

The many faces of knowledge

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Introduction

This article will investigate how, in the last decades, discussion about knowledge has broadened from a need for a wider understanding than we have had traditionally. The aim of the chapter is to show the breadth of the concept of knowledge and the diversity of discussion of knowledge today in a wider philosophical debate. This can be helpful to understand and reflect on what people do in different activities and professions, including the practical ones. A point of departure for a great part of this discussion is the tradition of Aristotle who first included different forms of practice when describing knowledge.

Firstly the central concepts for understanding knowledge will be described, and secondly how they have developed. Thirdly the three forms of knowledge formulated by Aristotle, are described in relation to contemporary discussion and their relevance in a wider reflection on the content and the application of knowledge in practice. The term *episteme* represents scientific knowledge, *techne* is expressed in connection with tacit knowledge or the reflective practitioner, in the field of production. *Phronesis*, practical wisdom, connected with *praxis*, is expressed both as an ethically rooted kind of knowledge, and which develops, in the hermeneutical tradition, as an interpretative form of understanding.

Knowledge in its traditional and standard conception is connected with the Platonic definition usually known under the term of *episteme*, from which the question of epistemology stems. This standard definition of knowledge tells us that knowledge emerges from what we believe, or hold to be true. What we believe is true must be supported by good arguments, in order to be justified as true "justified true belief". This definition has its origin in the works of Plato and is based upon the distinction he makes between *doxa*, to have a meaning or a sense of meaning, and *episteme*, to possess certain or objective knowledge. The activity we call epistemology, which is directed towards what can make knowledge certain and true and our sources of knowledge, has a dominant position in our understanding of knowledge in the western world, especially in Anglo-Saxon philosophy. Epistemological questions and definitions represent one of several conceptions of the content and the limits of knowledge in relation to the contemporary discussion of knowledge in other fields. Traditional questions about the origin of knowledge and its foundation are associated with questions of the content of knowledge in different human activities. This involves a discussion about the relationship between the theoretical and the practical. The issue of the content of practical knowledge has become a topic of increasing interest. This discussion became intense in the 1980s, taking as its background a number of different philosophical perspectives. One is Ludwig Wittgenstein's view (1921) about that which can be said and that which is beyond words, another is Michael Polanyi's idea (1958) that knowledge rests upon tacit background knowledge, a third is Gilbert Ryle's distinction (1949) between knowing that and knowing how. The development of society and the need for learning in different sectors have meant that ideas concerning practical knowledge in relation to different occupations have become a goal for research and reflection. The reflective practitioner, a term coined by Donald Schon (1983) has been applied, in conjunction with tacit knowledge and knowledge in practice.

At the same time, one further perspective of knowledge, called practical wisdom based upon Aristotele's tradition of ethics, has attracted the interest of researchers and thinkers. This form of knowledge has an ethical dimension, in that it has represented an alternative to other views

in ethical discussion. It is the core element in understanding human actions in the widest sense. It has arisen as a reaction against, or a complement to, the utilitarian tradition as expressed in the liberalist atomistic conception of man (Rawls, 1971). These three forms of knowledge - the scientific, the practical and the ethical - can be traced back to Aristotle's text "*The Nicomachean Ethics*" (300BC) where these three forms of knowledge are mentioned for the first time. This view of knowledge has become a central point of departure for further discussion of the content of knowledge in an increasingly knowledge dependent society such as ours.

The Aristotelian point of departure

The Aristotelian conception of human knowledge focusses on a person's involvement in a number of activities or forms of life. Theory, *theoria*, is the philosophical activity whereby we reflect on and investigate how existence is realised. Its goal is truth and it presupposes a world in which we can have knowledge. Theoretical activity thus involves looking at what cannot be otherwise than it is. It requires general assertions, which include both a description of how it is and an understanding of why it is as it is.

A second activity, called *poiesis*, involves what we do when we form, produce and create different products. This is a productive activity, where the goal is to get something out of the activity itself. The activity functions as a means to reach a goal that is a result or a realisation of work. It includes craft work, art and poetry, and also reflection of these activities: a reflection on what we are doing when we do it.

