I would like to highlight one of the more exciting, and yet risky, situations in the research process for a social scientist, i.e. coping with an unexpected outcome of an empirical investigation. I thereby mean the analyses of a qualitative material of high complexity. The creative ability of the researcher will be tested, with the aim of explaining or understanding the research material. This situation is much more demanding than when a pre-understanding is confirmed. The material has to be put into a new context where other relations and circumstances might possibly be exposed.

This is a rarely noticed situation in the research process, and since it often takes place in the loneliness of the researchers workroom and rarely reaches the public during discussions in seminars, it might be the most mystified. To highlight this situation might be regarded as an attempt to disclose professional secrets of an individual and private occupation. This is not my aim. My aim is rather to boost the research process, a process mostly governed by strict regulation, but also consisting of situations that involves creativity from the researcher.

Knowledge of this situation could be reached by having different researchers accounting for their experiences from which general traits would be generated. This is not my approach. My approach is to analyze the situation in relation to what preconditions it, regarding both the research material and the researcher’s attitude and practice. My main focus is on creativity, which in my view preconditions the situation.

In order to be able to characterize this practice I want to regard it as separate from other practices both in relation to how the researcher thinks and to what kind of material is used. The approach of the researcher is preconditioned by a knowledge and experience related to the research process. A good orientation in different theories and an experience of dealing with and analyzing data is required. The creative practice is appropriate to certain kind of material and not for other.

The paper starts out with a characterization of the situation and its preconditions in the context of the social sciences. Then I turn to Hans Joas book *Creativity of Action* where he explores different understandings of creativity and argues for his own notion of creativity as a base for all action. My critique of Joas position guides me to find an alternative in Aristotle’s concept of practical wisdom (*phronesis*). Practical wisdom is related to situations without a
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given solution and is practiced by contemplating previous experiences and general principles. My understanding of creative thinking is inspired by the Aristotelian concept of practical wisdom and I end the paper with an attempt to practice this understanding on the situation in the research process that was mentioned above. In a parallel text I account for an example of creativity in the research process taken from my own research on adventure sports.

On my way out in the boat for the first diving-site of the day I try to look indifferent, but I guess that my anxiety for the intro-dive is obvious for everybody. The other participants (whom except for the crew and the dive master are all Scandinavians) are occupied with their gear and chatting. At first my preconceived impressions are confirmed: the number of dives for each participant is communicated and an invisible hierarchy is established where the most experienced has to answer eager questions. But the topic of the questions is not on different adventures or risky dives but on the encounter of sea creatures in the seven seas. To my big surprise the scuba diver reminds me more of an ornithologist who chases the club 300, than a risk-taking adventurer who challenges limits. The pre-understanding that I have based my research project on seems to be hasty and if not totally wrong then at least part of a much more complex context than I have anticipated.

The preconditions of the creative situation

The situation in the research process that I aim at is possible to structure as follows: the preconditions, characteristics of the situation and the attitude of the researcher.

The preconditions of the research process in the social sciences, particularly in relation to the natural sciences, is the dependence on certain assumptions about society which makes it possible to construct the research object. The research object of the social sciences has no
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independent existence from the researcher. This means that the data that is created by a scientific method is dependent not only on certain scientific and methodological positions but also on certain theoretical positions by the researcher, for instance on the structure of society. These positions have an influence on the knowledge that is produced in this process. The preconditions of the social sciences are valid for quantitative data as well as for qualitative data.

A data is not possible to distinguish and investigate without these assumptions, which means that data is theory dependent. Meanwhile these assumptions involve expectations on the outcome of the investigation of the data. The expectations are based on these assumptions but articulated through specific theories. Specific theories aim at relating the data to a more general and abstract level than the descriptive level. This analytical phase of course emerges when the data is collected but it also affects the distinction of the data because of the influence of our pre-understandings on the distinction. This does not however mean that the data is pre destined in all parts or that it accomplices all our expectations on the outcome of the investigation. The data can potentially surprise us.

Above all, the failure of the pre understandings or the model of explanation to meet with the actual outcome, characterizes the situation in the research process that emerges when the data surprises us. The expectations from the researcher on the outcome of the data based on methodological positions and articulated in specific theories are not verified or comes out in a much more complex context. The pre-understandings based on specific theories have to be re-evaluated. The data has to be related to new relations and circumstances through a new analysis. There is a need for a new “account” of the data to be written.

