
Dr. Karim Benammar
CONSCIOUS ACTION
THROUGH CONSCIOUS THINKING
Reflection Tools in Experiential Learning
head
Starting from positive experiences
heart
guts
Hogeschool van Amsterdam
Amsterdam University of Professional Education
The creative act: thinking out of the box

HVA PUBLICATIES

Conscious Action through Conscious Thinking

Reflection Tools in Experiential Learning

Dr. Karim Benammar
Associate Professor 'Reflection on Action'
Educational Research and Development
Hogeschool van Amsterdam

Lector Reflectie op het handelen
Stafafdeling Onderwijsresearch & Ontwikkeling
Hogeschool van Amsterdam

Public Lecture
Delivered in Dutch as 'Bewust handelen door bewust denken - Reflectietools in het leerproces' on September 17, 2004

Hogeschool van Amsterdam

The writer Primo Levi, working as a chemist in his first job after the Second World War, is given the task of finding out why batches of paint have livered, that is, turned solid. He suspects that the chromate in the mixture is too basic, but finds that all quality control slips for the last years dutifully list a value of 29.5, a level at which it is suitable. The constant value of 29.5 in itself is an 'abomination', however, because variations in the testing and the reagents should always produce fluctuations. Levi subsequently discovers that the testing procedure calls for adding 23 drops of reagent, which is a puzzling number for two reasons: first, we do not measure drops with that level of precision, and second, it is such a large amount of reagent that it floods the testing procedure, rendering it useless. Levi searches in the archives for the original testing procedure card, which reads 'add 2 or 3 drops', with the 'or' rendered nearly illegible by a smudge. The fatal procedure now falls into place: the incorrect transcription of a dosage of reagent from one card to another leads to an excessive amount of reagent being used; this falsifies the testing procedure; and tainted shipments of chromate cause the livering of the paint.[1]

This story is of course remarkable because of the investigative zeal of the young researcher, for his insistence in finding the root cause of the problem by asking 'why' several times. As such, it is a textbook example of both the delight of scientific investigation and the importance of finding root causes in production processes. But I am fascinated by the worker who, year after year, added exactly 23 drops to the mixture without asking himself or others as to the reason for this peculiar directive. I am intrigued by the quality control specialist who, year after year, put his signature to innumerable batches with an identical test result of 29.5, a result too good to be true. This comfortable repetition of one's experience constitutes acting without awareness.

Every instance of these actions reinforces and compounds the mistake. If we use incorrect assumptions, if we are misinformed, or if we follow an erroneous method, we will act wrongly without being aware that we are doing so. In order to learn something from experience, we must reflect on what the experience means to us. We must know *why* we act. The danger inherent in acting unconsciously is that we find ourselves as professionals in

1 - Levi 1986, p. 147-159.

the field using methods we do not understand, following rules we do not question, and acting without considering the consequences. We are also unable to make proper judgments if we do not act consciously.
Unreflective action may often lead to satisfying results, but we cannot *learn* anything from it. Unreflective action is never innovative. Were we to find something new by accident, we would not be able to recognize it as such. The new result would be perceived as an anomaly in our conceptual framework, and consequently discarded. We are simply not aware of anything new if we do not think things through. Without reflection, there is no insight into the 'why' of our actions. Without insight, there can be no discovery.
This paper tackles the following questions: What is it that I am doing when I reflect? What is the structure of my thinking in the process of reflection? How can reflection be provoked and stimulated? How can it be integrated into the learning process in experiential learning? Finally, what are the areas in which reflection plays a major role in our lives? My analysis of the structure of the reflective process presents us with a string of paradoxes. The first is that we need to withdraw in time and space from the action in order for reflection to allow us to be more fully present. The second is that reflection depersonalizes our experience in order to make it more truly our own. The third is that reflection exercises are straitjackets, which allow our thinking process to be truly creative and free.

What is reflection?

Reflection is quite simply a form of thinking.[2] To reflect is to think with a degree of awareness that one is thinking. When one thinks, one can be totally involved in the process, conceptualizing experience, perception, or action. Reflection is a more leisurely thinking: it involves reconsidering our experience and re-evaluating our actions. Reflection includes an awareness of thinking, and engagement with the process of thinking itself.
In our everyday language, this distinction is shown by the differences between the words *thinking* and *reflection* in English, *penser* and *réfléchir* in French, *denken* and *nadenken* in Dutch. The English and French root *re* indicates the repetition of the act of thinking, and that reflection is in some

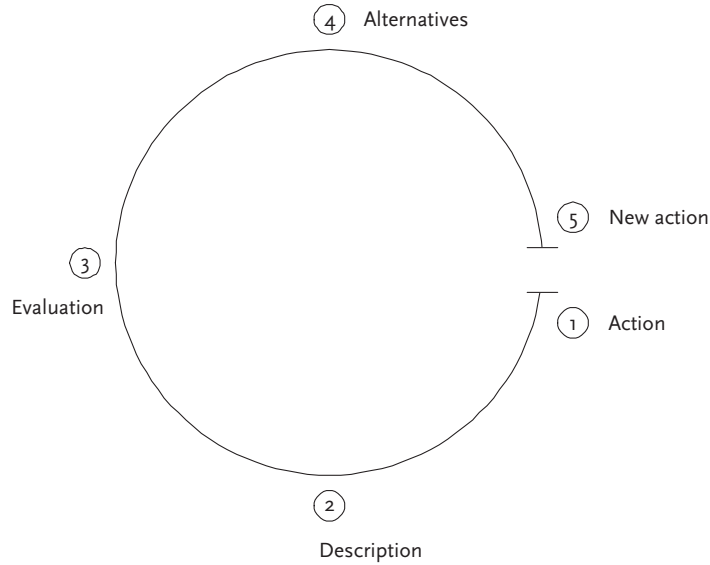
2 - John Dewey defines reflective thought as 'active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends' (Dewey 1910, p. 6).

