger on his course about the Letters of St. Paul to the early Christian communities, which contained a first use of the concept of situation in a phenomenological perspective. By examining the contrasting aims, methods, scope, approach and outcomes of these cases, important implications are drawn for the conduct of field work, gathering of data, relationship with studied subjects and other aspects of research aimed at honoring the central role of "the situation".

Keywords: situated action, phenomenology, human-machine interaction, cognitive science, affectedness, research methodology

1. INTRODUCTION

These days, the adjective "situated", the noun "situation", the Latin expression "in situ" and the abstract concept of "situatedness" are liberally employed by the researchers and scholars who want to take and articulate alternative approaches to the study of organizations, the analysis of knowledge and change, the design of sophisticated technical systems and the general understanding of complex interactions between people and technologies. These alternative perspectives have been developed and deployed against the positivist paradigm in social and organizational inquiry (Burrell and Morgan 1979) and the normative discourse in organization science aimed at finding law-like relationships among organizational facts, events and behaviours (Deetz 1996). Although these approaches support the

interpretivist paradigm especially, they are also employed in other radical or critical discourses. These "situated" perspectives are exemplified by the following instances taken from recent literature on organization theory and information systems.

Writing about the theory of organizational change triggered by the introduction of technological innovations, Orlikowski (1996) contrasts "situated change" to planned, deterministic and radical change.

In relation to knowledge management, Schultze and Leidner (2002) illustrate an interpretive discourse that highlights "the dynamic and situated nature of knowledge"(p. 224).

From a more post-modern perspective, Haraway (1991) urges the abandonment of the study of formalized knowledge in favour of "situated knowledges". Suchman's (1987) seminal research on planning in relation to expert systems and human communication contrasts "planned vs. situated action", suggesting that designers ought to develop systems and programmes that are able to take account of the emerging circumstances of action.

Orr (1996) uses the situated action perspective to study how repairmen actually fix photocopier breakdowns during their maintenance interventions. Bricolage and improvisation (Brown and Duguid 1991) are forms of situated action that are important in organizational breakdowns and emergencies (Weick 1993), and when operating in the turbulent environments that are routinely faced by high-tech companies (Ciborra 1996). Lave and Wenger (1991) unveil the characteristics of learning as a "situated process" and the importance of situatedness of experience in communities of practice (Wegner 1998). The concept also crosses other disciplinary boundaries, from Artificial Intelligence (AI) (Clancey 1997) to media studies, where scholars write about the "situated culture" in which we take part through networks of direct and interpersonal communication (O'Sullivan, Dutton and Rayner 2003, p. 8).

All these notions are taken for granted within the interpretive approaches in contemporary social and organizational studies. So, when Orlikowski (2000) sets out to enlarge and enrich Giddens'(1984) structuration theory framework for analyzing the use of information technology in organizations, she feels able to employ the terms "situated/situation" thirty-one times in a single paper without ever defining them.

A common denominator in the discourses that introduce or use the notion of situatedness is their explicit, but more often cursory or implicit, reference to phenomenology (usually via ethnomethodology) as the original source of the concept. Thus, Suchman (1987, p. 39) recalls Dreyfus' (1991) introductory work on Heidegger in order to highlight the "transparency" of the situated character of action. When Winograd and Flores want to illustrate the importance of the concept of being "thrown in the situation" as an aid to grasping the more abstract notions of decision and information, they refer to Heidegger (1962) and Dreyfus (1991).

Wenger (1998, p. 281, n. 35) also sees the theories of situated experience based on Heidegger's phenomenological philosophy as one of the sources for the social theory of learning and communities of practice. In technology design, Robertson (2003) notes that phenomenological approaches related to situated action have "played a major role in the shaping and progress of Computer Supported Collaborative Work" systems. Finally, in a recent monograph on

action, systems and their embodiment in social practices, Dourish (2002, p. 121) pays his debt to the importance of the "situated" perspective, indicating that "Suchman's work can be related directly to the work of the phenomenologists. In that Suchman's work is in the ethnomethodological tradition established by Harold Garfinkel, who himself drew extensively on the work of Alfred Schutz", who, we may add, drew heavily on the research of Husserl (1970) and Heidegger (1962), the founding fathers of phenomenology.

Unfortunately, if our tribute to the original roots of the concept of situatedness expresses an authentic commitment, and does not just pay lip service to the founding fathers, we are bound to encounter a major problem caused by a crucial oblivion: the (intentionally selective?) forgetting of what was once written about situatedness by a key source of the concept.

The best way to illustrate this crisis faced by the current liberal use of the notion of situatedness is to refer back to Orlikowski's (2002) methodologically-influential paper on the "practice lens". In sharp contrast with the thirty-one quotes of "situated/situatedness", in the same article she mentions the terms "emotion/emotional" only three times. The latter terms are neither defined nor actually applied in the body of the paper, while, tellingly, one of the three mentions can be found in a footnote where the author thanks an unknown reviewer for having reminded her about "the importance of emotional connections in people's use of technologies." (ibid., p. 425, n. 8).

This should sound, at best, puzzling for a reflective reader who has close to heart the phenomenological roots of situatedness and the wider tradition from it was first launched: the original German language of phenomenology. "Situated" is a translation of the German "befindlich"; "situatedness" is "Befindlichkeit". The latter, discussed in Section 29 of Heidegger's *Being and Time*, has been infelicitously translated as "state of mind" (Heidegger 1962, p. 172 - see Dreyfus 1991, p. 168). In any event, "Wie ist Ihre Befindlichkeit?" is a courtesy form in German for asking: "How are you?". Hence, the original term "befindlich" not only refers to the circumstances one finds himself or herself in, but also to his or her "inner situation", disposition, mood, affectedness and emotion.

In particular, Heidegger (1962, p. 182) states that understanding (i.e. cognition) is always situated, meaning that "it always has its mood". In other words, situatedness refers in its original meaning to both the ongoing or emerging circumstances of the surrounding world and the inner situation of the actor.

Surprisingly, concern for the inner situation, or even the "state of mind" of the actor, cannot be found in any of the contemporary texts that make liberal use of the idea of situatedness¹. Hence, understandably, the *de facto* lack of hospitality for the notion of emotion in Orlikowski's leading article on the situatedness of technology use.

