



Embodied thinking and sensitive thinking: Ways to the future

WP3 – Improve the methodology
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Claude FALGAS (Yotta-g – P10) - Translation by Sarah BEIGEL (P00)



PARTNERS INVOLVED IN 'NEW ADVISERS' LEONARDO PROJECT

Lead partner:

P00 AC3A - Association des Chambres d'agriculture de l'Arc Atlantique – France

Partners:

P01 CEA - Casa Escola Agricola Campo Verde - Portugal

P02 Federacion EFA Galicia – Spain

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P08 APCA - Assemblée Permanente des Chambres d'agriculture – France

Silent partners:

P09 IALB - Internationale Akademie land- und hauswirtschaftlicher Beraterinnen und Berater – Germany

Coordinateur

P10 Chambre d'agriculture de Loire Atlantique (Nantes – France)

IMPORTANT MENTION

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SUMMARY OF THE DOCUMENT

English

While agricultural advisers and trainers have to take into account the complexity of life, it is no longer possible to rely only on a rational model of reality. The line of thought must also be able to continuously adjust to a changing environment, as perceived by the body. To set up the images for the tutorials produced by the New Advisers project, we were inspired by "Image-Theatre" to experience how to connect "subjectivity" and "rationality". Such alternative forms of transmission and sharing of experience lead to the development of an embodied thought. They seem relevant for contributing to the reorganisation of professional systems.

French

Alors que les conseillers agricoles et les formateurs ont à prendre en compte la complexité du vivant, il ne leur est plus possible de s'appuyer seulement sur une modélisation rationnelle de la réalité. Le cheminement de pensée doit aussi pouvoir s'ajuster en permanence à un environnement changeant, tel qu'il est perçu par les corps. Pour mettre en place les images destinées aux tutoriels produits par le projet New Advisers, nous nous sommes inspirés du «Théâtre-Image» afin d'expérimenter comment relier "subjectivité" et "rationalité". De telles formes alternatives de transmission et de partage d'expérience conduisent à l'élaboration d'une pensée incarnée. Elles nous semblent pertinentes pour contribuer à la réorganisation des systèmes professionnels.

German

Während landwirtschaftliche Berater und Trainer die Komplexität des Lebens berücksichtigen müssen, ist es nicht mehr möglich, sich nur auf ein rein rationales Modell der Wirklichkeit zu verlassen. Der Gedankengang muss sich auch kontinuierlich auf einen verändertes Umfeld anpassen können, so wie es durch den Körper wahrgenommen wird. Deshalb haben wir uns vom Bild-Theater inspirieren lassen, um die Tutorials im New Advisers Projekt zu produzieren, um selbst zu erfahren wie man "Subjektivität" und "Rationalität" verbinden kann. Solche alternativen Formen der Übermittlung und Weitergabe von Erfahrung führte zur Entwicklung eines verkörperten Gedankens. Diese erscheinen uns relevant, um zur Reorganisation von Berufs-Systemen beizutragen.

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In the Leonardo Transfer of Innovation project “New Advisers” we are working on the development and improvement of training tools which allow agricultural advisers or trainers to more effectively help farmers reduce their pesticide use. The professions of adviser or trainer are part of the tertiary sector, which means that in the professional activities, speech and thought have particular importance (i.e. providing information, advice, recommendations ...). In addition, the interaction between people is also important because the professional activities involve, among other things, meetings, collecting and presenting information, support... All of this is rooted in a particular local context (climate, soil characteristics, work habits of the farmers receiving the advice...) and the professional conditions vary considerably from one country to another depending on the organisation of the profession, economic conditions, etc. This diversity has led the partners of New Advisers to leave aside technical questions and to focus more on relational processes, which, as far as we know, are also much less frequently discussed.

How can we enable advisers or trainers to fully play their role of supporting farmers faced with the global challenges to reduce pesticide use? We believe that embodied thinking is key. For us, embodied thinking is a way to use reality as a starting block (not an invented reality), being aware of the wealth of experience available that we can use to develop this reality with other people and bringing in new elements. Embodied thinking is a support that fixes a person or social group in the current given situation. This way of working does not neglect knowledge, but also considers informal ways which are often already spontaneously present that need to be highlighted to be adjusted. In the following lines, with the pragmatic goal of opening a space for possible opportunities, we want to develop some markers or guidelines for those who wish to consider their thought processes while keeping their body attentive to the perceptions of the environment.