way *about* thinking. The Dutch *na-denken* indicates that reflection occurs after the thinking. When one reflects one thinks again, one thinks about one's thinking, and one thinks after thinking.
We define reflection as the act of reinterpreting knowledge and experience. Reflection thus involves both the experience one has had and the knowledge about that experience, including the presuppositions involved in that knowledge. We turn our raw experience into knowledge about that experience. In reflection we are interpreting experience *as* knowledge and knowledge *as* experience.
The immediate goal of reflection, then, is to gain insight into one's actions, one's convictions, and into the process of thinking itself. We use reflection in education as part of the learning process. This can take the form of reflection on experiences in training, on methodological assumptions, or on the ethical and societal context of our actions as professionals. We define experiential learning for the purpose of this paper as a learning process which starts from lived experience. Some forms of experiential learning used in higher professional education are project learning, action-oriented learning, and internships. While the process of reflection also applies to theoretical learning more prevalent in universities, the reflection tools outlined below have been developed to be implemented in experiential learning.

The most basic form of reflection is circle reflection:[3]

3 - This form of circle reflection has been used extensively in The Netherlands in teacher training education, where it is known as the Korthagen circle.

Figure 1
Circle reflection



1. The starting point is the action or experience we wish to reflect upon.
2. We take a step back in order to describe the situation.
3. We evaluate what happened, what we had sought to achieve, and what we have in fact achieved.
4. We develop alternative modes of action.
5. We put these alternative actions into practise, creating a new starting point for reflection.

Stepping out of the process

The first characteristic of reflection is that it involves taking distance in time and space from the experience; we stand back from the process in order to observe it. The usual unreflective thinking process follows set patterns. This process leads the thinker in making sense of experience, in linking experiences according to well-worn patterns. Reflection adds distance in time and space to the unreflective thinking pattern.

By taking time to reflect on the situation, one takes oneself out of the immediacy of the action. The experience becomes fixed in a closed-off time, is seen and evaluated from a different time-frame. The act of reflecting occurs outside of the usual flow of experience. In fact, we often need to shut ourselves out of the flow of outside experience in order to concentrate. The experience that is being examined can thus be seen *as a finished whole,* its structure can be analyzed, questioned, and evaluated.

Reflection also demands distance in space. The space of action is placed aside; one withdraws from it. By taking distance the reflecting subject is able to loosen herself from involvement in the experience *as* a subject. Each moment of experience and each action contains a personal element: the subject is engaged. The actor and the action are entwined. By disassociating the reflector from the actor in the reflection process, we attain a measure of objectivity. One has to imagine this process spatially: one takes a few steps back from the action in order to look at the experience from many different angles. We take distance from the action, from our own participation in the heat of the moment, and thereby from our own habitual, unreflective acting. In the reflection process, we are looking at our action again *as if someone else had done it*. By observing the situation from the outside in time and space, we are no longer just a subjective participant, but we also become an objective observer. Becoming the observer of a process in which one was the actor brings about an objective view, entails seeing oneself *as if one was someone else*. The reflective process requires this depersonalization. Paradoxically, as we will see later, depersonalizing the experience will enable us to make it more truly our own, to become more authentic in our actions.

One has first to imagine that someone else did it to gain insight into how it could be done differently. There are different methods for this depersonalization process, in which one takes the point of view of someone else. Observing one's acting from an outside position leads to a greater degree of awareness, of conscious acting. One strives to attain the double experience of observer and actor.

The experience one wishes to reflect upon can also be acted out by a group in order to make it more vivid for all involved. The reflector can take different roles besides her own so as to experience the situation from different perspectives; alternatively, she can observe the situation from the outside as an objective observer. The involvement in a different role allows the reflector to step into someone else's shoes for a while.

By taking distance in time and space, we can make the action conscious, even if we do not change our behaviour. The actor knows what she is doing while she is doing it. This process resembles that of cultivating the observer in Buddhist meditation. We practise observing the stream of thoughts, impressions, judgments, and emotions that well up when we sit still, but we learn not to react to them. After a while we develop an 'observer' faculty, so that we can witness our actions while we are carrying them out.

When one takes a step back, one depersonalizes the situation in order to break a pattern of behaviour. From a different vantage point in time and space, action can be seen in its impersonal totality. This affords us insight into the situation. This moment of rest is the moment in which evaluation and assessment take place. Then alternative modes of actions can spring from the creative mind of the reflecting person because the connection to the acting subject has been loosened. With this analysis done, one can step back into the circle of action.

The creative act: thinking out of the box

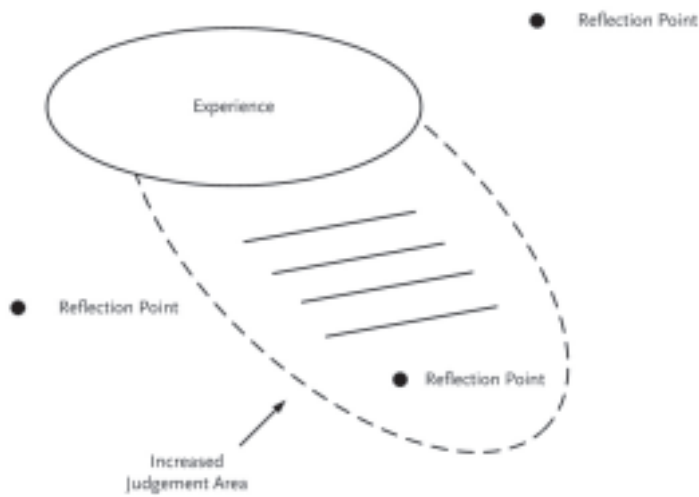
Once one has achieved an objective overview of one's actions as if one was someone else, one needs to change habitual behaviour. A truly creative step is required. Our thinking pattern needs to be disturbed in order to think outside the box. *One needs to be pushed outside the box*, quite literally. Because we are so used to thinking in our usual patterns, we need a method to think differently. We need tools to guide our thinking pattern.