As for the researcher this situation means that the expectations or the pre-understandings that first guided the investigation has to be reconsidered. If the attitude of the researcher so far has been characterized by being goal-oriented since the expected outcome would have fitted the anticipated analysis, now this attitude has to change in order to deal with the unexpected outcome. The data has to be dealt with in relation to other relations and circumstances, and the outcome of the analysis is no longer anticipated. So the anticipated
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analysis cannot be the goal of the attitude of the researcher. The analysis should instead be guided by openness and a search for other relations than the anticipated ones.\[7\] The preconditions for this analysis are the knowledge of the researcher on different specific theories that on different levels of abstraction establishes relations and circumstances between social phenomena, and the ability to practice these on a data. The specific theories might add new meanings to the data through the process of establishing new relations. A new knowledge is generated through the congregation between data and theory. This situation demands a special attitude and capacity from the researcher: creativity.

My research project on adventure sports is based on the theoretical assumption that certain characteristics of the society and the culture is reflected in the activities practiced. Certain characteristics make certain actions possible. Actions require certain characteristics in order to be possible to enact. Through the study of a certain contemporary practice it would then be possible to characterize the society and culture it is practiced in.

Adventure sports are activities that involve risk as an important aspect. The risk is reduced with the help of technical equipment and knowledge, but not eliminated altogether. Different examples of adventure sports are: climbing, parachuting, base-jump, free skiing and snowboarding, rafting and scuba diving.

The major research question is then: What circumstances in contemporary society and culture make mostly young people do leisure activities with a deliberate exposure of risk?

Creativity as an attitude

Ideas of creativity and how it is practiced differ between intellectual traditions. Hans Joas distinguishes in his book The Creativity of Action (1996) between two basic understandings
towards creativity: either creativity is perceived as a distinct form of action or as a precondition for human action or life whatsoever.

Joas finds three different understandings of creativity as a distinct form of action. Firstly creativity understood as *expression*, where it is the actor’s own subjective world that provides material for the creativity to handle and to communicate to others. The next understanding is creativity as *production*, where the objective world is reshaped and given new qualities through the human creativity. Finally creativity understood as a political action, *revolution*, where the social world is the object for the creative action.

As one example of creativity that preconditions all human life Joas mentions the connection between creativity and outer and inner sense of human life as it is expressed in the continental “Lebensphilosophie”. The other example is the connection that pragmatic tradition makes between creativity and human intelligence, which preconditions the individual’s interest in the world.

The aim of the book is to develop a theory of action based on human creativity. The sociological tradition’s (Weber, Durkheim, Simmel and Tönnies, according to Joas) understanding of action is more or less ignoring creativity. Joas critique of traditional sociological theory of action is based on the pragmatic tradition with influences particularly from phenomenology. The main argument from Joas is that the two dominating action models, rational actions and value oriented actions, are producing residual categories when practiced, in which most parts of human actions are placed (Joas 1996:4-5). When Joas analyses the foundation for these action-models he finds three implicit assumptions. The first assumption concerns the actions teleological character, the second assumption about the actor’s bodily self-control, and finally the assumption of actor’s individual autonomy. Joas own definition of creative action is based on a fundamental restructuring of these assumptions, which departures in this critique and presents alternative assumptions. Firstly; action has to be contextualized, i.e. related to the situation of the actor and the action, secondly; the corporeal relation to the world has to be problematized, thirdly; the social precondition and dependence has to be considered.
The focus of Joas first critique is the means-ends categories for an understanding of action. Joas argues that contemporary sociological studies of organization show the un-attainability of this analytical model. There is no meaningful way to analyze action based on this model since it is impossible to reconstruct the causal sequence. In Luhman’s system theory, actions within organizations are analyzed as processes, a view Joas also finds in Dewey. This process is related to a situational context, which presupposes an action-oriented reflexive intentionality by the actor. The reflexive intentionality is based, according to Joas, in contradiction to the teleological intentionality, on a three-part perception. Firstly as unspecified worldly expectations, secondly on the perception of the world not as divided but as a whole, and thirdly as a bodily ability to choose perception and action related to the situation (ibid 1996:159). Joas holds that the situation constitutes the action, but in order to avoid a behaviourists position he adds the idea that the situation is perceived as meaningful through the reflexive intentionality. This is the foundation for Joas position on the creativity of action. Action consists of the creative realization of the world (through the reflexive intentionality) and a constructive satisfaction of impulses (through the situational context) (ibid 1996:163). I will return to these two aspects later.