The third activity characteristic of man is *praxis*. It is, like the aforementioned, practical in character but distinguishes itself from the other two in the sense that it describes human actions. It is ethical in character, but ethics is not considered to be the same as moral philosophy. The word ethics is created from the word *ethos*, our disposition to act in a certain manner. Ethics is regarded as a general theory of action supporting the social art Aristotle calls politics. The goal of this activity, *praxis*, is the meaning of a good life for mankind.

Connected with these three activities, there are respectively, three different forms of practical attainments, each based upon the dispositions we have acquired through our habits, *hexis*. We can call them different faculties, or forms of knowledge. Connected with theory there is knowledge as *episteme*, to *poiesis* there is *techne*, and *praxis* is connected with *fronesis*. Moreover these three forms of knowledge are also connected with three forms of rationality: the theoretical, the productive and the rationality associated with meaning. *Episteme* can be translated as theoretical-scientific knowledge, *techne* as practical-productive knowledge and *fronesis* as practical wisdom. Accordingly, these three forms of knowledge are oriented towards what we know, what we do and how we act.

The development of the three forms of knowledge – episteme, techne and fronesis

Episteme develops through history both as epistemology i.e. as a reflection about the nature of knowledge, and also as the scientific form of knowledge. Knowledge which is regarded as the search for an agreement or correspondence between subject and object is characteristic of science from the 1600s onwards. The interest in knowledge particularly as a theoretical question happens contemporaneous with Descartes (1600). The mathematical and exact knowledge, which was Plato's most typical example of *episteme*, that which could not be otherwise, was dominant in determining the direction of all knowledge. It was preserved and developed in the Age of Enlightenment and in the positivist tradition in which science is regarded to lead progress. The different criteria of verification and falsification have a

particular position within scientific theory to maintain a boundary between scientific knowledge and other knowledge called, not doxa, but metaphysics.

Techné, which for Aristotle stands for both technique, craft work and art, has been translated to the Latin term *ars*. During the Renaissance a process began in which craft work and art were separated from each other. Art became an example of how there is no strict division between the theoretical and the practical. It could not be tested in the same way as theories and was not immediately useful. However, the artist worked with tools like the craftsman and ideas had just as much significance as in science. An early example of the difficulty faced in distinguishing the theoretical from the practical was seen in the relationship between mathematics and music. Mathematics was the original image for Plato's *episteme*, while music was regarded as a practical activity. A second example, proposed by the Italian mathematician Fibonacci (1509) is the 'golden section', the series of numbers in which each number is the sum of the two previous numbers. This mathematical proportion, which can be found in nature, has been of great importance in the development of aesthetics. In other words, the meaning we associate with the word "technique" is significantly narrower than the one the Greeks gave to the word *techné*.

Phronesis, was a general virtue, termed *arete* in ancient times, and was connected with acting and human relations which was called *praxis*. In the Aristotelian understanding of practice there are two types of actions, *praxis* and *poiesis*. *Poiesis* is connected with production, while *praxis* concerns the social and the political. *Praxis* and *phronesis* came to play a central role in the theology of the Catholic church, but lost significance with secular development. In modern times *praxis* and *phronesis* came to be replaced by *techné*. It has therefore been a recurrent problem to keep *praxis* separate from *techné*. In our time, the general understanding of the practical is the same as that which can be managed. With the dominance of other ethical traditions, such as utilitarianism and rule ethics, *phronesis* declined or partly disappeared until its return with modern development in the 1980s. Today, it constitutes an alternative or a complement to other ethical and political standpoints with a specific meaning.