The main purpose of this paper is to address such a troubling "situation" head-on and to counter the forgetting (intentional or otherwise) of its original roots which the notion of situatedness sports

¹ There is insufficient space here to ascertain precisely how the transfer and translations across the decades, the continents and the disciplines (such as ethnomethodology, sociology and anthropology) have transformed Heidegger's notion of *Befindlichkeit* into today's notions of situated action, knowledge, learning and change.

in contemporary discourses once one crosses the boundaries of the purely philosophical debate. It does so by carrying out a detailed comparison between the original and the more recent treatments of the concept. In order to overcome the superficial cacophony that arises largely due to its ubiquitous use, some tough methodological questions need to be addressed, such as:

- What are the contours of a situated understanding of organizational life and technology use?
- Can a researcher extract himself or herself from the situation being described?
- How, and to what extent, can a situation be subject to an objectifying empirical analysis?
- And, last but not least, what is the role of emotions, moods or dispositions of the heart in (the study of) a situation?

The paper aims to offer new background materials and an initial discussion of their implications in order to help stimulate a fresh questioning around the notion of situatedness in the fields of management studies, organization theory and information systems, especially among those interested in seeking and developing alternatives to the positivist perspectives.

The organization of the argument is as follows. First, the meaning of situatedness in the recent literature on information technology and organizations is assessed in greater detail. What is really meant by situated action, learning, change, etc.? Second, since such an investigation still leads to fairly vague definitions and statements, one also needs to look at the few controversies in the literature generated by opponents of the situatedness perspectives, in particular in organizational theory and cognitive science (specifically, AI). Third, two case studies will be put forward to spell out similarities and differences between the current renditions of the situated perspective and the original one. One study is the empirical investigation of situated action as carried out by Suchman (1987), while the other is extracted from the early lectures on the phenomenology of religious life given by the young Heidegger, less than a decade before the publication of his opus *Being and Time* in 1927. The comparative exercise is aimed at eliciting, in a systematic fashion, aspects related to the background, scope and articulation of the different definitions of situatedness, their methodological implications, how the empirical material is collected and interpreted and the main conclusions drawn. Finally, a summary is provided of the new tasks that lie ahead if one wants to take situatedness more seriously and comprehensively, possibly within the scope of a renewed, authentic phenomenological tradition.

2. A CLOSER EXAMINATION

Critics may have a point when expressing the impossibility of identifying a well-delineated research position on situatedness: rather they have to deal with an amorphous mass of closely-related views (Vera and Simon 1993). It is difficult to establish the precise contours of the contemporary use of the term "situated" in social and organizational analysis, in particular when one wants to establish its actual links with phenomenology. Here, we attempt to come to grips

with what the most quoted and influential authors had in mind when launching and using the term in the 1980s.

In the AI and management information systems fields, Winograd and Flores (1986) briefly mention the importance of the situation in which understanding takes place. To support their line of argument, they quote a passage from Gadamer, a student of Heidegger, which evokes the difficulty of capturing (let alone modelling) the subtleties of a situation: "To acquire an awareness of a situation is, however, always a task of particular difficulty. The very idea of a situation means that we are not standing outside it and hence are unable to have any objective knowledge of it. We are always within the situation and to throw light on it is a task that is never entirely completed." (Gadamer 1975, quoted in Winograd and Flores 1986, p. 29)

In her work of the same period, Suchman (1987, p. viii-ix) defines situated actions simply as: "actions taken in the context of particular, concrete circumstances...the circumstances of our actions are never fully anticipated and are continuously changing around us... situated actions are essentially ad hoc". The notion of situatedness is crucial in order for Suchman to show that the foundation of actions is not plans, but "local interactions with our environment, more or less informed by reference to abstract representation of situations and of actions." (ibid., p. 188)

Soon after, Lave and Wenger (1991) expressed their dissatisfaction with the vagueness of the definitions of situatedness in the literature, and also a feeling of unease about their narrowness: "On some occasions 'situated' seemed to mean merely that some of people's thoughts and actions were located in space and time. On other occasions, it seemed to mean that thought and action were social ..., or that they were immediately dependent for meaning on the social setting that occasioned them." (ibid., p. 32 - 33). In order to discuss the features of situated learning that take place within communities of practice, they suggest going beyond the notion of situatedness as an empirical attribute of everyday activity. Instead, they propose to look at it as an overarching theoretical perspective, that is as "the basis of claims about the relational character of knowledge and learning, about the negotiated character of meaning and about the concerned...nature of learning activity for the people involved." (ibid., p. 33) This more general perspective implies that there is no activity that is not situated and underlies the need for a "comprehensive understanding involving the whole person" (ibid.) Unfortunately, the latter idea is not developed any further, and their association between situated understanding and the whole person remains unexplored both theoretically and empirically.

Ten years later, these ideas and concepts are very much in use within the broadly defined interpretivist accounts of learning, knowledge management and technical innovation. However, little has been added towards their deepening and clarification: a sort of taken-for-granted adoption prevails, possibly becoming a new (alternative) management fad. Similarly, references to phenomenology are often made, but never quite fully explored and exploited. Collateral aspects are mentioned, such as transparency, ready-at-handness and so on (see for example Suchman 1987, p. 39). Yet nobody quotes Section 29 of *Being and Time*, where Heidegger (1962, pp. 172 - 182) introduces the notion of situatedness (*Befindlichkeit*), contrasting it with the privileged role attributed then (and now) to understanding, cognition

and the purely mental. Such an account can be found in Dreyfus (1991, Chapter 10 on Affectedness), but only within the boundaries of a specialized philosophical study of the first Division of Being and Time. Winograd, Flores and Suchman have been influenced by Dreyfus' work, hence the interesting cross-fertilization from philosophy into computer science, anthropology and organizational theory that took place on the West Coast of the US at the end of the 1970s. Still, the definitions these authors deploy seem to remain on the surface and do not exploit all their ramifications; in particular, factors such as emotions or moods (part of the comprehensive understanding of the "whole person") were not picked up then - or more recently. Lack of proper references to phenomenology while using its ascendance may also induce the reader not versed in philosophy to believe that what these authors say about situatedness is indeed all that phenomenology has had to say on the subject. The consequence is a non-problematic use of the terms "situated/situatedness" by scholars and practitioners who embrace the interpretivist or radical perspectives in management and organization studies. Those terms end up meaning just "context" or "emerging circumstances" of action and knowledge.