Joas second critique is related towards the means-ends categorizations activistic understanding of action, as gender related and ethnocentric. Further more, it is based on an instrumental perception of the body where the actor is supposed to have total body control. Joas is inspired by Merleau-Ponty’s phenomenological analyses of corporeality for his alternative. Intentionality is not primarily regulated by the mind but operating as a pre-reflexive corporeality – the passive intentionality. Further more it is not possible to control every body expression, like blushing. There is a meaningful loss of intentionality (ibid 1996:170). As an alternative to an instrumental perception of the body Joas is using Merleau-Ponty’s division into two kinds of corporeality – a habitual and an actual. The habitual is related to practical matters in life, which are performed with another aim than the single movement. The actual corporeality is the abstract movement taken out of its context. The habitual is not reflected as a movement while the actual is reflected upon. We handle situations in everyday life with the habitual corporeality without a conscious relation to our single moves.

The last area subjected to the critique of Joas is the assumption of the autonomy of the individual actor. Joas explains the domination of methodological individualism from social theory’s deep roots in the individualistic western culture. Based on Mead and Durkheim, Joas
develops his notion on the primary sociality. To Mead, man is human through the use of significant symbols. We act and sense in relation to these significant symbols. This makes us able to take the position of the other and act as social beings. The sociological writings on religion by Durkheim are above all explaining how the primary socialization is forming an identity of the self through the communicated categories of thought.

The creativity in focus for Joas, preconditions human action whatsoever. It is not complementary to other forms of action but the basic category. From Maslow, Joas adopts to his theory of action the concepts primary, secondary and integrated creativity (ibid 1996:255). Primary creativity is related to basic activities and expressed through fantasy, playfulness and enthusiasm. Secondary creativity provides solutions of technical, scientific, artistic and everyday practical problems. The third category aims at integrating the primary and the secondary creativity and to be the foundation of a participation in a democratic society.

I share Joas critique of traditional theory of action but not his alternative. My reservation for Joas alternative is partly based on a critique of the status of creativity in relation to other attitudes, and partly on the analytical value of Joas theory of action.

The situation in the research process that this paper aims at exploring, preconditions an attitude from the researcher that has to differ from most other situations. Other situations in the research process, such as the gathering of data through deep interviews, demand an open-mind-ness from the researcher in order to work satisfyingly. An other example is the transcription of a recorded interview into a text, which above all demands thoroughness. Different attitudes and capabilities are suitable for different situations in the research process. The kind of creativity I am addressing is an attitude that is more suitable for certain situations and less suitable for others. Joas definition of creativity makes it the fundamental precondition for a right choice of attitude. Creativity, in my understanding, is the ability to rightly define a situation and choose a strategy for solution. Creativity for Joas, is not a kind of problem solver which is suitable for certain situations, but preconditions the problem solving whatsoever. The analysis of Joas is targeted at a level that preconditions human action and not at a level that categorizes different human attitudes. Here is a connection between my first and second critique of Joas definition, and it involves the analytical value of
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his theory of action.

Joas aim is rather to establish an anthropology of the human species based on creativity, than to develop a concept of creativity as a category of action that is adaptable in the analysis of social actions. The question in focus is: How is it possible to understand human action? and not: Which categories of action are adequate when investigating human behavior?

Joas approach is to understand how the individual as a social being from her own perspective experiences and deals with his or her life. The primary aim of an approach in the pragmatic tradition is not to impose through conceptual categories a raster on the social reality from which different relevant connections or circumstances emerges in relation to the basic problem. The aim is rather to understand the human being, a kind of descriptive social ontology or anthropology. This can be the foundation for the development of concepts for social analysis, i.e. a perspective on social action based on certain assumptions.

My use of the concept of creativity is related to the approach of a limited kind of action. According to this approach a certain kind of action is possible to distinguish in relation to others. This depends on towards what the action was intended, or in what context it was made, and on what attitude is on demand from the actor in order for the action to be successful in one way or the other. Creativity, according to me, does not precondition human action, but is one category of action among others.

I would rather try a concept of action from Aristotle on the situation in the research process that I have identified. It is a concept of action without a means-ends orientation but developed by Aristotle for a completely different situation than the one I intend to adapt it into.
The next day I have arranged an interview with one of the scuba divers. He is 24 years old and is relatively inexperienced: 7 dives and a 6 months old certificate. He confirms my new understanding of scuba diving: The opportunity to encounter “big animals under the surface”. There is a desire for diving sites around the world with a more or less guaranteed presence of Moray eels, White shark and the dream of my interviewee: Whale shark. These experiences are communicated between the participators and form, besides the formal statistics of the logbook, an informal career for scuba divers. Diving on wrecks is also part of this, but there the experience is more guaranteed.

