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8

'Subjectifying Action' as a Specific Mode of Working with Customers

Fritz Böhle

When customers are involved, work processes are highly unpredictable and indeterminate. Customers and clients have their own interests and needs, act independently, and are not directly incorporated within the organization of service delivery. As revealed by empirical studies of ordinary work practices, indeterminate situations arise even within highly standardized forms of service interaction with customers and clients. Call center interactions provide a good example, and even these services require that employees be able to resolve unforeseen and indeterminate situations using self-directed, situational action (cf. Holtgrewe, 2001; Kleemann and Matuschek, 2003).

With industrialization arose the modern idea that work activities are based upon goal-oriented and rationally planned action. This understanding of work, however, downplays the fact that work processes give rise to unpredictable situations that must be resolved on a case-by-case basis. Empirical investigations repeatedly demonstrate that work involves unexpected situations, not only in the service sector but also in other areas such as the monitoring and regulation of technically sophisticated industrial production facilities. For coping with such unpredictability in work processes, planned, rational action is of limited utility and must be augmented by 'other' modes of working. For understanding the content and implications of such unplanned and non-rational modes of working, the team of the *Institut für Sozialwissenschaftliche Forschung e.V.* (ISF) in Munich has developed the concept of 'subjectifying action.'[1] The concept emerged in the late 1980s in investigations of how technical advances in industrial production affect the organization of work; since then, it has been further elaborated and affirmed in empirical studies of various work contexts including especially service work. The general characteristics of the

concept of subjectifying action as a mode of work are detailed below, in section 3, as a prelude to the subsequent empirical demonstration using the example of nursing care in section 4. The analysis concludes in the last section by ordering these empirical findings within a typology of the relationships linking service providers with customers and clients, followed by a reflection on the special role of subjectifying action in these relationships. First, however, let us review the characteristics and implications of the classic model of planned, rational action, and, subsequently, the increased relevance of unpredictability for general discourses of work processes.

1. Planned, rational action in work processes

The most important philosophical–theoretical formulation of work as planned, rational action stems from Karl Marx (1974 [1864]). Unlike Hannah Arendt, who differentiates between labor, work, and action, Marx does not reduce work to mere physical activity embedded in the 'cycle of nature' (Arendt, 2002: 89ff.). For Marx, work is oriented toward changing both 'external' nature and 'one's own' nature and thus encompasses not only the production of goods but also the process of self-realization undertaken by the worker in the work process (Müller, 1992: 110ff.). Marx illustrates the essential characteristic of human work by contrasting the bee and the architect. Human work is unique because 'at the end of the work process a result is achieved that was, at its beginning, already present in the mind of the worker as an idea' (Marx, 1974: 193). Human work is thus special because it is goal-oriented and planned, and because it is as a form of self-determined, autonomous action. This understanding of work is not only typical of Marx's thinking, it also dominates theories of the enlightenment and of modern culture generally. These theories highlight the fact that although work – especially industrial production – is planned, modern workers are restricted to carrying out activities planned by others. The characteristically human part of work is restricted in these analyses to the planning of action; the practical realization of work goals, however, is thought to involve nothing more than carrying out pre-existing plans and directives. Intellectual aspects of work are valued more than physical and practical skills. Planned, rational action is 'objectifying' action. It is characterized by a reasoned, intellectual regulation of action, the use of scientific knowledge and methods, and the subordination of feeling and sensation. Feeling and sensation are not totally excluded, but their apportioned role is restricted to subjective motivation and/or

satisfaction because they are thought to disrupt the efficient planning and execution of work activity.

Planned, rational, objectifying action can be distinguished from subjectifying action, described in full below, in terms of four specific characteristics. First, its *modus operandi* is based on the principle of 'think before you act.' Practical activities are carried out only after a decision is made about the ends and means of action. Practical action is planned in advance, and the better the planning, the higher the chances of successful implementation. A second characteristic involves *scientific knowledge* and *methods*. If the planning of action is to precede its practical execution, a kind of knowledge is necessary that is independent of the experience generated by practical action. This kind of knowledge is rooted in science and its logical–analytical methods. Third, *sensory perception* must be focused on the precise, objective registration and reasoned interpretation of information from the environment. This requires a separation of sensory perceptions from subjective sensations. For this purpose, visual perception appears more appropriate than the so-called lower senses of haptic perception, smell, and taste. The body's lower functions play a minor or even disruptive role and must be brought under control. Finally, the *relationship* to objects and problems that need to be solved is distanced, businesslike, and unemotional. This does not mean that problem-solving cannot be spirited and passionate, but such emotions are acceptable only as sources of motivation and energy and must be attenuated during the planning and execution of action.

2. Experience-based knowledge and unpredictability

Since the late 1980s, studies in the sociology of work have been arguing that advances in technology create new demands on the qualification of workers. At first glance, these developments seem to support the thesis that with technological advances, industrial work becomes increasingly 'intellectual.' Closer inspection, however, reveals that although specialized theoretical knowledge and abstract thinking are indeed increasingly important, this is not what constitutes the essence of new demands on workers. Rather, what makes skilled workers irreplaceable is their personal, experience-based knowledge. Skilled workers know the materials, the 'bugs' in the machines, or the layout of the production line. They recognize malfunctions as they emerge, and they know how to prevent them (cf. Pries et al., 1990; Schumann et al., 1994).