3. DEBATE AND CONTROVERSIES

Another means of spelling out the definition of situatedness in the contemporary debate is to examine the unfolding, and the temporary outcomes, of recent controversies around the scope and utilization of the concept in both organization theory and cognitive science/AI. Within the former, Contu and Willmott (2003) address the situated learning theory critically, especially its scope. They do not examine situatedness per se, but the way they look at the dissemination and practice of situated learning elicits some features of the interpretivist and phenomenological approaches as they are being applied today, especially in the corporate world. The authors acknowledge first that situated learning is a conceptualization that offers an alternative to cognitive theories of learning. Within cognitive science/AI, learning is portrayed as a cognitive process involving a selective transmission of abstract elements of knowledge from one context (i.e. the classroom) to the site of their application (the workplace). Lave and Wenger (1991) see learning as integral to everyday practices, to the lived-in world. Looking at learning as a situated process means appreciating that it is embodied (lived-in) and historically and culturally embedded. Furthermore, Contu and Willmott note that the new perspective does include due attention to the exercise of power and control in organizations. They point out, however, that a more conservative approach has been adopted in the subsequent popularization of the idea of situated learning, for example as carried out by Brown and Duguid (1991) and Orr (1996) with the notion of communities of practice, which casts situated learning as "a medium, and even as a technology, of consensus and stability." (Contu and Willmott 2003, p. 284) This is the outcome of a subtle cleansing process, whereby the organizational context of learning is looked at "in terms of a transparent background rather than a contested history." (ibid. p. 293) In particular, the situation of learning (typically, the community of practice) is conceived as "unified and consensual, with minimal attention being paid to how learning practices are conditioned by history, power, and language." (ibid.)

Even without going further into the detail of this critique, and accepting that the focus on power and historicity has been lost in the popularization of the concept of situated learning, one should not be surprised if most of the "situatedness studies" end up supporting a consensus and stability framework for organizational analysis and design (and there is also a question about whether these dimensions were adequately emphasized by Lave and Wenger to begin with, or yet again just mentioned in passing, like their quick reference to the "whole person" that was not subsequently elaborated any further). Recently this has often been the way any interpretive discourse is portrayed: as a discourse that "acknowledges the multi-vocal fragmented, and conflicted nature of society, yet also focuses on the integrative values that allow organizations and communities to function in harmony." (Schultze and Leidner 2002) Note that the accusation of a bias towards consensus and stability is then extended to the root disciplines of the interpretive discourse, i.e. ethnomethodology and phenomenology. Thus, authors ranging from Burrell and Morgan (1979) to Deetz (1996) have felt it necessary to place interpretive perspectives next to others that highlight radical change and transformation, radical humanism, critical and dialogic discourses, and so on (see also Crotty 1998).

A more pointed critique has been put forward within the AI and cognitive science fields by Vera and Simon (1993) in a special issue of *Cognitive Science* that was dedicated to the situated-action paradigm. Remember that researchers like Suchman (1987) take the view that "plans as such neither determine the actual course of situated action nor adequately reconstruct it" (p. 3). But plans are precisely the main form of symbolic representation on which AI systems designed to interact with the environment are usually grounded. In this way, the situated-action idea is aimed at undermining those efforts in AI and robotic research based on planning programs. The counterargument put forward by Vera and Simon(1993) states that symbolic systems are able to interact with the situation by receiving and processing sensory stimuli from the world. Such systems can account for local circumstances, perceive and represent social relations if they have an impact on the system and produce appropriate responses even for temporally-demanding tasks embedded in complex environments. For example, if Suchman's (1987) concern is the mutual intelligibility between people and machines in a situation of technology use (see the first case study below), then Vera and Simon (1993) indicate that such an understanding, and the correlated situated actions, cannot be achieved without internal symbolic representations, learning, planning and problem-solving programs that feed upon them. In summary, "the term situated action can best serve as name for those symbolic systems that are specifically designated to operate adaptively in real time to complex environments...It in no sense implies a repudiation of the hypothesis that intelligence is fundamentally a property of appropriately programmed symbol systems." (p. 47)

Situated action is here regarded as an approach that is homogenous with, though in competition to, cognitive science and AI concepts. It differs only in a matter of degree: Can a symbol-based system be so sophisticated to capture emerging circumstances? Can it be so rich as to represent the embedding of networks of social relations? Can it be fast enough to perform meaningful action on the fly? In principle, the answer is 'Yes' according to the cognitive scientists: when

reconstructing situated decision making, symbolic representations of the ongoing problem space can be drawn, algorithms can be identified and problem-solving programs can be written. This includes the stuff of which AI applications are made: plans, if-then-elses, means-ends chains, etc. In such a view, a physical symbol system interacts with the external environment by receiving sensory stimuli that it converts into symbol structures to be stored in a memory device, and it acts upon the environment in ways determined by the newly-acquired symbol structures. The memory is an indexed encyclopedia, where representations of external situations are stored as they come in. Stimuli coming from the environment invoke the appropriate index entries, and so on. In other words, cognitive scientists argue that one can design and build symbol systems "that continually revise their description of the problem space and the alternatives available to them." (Vera and Simon 1993, p. 13) This mimics one of the key ideas of the situated action literature: the importance of moment-by-moment capture of the full situation of action. To be sure, the controversy lies in whether highly adaptive symbolic systems can actually be built. Suchman reviews the developments of AI and the various attempts at representing situations, e.g. through scripts (Schank and Abelson 1977), and sees the task of reconstructing a meaningful knowledge background and context of action as infinitely long, hence unachievable in practice. In the end, Suchman (1987) insists, the situation cannot be fully translated into a series of symbols, or a mental state. It is something "outside our heads that, precisely because it is non-problematically there, we do not think about".(p. 47). It is not just knowledge about the world, it is the world as an inexhaustibly rich resource for action (ibid. p. 43 and p. 47)

4. TWO CASE STUDIES

The stage is now set to compare the contemporary perspectives on situated action, and their claim to constitute an alternative to the positivist and cognitive views of learning, knowledge, change and organizations, with the original thinking applied early on within phenomenology. The recent availability of the teaching notes and lecture transcripts of the courses that Heidegger gave between 1919 and 1926 (before the publication of *Being and Time*) offers fresh material based on discussions, investigations and applications of the emerging phenomenological method to a range of domains. This is suitable for utilization for our present purpose, in particular the investigation into what constitutes a situation, why to study it and how to analyze it. In his early courses held at Freiburg and Marburg Universities, Heidegger addresses precisely these questions (to be sure, among many other directions of inquiry). On the basis of his answers, we can try to trace the direction in which our understanding of situatedness has evolved in the jump from continental philosophy around World War I to the recent, mostly Californian, renditions that have been imported into anthropology, organization theory and information systems. From this, we can ascertain what was lost, or what was gained, in the decades that have seen the translation of "befindlich" into the contemporary "situated".