Trial and error is the simplest form of inducing new behaviour. The trial and error process is almost never random, of course; otherwise it could not be applied to any situation with more than a few possibilities. Instead, trial and error is usually guided by an intuitive process which is seldom made explicit, by hunches, or by applying behaviour learned through experience. While trial and error may appear to be a rather unsophisticated method, it at least offers new behaviour. Without realizing it, we are often stuck in the endless repetition of things that do not work. We try something, and when it does not work, we try it the same way again.

While the unconscious aspect of the trial and error method can lead to satisfying results and even remarkable breakthroughs, we are usually not stretched out of our mental comfort zone enough to try something really novel. Moreover, because the trial and error process is seldom explicit, it cannot be guided and implemented in an educational setting. Instead, we are looking for a more structured and focused approach to changing the patterns of action. Mentally, we need to be jolted in some way to experience a liberating 'Eureka!' Emotionally, we need to come to a realization of what different behaviour would really mean. How, then, is creativity released in the reflection process?

Several types of reflection exercise use the input of external observers. In point reflection[4] we start by describing our experience. The people who listen to us get a schematic representation of our situation, without the emotional involvement. They are observing from the outside, seeing the reflecting person as one of the actors. In point reflection the outside observers each contribute one concept which they believe we should include in our account of the situation. By integrating this concept from outside of the immediate field of the story as we relate it, we are broadening our perspective to include these points of view. While we are making use of the insights of outside observers, we have to make the step of including this new perspective. By including the reflection points in the retelling of the story we integrate that additional perspective into our experience.

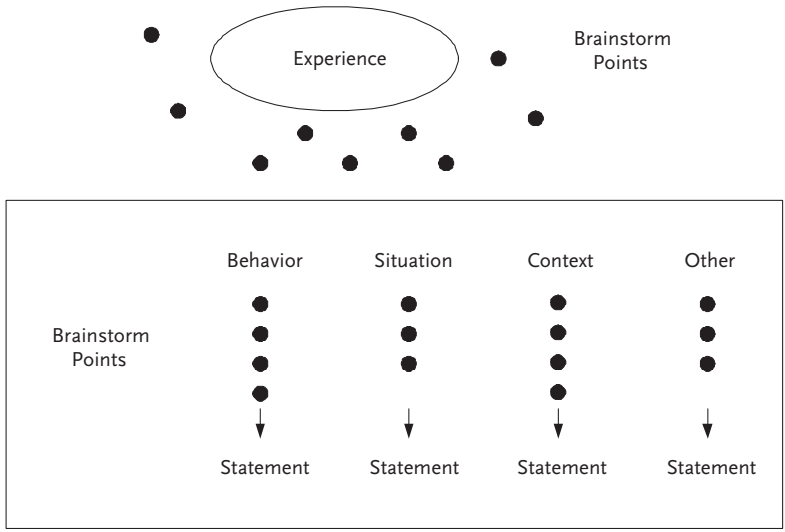
Figure 2
Point reflection



4 - Adapted from Procee 2004.

Reflection through brainstorm and reflection with metaphors are versions of point reflection.[5] In reflection through brainstorm, different points of view are generated intuitively by a group of sympathetic listeners, and are then ordered into categories by the reflector. It is a more holistic and comprehensive form of point reflection.

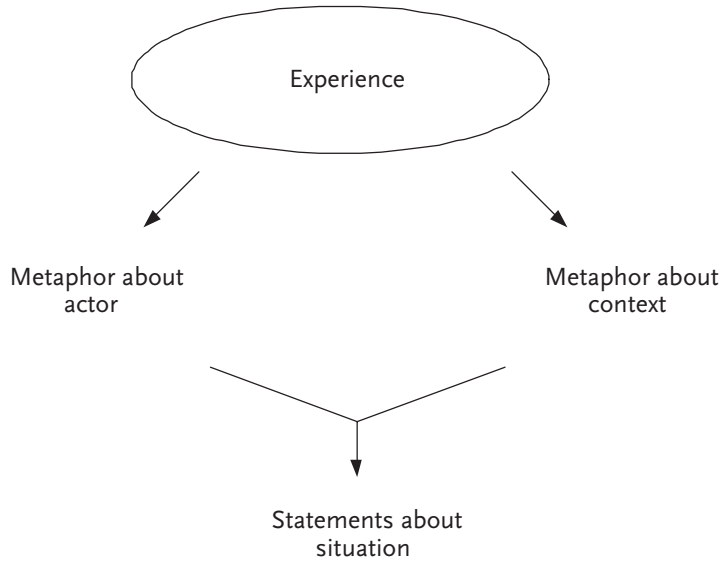
Figure 3
Reflection through brainstorm



In reflection with metaphors, the person reflecting and the situation they are in are described by the group in terms of two metaphors. The interaction between these metaphors is then summed up in a series of core statements which help the reflector gain insight.

5 - Reflection through brainstorm and reflection with metaphors are tools which have been adapted by Olga Wortman and Gerard Blom from Hendriksen 2002, p. 54-59 and p. 119-123.