The link between action and thought: beyond the fascination for the “expert” approach

For a long time, in agreement with classical thought, people were considered to have evolved due to the rationality they demonstrated. According to this view, when a person is fully grown, as an adult they are supposed to reach conclusions using logic and even if they are not always rational in their actions, because they have the capacity they must strive to be rational. The rational human also benefits from this: it dominates and oversees the sensitive reality, locates the internal logic in it through science and technique, and then uses it to his/her own advantage according to a law of cause and effect.

In agriculture, the economic and social development during the 1960s (the Common Agricultural Policy implemented in 1962 aimed at modernising agriculture and helping rural development) strongly encouraged this point of view which seemed to be validated by resulting effects: everywhere, farms became “agricultural exploitations”, bigger, better organised, the fruit was better quality and sold by large retail outlets, pesticides and genetic study greatly increased productivity, etc. However, now, a few decades on, the limits of this way of thinking and doing have been reached: recurrent weeding issues, nitrates making water unfit for consumption by human babies, diseases caused by pesticides etc.

In the 1960s, agricultural advisers and trainers mainly played the role of communicator using an “expert” approach. According to this method, a scientifically validated truth was believed to be a universal one, and not just true for one given time and place characterised by specific condition and driven by a particular person. In the “expert” approach, two different people faced with a similar situation would provide an identical solution. The aim of the “expert” approach was to keep the situation under control (weeds or diseases, for example).

But the world has changed. A few decades later, almost everyone agrees that things are not so simple. Situations are seen as complex: conflicting aspects seem to occur simultaneously, which creates difficulties for the people making decisions, especially as the future seems uncertain and the causes and effects are so intertwined. The people engaged in these situations also aware of sometimes having conflicting intentions, such as the need for economic viability and the worry of being legitimate with respect to their neighbours, as well as wanting to reach greater consistency with ecological values ... In addition, elements of a situation that might have seemed insignificant at a given time, can become important enough to completely turn the situation around: history is made of the little unlikely 'nothings' that can turn into major realities due to a certain combination of circumstances.



Photo1: Rationality by itself cannot always find the right solutions

A few decades later still, the understanding of the human was also transformed. We now know (since the mid-1980s thanks to researchers such as Francisco Varela) that pure thought does not exist and that the brain is not separable from the body. The body is first of all “sensitive”, in the sensory-motor loop which is the basis for neural processes, perception leads to action and action generates a perception. In the human mind, from this loop installed in the immediate consciousness (awareness), reflective thought (consciousness) is developed. This becomes specialised knowledge and rationality and can be communicated to others in another loop of interaction (symbolic) built in verbal language. Antonio Damasio presents this dual process in different terms, as both sensitive and symbolic: the self is key to the conscious mind; it only appears when it is added to reflective thought. The basic dynamic process is formed by the way our minds function, behavioural traits, while the self (which is aware) is the process which focuses on our experiences and sometimes brings us to think consciously about them (A. Damasio - 2010).

This dual process occurs for experts and any ordinary individual. And even if there is a difference in terms of how they operate when the expert goes further, faster and more efficiently than the ordinary individual, there is therefore no real fundamental difference between the practice of ordinary people and that of “experts”; they both function in a similar manner. Similarly, an expert in a particular area makes the same mistakes an amateur makes

when they venture into an area that is foreign to them. All of this brings our attention to the processes of action/reflection which are very common in professional activities, rooted in a sensory contact with reality at the same time as developing thought.

For individuals, the body is the foundation of the conscious mind and the two are inextricably entwined. For a group, before, when advisers and trainers did not formally exist and it was farmers who reflected upon their practices and transferred them to their neighbours, the link between observation and reflection was maintained as were the coherence between the effects produced. This link was broken when the “expert” mode used mainly in professional practice led to the neglect of signs that the situation was changing. However, professional practices are not only organised using the “expert” approach. Agricultural advisers as well as trainers also experience situations which are organised differently. Certain professional activities exist where group support to feed the synergy of creativity is instated; each person agrees with the others and adjusts to the situation. This method leads people to move outside of their “comfort zone” (which is limited by habit and certainty or belief) and towards a direction which seems acceptable by all. Sensitive and embodied thinking seems to be at the heart of this process. It does not solve everything, of course, but seems to be a prerequisite for individual and collective creativity to happen.