The discovery of experience-based knowledge, also referred to as specialized production knowledge or 'tacit skills,' is not recent (Hoffmann,

1979; Wood, 1986). Yet both the sociology of work and industrial practice have been guided by the assumption that technological progress implies the replacement of experience-based knowledge by scientifically grounded expert knowledge. What is new, then, is a re-assessment of the continuing significance of experience-based knowledge. It is no longer seen as a dying remnant of artisan traditions but rather as an important aspect of workforce qualification, necessary not in spite of, but rather exactly because of continued technological progress and the increased use of scientific knowledge. The reasons underlying this reappraisal lie in a similarly unexpected development: the discovery of inherent limits on scientific–technical control mechanisms. Max Weber considered the idea that 'in principle, everything can be controlled by rational calculation' to be a fundamental characteristic of the modern, scientifically influenced worldview as contrasted to the animistic and religious worldviews of traditional societies (Weber, 1988: 594). For the economist Werner Sombart, rational planning and, even more important, the creation of the conditions that enable rational planning, are among the most fundamental features differentiating industrial production from traditional artisan production and agriculture (Sombart, 1919: 34ff.). Indeed, it is undisputable that scientific knowledge, technology, and organization have served to greatly increase the scope of planning in work environments.

Despite these advances, the shortcomings of rational planning are showing up in exactly those areas that were thought to be premier examples of its unbounded applicability and success. When technical and organizational systems become increasingly complex and are subject to continual change, their workings become unpredictable. What is new and unexpected is that unpredictability emerges even in previously successful, predictable systems. Unpredictability seems always to enter through the 'back door.' The dream of total reliability and control has begun to fade, and the commonly touted contrast between the reliability of automatic systems and the risk of human error has lost its persuasive force. The unpredictability of technical processes turns out not to be the exception but rather the rule, and human intervention becomes necessary for coping with it. The underlying causes range from qualitative differences in production materials to wear and tear in production facilities to functional disruptions in technical monitoring and control systems. They result from internal developments caused by plant facilities and processes or from external influences such as inclement weather or dysfunctional front-end and back-end processes (Böhle and Rose, 1992). The concept of 'critical situations' applies well

here (Schulze, 2001: 67ff.). Critical situations arise due to unforeseeable and incalculable influences and because of 'creeping' and mutually reinforcing changes in otherwise stable processes. Studies in different working environments support the conclusion that the ability to cope with the limits of planning and the problems of unpredictability is a central requirement in all kinds of human working environments, not only in the management of highly technical systems (Böhle et al., 2004). As technology and the application of scientific knowledge become more widespread, human intervention is increasingly necessary to cope precisely with those things that escape the control of technology and science (Deutschmann, 2003: 484).

Taking this approach, the sociology of work acquires a differentiated understanding of a 'world of work' that is rarely mentioned in ordinary depictions of work processes and that often remains invisible in practice. Ironically, the more completely workers exercise control over the problems of unpredictability, the stronger is the impression that everything is functioning 'as planned.' At the same time, new forms of decentralized organization make every single employee, not just the management, responsible for ensuring the smooth operation of their firm's internal processes. This applies not only to planning processes but includes also the competence for dealing with unforeseen problems on-the-spot.

For answering the question of how best to respond to unpredictability and uncertainty, it would seem most appropriate to rely on the model of planned, rational action. Critical situations, it would seem, call for reasoned reflection and theoretically grounded expert knowledge. Similarly, the use of tested, formal processes and rules would seem an appropriate way of eliminating the risk of human error. Yet, as early as the 1950s, organizational theorists were calling attention to the fact that the conditions for rational action are often absent in practice (Simon, 1957). Typically, important decisions have to be made under deadline pressure, which precludes extensive reflection, or have to be made in the absence of needed information. Additionally, when unexpected situations arise, routine and tested processes may be more of a handicap than a help, as they make situation-specific adaptive reactions more difficult. In order to avoid a hopeless struggle for control or the fall into total resignation, workers need a 'different' mode of action that is better suited to the specific characteristics of critical situations. Because precise information is not available or is strictly limited, it is even more important to access and use other, usually not officially recognized forms of information such as noises and vibrations in the case of industrial plant facilities. Given that theoretical models cannot capture the complexity

of events under specific, concrete conditions, other kinds of knowledge and cognitive powers are needed. Under closer scrutiny, we see a different side of professional expertise coming to the fore that is normally very difficult to perceive because it appears to be an exception to what is presumed to be the rule of 'genuine' expertise and professionalism. Yet if one starts asking employees to describe precisely what characterizes those individuals who are considered to be the 'real experts' in their field, as in the empirical study reported on below, reference is nearly always made to phenomena such as having a feeling or a 'good nose' for something, making quick decisions without long deliberation, presentiment about problems or malfunctions, and reliance upon intuition in problem solving.

3. Subjectifying action as a specific mode of working

As shown by studies of how employees cope with unpredictability in different work contexts, intuition and feeling are necessary precisely in problematic situations that could not have been anticipated or controlled using scientifically grounded, expert knowledge and rational planning alone.[2] These studies also show that having the right intuition about technical processes, presentiment about malfunctions, or the ability to make decisions intuitively are based on a specific way of interacting with the objects and parameters of the production process. It can be described as 'subjectifying action' and thus contrasted to planned, rational, objectifying action. To call it 'subjectifying' underscores the cognitive and pragmatic significance of so-called subjective factors such as feeling and sensation. It also calls attention to the fact that the objects of work are perceived to 'behave like' a 'subject' in the sense of not being fully predictable and controllable. Sensory perception and personal intention to experience something play an important role as the basis for the acquisition of knowledge. In practice, workers' activities do not involve the application of scientifically grounded expertise but rather are guided by the goal of acquiring experience-based knowledge. For this reason, subjectifying action is sometimes referred to as experience-guided subjectifying action (cf. Bauer et al., 2006).