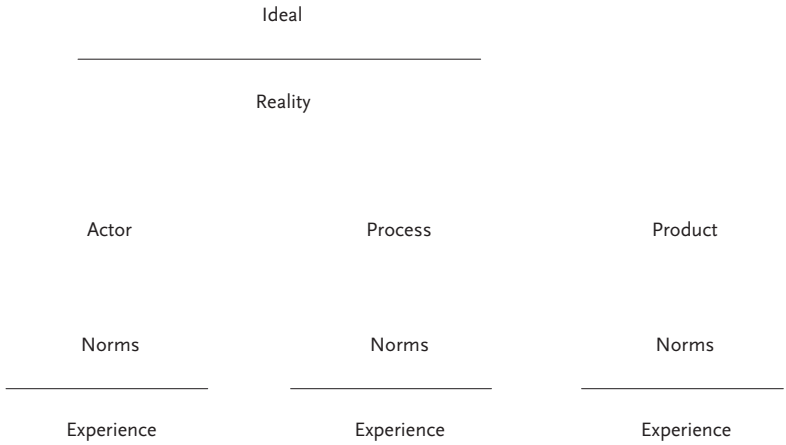
Figure 4
Reflection with metaphors



The additional insight into the situation need not come from other people's view on the situation, however. We can judge our own action or experience against our own standards on the matter. In line reflection,[6] we describe the actor, the process and the product, and determine which communal norms to accord to each of these three parts. We then test our own behaviour in reality against the standards we have set ourselves. This not only gives us insight into the efficiency or quality of our actions, but also allows us to set positive goals, and communicate to others what we set out to do, even though we are bound to fall short of our ideals in some fashion.

6 - Adapted by Victor van den Bersselaar from Procee 2004.

Figure 5
Line reflection



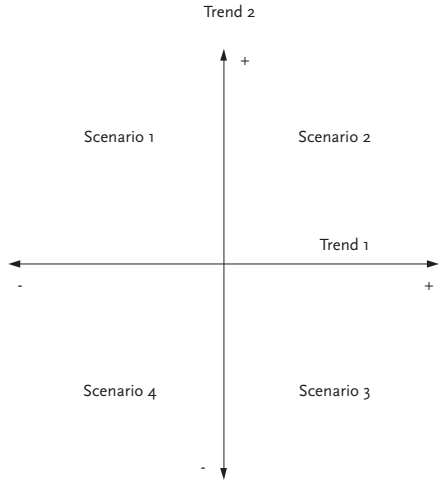
By breaking away from the pattern we think in a different way from our usual way of thinking. We learn by extending the patterns of our thought. We re-arrange our conceptual framework through reflection. Reflection tools are straitjackets that force us to think differently, to follow an artificial step-by-step process. The effect of reflection tools is paradoxical: by forcing our thinking process into a straitjacket, they set us free, allow creativity to come to the fore. The exercises prescribed by the tools are set exercises, but they liberate our creativity. We are usually not aware of the rigidity of our thinking patterns. Using a tool may appear artificial, but it forces one to do something about the acting or thinking process. This disjunction is the key to reflection exercises: separating acting from reflecting.

Reflection tools are exercises which structure the reflection process. Some tools are ways to share the insights of others, as is the case with point reflection, reflection through brainstorm, and reflection with metaphors. Other reflection tools help us in making connections between concepts in our thinking, as is the case with circle and line reflection.

The scenario method, a tool developed in business management, is another reflection tool which structures the thinking process in order to liberate creative thought. In one application of the scenario method, we map possible futures along two axes, thereby creating four possible scenarios. The decision to fix these axes according to chosen parameters *liberates* the imagination to conceive of a scenario within the framework. Otherwise, the number of parameters is too large, the uncertainty too great, the temptation for prophecy too prevalent.[7]

7 - The scenario method was developed by planners at Shell. See Schwartz 1991; Van der Heijden 1996; Lindgren and Bandhold 2003.

Figure 6
Example of scenario axes



The scenario method focuses our thinking by forcing us into a straitjacket: it releases the creative imagination within one scenario quadrant. In education, we use the scenario method to direct research methods. A possible future is mapped out through the application of the method, and students are then asked to make a convincing case as to why the future will look like this. Students carry out investigations using various methods such as statistics, media scans, and expert interviews. They learn an important lesson: *the future is open*. To their surprise, they find that very convincing arguments can be made for all four scenarios. There is not a single answer, a single interpretation, or a single truth.

A Socratic dialogue is a communal analysis of presuppositions and underlying assumptions. It is a communal search for wisdom (the essence of *philosophia*) in which the conceptual framework of the participants is laid bare. Our personal, methodological, and moral convictions are investigated in a joint effort. Socratic dialogue can be implemented in project work, which constitutes a significant part of experiential learning. It is also a very useful tool for any common undertaking in business, for management teams, and for those who share a common task.

We can use also use Socratic dialogue to deal with more specific questions in the learning process. How do we invest? What do we recommend to our clients? How do we perceive our clients? This may lead us to more fundamental questions: What is a bank? In medical training we may ask: How do we treat patients? What is the nurse-doctor relationship? What is the doctor-patient relationship? What is care? What is health? What do health-care workers believe health should be? These presuppositions are investigated and clarified for all participants through a communal effort.

Second nature: reflection-in-action and action inquiry

Reflection can be integrated into the flow of the action, rather than constituting a separate exercise. One way to achieve this is to make the reflection process continuous rather than incidental. Another way is to reflect on the action as it occurs, either through 'reflection-in-action' or through 'action inquiry'. Finally, it is also possible to combine elements of the different reflection tools to form a hybrid strategy adapted to the needs as they arise. The reflection process becomes a natural, self-regulating activity, eventually turning into semi-conscious second nature.

In order to reflect continuously, we must make the end point of one reflection circle the starting point for further reflection. Graphically the difference is illustrated by the difference between the figure of going round in a circle and that of 'taking off' in a spiral: Our experience and understanding increase through repeated reflection circles.[8]

Figure 7
The reflection spiral

8 - Korthagen 2001, p. 60-61.