Revisiting alternative forms of relationships and experience transfer

This sensitive and embodied thought, which was randomly developed and transmitted informally, is used to question our usual practices. Either by ourselves or, better still, in a group, it helps us to adapt, evolve and try out new things. Many intangible practices that have been developed over the years are connected to this way of working as in all cultures there are ways of helping people to detach themselves from the perceived chaos. This means taking account of basic processes, behavioural traits, experiences from professional relationships with regards to people and their environment. An agricultural adviser or trainer working with people therefore needs to be aware of these aspects. These issues are still not very developed in professional groups, but the comparison with what happens for the person should also be used and it is one of the ways of thinking which has enriched the activities in New Advisers.

In order to improve the grip on ones’ own conscience in this way, it is important to have intelligence (a good understanding of a symbolic system), an emotional (reduce excess emotions) and a practical engagement with the way our bodies are ‘wired’. All of this must be set up in a cultural context. Embodied thinking reflects our lives (sensory, mental, social, existential...) in contact with a living world that is also always in constant transformation. This is a subjective phenomenon that also needs social confirmation and/or constant adaptations so as to be validated and then believed as reliable. What adviser or trainer today has not experienced, even partially or briefly, in his/her professional life or elsewhere, this kind of process taking place as well as the strength of the dynamic that emerges? From this, how can he/she transform this type of informal action which is not aware of the sensitive and embodied thinking, into a professional skill? The evolving professional world is in need of it.

The tutorials to present the methodology to use of the advising/training tools tested in the project were conceived with this idea of putting embodied and sensitive thinking into action. Such a methodology is rooted in the ways of working that are already established by years of practice (even if neuroscience research has only recently validated them). When John Dewey (1859 - 1952) created an experimental school where children “learned by doing”, he was already convinced that a person can learn through experience, reflecting on his/her own action through interaction with others. This way to be in contact with reality is also the basis for the development of “active methods” developed by Maria Montessori, Ovide Decroly, Célestin Freinet... in the context of education of children. A little closer to our subject, the idea of the human being an actor of a situation, acting or reacting on life’s stages is one of J.L. Moreno’s

main ideas (1889 - 1974). He set up his practice of psychodrama from the idea that action comes first and then spontaneity can enrich it, including in a “role” that is both a way of acting and thinking and a more or less strict social norm.

Again a little closer to our subject, but still with the same practical perspective, is the Image Theatre of Brazilian Augusto Boal (1931 - 2009) who developed different forms of social theatre. His practices foster the development of thinking in images which come from body language, attitude, facial expressions... Image Theatre is therefore a “game” accessible to the participants of a particular situation making it possible to uncover its complexity, tensions and questions. Establishing an image therefore allows the “players” as well as the “spectators” to develop various types of extensions; physically first and then possibly verbally: having a particular role and following its logic, finding alternatives, highlighting significant elements etc. When setting up the images for the tutorials, it was important to ensure the accuracy of the message, the coherence between the expressions between the players and the coherence of each personal expression.



Photo2: Filming for the tutorials: precision, concentration and coordination for the “actors”.

In fact, the freeze-frames showing body language were able to transmit interactions, feelings and issues without using verbal language. The tutorials using images are intended to supplement the written recommendations on how to use the advising/training tools so that they help this sensitive and embodied thinking to emerge in situ. Short texts between the images, translated into the different languages were added to improve the understanding of the images. In order for the intention to pass through the existing filters between those doing and those receiving, it was essential that the right state of mind (which allows the existence of sensitive and embodied thinking) was present throughout the filming. Given the short time (a day and a half with the group of partners) we did not expect such a spontaneous and in-depth input from the partners, even if a “script” had been carefully made in advance.

A “subject” approach, using personal subjectivity

For us, a “subject” is a person who takes account of his/her subjectivity, cultural filters and current state of mind when they say “I”. This “I” is not really stable since real situations provoke emotional reactions. This is what automatically happens to ordinary people and in the 1990s A. Damasio confirmed this scientifically: our emotions play a role in decision-making and reasoning. With regards the need to move towards a practical reduction in the use of pesticides, an issue which leaves no one indifferent, these emotions had to be reflected in the images of the tutorials. The preparation, which was meant to stimulate the embodied and sensitive body of the “actors”, took place with particular attention to life as it is reflected through corporal movement in different, not always comfortable situations, such as imagining how they would react in these different situations or walking with their eyes closed in front of the other participants, etc.