The concept of subjectifying action as a specific mode of working is an extension of analyses of work activity. It rests on the assumption that human work capacity encompasses both objectifying and subjectifying action and that both are necessary to cope with the challenges of modern work environments. The distinction between objectifying and

subjectifying should not be confused with the distinction between the worker as the 'object' of a firm's rationalization processes and as the 'subject' of self-regulated action. Nor should it be confused with the distinction between instrumental action directed to the 'external world' and subjective experiences and feelings related exclusively to the 'inner world.' Rather, the concepts of objectifying and subjectifying action make reference to different forms of (subjective) interaction with the environment including specifically the way it is apperceived, understood, and pragmatically altered. Subjectifying action gives us access to information that objectifying action filters out or cannot access in the first place (Böhle et al., 2004: 48ff.). In the sense of a moderate constructivism, we can say that these are two possible 'constructions' of reality, each based on a different point of reference and able to open different avenues for the discovery of knowledge and for action. The concept of subjectifying action is rooted in research approaches and traditions that emerged or were revitalized through research into the human effects of technology and information management. Examples include different concepts of action: situational and context-oriented (Suchman, 1987), professional-intuitive (Dreyfuß/Dreyfuß, 1986), and intuitive-improvisational (Volpert, 2003). All of these approaches elaborate the argument that intentional, goal-oriented action is possible also by other ways than rational planning. On the issue of knowledge, for example, work has been done on the concept of the body's own 'implicit knowledge' (Polanyi, 1985; Neuweg, 1999), the difference between 'knowing that' and 'knowing how' (Ryle, 1992), and the idea of context-specific knowledge of the work process (Fischer, 2000). Research by cognitive psychologists into experts and professionals also relativizes a strict interpretation of the planned, rational work model. Their studies call attention to the surprisingly broad spectrum of mental processes used by experts to solve problems such as reflection in action, heuristics, chunks, analogous thinking, and synthetic thinking (cf. Schön, 1983; Sternberg and Wagner, 1986). Finally, other important influences on an expanded understanding of sensory perception for understanding and action arise out of phenomenological theories that posit an embodied relationship to the world (Merleau-Ponty, 1966; Schmitz, 1978). These theories seek to overcome not only the purported mind-body distinction, but more importantly, to overcome the separation, rooted in modern thinking, between the objective, rational acknowledgement of the 'external world' and inwardly directed experiences and perceptions associated with feelings and sensations.

The concept of subjectifying action builds on these insights but sets new accents:

- Like concepts of situational and context-specific action, it is focused on modes of action that are intentional and goal-oriented but that obtain a concrete goal and a concrete plan of action only in the actual process of action. This mode of action can thus be influenced by sensory perception, mental processes, and relationships to the environment. Precisely these influences play a role in helping individuals cope with unpredictability in complex systems. Thus, its focus stands in contrast to standard research on expert knowledge in that it relies not on mental processes alone but rather on the connection linking mental processes with the other components of human action, especially sensory perception and the process of acting itself. Similarly, implicit knowledge is conceptualized as knowledge embedded within and dependent upon a particular mode of action.
- In contrast to the concept of intuitive-improvisational action, subjectifying action is not limited to common, routine situations. Indeed, it is especially necessary and likely to succeed exactly in those situations where problems and unusual circumstances arise. The argument is not that experts act only in this way, but rather that experts are able to use different, complementary modes of action.
- Finally, subjective factors like feeling and sensation are not only important as supports for planned, rational action, for example whenever the execution of planned, rational action depends on emotional incentives and the requirement that goal achievement be emotionally satisfying (cf. Damasio, 2000). Instead, subjective factors have both regulating and cognitive functions for subjectifying action and in this way play a role similar to reason in the context of planned, rational action.

The point of all this is not that subjectifying action involves directing one's attention to additional sources of information. The much more significant point is the scope of attention and the potential resources thereby gained: additional sources of information are looked at in a different way. The concept of subjectifying action directs attention away from the individual elements of action onto the way these elements influence each other interactively. Of central importance are the process of action, sensory perception, mental processes, and the relationship to the environment.[3]

Of foundational importance for subjectifying action is the *process* by which concrete goals and the specific plan of action first emerge during action. For outside observers, the process looks like drifting, muddling through, or 'haphazard activism.' Careful inspection reveals that the apparently haphazard process is, in fact, one of dialog and interaction. The typical statement for engineers dealing with the unpredictable elements of complex technical facilities is that 'when trying to tweak the system, you have to wait for the plant's response.' Before the intervention is actually made, it is never possible to precisely estimate its effects. This kind of approach can be described as 'feeling one's way through.' In these kinds of situations, in which unforeseen irregularities arise, it is not possible to develop appropriate and effective responses through mental analysis alone. One must, rather, find out through practical action what works and what doesn't by starting a 'dialog' with the relevant objects of the environment and waiting for them to answer. Action and reaction, decision and practical action are intertwined in an ongoing dance; this stands in stark contrast to the reduction of overarching goals into smaller, component parts as practiced in incremental, planned decision making. These qualities of 'cooperative' action in the interactive-dialogical approach can be seen also in the interaction with material objects. Engineers, for example, often describe 'fighting' or 'cooperating with' technical facilities as they attempt to reestablish an upset equilibrium.