To this end, we pick two case studies to be compared in a systematic fashion. As representative of the contemporary school of thought, we select the research by Suchman (1987) on the limits of planning and

the power of situatedness. The reason is the comprehensiveness of this research and the influence it has had on different domains, such as cognitive science, AI, human-computer interaction, organization theory and learning theories (Heath and Luff 2000). Furthermore, Suchman's research is empirically well grounded and deals more than other works with issues of method, in particular how to study situated action in a real setting. Heidegger's lecture notes on the Phenomenology of Religious Life, a course held in the winter semester in 1921, offer the material for the second case study: an analysis of the situation of early Christian communities as gleaned through the Letters of St. Paul, in particular the situation of being an early Christian (Heidegger 2004).

The materials of the two studies are presented in a consistent manner, structuring them into five main subsections: background and motivation; definitions of situatedness; methodology of inquiry; findings; and research outcomes. However, there are a number of reasons why the balance in terms of the amount of detail presented here is definitely tilted in favour of Heidegger's phenomenological interpretation of the Pauline Letters rather than Suchman's work. First, Suchman's publication is widely available and read in our scientific community. Second, many essential points of her study have already been mentioned and used in the earlier part of this paper. Third, Heidegger's early lectures have been published in German in the last ten years and have begun to be available in an English translation only recently; it is therefore new material that needs to be reported more extensively. Finally, it is also a matter of restoring a balance. Contemporary studies of situated action and learning too frequently make only a cursory reference to phenomenology: a short quote from Being and Time seems to suffice, even for the more attentive scholar. And, as noted above, the quote never seems to refer to the section dedicated to situatedness/Befindlichkeit. Instead, within its limits and constraints, this paper aims to give the original notion and its methodological implications the space they deserve. But it should be noted that this skewed treatment of the cases implies no judgement on their respective grounding, validity or importance.

4.1 The First Case Study - The Situation: Coping with a Complex Photocopying Job

4.1.1 Background and Motivation

The original audience of Suchman's research is constituted by designers of intelligent machines, and colleagues in the cognitive sciences. For them, busy in constructing computational models of action for robots and expert systems interacting with the environment, purposeful action is determined by plans, and plans have a logical form based on symbolic representations of outer states of the world and inner states of the machine. Suchman's perspective on the scope and validity of plans comes from another angle: studying how people make sense of everyday activities, seen as interactions between the acting person and the surrounding social and material circumstances (Suchman 2000).

4.1.2 Definitions

As already mentioned, Suchman (1987) defined the situation as being the full range of resources that the actor has available to

convey the significance of his or her action and to interpret the actions of others. Concern for the situation denotes the material and social circumstances of every course of action (ibid., p. 50). Specifically, when analysing how users deal with photocopiers and their intelligent help systems, it appears that, "the situation of the user comprises preconceptions about the nature of the machine and the operations required to use it, combined with moment by moment interpretations of evidence found in and through the actual course of its use." (ibid., p. 119) Note that the temporality of situated action is the moment by moment. It points to the fleeting circumstances on which the making-sense of the action relies, but which these accounts of action routinely ignore. In contrast, although plans provide sense or meaning to an action through a formalized representation of events, resources and interactions over (clock) time, they do not help to cope with unexpected breakdowns and more generally emerging circumstances. In the empirical study, two interdependent situations are monitored: one of the user with her preconceptions, puzzles and interpretations; the other of the machine as dictated by a plan encoded in a program written by a designer. The interdependency between the two is determined by the actions of the users, the machine and the communication between each other of the respective actions.

4.1.3 Methodology

The overall empirical thrust of the analysis is to observe "how people use their circumstances to achieve intelligent action." (ibid., p. 50) In general, to study the action in situ requires accounts of formal representations and their "productive interaction with the unique, unrepresented circumstance in which action in every instance and invariably occurs." (ibid., p. 189)

Operationally, the problem of studying situated action is described as "akin to the problem of a detective who is just sent out and told to report back on what going to the grocery store is all about and how it is done." (ibid., p. 111) After having tried paper and pencil observations as a means of building reports of actions, and having being confused herself about the problematic interactions between the users and the photocopier, Suchman comes to the methodological conclusion that "to understand the problem would require the use of an adequate, i.e. videotaped, record." (ibid., p. 110, footnote 3). Video technology is then deployed in a sort of uncontrolled experimentation. The situation is constructed so as to be visually observable: two users of a photocopying machine interacting with its embedded expert help system. The experimental setting is created artificially by giving the users a complex task to perform with the machine; after that, they are left on their own to cope with the task, the machine and the help system. The data thus obtained are a corpus of videotapes of first-time users and the expert help system: "a record of events which is not pre-judged as to its analytic interest either in advance or in the making." (ibid., p. 114) The videotape transcripts are subsequently organized according to an analytic framework that distinguishes: the actions of the user not available to the machine; those that are actually available (as viewed through a key-hole by the machine); the effects of the machine on the user; and the embedded design rationale contained in the programs of the expert help system. Users were also asked to read the instructions

aloud and their conversations recorded; this constitutes the verbal protocol accompanying the videotapes. Suchman points out that audiovisual technology offers the following advantages: it provides a record of the action and its circumstances that can be replicated, is available for repeated inspection, and is independent of the researcher's analysis (ibid., p. 113). It thus conforms to the key tenets of scientific experimentation, after all.

4.1.4 Findings

The expert help system in Suchman's study is designed to provide the user with the relevant information on how to operate the photocopier for a given job. Information is released step-by-step so that the user is guided through a complex task. However, in order to offer the appropriate instruction, the system must recognize not only the overall goal of the task but also each action needed to accomplish it, and for which it is then able to convey an instruction to move the job to the next step. Thus, one can identify a recurrent sequence where the machine presents an instruction, the user takes an action, the machine acknowledges the action and then sends the next instruction to the screen interface to be read and acted upon by the user. The expert system is based on a plan developed by its designer that matches goals, outcomes and actions.