While still all staying grouped together and eyes closed, you must walk to the chair, go around it and get back to your starting point together”.

Photo3: The challenge opens the gates to personal determinism:

In order to establish and maintain fluidity within the relationship between the perception of an environment (the other “actors”) and one “actor’s” own position, in order to move their body in a way that is consistent with the way they are thinking without using verbal language, in order to make their spontaneous perceptions and reactions intelligible, there is no other alternative but to look at the way the “engine room” of the relationship is functioning at that moment. This is a way to stay in touch with the dual process which bases ones’ sensitive and symbolic self on the present and on the subconscious emotional and physical memory of other more or less similar situations that we have already experienced.

This way of working as a whole aims to engage a person in a group process that sometimes takes place in just the right way. In fact, when all goes well, a general and creative process that Mihaly Csikszentmihalyi (one of the founders of “positive psychology”) calls “flow” is obtained. This state of “flow” is experienced by the person consciously involved in an

experiment between challenge and capacity and for which difficult things are done effectively, with pleasure and with minimum use of energy. Leading ones' attention to what happens both within and outside of oneself promotes this "flow" because the multitude of micro-choices made by the person become more conscious, which in turn transforms the quality of the given experience.

Without going as far as a "flow" experience, it seemed that some participants became more aware of themselves during the "game" which led to the creation of the images for the tutorial. In fact the participants said that they had "learned a lot" and had experienced "difficulties in showing their own feelings" and at the same time observed "*the evolution of each of the participants during the day and half*". In our society which chases after time, taking the time to be still and slow allows us to discover something else, after an exercise where the participants had to remain still without moving, they said "*we are still alive*" and we feel "*movement within the stillness*". This discovery is even more contrasting as it survives in the context of a professional life which is usually based on speed and action. The way our bodies move, even today, plays a part in our relationships by giving parameters related to space and time as well as to the meaning of a situation for us. This awareness will "*affect the way we work*" or "*improve the way we act professionally*". In fact, after a day and a half of work, a consensus was found around the idea that "*body-language' is as important as verbal language*" even in the professional activities of advisers or trainers which aim to help farmers feel they are able to reduce their pesticide use. The ease with which each of the participants joined in with the process, losing their mask which gives the best image of themselves, also probably shows that this process is not completely new, even though we have used it empirically and informally, without consciously meaning to.



Photo4: Body language, as important as verbal language.

And if embodied and sensitive thinking may be a catalyst for the reorganisation of professional systems?

From our point of view, sensitive and embodied thinking is a catalyst for creativity. If the framework of New Advisers led to the participants becoming “actors” in the image-based tutorial, this should certainly work elsewhere too. Mihaly Csikszentmihalyi, in his work, came to the conclusion that creativity is the result of three elements: a culture with symbolic rules, a person who brings something new to this symbolic system and experts who recognise and validate the innovation (Csikszentmihalyi - 1996). For agricultural advisers and trainers, would it not be possible for these people who propose sensitive and embodied thinking to become the people who propose innovation, even if this innovation is only the conscious updating and reformulation adapted to today's needs of a process that has always existed? Then the question remains about the recognition and validation by the profession of advisor or trainer. From our point of view, it is likely to come mainly from people in the field (as it happened for our little “actor” groups), by measuring the benefits that this way of working can bring to their professional activities in practice.

How is it possible, in a period of crisis where uncertainty is growing over the future, to put embodied and sensitive thinking into action? It is a way to regenerate ones' own outlook on the world and ones' own interaction with this world. It cannot be established from the outside because it is very different to exclusively taking account of a regulatory framework. However, the results obtained on the small scale on which we are working, lead us to think that such a path is not too difficult to initiate and follow. The future is uncertain again. We just hope that the image tutorial, once finished, will give ideas to those who watch it and will enable them to find their way out of misunderstanding, conflict and blockages and help them find solutions for the future. On the level where we are working, and given our wealth of experience, we have found that when a person “trains” in this way, respecting others and respecting his/herself, he/she then always retransfers this skill at some point in his/her professional or personal, individual or collective life. With regard to collective intelligence, we believe it would be a shame not to take advantage of this beginning of a movement, since the construction of a Europe based on democratic values is an on-going process for which we all share the responsibility.

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