The knowledge that is accrued can be the result of experiential diversification made up of reflection on different cases, which is the normal way in which experience begins to count. A more sophisticated application of knowledge can also occur through action characterized by increasing subtlety, when the straightforward but inflexible application of rules makes way for nuance borne out of repeated reflection.

Finally, the level of abstraction can increase through a spiral-like movement. Repeated reflection allows the learner to abstract from the level of the particular towards the level of the universal, from ego-centred action towards communal ethical considerations, or from disconnected experiences towards an articulated strategy. Higher abstraction reached through a spiral movement is like moving into a higher gear, in which movement has less strength but more speed. The learner who stays at the level of unreflective experience is stuck in low gear, and will never be able to get up to speed in the thinking process.

David Schön distinguishes *reflection-on-action* from *reflection-in-action*.[9] Reflection-on-action occurs after the fact, in a different time and place, which we presented earlier as one of the basic characteristics of the reflective process. Reflection-in-action, however, occurs while the action is still taking place. Reflection and action become intertwined and are no longer easily distinguished. While the reflection process may be practised by following a method and a step-by-step action plan, eventually they become integrated into our active professional behaviour, and become experiential second nature. Reflection no longer consists of steps taken outside of the process, but of conceptual change which occurs during the process.

A similar conjunction of reflection and action is experienced in action inquiry. This method consists of observing one's action while one is doing it, and adjusting one's behaviour accordingly. Part of oneself is acting, while the other is observing, reflecting, and changing behaviour. Action inquiry requires the ability to observe oneself *as one is acting*, a skill practised in meditation technique. This ability is not straightforward, however: apart from being able to observe oneself, one must maintain the awareness to do it while one is also engaged in action. This requires a doubling up of

9 - Schön 1983; Schön 1987.

perception. Action inquiry leads to an increased mindfulness, a capacity to be aware of one's experiences and one's thoughts on more than one level. Finally, reflection can become more sophisticated when the learner uses a combination of exercises and tools. The person engaged in action can apply different 'thinking tricks' at the appropriate time in the process. In order to do this, the learner must have experience and familiarity with the working of the various tools, and the ability to use them as if they had indeed become 'second nature'. Integrating reflection into the flow of one's activities leads to new ways of experiencing and learning, as well as leading to greater awareness.

Implementation in the learning process

When a teacher explains something, she presents information from different points of view, re-interprets the situation at our level, and helps us to make the thinking movement which allows us to gain understanding. The teacher has a greater overview, a greater space in which to make conceptual connections, and richer insight. More experience has provided her with a stock of events, which can be narrated as heuristic tales.

Through reflection we gain new insight into the situation, whether it is a mathematical puzzle or the interaction of historical facts. Conceptual bridges are made; there is a rearrangement in our conceptual framework. Things literally fall into place. When this happens suddenly and unexpectedly, we speak of an 'a-ha' moment.[10] The explanation is never just an enunciation; understanding only happens if there is a change in the receptor's arrangement of her conceptual framework. We cannot force somebody to understand: We have to allow her to determine the moment of rearranging her experiential framework herself.

The same is true of our emotive stance in the world. If one is unaware of the assumptions of one's personality in dealing with life (for example that one is aggressive or shy, active or passive), one will not change one's pattern of behaviour just because one is being shown this by others. Outsiders will be able to point to the pattern of our actions and to the effects it has on our professional and private lives, since it always easier to see these patterns in someone else's behaviour.

10 - Mogi 2003.

Merely pointing things out to people is not sufficient for them to become aware of their own behaviour. We can only be guided through a reflective process that is ours to make. Outsiders have different thinking patterns, different emotional involvement, and can thus help us with our thinking patterns: reflection exercises are best done in pairs or small groups. Others can point out new insights, but we have to make the thinking movement in order to be convinced. Where we spoke earlier of a mental gap in the case of understanding, we have here an emotional gap in terms of behaviour. The third centre is the will, the level of commitment and passion. Reflecting on our intrinsic motivation will allow us to harness its powers for action, but this can only happen from our own inner conviction.

Reflection can occur spontaneously, and some students have a more reflective disposition than others. In a learning situation, however, we want to *provoke* the reflection process in students, *shape* this process by the use of tools and prescribed exercises, and finally *evaluate* whether reflection took place.

Problems and dilemmas often lead to reflection by bringing a sense of urgency and a desire for resolution to the process, and are often the starting point for reflection. Of course, solving problems is part of the learning process, and a central issue in the practice of science. Perplexity is one of the elements of an inquiring disposition necessary in all learning processes. Although they are not often used for this purpose, positive experiences can also be excellent starting-points for the reflection process. Teachers, coaches, and management consultants rarely ask *why* procedures were successful. Getting to the heart of a success-story, however, not only affords us insight into the learning process and the path to success, but also inspires co-learners. In the end, it should not even matter to the experienced reflector whether the basic experience has a strongly positive or negative emotional dimension to it.

Apart from being structured, the reflection process also needs to be guided and applied to a learning situation. We tend to reflect on personal situations with an emotive content, and while this may be salutary, it does not always contribute to the learning practise of *professional* development. Besides reflecting on working in teams or on experiences acquired in internships, students have to be guided in reflecting on the methodological and social context of their skills and knowledge.