The marine-biological interest combined with an environmental engagement is a growing focus among scuba divers. The alarming death of coral reefs and diminishing fish populations are a threat to this group, since their space of experience is endangered. Paradoxically, the biggest threat against the coral reefs is the growing interest in scuba diving.

The education during a course in scuba diving is partly a preparation for situations of risk. You dive in pairs and communicate with a small number of signs underneath the surface. You depend heavily on your partner in an emergency situation. If you have problems with your air supply - you might have to “borrow” the partner’s supply. You could navigate poorly, or get stuck in something on the bottom, or get injuries from touching the wrong things.

Scuba diving has always been a distinct male activity, but the number of female participators has grown during the last 20 years. My interviewee got his certificate after his girlfriend, which nowadays influences their choice of vacation.

Aristotle’s concept on practical wisdom (phronesis)

To Aristotle, Man is seen as a complex being with characteristics and abilities that in different ways are compatible with and aimed to be adapted in different situations. These situations are of different kinds and thereby demand a right attitude in order to be handled properly. One of these situations is when there is no pre-given answer to a proper action. The individual has to rely on his or her judgment to choose the right action based on previous experiences and a self-negotiation. To Aristotle you have to adapt practical wisdom (phronesis) on these kinds of situations.
This concept has been developed and used within several contexts by for instance Martha C. Nussbaum (1990), who develops an Aristotelian ethics in opposition to a utilitarian and Kantian ethics, or Hannah Arendt (1958), who redefines the area of politics in relation to the human conditions.

My attempt to adapt the concept of Aristotle on the process of research is based on dissatisfaction with existing theories of action. However, the attitude I am exploring does not exist in the thinking of Aristotle since his understanding of science differs from mine. Below I will discuss advantages and disadvantages with my adaptation of practical wisdom on this situation in the research process.

Aristotle uses another concept for the attitude demanded by a scientific activity. This attitude is based on the understanding of scientific activity in the days of Aristotle. Scientific activity was committed to absolute knowledge, a knowledge based on a necessary and universal truth. But it was not until when Galileo Galilei transferred the shapes of mathematics onto nature that these kinds of truths were verified by a scientific method. During the Classical Antiquity, reality was perceived as ever changing without any possibility to be fixed in lasting characteristics. However, the foundations of reality, the metaphysics, and the principles of the sciences were eternal. That is why Aristotle distinguishes between two kinds of reason: the one we use when we think about the changing world – a calculable reason – and another by which we contemplate the eternal – scientific knowledge. “(...) for it is when a man believes in a certain way and the starting-points are known to him that he has scientific knowledge (...).” (Aristotle 1999:a:93). Scientific knowledge is taught and provable since it comprises of the necessary and eternal. Obviously, this attitude is not adaptable on the kind of knowledge generated by the social sciences. This kind of knowledge is dependent on the scientist's theoretical and methodological assumptions for it to emerge and the analysis only generates possible and not any casual relations. The social sciences cannot claim any eternal truths. The attitude reserved by Aristotle for a scientific activity is not adaptable on the social sciences. But for the situation in the research process that I have addressed above, the calculable reason might be interesting. The calculable reason is one of the foundations for the practical wisdom since it comprises of problems without given solutions. The Aristotelian concept of action relies on the practical wisdom as the necessary attitude of Man in relation to this kind of problem. In order to understand how Aristotle perceives practical wisdom, it is
necessary with a thorough analysis of the context that, in his understanding, preconditions this human attitude.

Aristotle divides between actions, whose goal is the very activity, and actions whose goal is the result of the action, i.e. where the result is more important than the activity. Every action is started by a sensation (an external impression) or a thought, which develops a desire that has to be controlled by the intellect (ibid 92). The sensation and the desire precondition the action and equals Mankind with the animals. It is the active use of the intellect that raises man above the level of animals. The desire has to be considered by the intellect in order to become a proper desire, i.e. the foundation of a morally acceptable action.

Man’s intellect, or the rational part of the soul (in contrast to the irrational part) is divided into a practical and a theoretical thinking. The practical thinking is exercised on the desire in order to result in a good act. The theoretical thinking has no practical influence, i.e. it has no direct affect on the act. It is self sufficient and not dependent on any external stimulus. But to Aristotle it is an activity since the intellect is running. The theoretical thinking has, however, indirectly a practical effect since it influences the practical thinking. This influence varies dependent on the kind of situation that needs to be handled. The kind of practical thinking differs demanding on the situation. This since, a proper desire, which preconditions a good act, is possible only if the intellect adapts the right kind of thinking on what is desired. The consequence of a wrongly adapted thinking has to be a perverted desire and a morally unacceptable act.