The scientific perspective

Discussion within science establishes clear boundaries between different areas. The common and somewhat overused dichotomy between the two cultures, the natural science-technical and the social science-humanist area, constitutes not just the foundation for separating academic faculties, but also different sets of attitudes to knowledge and science. Moreover, a distinction is made between different disciplines and between different ways of viewing things within the particular disciplines. If we look at this from a neutral stance over time, we observe a generally increased perception of different perspectives on knowledge. The different conceptions of knowledge proposed by philosophers and theoreticians in the different areas have resulted in a rich number of perspectives from which a selection can be made in the pursuit of different goals and endpoints. This is seen clearly in conflicts about what can be considered as scientific and where the boundaries of knowledge lie.

One of the most frequently discussed perspectives in recent years has been social constructivism, which perceives knowledge from a sociological perspective, in opposition to the use of terms such as knowledge realism or essentialism. A conflict between biologists and sociologists, is especially apparent when sociologists study the construction of knowledge among different groups of researchers and express their findings in terms of power. A further example is provided when biologists present knowledge of man as nothing other than, medical, physiological or biological. Both of these examples are based on the same mistake

that reduces all knowledge, or the whole truth of mankind and knowledge, to their particular scientific discipline. To say, as sociology does that knowledge is "nothing other than" social constructions, is the same mistake as saying that humans are "nothing other than" their biological make-up. Scientific reductionism can be found in all sciences. The continual competition between the sciences for hierarchical positions is part of the history of science and is somehow beyond knowledge as power and truth. Throughout the history of science it is possible to find a hierarchy of sciences, in which a particular science has occupied the highest position, and consequently is assumed to have the greatest truth-value and thus the greatest power when it comes to determining the dominant interpretation of all knowledge. For a time it was theology, in another time philosophy, then physics, and now, perhaps, both sociology and biology.

As an alternative to scientific reductionism, which involves reducing knowledge and man to a final level and a single science, it is possible to envisage a many-sided acknowledgement of all the levels by which we try to gain knowledge and understanding about man and reality. It might seem self-evident that mankind and knowledge can be understood with the help of physics, chemistry and biology, and even sociology and psychology and with linguistics, aesthetics and theology. What is of interest, however, is to look at the relationship between the different disciplines and the forms of knowledge with which they are connected. When we work in cross-disciplinary settings or carry out thematic studies, the different disciplines are forced into a dialogue with each other, which in itself produces new knowledge in the form of new interpretations. The same can happen if we work in groups with members from different professions and with different knowledge bases. A dialogue-based view of knowledge presupposes understanding that a complex phenomenon can be understood from different perspectives, and this requires an openness to different interpretations. The decisive point in the relationship between different forms of knowledge is a mutual respect for the different activities. Moreover, when we generalise this fundamental view of knowledge, it means that a pluralistic attitude towards knowledge, with its many different perspectives, is regarded as an enrichment. The decision regarding which perspective to adopt is connected with the level at which we work, in what science, for what goal, the kinds of questions posed and the problem to be addressed and solved. The issue to focus onto is then what hindrances exist with the adoption of a particular approach and the kinds of difficulties with which this approach is practically connected

Science and its context

In several conceptions of knowledge we can observe how knowledge is tied to the different contexts in which it is contextualised. A whole spectrum of different concepts, each in their own particular way, shows that knowledge is beyond the influence of the context in which it arises and is applied. This concerns all of the three forms of knowledge discussed previously: *episteme*, *techne* and *fronesis*.

With respect to *episteme*, this is the form of knowledge, which from the very beginning up until the present has been regarded as an objective, free-standing form of knowledge. A first sign can be found with Pythagoras(600 BC). Plato who made the distinction between *episteme* and *doxa*, between the objectively true knowledge and meaning or the individual meaning, saw *episteme* as a truth not tied to the perceived. The most pure epistemic knowledge was mathematics, first and foremost geometry, with its origin in the world of ideas. The point of truth for Plato, located in the world of ideas, was in modern times fixed in the subject, - a subject released from traditions by the decision to bring forth the truth in his or her own thinking, "I think, therefore I am". This tradition has been continued in modern natural

science and in neopositivism, where the Vienna School of Philosophy led with the ambition to build an exact language and science. Moritz Schlick (1918,1925_), leader of the Vienna School, writes :