Reflection tools not only provide the structure for the thinking mind, but can also relate the reflecting process to a different level of understanding. The three classical levels are the mental, emotional, and willpower levels, or mind, heart, and guts. One of the centres of action is usually more strongly developed than the other two, resulting in predominantly cerebral, emotive, or instinctive types. Gaining insight into a situation or an action may mean looking for the perspective on a different level, as anyone who has fruitlessly pondered on an emotional problem will know. Unless the emotions are engaged, for example, circle reflection may become a rather one-dimensional mental exercise.[11]

Reflection is most effective when a resonance can be achieved between the three human centres. The centre of the will can engage the emotional centre, which in turn can lead to new patterns of thinking. Alternatively, the emotional centre impacts the functioning of the thinking centre as well as the motivational level. Ethical dilemmas involve instinctual, gut-level reactions. Methodological questions involve mental and instinctual issues, but also emotional ones: why do we want to resolve certain issues? Even though the starting point for the reflective process may occur at one level, resolution may involve the engagement of one or both of the other levels. While one must be careful not to let teaching methods slide into therapy, awareness of the three-dimensional aspect to issues, dilemmas, and success stories is a must.

Level reflection[12] combines the reflection circle with levels of personal growth. The levels at which reflection can occur are the levels of the environment, behaviour, competencies, convictions, identity, and spirituality. In level reflection, we simply use the classical circle reflection method, but at the point of developing alternatives, we reflect on the level at which our action is taking place: does our behaviour or experience occur at the level of our behaviour, or at the level of our convictions? How does our sense of our own identity affect our convictions, and through those, our competencies?

11 - This has led Fred Korthagen to develop circle reflection, which only takes place on the mental level, into core reflection, which makes us of all three centers.

12 - Level reflection has been adapted from Korthagen's core reflection by Jan Leen.

Why reflect?

So far, I have analyzed the *process* of reflection and its use for learning; in this last section, I want to focus on the learning process in higher education. Why is reflection important for experiential learning? We want to achieve three goals. First, we want students to become aware of their learning goals and of the competencies they need to acquire in order to achieve these goals. Second, we want students to use reflection exercises to link experience gained in experiential learning to the methods used in their profession. Third, we want students to reflect on the social context and the ethical consequences of their actions as professionals. This should guarantee that all graduates of higher professional education make the most out of experiential learning, that they are confident about the use of theory, and that they exhibit professional behaviour in their professional role.

We wish to provoke the reflection process in students. We also want to guide this process for them initially, and find a way to judge whether reflection has in fact occurred, through the use of assessment tools, tests, journals, or papers. As the role of the teacher shifts from that of purveyor of knowledge to that of coach of the learning process, the ability to be able to guide the reflection process in students takes a more central role.

At university level, where experiential learning is not the norm, reflection exercises can be used to help students with their learning choices.[13] The reflective process, however, is not restricted to thinking about one's learning process. Critical thinking is a basic form of academic training in the humanities, and the use of reflective exercises has always had a place in scientific methodology. A theory is in effect nothing more than the structured presentation of someone's reflective process. When we change the conceptual framework on our personal level, we advance our understanding. When we change it on the communal level, it can herald a change in ideology or way of thinking. Sometimes this leads to those rare and momentous occasions in the history of a science called paradigm shifts:[14] Darwin's

13 - Dutch university students appear to have an inordinate amount of trouble finishing their studies in the allotted time, and many do not finish their studies at all. Guided reflection on their choices, motivation, and learning goals could have a salutary effect on drop-out rates. At the other end of the university schooling process, reflection exercises are used by Professor Henk Procee of Twente University to help students choose a suitable Ph.D. topic.

14 - Kuhn 1970.

natural selection, plate tectonics in geology, or Marx's perspective on economic and social justice.
Three places where reflection can straightforwardly be institutionalized are education, psychology, and management. Reflective exercises are used in the learning process, in the process of integrating new information, and in the process of understanding. Reflection exercises contribute to our psychological growth by making us aware of engrained patterns of behaviour. Finally, in management and business, reflection exercises and a reflective attitude lead to new paths in thinking and innovative approaches. The interest of management studies for thinking exercises and transformational methods is testimony to the far-reaching effect of reflection. The Japanese notion of *kaizen*, for example, which means continuous improvement, has become entrenched in the production process and in quality-control circles.
If we undergo the experience without asking ourselves why, we will not learn anything. If the conceptual framework from which we work is not made explicit, the experience will not add anything to that framework. When the framework is made explicit, the new experience leads to a reordering of experience. Experience is interpreted as knowledge. Through reflection, one becomes more aware, more flexible, and more authentic. By taking distance from our actions, by depersonalizing our actions, we gain awareness, and this paradoxically makes those actions more our own, allowing us to find the link between our behaviour, our convictions, and our identity. The immediate goal of reflection is to gain insight, but the ultimate goal is to become more conscious, to act more authentically, and to be more fully engaged in society. Learning from experience and discovery proceeds through awareness. The emancipatory power of critical thinking comes from its relentless questioning of the status quo.
The aim of our research group is that students reflect on their professional behaviour, that they become more conscious. We have studied and adapted reflection tools and will implement them in the learning processes by training teachers in the use and implementation of reflection tools. These teachers will themselves also be able to reflect on their teaching methods though the use of these tools. Our research group, in fact, uses its own tools in planning its strategy and aims, in its ambitions for quality, and in evaluating personal experiences. Elements from one tool are also used for other reflective processes: our training in Socratic dialogue has made our

own meetings more focused, efficient, and pleasurable. We believe in sharing our knowledge, and have made a website describing reflection tools. We ourselves are indebted to others who have developed tools, most notably Henk Procee, Fred Korthagen, and Jeroen Hendriksen.

Is there a danger that we will reflect too much? I doubt it very much. We are a nation of doers who rarely take the time to think about what we are doing and why we are doing it. The world could certainly do with more methodological thinking, innovative solutions, and more thought for the consequences of our actions. There is an enormous difference between blindly applying a method and being aware that one is applying one of several possible methods. The ethical awareness of the consequences of our actions is more important than ever because of our continuous scientific, technological, and economic advances. How do we create a productive but sustainable society? How do we balance personal freedom and social responsibility? These are also questions of awareness.