Planned, rational action, just like incremental decision-making and planning, proceeds on a step-wise basis, waiting for a reaction to one's intervention (action) before proceeding to analyze the reaction so as to select and execute the next action. In the process of subjectifying action, however, action and reaction follow upon one another in constant flow. Action thus takes on the character of a cooperative performance or battle, with the actors constantly adjusting their actions in response to each another in one single flowing moment. They are directed by the principle that it is only possible to achieve a concrete result by 'working with' the circumstances, not by 'working against' them. Thus, success depends on learning the quirks and powers of the 'dialog partner' and on adjusting one's strategy and intentions accordingly. This should not be confused with mere reactive thinking or with a passivity that extends to the surrendering of one's own will and goals. Rather, action is directed toward the attempt to realize one's intentions in 'dialog' with the constraints and opportunities presented by the relevant circumstances.

A certain form of *sensory perception* is necessary for influencing and reacting to concrete circumstances in the interactive, dialog-oriented

manner described above. Sensory perception becomes attuned not only to information that can be precisely measured and rationally appraised in the sense of an 'objective' apperception of reality. Rather, it is necessary to perceive diffuse, multilayered characteristics of concrete circumstances and their effects. Examples include noises in technical equipment, collective moods, or subtly disturbing patterns of seemingly insignificant irregularities. In the perception of such information, subjective interpretation and feeling come to the fore, outweighing objectively definable and quantifiable criteria. Perception is focused on qualitative properties that are difficult to measure. Noises are not registered primarily in terms of their frequency and intensity, for example, but rather whether they are 'right,' 'harmonious,' or 'off.' Good engineers thus have an ear for the 'melody' of their machines. Similarly, good leaders 'feel' that organizational processes are on track or, conversely, that project implementation is on the verge of derailing. Actors often associate bodily sensations with these situations, that is, their 'gut feeling.' This gut feeling is not the result of an inward direction of one's sensory facilities but emerges from an interpretation of external circumstances based on subjective feeling and sensation. It is a subconscious process that is rarely consciously harnessed. Importantly, however, it is more than the mere result of the non-conscious, mechanical impulses of the nervous system. Characteristic of this way of perceiving appears to be a mental disposition described as 'attentiveness' and 'subthreshold perception' (cf. also Weick and Sutcliffe, 2003: 55ff.; Varela and Thompson, 1992: 41ff.).

Subjective perception based on feeling and sensation is not controlled or reflected upon by reason. This need not mean, however, that *mental processes* are neutralized and only feelings count. A person who is relying on feeling and sensation to perceive is still thinking, albeit not analytically in search of a logical conclusion. Rather, much more central are those thought processes that are embedded in practical action in the sense of 'reflection in action.'[4] Thought occurs in immediate relation to perception, behavior, and action. It is associative, based on analogy and images. From the perspective of planned, rational action, this kind of thought is of inferior quality or misleading. This, however, is an error, at least insofar as subjectifying action is concerned, for in this way, the actor calls up memories of similar situations when dealing with events that are completely new. Previous experiences are not then applied in one-to-one correspondence to the new situation, as assumed to be the case in analogous thinking. Rather, different situations are mentally visualized, compared, and distilled in order to interpret new situations

that lie outside the actor's ken. Associations do not emerge randomly. They are anchored to the same object and bounded by the subjectively experienced construct that emerges when particular conditions become situated to each other. In this way, a particular event can trigger a complex chain of associations. Further, individual pieces of information and the individual components of relevant issues are connected visually and perceived simultaneously as a single picture. Being able to make these kinds of connections is a power that resides in the subjective mind and is not inherent in the 'objective facts' themselves. Finally, in this form of visual thinking, complex situations and processes are mentally visualized 'as a film.' Information that is available through sensory perception is spliced together with imagined, possible facts that are not accessible by the senses. In short, one 'sees more than one sees.' This is how it becomes possible to create a complex picture of concrete situations from sparse and disparate information.

Analytically, there is a difference between the dialog-oriented interactive method, sensory-perception based on feeling and sensation, and associative, visual thinking. In practice, they are inseparable. Each is a pre-condition of the other and is based on a *relationship* to the environment characterized by proximity, unity, and connection. In contrast to planned, rational action, the objects that make up the particular situation are not seen as mere objects for manipulation but rather as something akin to the actor and to which the actor has a bond. Actors do not maintain a distance from the thing; they become one with it. The actor and the object together make a kind of unity. Recall the description, noted above, of dialog-oriented interaction as cooperation or battle. The anthropomorphizing of objects and their perception as something living is not irrational, subjective projection. It is, instead, a quite realistic way of describing and grasping uncertain and unpredictable situations. In these kinds of situations, material objects are not limited by normal rules and regularities. Rather, they 'behave' like free subjects whose action is not fully determined or calculable and who cannot be influenced without some minimum amount of personal interaction.

Under these conditions, effective work activity is based on the ability to engage in planned, rational, objectifying action and in experience-driven, subjectifying action as the situation demands. Coping with the challenges of work means being a master of both and being willing to use both separately or in combination. Subjectifying action is a useful and necessary option for overcoming unpredictability and uncertainty in work processes. As empirical studies demonstrate, subjectifying action

makes it possible to preserve one's capacity for goal achievement not so much by overcoming uncertainty as by harnessing the parameters it sets. This is especially the case for interactive service work.