Aristotle distinguishes between five different kinds of thinking dependent on five different situations (ibid 93-99). Knowledge (episteme) deals with situations with eternal solutions since its preconditions are unchangeable. An act based on knowledge is unambiguously possible to judge as good or not.

Craftsmanship (techne) is a skill that deals with situations in relation to the manufacturing of things made by Man. Craftsmanship consists in a trained technique combined with a proper understanding of the goal of the manufacturing.
Practical wisdom (*phronesis*) is a calculating attitude that deals with situations without given solutions since its preconditions are constantly changing. The calculation is based on experiences of previous similar situations (i.e. a knowledge of the particular) and the ability to reason in a logical way in relation to the wanted (i.e. based on a knowledge of the common). The calculation is dependent on judgment when these knowledges are considered and the desire inhibited towards a good act. Judgment is in turn dependent on character. The character can be week or strong, i.e. differs in its influence on the desire, but to its content dependent on experience and therefore formed over time. The actual experience that forms the character might be forgotten, but not their effect on the character.

The understanding (*nous*) is the intellectual ability to reach knowledge of the point of departure for other forms of knowledge. Theoretical wisdom (*sofia*), finally, is the most completed of all thinking and consists of the truth of the basic principals. I will not get into the two last forms of attitudes of thinking any further because they are not relevant for what I am looking for in the action theory of Aristotle.

I find the practical thinking to be the most interesting in relation to action. Aristotle is ambiguous in his definition of what can be considered as an action. In the first and second book of *Nicomachean Ethics* he is using an extended concept of action embracing both a result-oriented and a process-oriented activity. In the sixth book, which is focusing the forms of thinking, action is limited to process-oriented activities, while the result-oriented is defined as production. The decisive point is where you find the good in the activity. This circumstance is handled in the second book, which leads to a narrower concept of action in the sixth book.

In the result-oriented activity the good all ends up in the final product. The craftsmanship put into the product is not valuable in itself, but only in the way the craftsmanship is reflected in the final product. To the process-oriented activity there is a demand for, not only the result of the action to be good, but also that the actors attitude towards the action is right. “(...) in the first place he must have knowledge, secondly he must choose the acts, and choose them for their own sakes, and thirdly his action must proceed from a firm and unchangeable character.” (ibid 25). The process-orientated activity can apparently reach the same result.
whether the actor has a good judgment and a strong character or not. It is decided by how the actor through the practical wisdom calculates the situation. In the sixth book this circumstance is in focus for the concept of action – the influence of the intellect on the practical life.

An action give a result, but this result is not more important than the action in itself. The result of the action can even lose value if the origin of the action and the action itself was improper. The origin of the action is influenced by the attitude of the thinking the situation demand. With knowledge, situations with given solutions are handled, which makes the result of the action possible to judge as right or wrong. The knowledge aims at a product in which the good has been transferred. None of these attitudes have the process-oriented activity in focus; they are all oriented towards the product and not the process.

Practical wisdom is the attitude in the Aristotelian system that handles the process-oriented activity – action. It is the act itself that is the goal of the action, and not the result. There might be a result of the action but the act is not judged in relation to this. That is why the result is neither in the focus of the action nor of the considering of the appropriate action. The Aristotelian concept of action is above all signified of not being result-oriented. It is the appropriate action that is considered and not the result. The result of the action is not considered in itself, which is the case for the result-oriented action. The result is not anticipated and for that reason not possible to influence the action. The action is not limited by the consequences of a considered result. The different parts of the action are not possible to relate to an unknown result, but have to be related to something else.

In focus of the considering of an act, or rather the situation demanding an act is previous experiences and certain universals (ibid 97). The specific characteristics of the situation have to be related to previous private experiences since the preconditions of the situation are constantly changing. This changeability is characterizing the situations handled by practical wisdom. A situation is possible to judge by relating it to previous experiences. It is in relation to previous experiences that a situation is possible to balance and value and not as an isolated unique event. Experience is the source for the knowledge from which the situation is judged. Different parts of the situation are perceived based on this knowledge. The typical, i.e. general, and the special, i.e. unique of the situation is emerging. By the comparison of the
combinations of parts, out of experience there is a possibility to find similarities as well as the uniqueness of the situation.