Moreover, by reflecting on our actions we feel we can contribute to the professional process and to the vision for our field, and come to enjoy our work. People keep learning if they are in an environment in which they function well and can build on positive experiences. Our society needs professionals who act consciously, who reflect on their professional responsibilities. Our task is to equip our students with the tools to find personal, professional, and societal satisfaction.

Acknowledgements

It is a great pleasure to draw up a long list of people to thank; it reaffirms the communal nature of our endeavour, and makes visible the wide network of those who have supported the project.
I wish to thank the Board of the Hogeschool van Amsterdam for instituting my research group and my position. I am grateful to my directors Caroline Nevejan and Marcelle Peeters, as well as to Elly Mathijssen-Jansen, for all their professional guidance and help. My colleagues at Educational Research and Development, Warnar Moll, Triks van den Berg, Olga Wortman, Marianne Kok, Mike de Kreek, Michael Nieweg, Piet Abrahamse, Martin Stam, Huib Schwab, Ton Plug, Pieter Rotteveel, Marieke van Schaik, Sandra van Schie, Carlien Macnack, and Eline Verbruggen, have been a welcoming community of practise.
In this paper I have relied on the work of my research group, composed of Victor van den Bersselaar, Gerard Blom, Maarten van den Burg, Rob Haacke, Janneke Hesselink, Jacqueline Kösters, Jan Leen, Yvonne van de Ploeg, Irene Sparreboom, Sijmen Vrolijk, and Olga Wortman: I wish to thank them for an inspiring collaboration. I am indebted to Marianne Elshout-Mohr, Henk Procee, Fred Korthagen, Angelo Vassalos, and Huib Schwab for advice and training on reflection. For comments on earlier drafts of this paper I wish to thank Elly Mathijsen-Jansen, Warnar Moll, Martin Stam, Huub Toussaint, Martha Meerman, Victor van den Bersselaar, Olga Wortman, Huib Schwab, Chris Rimmer, Linda Johnson, Stuart Idell, and Lioba Steinkamp.
I also wish to thank Milou Hermus for the cover artwork, Sijmen Vrolijk for the diagrams, and Wouter Bouw, Christine Spelten, Katja van der Vet, Chantal Nicolaes, and Bert Zonneveld for their help with this publication and with the public lecture.
Finally, none of this would have been possible without the support of my parents Fethi and Eva, my sisters Dounia and Marie, my extended family, and the care and partnership of Lioba.

Bibliography

Banks, Sarah, and Kirsten Nøhr (2003). *Teaching Practical Ethics for the Social Professions.* Copenhagen: FESET.

Benammar, Karim (2003). Het Gemaskerde Zelf. *Filosofie Magazine*, 5, p. 22-25.

Benammar, Karim (2004). Het Vervloekte Teveel: Bataille en de Economie van Overvloed. *Filosofie*, 14-1, p. 8-11.

Bersselaar, Victor van den (2003). *Wetenschapsfilosofie in veelvoud*. Bussum: Coutinho.

Borst S. (2001). Zoek het goede. *Avanta*, 9, p. 13-15.

Cooperrider, D. L. and D. Whitney (2000). *A Positive Revolution in Change: Appreciative Inquiry.* http://connection.cwru.edu/ai/uploads/whatisai.pdf.

Delnoij, Jos, and Wieger van Dalen (2003). *Het Socratisch Gesprek.* Budel: Damon.

Dewey, John (1910). *How We Think.* Boston: Heath.

Elshout-Mohr, Marianne, and J. van den Bijtel (1994). *Leren reflecteren en leren zelfevalueren: versterken van de zelfregulatie van studenten*, rapport 371. Amsterdam: SCO-Kohnstamm.

Emst, Alex van (2002). *Koop een auto op de sloop - paradigmashift in het onderwijs*. Utrecht: APS.

Fisher, Dalmar, David Rooke, and Bill Torbert (2000). *Personal and Organisational Transformations: Through Action Inquiry*. Bristol: Harthill Group.

Heidegger, Martin (1968). *What is called thinking? (Was heißt Denken?).* New York: Harper & Row.

Hendriksen, Jeroen (2000). *Intervisie bij werkproblemen*. Baarn: Nelissen.

Hendriksen, Jeroen (2001). *Begeleid Intervisiemodel.* Baarn: Nelissen.

Hendriksen, Jeroen (2002). *Werkboek Intervisie.* Baarn: Nelissen.

Kessels, Jos, Erik Boers, and Pieter Mostert (2003). *Vrije ruimte – filosoferen in organisaties.* Amsterdam: Boom.

Koetsenruijter, Riet, e.a. (2003). *Reflectie in de verpleegkundige beroepsuitoefening*. Utrecht: Lemma.

Kolb, David (1984). *Experiential Learning.* Engelwood Cliffs, NJ: Prentice Hall.

Korthagen, Fred (2001). *Linking Practice and Theory: the Pedagogy of Realistic Teacher Education*. Mahwah, NJ: Lawrence Erlbaum.

Korthagen, Fred, and A. Vassalos (2002). Niveau's in reflectie: naar maatwerk in begeleiding. *VELON Tijdschrift voor Lerarenopleiders*, 23(1), p. 29-38.

Korthagen, Fred, e.a. (2003). *Docenten leren reflecteren.* Soest: Nelissen.

Kuhn, Thomas S. (1970). *The Structure of Scientific Revolutions.* Chicago: University of Chicago Press.

Levi, Primo (1986). *The Periodic Table.* London: Abacus.

Lindgren, Mats, and Hans Bandhold (2003). *Scenario Planning: The Link between Future and Strategy*. New York: Palgrave MacMillan.