4. Subjectifying action in interactive work: The case of nursing home care

The concept of interactive work in services[5] understands the 'object' of work not so much as an object that is manipulated by the worker but as a subject in and of itself. In this way, it gives justice to the fact that work with customers and clients is characterized by a high degree of uncertainty and unpredictability. Unpredictability is accepted as a structural element of the service relationship stemming from the fact that customers are not calculable, manipulable objects. They have their own interests, and they act autonomously and upon their own initiative in the service relationship. Even when an attempt is made to influence, control, and standardize customer behavior, the fact that the object of service work is really its own subject can never be fully neutralized. Moreover, service work for customers is dependent on influences that originate outside the workers' organization and sphere of responsibility to a much greater extent than in the case of industrial production and administration. Challenges and problems that require resolution are either brought into the organization 'from the outside' as in the example of stationary health care, or they must be engaged with outside the workers' actual organization, as in the examples of ambulatory nursing care. Finally, personal bodily services like health care and nursing are special because they involve work on the human body, which, as a living organism, cannot be controlled or manipulated like an inanimate object. In the following passages, subjectifying action in work with customers is described empirically using the case of nursing care, a prime example of work involving the human body.

In contrast to sentimental work (Strauss et al., 1982) or emotional labor (Hochschild, 1983), subjectifying action is not only directed at increasing customers' and clients' sense of well-being as an additional goal that runs parallel to workers' central purpose.[6] It is directly applicable to the core content of service work.

The work introduced below builds on studies showing that nurses possess a unique, experience-based knowledge, the 'knowledge of familiarity' (Josefson, 1988), and that the main channel of communication and interaction between nurses and their patients is not symbolic speech but rather physical and emotional empathy (Groß, 2001; Uzarewicz and Uzarewicz, 2005). Moreover, existing studies point out that deviations

from prescribed routines do not occur due to deficiencies of training; they are instead actually typical of nurses who are considered especially experienced and competent (Benner, 1994).[7] For nurses, the specialized knowledge acquired in training is of course very important, indeed irreplaceable. At the same time, however, nurses repeatedly emphasize that their specialized knowledge is just the beginning, an initial basis. Good nursing, they say, requires additional knowledge based on *professional experience* to be gained only through work interaction with resident patients: 'To know, to feel what is important for this resident right now, I need experience in my profession and experience with the resident.'[8]

Experience-based knowledge encompasses, first of all, intimate familiarity with the resident patients, including, for example, their physical limits, their needs, or their moods as indicated by these example statements. 'We of course learn that they must drink, they must drink, they must drink, but when I know that someone prefers to drink more in the afternoon than in the morning, then I don't have to worry in his case in the morning that something might be wrong when he doesn't drink.' Or: 'We have one patient who is always in a bad mood on days when he has visitors, but I am used to that and know what the problem is. On visiting days some patients are simply always deathly ill so that on Wednesday I know, tomorrow is Thursday and she's going to be feeling poorly tonight, without having to panic – look in after her, of course, but just know.' However, experience-based knowledge is not just an aggregation of individual experiences into a 'trove of experience.' Instead, 'it is simply a certain kind of knowing, a knowledge that is based on my experience as nurse, experience that I gained on the job, things that I experienced, saw, felt, or simply was a part of.'

Experience-based knowledge manifests itself also as *knowledge gathered from having experienced particular events or situations*, knowledge that relativizes the lessons learned in training and that enables nurses to make specific decisions for individual cases and concrete situations.

> Experience is thinking out of the box. For example, not every stroke case is the same. Of course, all strokes are a stroke in the sense of being the same diagnosis, and all strokes have some identical symptoms. But every person who had a stroke is different. This is where experience helps, as I see not just the set of symptoms but also the person. I'm experienced enough, now that I've taken care of ten stroke patients, to know that not every stroke is the same.

Using the concept of subjectifying action, two arguments are elaborated in the following passages. First, nurses integrate experience-based

knowledge, which is based on a specific method and relationship to the relevant objects of work, into their overall work structure. Second, habits of perception that are body-oriented, utilize all the senses, and are tied to subjective sensations play a special role in this process as a basis for knowledge and action.

4.1. Unpredictability

Nursing care for the elderly is work that is heavily dependent on specific events and situations that are very difficult to anticipate. In this context, forms of unpredictability emerge that are common, also, in other kinds of work environments. For example, administrators call and expect to receive immediate oral or written information, physicians come by, relatives request visiting time, or new patients arrive – all without advance warning. At the same time, a major difference between nursing and production resp. administration work is the fundamental indeterminateness and unpredictability associated with the subjective, human character of their 'objects of work.' Humans are living beings, react in unpredictable ways, and have feelings and personalities. And they have bodies that are only partly manipulable, unpredictable, and of limited strength. In elder care, nurses also have to deal with additional problems of overall physical and mental constitution. Some residents are only partly mobile, some are completely immobile or suffer from chronic pain. Some residents cannot communicate well verbally, and some suffer various degrees of dementia.

4.2. A dialog-oriented interactive method

In order to deal with the challenges associated with their very human 'object of work,' where success is defined as the efficient delivery of high-quality nursing care to elderly patients in both process and result, nurses are guided by the principle of *flexible planning*. This sets a loose framework only, with relatively few fixed points. In all the study's nursing homes, a daily schedule determined, for example, the times for basic care (washing, combing, dressing, etc.) and meals. A weekly plan regulated non-daily activities such as showering, bathing, and therapies. Although they are guided by the schedules, nurses reported that they *make adjustments for particular situations and contexts* as needed:

> Despite [the schedules], no two days are ever the same. Every resident is different and every individual resident is different from one day to the next. Even just the way I wash this or that patient, what the one patient can do on his own and what I have to assist him with, and

> how I motivate or activate one patient or another. And even these things are not the same every day. It varies depending on how his day is going or his mood.