Among the evidence collected through the videotaped sessions, perhaps the most interesting ones are those featuring "communicative breakdowns", where the respective situations of the humans and the machine get out of synch, and the pre-designed plan embedded in the expert system shows its inability to capture all the relevant aspects of the users' situation, thinking and action. Two instances stand out:

a) False alarm

Here the users do not understand the instructions of the machine, are puzzled and come to the conclusion that they must be mistaken. But this is not the case: the machine sees nothing wrong and communicates the next instruction. However, the output is not what the users expect. The help system does not intervene because it detects no error. The users are left wondering: "What do we do then?" (ibid., p. 164), and they start to ascribe spurious intents to the machine and to act on the basis of those assumptions. The machine remains unable to detect the misunderstanding on the part of the users.

b) Garden path

A misconception of the user produces an error. The machine does not interpret the action as a faulty one, but as performed in the context of a different procedure. Thus, the user's error is not detected, and is actually mistaken for some other correct action. The users also do not understand that the machine is now following a different plan towards another goal. The users then get the next instruction, a fact that by itself conveys the message that they are on track, although that is obviously not the case. Only the effects of the user's action keep being available to the machine, not their intentions that reflect the particular situation at the moment of action. The respective situations of the user and of the machine begin to evolve differently, but this divergence is initially masked; thus, no counteraction is initiated by either of them.

4.1.5 Outcomes

Research and development in cognitive science are aimed at representing mental constructs (such as goals or plans) and writing programs for their manipulation in order to enable systems to be guided by these programs to interact intelligently with their environment. The alternative research strategy implemented by Suchman is aimed at exploring the relation of knowledge and action to the particular circumstance in which they occur. Her empirical study confirms that the organization of situated action is an emergent property of moment-by-moment interactions between actors and their relevant environments. (ibid., pp. 178 - 179)

Expert systems are built on a planning model of human action. "The model treats a plan as something located in the actor's head" (p. 3), directing his or her behaviour. But the evidence provided, for example by the "false alarm" and the "garden path" instances, shows that the planning model confuses plans with situated actions, and ignores the fact that intentional action emerges out of the interplay between representations (as featured in plans) and local circumstances that typically lie outside pre-designed plans.

In general, Suchman's empirical study highlights the profound asymmetry between people, with their capability of ad hoc improvisation, and the machines that are unable to access the moment-by-moment contingencies stemming from situated interactions. This has important design implications. While the AI specialist tries to embed into expert systems more and more sophisticated plans, never achieving the richness of the situation (the world), Suchman's recommendation is to keep plans vague and open to many possibilities. Plans, and representations more generally, should work as signposts or guides to assist people in their interactions with the technologies, while leaving ample room for experimentation and serendipity. The local interactions between the actor and the emerging circumstances are bound to remain essentially outside the plan's scope. Finally, countering the pretence of cognitive science and AI to build intelligent artefacts using a theory of the mind based on symbol processing, Suchman envisages an alternative approach aimed at building "interactive artefacts", rooted in rich accounts of situated human actions and shared understanding.

4.2 The Second Case Study - The Situation: Living as an Early Christian

4.2.1 Background and Motivation

Leaving aside the multiple philosophical debates that phenomenology confronted and related to at the beginning of the twentieth century, the attempts by Husserl (1970) and later Heidegger (1962) are of relevance here to positioning philosophy, and in particular phenomenology, as a foundation of all the other sciences. While the latter are based on a series of presuppositions and assumptions, which are not further discussed within their respective "regional domains", phenomenology strives to be a style of thinking with the least possible presuppositions - a primal science. But where to anchor it, then? And how to do it?

In his earliest course, the War Emergency seminar during the winter semester of 1919, Heidegger (2001a) puts forward a number of key ideas. First, that one should stay clear of a history of philosophy or a review of philosophical ideas. What matters is "philosophizing" as part of life. The standpoint, or better the springboard, of philosophical inquiring should then be "factual life" itself, the stream of life taking place in the surrounding world in which we enact philosophy. "Because factual life experience is more than a cognitive experience, more than even the simple experience of taking cognizance, philosophy in the face of it must undergo a total transformation. What is had, lived, experienced in factual life experience is more than a mere object for a subject and its theory forming activity, it is a world *in* which one can *live* (one cannot live in an object)". (Kisiel 1995, p. 154) That is the foundation. Heidegger wants to avoid the "common sense" standpoint immersed in the everyday life, since it is warped by public interpretations, by what people say and by their unreflective absorption in mundane affairs. He also rejects the theoretical standpoint because, instead of a dynamic flow of experience and historicity, it delivers a brute collection of objects, resources and relations present at hand. The outcome is a "de-vitalizing" of experience and history (Guignon 2002, p. 82). Phenomenology "does not derive from a system of relations, a network of general concepts, that can be stretched to reach everything... Instead it inquires the givenness of concrete life situations, basic situations, in which the totality of life expresses itself. Life is in every situation, it is all there". (Heidegger 1993, p. 231)

How, then, to access the flow of life in the world and the ensuing historical experience? In discussing how phenomenology can disclose the life-experience, Heidegger refers to Husserl's "principle of all principles": all philosophical pronouncements must be grounded in something immediately accessible to us. For example, "the logic of the grasp of the object, and the conceptuality of the object...must be drawn out of the mode *in which the object is originally accessible*. Also decisive for the definition of the life situation in which the object comes to be experienced and, further, the basic intention in which the experience from the outset aims at the object (how the sense of the situation and of the anticipatory intentional grasp (the preconception) is 'given its due')." (Heidegger 2001, p. 17) Life, thus, must be "understood in a primal scientific way as leaping out from its source." (Heidegger 2002, p. 82) The here and now of the situation offers such a primordial insight into life (Guignon 2002, p. 86). This is shown, for example, in the situation in which philosophizing itself occurs: philosophy, as a knowing comportment must be then understood in the situation where it takes place, where it is enacted - that is, the University (see the Appendix to the 1919 lectures titled "On the Essence of the University and Academic Studies", in Heidegger 2001a). More generally, concern for factual life expresses the re-balancing of activities advocated by Heidegger in relation to Descartes' famous statement "*Cogito, ergo sum*" (I think, therefore I am). Far from being primal, the thinking is just the tip of the iceberg of something that is pre-theoretical and pre-thought: living, being. Thinking is supported by being, and phenomenology is an inquiry into factual life, that is being-in-the-world (*Dasein*). The accent of inquiry is then shifted towards the "sum". (Heidegger 2001, p. 130 - 131) For Heidegger, "to be" or "to live" means essentially to care. What we

care for is what is meaningful. We live in the world, i.e. we care about the world, and the world is automatically meaningful for us. Objects and circumstances stand out because they are endowed with such meaningfulness: that is how our experience encounters them in life, without them having "to run around naked." (Heidegger 2001, p. 69)