To judge a situation out of experience is not sufficient for the calculation, according to Aristotle. In order to calculate a possible action, the parts of a situation have to be valued. This evaluation is made out of general traits, i.e. based on a scale originating neither from the situation, nor from previous experiences. General, in the sense for everybody and for every situation of this kind. The standard used to evaluate the specific situation has to be based on some kind of value system. To Aristotle, this value system is the possibility of a virtuous life. This value system is based on an active judgment and a strong character that through a proper line of argument result in a true action. The value system does not provide any rules possible to apply independent of the specific parts of the situation. It is based on a general idea of “the good life”.

The pre-understanding of adventure sports as a leisure activity I have been elaborating with is based on certain traits of the contemporary western society. The late modern society can be perceived as an experience society where the individual is testing different activities and lifestyles (Schulze 1992). At the same time, the society of today is characterized by the massive resources spent on the management of risk in every day life (Beck 1992).

The process of individualization is the point of departure for Gerhard Schulze, which today is expressed in the aesthetization of everyday life. The individual regards himself as an object for his own life-project – to create the life he/she wants to live, to be the person he/she wants to be. In order to design this life-project, the individual tries out several of these different activities and life-styles supplied. The experience society is born, and, according to Schulze, characterized by an experience-orientation, i.e.

An overall tendency for man to devote the actions towards the goal of achieving positive, altering psychophysical processes (nice experiences) within. (...) With the expansion of possibilities, the experience-orientation has become the normal existential problem. (Schulze 1992:736, my translation)
To Schulze this process appears as active, where the individual processes the experience physically and mentally, in order not just to identify yourself with what you have done, but with something you are. The experience is integrated with the structures of significance we carry around and becomes part of our self-image, our life-project.

Society during the reflexive modernity is, according to Ulrich Beck, above all oriented at preventing, minimizing and coping with social, medical, psychological and ecological crises, that are produced by the advanced means of production in society. Increasingly numbers of resources are devoted to risk management, which occupy experts within different areas. In relation to this reflexive attitude comes a sense of embeddedness. The knowledge that resources and competence are fully into the elimination of risks produces a sense of security in everyday life. Leisure time can be devoted to activities that in different ways compensate the routinization of everyday life.

Scuba diving is an activity signified by different moments of risk. If the search for and management of these moments of risk is a vital reason for the practice, it would be a reasonable assumption to think that the conversation between the participants to some part deals with these issues. My fieldwork does not confirm this assumption. The conversations dealt with different visual experiences rather than experiences of risk. However, my interview confirmed a high-risk consciousness within scuba diving. My misjudgment might be explained by the assumption that experiences of risk are stressed in order to manifest a certain masculinity? This kind of masculinity, manifested by the talk of risky achievements, might not prevail among scuba divers?

Creative action

Joas’ understanding of creativity is developed as a precondition for action in general. My aim is to distinguish creativity as a separate form of action. With inspiration partly from Joas but mostly from Aristotle, I would like to outline an independent category of action named: creative action.
Understanding the motive for an action as situation-oriented rather than goal-oriented is mutual for the kind of situations that I have noticed in Joas and Aristotle’s thinking. To Joas the situation give impulses to an action that through the reflexive intentionality leads to a realization of values. To Aristotle a situation gives birth to a desire, which through calculation is disciplined into a proper desire and result into a good act. The creative moment is of course in the choice of action, since an anticipated goal is missing. To both Joas and Aristotle the choice is preceded by a reflection based on experiences, a reflexive intentionality in Joas, and a calculation based on previous experiences in Aristotle. On top of that comes some kind of value scale: the realization values in Joas, and general traits in Aristotle.

The difference between Joas and Aristotle is above all in the extent to which creative action is adapted, to Joas as a background to all kinds of situations, while only situations with unknown solutions for Aristotle. Another major difference is the ethical dimension in the action theory of Aristotle. This ethical dimension is fundamental to practical wisdom, but maybe not indispensable for a category of creative action?

The desire aroused by a situation has to be disciplined by the intellect, according to Aristotle, in order to lead to a moderate and virtuous life. In some situations knowledge is enough as foundation for the practice of the intellect, while other situations demands a consideration between previous experiences and general traits, in order to guide the desire in the right direction. If we remove the ethical dimension, then the activity of the intellect is superfluous. The desire is not guided and will be submitted to the constraint of an immediate and un-compromise-able satisfaction. To Aristotle all situations that arouse a desire consist of an ethical dimension that the intellect has to cope with. At the situations handled by the practical wisdom, there is a lack of a universal standard, which is why a consideration has to take place. To Aristotle all situations consist of an ethical dimension, so that aspect of practical wisdom does not disqualify it as a model for the creative action.