Of central importance here is that individual work tasks and activities vary only minimally in terms of content and goals. To the outside observer, they thus seem to be relatively highly standardized or to lend themselves to a relatively high degree of standardization. Yet their execution actually requires permanent adjustment to varying situation-specific conditions, although the necessity of utilizing a situation-sensitive procedure does not result from the complexity of constantly changing work demands, as is the case for innovation and management activities. Moreover, despite a widespread perception to the contrary, situational and context-specific nursing procedures are necessary not only for exceptional circumstances as when a resident suffers a fall ('the patient then needs immediate help and I have to forget everything else') or is dying ('I try to ease his last hours, I sponge him, moisturize him, whatever he needs; and I can't leave him alone the whole time, I hold his hand from time to time and talk to him'). Nor does it consist 'merely' of taking residents' preferences, habits, and peculiarities into consideration. Rather, it is precisely the routine, daily nursing care activities such as washing, showering, moisturizing, food service, etc. that are subject to unexpected changes arising from the ever-changing physical and mental states of residents, and these changes make situational adjustment to recent events, to current moods and reactive states necessary:

> 'I have one patient who always wakes up first. One day I might see that she needs to walk around because she's nervous. She leaves the room and can go to the bathroom outside while I make the bed, etc. Another day she's happiest having me set her on the toilette in her own room early in the morning.' Or: 'You might know how this or that patient likes to be washed, but one day his joints might be much more stiff, and on another day he may be experiencing pains here or there, and then you have to do everything differently. And if he also has a problem articulating himself, then I have to use his reactions as a guide to see, note, sense what's wrong today and how we can get the job done as best as possible.'

Good nursing care is thus characterized by a *dialog-oriented, interactive procedure* in which the planning and execution of action are closely intertwined. Activities such as washing or routine hygiene are planned, but they must be executed step-by-step, in consideration of the resident

patient's physical condition and mood and in interaction with the resident in some form of verbal and/or non-verbal dialog depending on his or her capacity to communicate. The nurse must be attuned to very subtle signs and reactions and use this information to continuously formulate a new reaction in finding the right way to take the next particular step. This requires, in the words of one nurse, 'a special sensitivity, a willingness to figure out and try different things,' which can be described as an 'explorative method.' The following example illustrates this in greater detail:

> The question is why is this resident not eating? Is he not able or not willing to eat? Is he simply not able to raise the food to his mouth today? If he cannot swallow, why not? Is he unable to swallow at all, can he control his swallowing? Do I have to insert the spoon on the left side of the mouth or the right side, or how do I have to insert the spoon, does he have to be able to feel the spoon so that the reflex is triggered? Those are all very different little things, all of which are very individual.

In elder care, work on and with the body is also a form of communication that aids the nurse in figuring out the right approach for the current situation. The communication that takes place during bodily care serves to activate the resident's active participation in the work process. The goal is to work together harmoniously to accomplish caretaking tasks and, for the nurse, to avoid responding ineffectively when a resident resists care: 'working as a partner with the resident, I can't do it without him, that's obvious. We are both happiest when we work together and stick together.'

4.3. Sensory perception based on feelings and sensations

An important foundation for the procedures described above is a multilayered sensory perception attuned to the multitude of information typical for elder care, that is, information that is *not measurable, definite, objective, or easily interpretable.* Only a small part of the nurse's task of information gathering involves obtaining numbers, values, or other forms of objective data, as in the measurement of patients' temperature, blood pressure, or blood sugar levels. Sensory perception becomes *nonverbal communication* through interaction, especially when it involves things that are difficult to verbalize, such as pain or psychological and emotional agitation, or when patients cannot clearly express themselves verbally. 'Communication is verbal and non-verbal. Eye contact, eye

contact and touching, sign language, facial expression, eyes, hands, arms. The whole day long.' Yet even verbal communication is at least in part ambivalent:

> Verbal communication still occurs, but usually it is not a matter of the words, not for all of them of course but for most, but rather of the melody or tone. And of course also of facial expression and gestures to a great extent.

Even *visual perception* is highly *differentiated* and links together multiple visual impressions:

> 'I observe attentively, notice changes in facial expression, gestures, posture, and language, and then draw my own conclusions.' The basis of nursing care activities, however, is a complex sensual perception that combines several senses in the collection, checking, and evaluation of relevant information: 'The patients usually send out lots of information. What I need is a mixture of everything, seeing, hearing, smelling, touching, and feeling.'

Beyond seeing, the so-called *lower senses* of hearing, touching, and smelling play an important role: 'I can tell if a patient is feeling poorly or is about to fall by the way his steps sound when he walks. The sound is different – wwwrrrt, not wrt, wrt, wrt – yes, and then he slips.' Or: 'I can tell by the sound whether it is an asthma attack or a cold. Because I have a lot of information about the resident, it all comes together so I just know.' Even the absence of familiar sounds can be important:

> 'Mrs. H. hums the whole day long. When she doesn't hum, when you don't hear anything, something is wrong.' Or: 'When a patient who uses a wheelchair leaves the station, you sense it. Suddenly you don't hear something you've been hearing the whole time, and then you know you need to check into it. Somehow you suddenly hear the silence, like with small children, and that's when it can be dangerous.'