4.2.2 Definitions

The situation plays a key role in the phenomenological method, as the privileged access point to the foundation, to factual life. A number of characteristics are added by Heidegger in the courses that followed in 1920 - 1922, and new terms are tried out and subsequently abandoned. First, for example, is the notion that, in philosophizing as part of life, the "I" of the observer/actor cannot be extricated from the situation. Hence, the adoption in the earlier courses of the term of "I-Situation", to remind us that the I-in-the situation should always be at the centre of our reflection. The situation is a situation for someone, the self always "swims together (with everything else) in the situation" (Heidegger 2001a, p. 206 - quoted by Guignon 2002, p. 85) Furthermore, by focusing on the situation, one can avoid the dichotomy between subject and object, which finds its sense only in a perspective that is *already* theoretical, thus depriving the lived experience of any life. Rather, the situation is an event that constitutes the "I" and the "world" simultaneously. Second, the situation is not static, as part of life, nor is it a process (still prone to be analyzed scientifically as a physical or chemical process), but it is an event. The temporality that is a relevant dimension of the situation is the temporality of factual life, not necessarily clock time: "the situation has a *narrative* structure". (Guignon 2002, p. 85)

Third, while the other sciences are engaged in a relentless effort of objectification and reification, philosophizing wants to dwell close to life as it is lived, and not objectified. On the contrary, "the phenomenological method works in its articulation, thanks to a critical destruction of objectifying forces, that are always there ready to stick to the phenomena." (Heidegger 1993, p. 255)

How then to talk about a situation, without objectifying it, without "extracting life" out of it in order to analyze it? Heidegger (1993) is well aware of the challenge: "The problem of a situation without objectification has not been set out so far in the philosophical literature." (p. 258) To deal with this, it is necessary to recall the ubiquity of meaningfulness in the world that surrounds us. We live and encounter the world in a smooth way because most of the things, people and situations we meet are endowed with meaning: since we care, things and people in the situation matter and are significant in some ways. The situation is typically: defined by a background motivation; shows a tendency that characterizes the course of events in some prevailing direction; and has a sense of fulfillment. In short, it is a narrative that makes sense.

Analyzing a situation entails getting to the main sources of its meaning. Heidegger (2001a) identifies three: sense of content; sense of relation; and sense of actualization or enactment. Sense of *content* refers to the various entities we recognize in a situation: things, people, physical and temporal circumstances, etc. Sense of *relation* illustrates the network of meanings and references that the various aspects and entities of the situation are embedded into: the semantic dimension of the situation. Just stopping at such descriptions of a

situation would entail an objectifying description, where life has been taken out (*entlebt*, in German). "The situation-character disappears. The unity of the situation explodes. The experiences, no longer possessing a unity of meaning or a unity of content, lose the unity the situation gave them." (Heidegger 2001, p. 206 - quoted in Guignon 2002, p. 85) Finally, the sense of *actualization or enactment* (see also Weick 1979) is linked to the happening, the situation as an event, the situation as an action. This is the key dimension that guarantees a study of the situation as part of the stream of life and not as an objectifying desk exercise. Furthermore, the sense of enactment captures other fundamental dimensions of the situation and its temporality: a sense of history and a sense of embodiment.

The courses held in 1921 - 1922 were dedicated to the commentary of various books by Aristotle, in particular the Nicomachean Ethics and the Rhetoric. In these courses, Heidegger uses the term *Befindlichkeit* to define situatedness for the first time, when translating creatively Aristotle's concept of *pathos*. In rhetoric, one of the aims of the speaker is to affect the situation of the audience, its *pathos*. The translation *Befindlichkeit* is useful to capture the non-cognitive dimensions of the situation, in particular the situation of the actor in the situation, his or her moods, emotions, disposition. The passions are the "ground out of which speech grows...the ground possibilities in which human existence (*Dasein*) primarily orients itself concerning itself, finds itself. This primary orientation, the illumination of its being in the world, is not a knowing, but a finding oneself." (Heidegger 2002, p. 262)

In general, there are many situations, but which one is worth studying? Heidegger's reply is quite clear. Situations are points of access to life. The most promising situations, which can reveal the anchoring of our thinking and understanding to life, are those where life comes to the fore in a stark, tumultuous way. These are typically situations of radical transformation, when entire modes of living and understanding give way to radically new ones. Becoming an early Christian, even before the Church was established, is living such a situation. Moreover, according to Heidegger (1993, p. 61 - 62), the big breakthrough brought about by the Christian religion, as opposed to the prevailing Greek philosophical thinking at the time, was the importance of the inner life (later on exalted in the writings of St. Augustin and his reference to "inquietum cor nostrum", our restless heart). Studying the situation of the early Christians obliges us to give high importance to the sphere of inner life as an integral part of the situation. Finally, the early Christian texts reveal a non-theoretical way of understanding, which will be lost later with the establishment of the Church, in particular with the import of Greek classic philosophy into the foundations of the Christian religion. That is why the study of early Christianity is so attractive for Heidegger: it is a way to access life in a moment of radical transformation and while it is expressing its inner, non-cognitive dimensions, in ways that are not yet caged by theoretical thought.

4.2.3 Methodology

In general, phenomenology has the same problem as the scientific method, that is how to escape the "natural attitude". But the solution it tries out is the opposite of the theoretical and the objectifying, where the emotions are barred and the lived experience cleansed.

Phenomenology looks for an a-theoretical comportment and interpretation beyond the natural attitude. The religious experience has an extraordinary methodological importance for Heidegger, because it represents a historical instance of such an a-theoretical approach to life.

Regional sciences, such as history, theology, or Neo-Kantian philosophy, would each have its own method to study the life of the early Christians, availing itself of key early documents such as the Pauline Letters. Thus, one could carry out a historical study of the Roman Empire in the first century of our age and examine the situation of the various religious movements. Theology would offer an exegesis of the dogmas and religious concepts contained in the Letters. Neo-Kantians would investigate the cognitive frames of religious thinking emerging from the New Testament, of which the Letters are a part.