The situation is in Aristotle’s version, through the calculation, more elaborated than in Joas version. The most crucial moment in the calculation made by the intellect of the situation, is the search for the singular and specific that characterizes the situation, and the evaluation made, based on a general idea of “the good life”. This elaboration of the situation is made
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out of two aspects. Previous experiences are fundamental in the search for the specific, and the amount of experiences are of course crucial for this calculation. More experiences increase the possibility to distinguish the specific in the situation. Crucial for the calculation is concrete experiences and not specific abstract experiences. The evaluation is made on general guidelines and not based on specific norms or scales of value. The combination makes it possible to regard the unique qualities of the situation when choosing an action without the risk of loosing direction or end up in a relativism.

How then, is it possible to define the independent category creative action? It is a situation-oriented action based on previous experiences and a general understanding of “the good life” without an apprehension of its final purpose.

My pre-understanding of the content in the communication between scuba divers was based on the idea that risk taking is an important feature in the hierarchy of the scuba divers community. This was a misunderstanding altogether. The emphasizes on risk, hardships and the adventurous in the activity is regarded with great distrust in between scuba divers. There is a perfectly rational reason for that – for safety reasons you dive in pair. And since both have invested time, money and expectations in the dive, nobody wants to dive with a partner who might spoil the experience because of a risky behavior. So, the subtext in the communication prior to a dive in a company of divers who are complete strangers to each other, circles around the need to map the participators in relation to risk. A hierarchy is established based on experience, but the claimed experiences are carefully examined in relation to attitude and image. If your attitude does not match the claimed experiences, you will be regarded with great skepticism. Your image also has to match the place you are given in the hierarchy – the less experienced should take a low appearance. If you are too strained, nervous or unfocused, the more experienced divers will place you under certain surveillance.

In order to endure in the community, a scuba diver has to nourish his/her reputation and image. If an incident is diminished or ignored by the involved, a story is soon likely to spread, casting a shadow over the participator. In order to avoid this, you have to present yourself to others as serious, balanced and relaxed.

The practice of scuba diving is based on a simple economy: The great investments made,
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such as time, money and commitment, are supposed to pay off as experiences. Journals and handbooks are guiding you to different places where experiences can be made. The extreme and hostile environment where the experiences are made is controlled with the help of equipment and know-how. It is the human factor that might jeopardize the experience. Your own know-how is limiting the experience (like the diving-depth) but is possible to calculate based on a self-knowledge. The newly met diving buddy, however, has to be judged in advance based on other criteria than the very practice of scuba diving (once you're in the water, the diving master has already made the choice of partner for you). This judgment is based on the impression you get of the other. To be paired with somebody who seems to be careless and adventurous could mean that you have to lower your expectations on the dive and instead be ready to cope with your buddies anticipated mistakes.

The communication happening prior to a dive can be understood as the making of an abstract trust. The dependence on each other as a consequence of the safety-measures taken by the diving organizations (you have to dive in pair) can be vital for your survival as well as the source for an unsuccessful dive because of the mistake of your buddy. If the trust established prior to a dive endures during the dive, it is transformed into a real trust. But the making of a real trust is only possible through the activity, based on experiences of the other in practice.

The qualities or expressions for reliability on demand in a Scandinavian context can be related to the kind of hegemonic masculinity (Connell 1995) dominating. It is qualities such as self-control rather than spontaneity, practical know-how rather than verbal capacity, seriousness rather than playfulness etc. (Nilsén 2009). These expressions for reliability might possibly vary in between different cultural contexts. There is bound to be lots of stories among the Egyptian dive masters about the “stiff” Scandinavians with a neurotic need of control.

Creativity in the research process

Analyzing data is an activity, which aims at “elevating” the data from a descriptive level, to a more abstract and general level. The aim is to increase its potential validity from being limited in time and space, to a higher degree. The complexity that signifies the qualitative
data is reduced in order to increase the validity. The analysis consists of the construction of connections and relations partly between different aspects of the data and partly between other aspects. The analysis is made in relation to different theoretical models applied to the data.

The situation in the research process addressed in this paper, demands an attitude from the researcher that does not nail down the analysis of the unexpected result to the anticipated result. The anticipated result has to be reconsidered and a new analysis made, with an initially unknown outcome. The attitude of the researcher necessary for this situation is characterized not of handling a result given in advance but of coping with the data unprejudiced. Of course, both factors within the sciences (such as scientific and methodological axioms) and factors outside the sciences (such as the socio-cultural background of the researcher) limit the unprejudiced.