Mogi, Ken (2003). Onceness. In Tokoro, Mario, and Luc Steels (eds), *The Future of Learning: Issues and Prospects*, p. 117-123. Amsterdam: IOS Press.

Moon, Jennifer A. (1999). *Reflection in Learning and Professional Development*. London: Kogan Paul.

Procee, Henk (1999). *De nieuwe ingenieur: over techniekfilosofie en professioneel handelen.* Amsterdam: Boom.

Procee, Henk, and Irene Visscher-Voerman (2004). Reflecteren in het onderwijs: een kleine systematiek. *VELON Tijdschrift voor Lerarenopleiders*, 25(3), p. 37-44.
Schön, David (1983). *The Reflective Practitioner.* San Francisco: Jossey-Bass.
Schön, David (1987). *Educating the Reflective Practitioner: Towards a New Design for Teaching and Learning.* San Francisco: Jossey-Bass.
Schwarz, Peter (1991). *The Art of the Long View: Planning for the Future in an Uncertain World.* New York: Currency Doubleday.
Van der Heijden, Kees (1996). *Scenarios: The Art of Strategic Conversation.* New York: John Wiley.

Dutch summary - Nederlandse samenvatting

Bewust handelen door bewust denken
Reflectietools in het leerproces

We moeten reflecteren op ons handelen om er van te kunnen leren. We moeten weten *waarom* we handelen, ons bewust worden van onze vooronderstellingen, van de gebruikte methode en van de gevolgen van ons handelen. Zonder reflectie is er geen bewust handelen, geen leermoment en geen innovatie mogelijk.
Reflectie is een vorm van denken: reflectie is denken over denken, het is *na-denken*, het is bewust denken. Reflectie is het herinterpreteren van onze ervaring en kennis. We gebruiken reflectie in vormen van ervaringsleren waar ervaringen in de praktijk gekoppeld worden aan de theorie, zoals projectwerk en stages.
Het reflectieproces heeft de vorm van een cirkel: we beschrijven ons handelen, evalueren dit, bedenken alternatieven en brengen deze weer in de praktijk. In dit reflectieproces nemen we afstand van ons handelen in tijd en ruimte: we bekijken ons eigen handelen *alsof het door iemand anders gedaan wordt*. Zo kunnen wij objectief naar ons eigen handelen kijken. Om echte alternatieven voor ons handelen te bedenken en niet terug te vallen in wat we gewend zijn te doen, moeten we onze creativiteit de ruimte geven. Paradoxaal genoeg kan dit het beste door ons denkproces te sturen door middel van reflectieoefeningen. Puntreflectie, reflectie via brainstorm, reflectie met metaforen, lijnreflectie en niveaureflectie zijn vormen van reflectie die door de kenniskring gebruikt worden als reflectietool. De scenariomethode is ook een oefening die ons denken over de toekomst openbreekt, juist door het proces strak te sturen. In een Socratisch gesprek onderzoeken we gezamenlijk onze vooronderstellingen.
We kunnen ook reflecteren tijdens ons handelen, door ons tegelijkertijd bewust te zijn van ons handelen en hierover na te denken: dit vergt wel een behoorlijke concentratie. Ook willen we graag dat onze reflectie doorlopend is, zodat de reflectiecirkel in een reflectiespiraal veranderd. Reflecteren is niet alleen een mentale bezigheid, maar is tevens een resonantie tussen het denken, de emotie en de wilskracht, tussen hoofd, hart en buik.
We gebruiken reflectietools in het onderwijs om de student te leren reflecteren over zijn leerproces, de gebruikte methode en de

maatschappelijke consequenties van zijn handelen. We willen het reflectieproces bij onze studenten provoceren en aanmoedigen: dit doen we door gestuurde reflectie op vragen die uit de praktijk voortvloeien. Door bewuster na te denken, leren de studenten bewuster te handelen. Onze taak is professionals op te leiden die door reflectie bewust bekwaam zijn in hun handelen.

Short biography

Karim Joost Benammar was born to an Algerian father and a Dutch mother in Regensburg, Germany, in 1966. In his youth he lived in Germany, Holland, Morocco, and Libya, and attended school in French. He studied philosophy at the University of Sussex in Brighton (BA, First Class Honors, 1987), and at the Pennsylvania State University, where he received his Ph.D. in 1993 for a thesis entitled *Pictures of Thought: The Representational Function of Visual Models*. From 1993 to 1996, he was a doctoral student at Kyoto University, where he studied Japanese philosophy. From 1996 to 2002 he was Associate Professor of Philosophy and Cultural Studies at Kobe University, where he taught in Japanese. He was a visiting researcher at the United Nations University in Tokyo (1999-2000), where he contributed to the Global Ethos Project, and at the Institute of Economics of the Federal University of Rio de Janeiro in Brazil (2000-2001), where he wrote on abundance and scarcity. He returned to Holland in 2002 and founded Plethora, a consultancy company specializing in intercultural communication between Westerners and Japanese. Since May 2003 he works as an Associate Professor in the Educational Research and Development section of the Hogeschool van Amsterdam, where he leads the research group 'Reflection on Action'. He has always been interested in the interaction between academic philosophy and the practical world, and has published a dozen articles on community, the structure of myths, masks and identity, and current ecological and economic issues.

HvA Publicaties is an imprint of Amsterdam University Press
This edition is established under the auspices of the Hogeschool van Amsterdam.

COVER ILLUSTRATION
Milou Hermus, Amsterdam

GRAPHIC DESIGN
Marise Knegtmans, Amsterdam
LAY OUT
JAPES, Amsterdam

ISBN
90 5629 362 1

HVA PUBLICATIES

Hogeschool van Amsterdam

Educational Research and Development

ISBN 90-5629-362-1