Touching, too, can yield valuable information about the physical and mental constitution of a resident: 'By touching I obtain information, is he cold, warm, dry, moist, slippery, pleasant, unpleasant? Does he have a fever or not, is he sweating? That works much faster than a medical thermometer and it lets me rule out some things and find out others.'

Touching and feeling is also a means of emotional communication with the resident: 'Touch, in order to feel how he is doing – and to show emotional warmth.'

Even smell is important in elder care. The basic principle is that 'every resident has their own smell.' What grabs a nurse's attention and triggers activity are 'really unpleasant smells that indicate illness, for example halitosis as the result of a stomach ailment.' Smells can also explain behavior: 'You can smell it when asparagus was on the menu. Then you know that the resident probably will have to urinate more frequently and that you don't have to be annoyed that he just went and you know that he'll probably have to go again a couple more times.' And smells can determine the way a certain activity is carried out:

> Wounds smell, too, of course. There are different kinds: soiled, unclean, pus-filled, and others, they all smell different. I treat each different kind differently, how often I change the dressing, what kind of bandages I use depending on whether the doctor gives me other materials.

Sensory perception is *connected to subjective sensation and feeling*: 'Looking at 23 residents and sensing what's important.' Or: 'I see and feel at the same time whether the pressure I apply while I'm moisturizing is pleasant or not, whether for example he becomes more calm or more restless, more relaxed or more cramped.' Sometimes nurses override their own sensibilities:

> My back is definitely telling me that I cannot lift Frau L. in and out of the bed any more today. But I see that she needs it and do it anyway. Yes, and then she breathes a sigh of relief and then I don't really feel my back any more.

4.4. Associative, visual thinking

In the interpretation of perceived information and in deciding which caretaking measures are necessary at any particular juncture, which are appropriate, and how they should be done, *thinking* often takes place *in images* or in *associative chains*. Importantly, the representation and activation of knowledge in any given situation is always related to perceptions and to the experience of particular situations, as illustrated by the following quote:

> I compare with earlier experiences. When for example I am looking at a wound, I think, what kind of ointment did we use for

> Mrs. So-and-So, this is what we need here. And then we look into the documentation, even of patients who have passed away, because sometimes the treatment occurred in the distant past and I don't remember all the names. I see a picture. I see the wound, how it looked, and I see the ointment. And I know that it was good, that it helped.

In this kind of thinking, subjective sensation and feeling is not neutralized or disruptive. The opposite is the case: 'Figuring out the problem is a mental seeing and a gut feeling.' Feeling in this sense does not refer so much to an emotional state as to a method of discovery and judgment in the sense of a sensitivity for shades and nuance. Feeling also plays a role in evaluating decisions: 'A decision is good only when it gives me a good feeling.' Feeling helps the nurse know whether a particular decision or the situation it created is 'right' or not. Yet, thinking based on personal feeling and knowledge based on personal experience should not be equated with subjective arbitrariness. Rather, reasoning processes are refined and developed further in interaction with colleagues, as one nurse described:

> When I pass on my observations and interpretations, and the second or third person does the same, than it's no longer subjective and you can come to the right conclusions, I think.

4.5. Emotional warmth and personal attachment

The work procedures described above are rooted in a personal and emotional relationship to residents. This statement refers not to an emotional tie, but rather to emotional warmth and familiarity with the resident as an 'object of work.' Only if such a relationship exists can the nurse know and respect the resident's habits and particular physical traits. And only if such a relationship exists can the nurse perceive and react appropriately to the constantly varying needs and daily changes in the resident's physical and mental constitution. Of critical importance for a relationship of emotional warmth and personal attachment is *empathy*:

> It is important to empathize and feel sympathy. For example, a crisis situation is something quite different for an elderly man than for me at this stage of my life, because he doesn't have the same level of energy, so there are many things he cannot take care of by himself. For example, a dentist's appointment can cause a crisis because

> the resident doesn't know how he is going to get on the chair or something like that. We could say to him: no problem, we'll figure it out, why worry?, we'll do everything. So I could respond that way or I could try to sympathize with what he's going through so as to respond to his needs better.

It is important to know and respect one's personal limits in order to avoid emotional burnout, to protect one's integrity, and preserve one's work capacity:

> I empathize and try to imagine how bad it is or how I would feel in the same situation. But I don't identify myself in the sense that . . . I have to limit myself, set boundaries, so that I see the other person but I remain myself and see myself, too. So each person has and keeps his own personality – and we are equal partners.

The resident as an 'object of work' is not perceived as an object but is recognized as a human *subject* and accepted as an *individual*:

> 'When I think about it, I imagine that this lady was as independent as I am just a few years ago. And now she cannot even undress. Then I don't just see a part of her but the whole person. I see her as an individual and then I treat her in a very different way.' Or, in another nurse's words: 'Accepting a resident as an individual is very important, even if he cannot speak anymore. That my needs are not the measure of all things, that you really make the effort to see and accept the other person, without denying or forgetting yourself. That works only in mutual cooperation.'

The resident is also seen as a *partner* in the achievement of common goals. This applies also to completely immobilized and inactive residents:

> Seeing the resident as a partner even if he can only lie in bed and cannot do anything, in this case you really have to be careful not to turn him into an object.