All these inquiries would enrich our knowledge, suggests Heidegger (2004), and would help us in clarifying the sense of content and the sense of reference that characterized the situation of the early Christians. But it is only with the phenomenological method that one can focus on the sense of enactment and thus get to the situatedness of the life of the early Christians, while simultaneously overcoming obvious hurdles such as: the different language in which the Pauline Letters were written compared to our modern language; the fact that we have to rely only on texts, some of which are apocryphal; and the fact that in carrying out this inquiry we do not reflect upon the role of the observer (Heidegger) while he engages in the interpretation. On the other hand, the Pauline Letters constitute the closest document available that captures the life of the early Christians; the first were written twenty years after the Crucifixion. Paul identifies himself resolutely with the members of the communities to which he addresses the Letters: the Thessalonians, the Galatians, the Romans, etc.). He helped to found those communities, and every letter starts with his spirited acknowledgement that he is one of them. The Letters give us access to Paul's inner world and to the communities of the new religious practice simultaneously.

But how to engage with the phenomenological interpretation? At a turning point of his course, Heidegger invites his students and himself to pay attention "no longer to the object-historical complex, but rather see the situation such that we write the letter along with Paul. We perform the letter writing, or its dictating, with him." (Heidegger 2004, p. 62) This is the closest way available to at least evoke and actualize, if not to enact, the situation of the early Christian communities and of Paul as one of their members and founder.

4.2.4 Findings

We pick two aspects of the situation of the Christian communities among the various exposed to Heidegger's phenomenological interpretation: how the communities lived temporality and how they related to the existing social order.

a) The second coming (*Parousia*)

The early Christian communities lived a different temporality, they lived their time in a special way (Heidegger 2004). We are just a couple of decades after Christ's death and Resurrection, and the new communities are waiting for the second coming of Christ (or *Parousia*) that will lead all peoples and the previous

generations to salvation, to the Lord. But it is not only about a future event; the past also matters. In the First Letter to the Thessalonians, Paul refers to the "having become" that characterizes all the Christians after the Annunciation. This event is the beginning of Christian spirituality and history. It is an experience that colours all the relations of the extant religious situation at that time. To have become, and to know of that event, shapes the opening of the situation to the future. Such knowledge becomes integral to the situation of being a Christian. The letter emphasizes the knowledge of the new temporality shared by all members of the community, and deals with the future event of the second coming. The issue is when this is going to happen. Heidegger points out that Paul addresses the burning question posed by the Thessalonian community not in terms of content (e. g. indicating a date, a when) or in terms of relations, but with a precise sense of enactment: how should they live the situation of waiting. He provides a knowledge that belongs to the factual life of the Thessalonians in their steadfast faith (Kisiel 1995, p. 185). Paul again emphasizes the identification with his audience. "You ask when, but you know it very well, as I do." And he admits that he himself "could endure the wait no longer" (First Thessalonians, 3:1,5). It is the very inner world of Paul that is being shared with the members of the community to whom the letter is addressed.

And the first thing they all know is that those who predict peace and security with nothing to fear are doomed because, "The day of the Lord will come as a thief in the night." (ibid., 5:1) Hence, it is useless to prepare oneself, rather the "when" is a situation of waiting, highly uncertain and characterized by a sombre alertness, endurance, tension and vigilance. The time the early Christians live assumes here a historical character. The "when" is determined by the awareness of having become, and by the actualization of their factual life experience in and through every moment - nothing else. (Kisiel 1995, p. 186) What characterizes the temporality of these communities is a time devoid of any length that can be planned, ordered or organized.

b) As though not (*hos me*)

Another community, the Corinthians, asks Paul how to relate to the existing social and institutional order. While waiting for the second coming, how to be a husband, how to be a slave, or how to be a freeman? This was confusing, since Paul predicated that there would be no more slaves or patrons, no more Greeks or Jews, no more circumcised or non-circumcised. Still, the members of the communities had all one or more of these positions, roles and identities. Again, Paul replies with a text that contributes to enact the situation of those people. "Let each remain in the same situation in which he was called" (1 Cor. 7:20) Far from revolting against the existing order, or accepting it passively, live each of those roles, positions and identities, but "as though they were not" valid. A slave should live as a slave, but give no particular value to that status, the same for the husband with the wife, the Greek or the Jew. Accept the existing order and at the same time re-enact it while depriving it of any legitimacy. Thus, the early Christians' sense of content and

sense of relation of the situation are left untouched. The meaning of the relations with the world derives not from the relative importance of their content or the network of relationships, but from the way they are re-enacted. Thus, something remains the same, and simultaneously is radically transformed. Relations and contents do not determine the situation and the factual life of the early Christians. Instead, "The relation and the sense of lived significance are determined out of the original enactment." (Heidegger 2004, p. 85)

4.2.5 Outcomes

Heidegger (2002, p. 54) emphasizes that special difficulties are presented by access to, and explication of, the genuine situation of understanding. The situation is not something that jumps at us, or we fall into. One needs to work one's way toward the situation. The attitude is not the objectifying one, nor of blissful unconcern and tranquillity. "The situation...does not correspond to a safe harbour but to a leap into a drifting boat, and it all depends on getting the mainsheet in hand and looking to the wind." (Heidegger 2001, p. 30) In particular, the phenomenological method is itself embedded into an I-situation. Hence, the rationale of its approach in being directed eminently towards enacting an attunement between the situation of the interpreter and that of Paul. By "dictating" the Letters together with Paul, Heidegger is able to evoke the situation of the early Christian, a situation of angst, calculated wait, uncertainty and sombre vigilance. Its salient aspects are the peculiar way of living the time left between the Resurrection and the second coming, and the apparent coexistence with the established order while undermining it by devoiding it of any legitimacy. Temporality is characterized not by clock time but by the *kairos*, the moment of opportunity and surprise of the second coming, and by the importance of the inner life, the *Befindlichkeit*, which overshadows the surrounding institutional and historical circumstances. The life of the Christian is enormously difficult, always re-enacted in need and affliction (Kisiel 1995, p. 190). The Pauline Letters enact this situation by intensifying the anguish and the gloominess.