The definition of creative action that I have been elaborating with, inspired mainly by Aristotle, is possible to adapt to this situation. The orientation in different theoretical models and concepts and the familiarity with analyzing data can be the experience of the researcher from which the data is handled. A general respect for the research material and knowledge of the rules of the research process can be the judging part in creative action. Handling the data out of these aspects can be the base for a new analysis relevant for the unexpected data.

Martha C. Nussbaum argues against an understanding of the Aristotelian concept practical wisdom (phronesis) as scientific in her article “The Discernment of Perception” (Nussbaum 1990). The concept holds in its definition a critique of what characterize the debate of rational choice as a foundation for scientific thinking. Nussbaum identifies the characteristics as: the comparison of valuable things; universal judgments precedence to individual; and the threat to the rational choice from emotions and fantasy. The possibility to compare and thereby value different things is based on the thought of a single quantitative value, i.e. an abstract quality from which everything can be judged. Practical wisdom is supposed to be used on situations with conditions constantly changing, and judgments coming from the particular and incomparable and not from the general and comparable. It is through the recognition of the singular and specific in a situation that makes it possible to calculate in a proper way, which leads to a good act. To Nussbaum the feeling and the fantasy are not a
threat to reason and rationality; they are rather status as a guide for reason and action in the thinking of Aristotle. The desire inspirers to action and is therefore welcomed, but necessary to be disciplined by reason in order not to lead to a blameworthy action.

Nussbaum is right in her understanding of practical wisdom as an attitude not too well fit for the scientific activity as a whole. The knowledge produced by the social sciences has to depart from an attitude where different phenomena are compared and general statements are presented with validity beyond the particular. The particular will then be opposed to the general, just as the seemingly incomparable has to be abstracted in order to become comparable.

However, I hold that the situation in the research process that I want to highlight presupposes a different attitude from the researcher than the established. This since the pre-comprehension that precedes the data, is not confirmed, i.e. the general is not confirmed by the data. The possibility to express other general ideas through a new analysis has to pass the particular. The pre comprehension that precedes the data deteriorates the making of other general analysis than the anticipated one, through the influence of the pre comprehensions on the structure of the data. The data has to be analyzed with the unique and particular in focus in order for new connections and relations to be revealed. An attitude concentrated on revealing the particular in the data is necessary. From there a new attitude takes over that focuses the general on behalf of the particular.
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[1] My paper could be valid even for quantitative data, however I leave out this approach since my example is from a qualitative data.

[2] The situation is similar to what Robert K. Merton calls The Serendipity pattern (Merton 1968) which is distinguished by the data being unanticipated, anomalous and of strategic importance to the understanding of the phenomena. Merton’s focus is on the need for theorizing in empirical research and not on the attitude of the researcher in this situation, which is my focus. Another attempt to understand a similar situation is Charles S. Peirce concept abduction, however what Peirce (1931) attempt to highlight is not the situation where the data surprises us but a kind of reasoning where the hypothesis does not determine the outcome.

[3] I represent a subjective understanding of sociology as a scientific discipline. This understanding opposes an objective understanding, which claim the independence of the research-object in relation to the researchers perspective.


[5] This is one adaptation of Kuhns (1962) conclusion: facts are theory-dependent. Parsons (1949) holds that the structure of the theoretical system is determining the data possible to study.

[6] I make, just as Mouzelis (1995), a distinction between empirically verifiable theories, i.e. specific theories, and theories for the making of specific theories. Alexander (1987) holds that general theories, like sociological theories, cannot be validated by facts. Specific statements are possible to validate but not the entire theory.

[7] If the Popperian idea of falsefication was possible to transfer onto qualitative data, which is doubtful since he have a research process based on hypothesis in mind, then the unexpected outcome requests a new analysis based on other relations, rather than the shaping of a new pre-understanding, which is tested in relation to new data. My idea is to “save” data with the help of new theories.
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[8] Joas traces creativity as a concept back to the mid 1700-talet, i.e. contemporary with the Enlightenment. He leaves out earlier attempts to analyze similar phenomena, like Aristotle.


[10] In Politics Aristotle is stating the consequences of an absent intellect: “Wherefore if he have not virtue, he is the most unholy and the most savage of animals, and the most full of lust and gluttony.” (Aristotle 1999:b:6).

[11] The categorical imperative of Kant or the devise of the Utilitarians: “largest possible benefit for the largest number of people” is possible to regard as an attempt to inform a general standard.

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