5. Customer relation types and subjectifying action as a specific mode of working

Nursing care is an example of a service that applies directly to the mental and physical constitution of the customer. Such services are thus

often called personal services or direct personal services in contrast to material services such as banking, insurance, transportation, or technical assistance; in the provision of material services, the service activity is linked both to a material or immaterial object and to interaction with customers.

There are three different types of relations between service providers and customers: exchange relationships, management relationships, and handling relationships (cf. Böhle, 2006).

Nursing is a form of *handling relationship* because the customer is an immediate 'object' of the worker's manipulation. This is also the case for medical treatment or beauty services such as hairdressing. Similarly, in consulting or training, the customer is an immediate 'object' of the worker's manipulation. The service provider 'processes' either the physical constitution of the customer or their skills and behaviors.

An example of a *management relationship* is provided by any technical service, such as machine-tooling, rendered by a subcontractor for the contracting customer. In this case, the customer performs 'like' an employer or manager who assigns a job and who is responsible for making sure the service is delivered. A management relationship is created also when customers are integrated into the organization of the service provider. The customer must then honor the rules of the service organization and follow its directives. This occurs, for example, when a technical service cannot be provided 'on site' but must be undertaken within the service organization and, accordingly, specialized equipment has to be delivered for the service provider's use. The example of nursing shows that in personal services, service providers and customers are always also in a management relationship in addition to being in a handling or processing relationship. There is a difference, however, between stationary and ambulatory care. In both cases, the same kinds of caretaking services are rendered and both give rise to management and processing relationships, but the intensity of the management relationship differs. In stationary care, the customer is integrated into the service provider's organization; in ambulatory care, the service provider enters into the 'organization' (the household) of the customer.

A third form of relationship between service providers and customers is the *exchange relationship*. Sales activity is a prominent example. In contrast to the asymmetric management relationship, the relation between service providers and customers is egalitarian, in principle at least. The exchange relationship is thus often held out as best describing the reception of services in the role of 'customer' as opposed to the reception of services as a 'person in need of care' or a 'manager.' The relationship

between service providers and customers can be one of pure exchange, for example in the sale and purchase of material and immaterial goods. It can also be a mixed relationship of exchange *and* management, for example in the sale and purchase of repair services 'on site,' as in the case of medical care or beauty services offered on the market. The concept of interactive work focuses attention on the need for cooperation between service provider and customer (see Margit Weihrich and Wolfgang Dunkel's chapter (Chapter 4) in this book). Considering the different types of relationship linking service providers and customers, however, we see that interaction and cooperation in customer and client relations are not an inherent part of the relationship at its outset but rather that they have to be created within the service process and that precisely this task is a core element of interactive work. The exchange relationship is not based primarily on cooperation but rather on different interests and mutual autonomy; the management relationship is based on power asymmetry; the handling relationship is based on a more or less one-sided manipulation. In light of these structures, subjectifying action in the work with customers is oriented not only toward overcoming unpredictability but supports also the creation of cooperative relationships. It is a mode of working by which the worker establishes a warm, personal relationship with the object of work; the worker then accomplishes tasks or resolves problems together with the object rather than by one-sided manipulation. Clearly, then, subjectifying action is all the more possible and likely to succeed to the extent that the relationship between service provider and customer is characterized by cooperation and thereby molds or transforms through practical action the relationships of exchange, management, and processing. From a broader perspective of social science theory, the question becomes whether and how it would be possible to organize services and service work within different institutional frameworks (market, organization, etc.) such that a substantial cooperative relationship is established at the outset of service delivery and need not only be worked out during the actual provision of the service.

Notes

1. Examples of our work are cited in note 2.
2. Relevant empirical findings range from studies of machine tool operators in industrial production in the metal industry (Böhle and Milkau, 1988; Bolte, 1993; Carus and Schulze, 1995) and of monitoring and regulation of complex technical systems like those in the chemical industry (Böhle and Rose, 1999; Bauer et al., 2006) to the piloting of aircraft (Cvetnic, 2008), to highly abstract

activities in computing (Pfeiffer, 1999, 2004), social interaction in the service sector (Böhle, 1999; Böhle and Weishaupt, 2003; Pfeiffer, 2004; Dunkel, 2006; Koch, 2010), and cooperation and communication in the technical development, planning, or management of projects (Meil et al., 2004; Porschen and Bolte, 2004).

3. For further elaboration on what follows see also Böhle, 2009.
4. On this topic see the discussion in Schön (1983) and Volpert (2003). Here, too, the immediate connection between doing and thinking is put forward in opposition to the guiding principle of 'think before you act,' but without any further elaboration. Schön, however, indicates that this form of thinking must be comparable to the state of concentration of jazz musicians engaging in improvization.
5. See Margit Weihrich and Wolfgang Dunkel's chapter in this book (Chapter 4).
6. As Brucks shows for physicians, for example. Physicians' sentimental work is limited to reducing angst or creating trust; their professional diagnosis and treatment, on the other hand, is fully consistent with planned, rational, objectifying action (cf. Brucks, 1999).
7. Our studies also confirm the special role of experience-based knowledge.
8. The following empirical findings are taken from an interdisciplinary research project on the work of interaction. The project included four nursing homes and investigated subjectifying action, sentimental work, and emotional labor (Böhle and Glaser, 2006). Detailed descriptions are taken from Böhle and Weishaupt (2004). Additional material can be found in Böhle (1999), Böhle and Weishaupt (2003), and Weishaupt (2006).

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