"The essence of knowledge demands that those in search of it travel to a distant peak, in order to look at the thing to have from there an overview of their relation to all other things"

Knowledge is here synonymous with theory and can be compared with its diagrammatic opposite, which asserts that knowledge is tied to its context:

"I myself assert, that I haven't achieved any greater distance to the social world in which I live. The normal view is that in order to gain knowledge one leaves the cave, departs from the place, climbs the mountain, to form for oneself an objective and universal standpoint but I think of staying in the cave, the place, at ground level to then interpret the world of meanings we share".

This quotation, from Michael Walzer (1983), one of the communitarian spokesmen, is formulated against atomistic or individualistic ideas. Communitarianism, stressing the common and the social, takes its ideas from the knowledge tradition represented by Aristotle, and later by Hegel (1807). Aristotle asserted in opposition to Plato, that both knowledge and norms, the theoretical and the practical, can be found in the world in which we live. Therefore, empirical investigation was important. The norms and values we embody are thus an in-built component of the social collective in which we live. This means that the mores, habits and traditions that exist in a society are themselves the preconditions for what people know, what they do and for how they act.

The objectivity and the independent character of scientific knowledge was asserted by the majority of analytical philosophers and theorists of science during the first part of the 1900s. The first who broke with this pattern was Ludwig Wittgenstein (1953). In his later writings he regarded language as a tool box which we use to achieve our goals in everyday life. We play different "language games" connected with what we do and what we say. Different language games accompany different forms of life, so that the knowledge we possess is used to reach the goals and meanings for which it is useful and for which we can apply them. Knowledge takes on the character of its use: its application constitutes its meaning, more than simply in the manner in which it is expressed. Knowledge is dependent on language. In the Anglo-Saxon discussion of knowledge, which has been covered so far, a major break occurred in the theory of science with the publication of Thomas Kuhn's book *The Structure of Scientific Revolutions* (1961). Inspired by Wittgenstein's forms of life and gestalt psychology, which says that knowledge is contextualised, Kuhn presents his view on how scientific knowledge is dependent upon the paradigms. A paradigm is the pattern through which researchers regard the world: it is the same as the picture of the world. Accordingly, we can say that science is contextualised internally, from within science itself. The external factors which influence science society and culture are not part of this conception. Kuhn's investigation is to a large extent based upon perception: how we are made aware of reality, in the form of totalities, which are in their turn dependent upon the patterns through which we regard reality. Moreover, science is a question of power and struggle, so when a change of paradigm takes place, the interpretation of reality changes.

Practical knowledge in what we do (*techne*)

The knowledge tradition in which knowledge is regarded as tied to practice is pragmatism, which was founded by Charles Sanders Peirce (1839-1914). The starting point for knowledge

is located in our habits and our actions (*pragma*). The basic idea is that we act in our everyday manner or in practical work according to our habits and routines. It is when we are really surprised and habits are broken, that something new takes place. Expressing this idea, Peirce marks his difference from Descartes, for whom one makes a decision how to think, free from habits and traditions. To be really surprised involves what we expect to happen not occurring, which implies that we seek something new. Put differently, we are doing a practical activity and encounter a problem demanding reflection or theory, which we then apply to resolve the problem and develop the activity. With such a perspective we can say that knowledge is closely connected with what we do practically.

However, the distinction between *techne* and *fronesis*, as I have described above, does not exist here. Pragmatism is an example of how *praxis*, action, is invaded by *techne* and instrumental knowledge which is connected with what we do, and follows a goal outside of the action itself. Pragmatism's great forefathers, Peirce and John Dewey (1859-1952), were strongly influenced by science, but, their concept of truth was different from the common view, which implies that there is a correspondence between the statement and the object. Consequently, the truth of knowledge is revealed in the practical consequences of an action. This basic thought has made pragmatism into a theory of knowledge applied by those who work with the development of knowledge in relation to practical activities. The starting point for knowledge is what we do, which leads to reflection, and thereafter to the completion of the practice and a satisfied frame of mind.