5. DISCUSSION

The two case studies show that there are two distinct agendas in the appreciation of situatedness, and that there is an evident discontinuity in the intellectual trajectory that connects phenomenology (at least in Heidegger's rendition) and the contemporary interpretivist schools. Although we cannot here go deeply into the precise ways in which Heidegger's notion of *Befindlichkeit* has been transformed into today's ideas about situated action, when contemplating the gap between the initial and the end points one still cannot help but feel a slight sense of vertigo.

Heidegger had the programmatic vision of founding phenomenology by steering clear from the mind, cognition, psychology and any other area of the established sciences, while staying closer to everyday factual life. He puts forward a richer notion of "situation", in which inner life is as important as surrounding circumstances, where the pre-theoretical is preserved by giving space to the moods, emotions and dispositions not linked to thinking: "One could say at the limit that the factual life is emotional, not theoretical." (Heidegger 1993, p.

220) In this respect, *Befindlichkeit* captures the multiplicity of meanings of being in a (simultaneously inner and outer) situation. In comparison, the current renditions of situatedness are much narrower, and are totally deprived of an inner dimension. As mentioned above, authors like Suchman point to the importance of fleeting circumstances or "the world that stays out of our head". The heart is also out of our head, but it still remains consistently ignored by those discourses committed to an alternative approach.

This difference gets even more apparent at the methodological level. Contemporary studies bend to the dictates of the scientific method: they strive to keep the observer separate from the situation to be studied. They set up experiments, and they record them through technical means that seek to obtain objective evidence that can be evaluated independently and shared. Things and people in the situation become objects, and events present themselves as processes occurring in objective time. However, when the situation is decomposed in this way, "the self comes to appear as a detached spectator making observations - one item among others in the space-time coordinate system... The world is "dis-worlded" and the stream of life is robbed of its character as living...it gives us a misleading picture of reality and our own selves." (Guignon 2002, p. 86) Heidegger, instead, is interested in enacting, re-enacting - or at least evoking - situations. The sense of a situation can be grasped by going beyond objectification or a semantic analysis: it needs execution here and now, and full participation in such an execution. One needs to dictate the Pauline Letters again, after 2000 years, to actually "understand" them.

In addition, there are more subtle differences where the claims of contemporary scholars are still the same as Heidegger's, but their implementation goes in another (usually scientific and cognitive) direction. Thus, for example, take the notion of time. The study of the temporality of the situation has a far-reaching importance in Heidegger's thinking; in *Being and Time* this leads to the exploration of the time we ourselves are. Getting close to experiencing the temporality of the early Christian communities can be regarded as one of his preparatory works towards introducing a new notion of time. In the work of Suchman and others, reference to the importance of fleeting circumstances, the moment-by-moment unfolding of action, never challenges the ubiquity of clock time. The empirical study of situated action never hints at a different or problematic notion of temporality. The clock regulates the video and audio recorders.

The distancing from cognitive science shared by the two agendas is also handled differently. While Heidegger makes all sort of efforts to stay away from epistemology and cognition, and the evidence is successfully provided by the outcome of his interpretation of the Pauline Letters, his approach evokes a situation coloured by moods and emotions in facing uncertainty and in their state of vigilance in waiting for "the day of the Lord". In contrast, the objectifying study of situated action reports the mismatches between the plans embedded in an expert system and the reasoning of novice users; it identifies sequences of instructions, communication failures, and misunderstandings between users and the expert system.

Note how the latter portrait of situated action may become an easy target for the symbol representations: preconceptions are symbols stored into "memory" and interpretations of evidence get translated

into perceptions of stimuli and their symbolic processing. Despite repeated denials, the mind and a focus on the cognitive level of ad hoc problem solving still prevail. On the other hand, the leaning towards the heart in Heidegger's phenomenological method is quite clear. In the loose sheets for his course in 1919 - 1920 dedicated to the phenomenological intuition, Heidegger notes: "Understanding - as intuition - goes along with and into the fullness of a situation... The phenomenological understanding is nothing else than an intuitive going along the meaning. It must stay close and present to the total situation of the phenomenon... Capacity to accompany - being intimate, "love". Love as motivating ground of the phenomenological understanding - given necessarily in its sense of enactment." (Heidegger 1993, p. 185 and 262) And, more generally, "The true philosophical attitude is never the one of a logical tyrant, who frightens life through his staring at it. Rather it is Plato's Eros." (ibid. 263) To be sure, Heidegger is aware of the difficulty of carrying out such a task and espousing such a method: "The first task is therefore the appropriation of the situation in which understanding is rooted; the full, concrete appropriation is by itself a task that will perhaps exceed the powers of the present generation... Those who attempt something else mistake in principle precisely what should be their aim...the pure cognition of the labyrinthine basic character of human existence." (Heidegger 2001, pp. 32 - 42)

6. CONCLUDING REMARKS

Our going back to the roots of phenomenology in order to restore the original notion of situatedness and to compare it with the contemporary debate on situated action leaves us with three main research agendas. The first, leaning towards AI and cognitive science, states that situated action can be implemented through computer programs interacting with the environment and processing symbolic representations of what happens in the environment. The second, which claims to be an alternative grounded in the social sciences (phenomenology via ethnomethodology) is based on a social ecology of the mind: goals and plans are a vague guide to action. They must be complemented by the *ad hoc* improvisations of humans exploiting the circumstances and what the world offers at the moment of action. The heart is totally missing from the first agenda. Emotions, moods are sometime referenced in a footnote, but do not seem to fit the second agenda, either, despite Suchman's (2000, p. 9) later claim to have fallen into "a classical humanist trap" in her original study. Finally, we have Heidegger's research programme, where the notion of situation includes all moments of the inner life of the actor - his or her mind *and* heart - and the location where any form of understanding is situated (meaning "affected"). It is the *pathos* that characterizes the whole person in his or her situatedness in the world. (Heidegger 2002, p. 192)

Empirically, the first agenda seeks the construction of expert systems able to interact with worlds of limited variety. The second is validated by studying routine activities within stable organizations and tasks: micro breakdowns reveal those improvisations that members of the organization are able to sport and confirm the situated nature of whatever plan or procedure they are supposed to follow. Phenomenology, however, is interested in studying situations of radical transformation, since that is where "to find oneself" in a

situation, to live, comes to the fore in a sharper way. By overcoming the current state of oblivion and neglect about key elements in its basic conceptualization, due consideration of this third, original agenda should remind contemporary scholars and practitioners that articulating situatedness in organizational analysis and interactive systems design is still going to be a challenging task, and indeed a "touchy" one.

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