The form of knowledge connected with practical activity has been the goal of a number of different perspectives, each with the intention of investigating and attempting to determine what characterises this form of knowledge. I shall, in the following, give a short presentation of these in order to show the richness of their respective approaches. I will limit myself to their philosophical background. Normally, no distinction is made between *techne* and *fronesis*, which means that all practical knowledge is treated as one and the same. Here, I will maintain the Aristotelian distinction between doing and acting, and regard *techne* as knowledge of the means to an end, external to the activity.

Tacit knowledge as the unsayable

During the last century, the first to develop a set of thoughts to investigate the nature of practical knowledge was Ludwig Wittgenstein. This can be observed in one way in his early work (1921) and in a different way in his later work (1953). In the first mentioned it is the last sentence, "what we cannot speak of we must pass over in silence", which has been taken as a starting point for understanding what we call tacit knowledge. A distinction is made between what can and what cannot be said, and they are regarded as two different forms of knowledge. The sayable, also called knowledge based upon assertion, is synonymous with the scientific knowledge expressed in linguistic statements. The unsayable, also known as intimate knowledge, is the knowledge we are not immediately able to express verbally but which we are able to perceive or show. There have been numerous interpretations of this. The positivist interpretation is that Wittgenstein establishes a boundary between science and metaphysics, so that he can then identify what is significant, namely, exact science. For many of the positivists, among them the already mentioned Moritz Schlick, all knowledge should be translated into verbal assertions if it is to be meaningful.

However, the members of the Vienna school were deeply disappointed when Wittgenstein refused to accept this interpretation. A second interpretation is that he really regarded the unsayable as the most significant, that which in the end is shown in the meaning of mysticism.

A third, is that the unsayable is what can be perceived, or what we can experience, through our deep intimacy with the activity. In the world this has been applied so that the knowledge which exists on the basis of a long-term intimacy in the occupation, the tacit, can meet the knowledge produced in research, knowledge based upon assertions, and this leads to a development of knowledge in the practical occupation. The two forms of knowledge can also meet in the dialogue between researchers, authors, artists and actors at collective seminars. In "*Philosophical Investigations*" the following declaration is the starting point for the pragmatist interpretation of tacit knowledge as common sense (1953ß 78):

"Compare *knowing* and *saying*
how many feet high Mont Blanc is ,
how the word "game" is used,
how a clarinet sounds.

If you are surprised that one can know something and not be able to say it, you are perhaps thinking of a case like the first. Certainly not of one like the third."

Our practical use of language is revealed with such a view of language as a toolbox which we turn to when we have a use for it in what we do. Language is played like a game, dependent upon the activity we are carrying out. To be in a language game, is accordingly, to be in a praxis. To master a task means being capable of using a language in order to carry out certain operations. However, this also means being complacent with the experiences which have been built up in the area or activity, and the tacit preconditions determining it.

"Knowing that" and "knowing how"

If we are to follow the growth of practical knowledge chronologically from these philosophical origins then the next stage in this development is Gilbert Ryle and his book "*The Concept of Mind*" (1949). Here Ryle introduces the terms, "knowing how" and "knowing that". The first refers to skills, to be capable of carrying out certain actions, and the second is to know how things are. Ryle regards knowledge as rational activities, but both these forms of knowledge are based upon different kinds of rationality. A theoretical argument is about logical conclusions, while in a practical connection attention is directed towards the activity itself. Knowledge is then tested by what we do. The understanding of what we do arises in the activity itself and knowledge belongs together with what we do. Therefore, to "know how" involves both what we can do and what we understand, or having an insight when acting. The idea thus accompanies us while the activity is taking place. Knowledge is here both to be able to do certain operations, a skill, and to be able to present a reasoned argument about what has been done.

Knowledge is expressed when one knows what is being done and consequently it is not just a case of acting according to habits or routines. When we do something with an intention and know what we do, we develop practical knowledge. Ryle has here, like many others in the post-war period, marked his disagreement with Descartes and the dualist conception of mankind. Consciousness and the body can not be clearly separated, which means that what we do and our reflection upon it can not be separated. The separation between having and not having knowledge is not between consciousness and body, but between what we do in an exclusively habitual and routine manner and upon what we steadily reflect upon which leads to something new through modification and improvement. Ryle calls these "habitual practice" and "intelligent practice" respectively.

Up until now, we have seen that practical knowledge is described as something we do and understand, as a combination of practice and reflection. Spokesmen for pragmatism and also Ryle share the desire to unite practice with theory. However, both the point of departure and the final point for knowledge are practice: what we do. According to Wittgenstein's perspective as we have seen, parts of our knowledge cannot be expressed in words. One repeating question is if tacit knowledge must remain tacit, or if one can gradually give verbal expression to it through reflection. One objection is that this division of knowledge into the sayable and unsayable cannot be defended, or is based upon an unnecessary dichotomy.

Tacit knowledge

From a completely different starting point all knowledge can be described as tacit. The philosophical source for this description is Michael Polanyi and his book *Personal Knowledge* (1958). Polanyi formulated his view as an alternative to a positivist assertion, with which he was deeply critical, and which states that it must be possible to express all knowledge in arguments. One of Polanyi's statements which is often repeated, is that "we know more than we can tell". Recognising a face or cycling are two examples to describe this. In a crowd we can easily identify the face of a person we know, for example one of our own children, but we cannot describe it in an adequate manner. We know what we do when we cycle, but we cannot provide a description. A friend of Polanyi recounts in a letter from the Sudan where she was working, that the parents in a nomadic tribe had strong misgivings about their children beginning school. The reason was that the children knew exactly how many different individuals of camels there were in a flock of thousands of animals. The parents were afraid that this kind of knowledge would be lost as their children learnt more formal knowledge in school.

The conception of tacit knowledge is in this case different. There is always something which is the focus of our attention, whether it is what we are working upon with our hands, or our attempt to solve a scientific problem. This is called "focal knowledge". But when our intention is to interpret and understand what we do, how we use the tools we require, then this constitutes a tacit background knowledge. Knowledge builds upon earlier experiences, traditions. These are passed on from generation to generation and in craft occupations between master and apprentice. The interpretations we make are dependent upon the traditions in which we have grown up and use the habits that have crystallised as a result of these traditions. Accordingly, we can say that tacit knowledge in this respect is the precondition for the result realised in the knowledge process.

A question recurrently discussed is whether tacit knowledge is something which can be expressed, or does it not need to be expressed because it is excessive? If we imagine a floor covered by a carpet as a picture for what could be verbally expressible, the whole of the floor can not be covered at the same time, but there is not one piece of the floor, which is not covered by the carpet. This should mean that our preconditions for knowledge can be made explicit, but not all at the same time.

The examples of tacit knowledge given by Polanyi do not just illustrate the idea that what the eyes witness can not be translated into words, but also what we can spontaneously perform. One example is the trained pianist who without extra thought finds the keys necessary for the melody. But when he once learnt to play each and every movement of his fingers required consciousness and had to be practiced. With this example we can see how what we have learnt through practice or in a gradual manner in a certain field becomes tacit knowledge. A more suitable name for this kind of knowledge is the spontaneous and the afterthought. When

we have learnt how to perform an action and the body has, so to speak, assimilated it we can carry it out without having to think. Just as a driver cannot sit and think in the abstract where the brakes and the accelerator are positioned, doctors can not look in the textbook every time they are to make a diagnosis. To describe knowledge as tacit in this manner shows the outer limits of our attention. The reason for this is that thought constitutes a gestalt psychology which says that our perceptions form a whole

Practical wisdom

Man, in the opinion of Aristotle, is a social animal, a *zoon politikon*. This means that we become what we are through the social collective to which we belong. For Aristotle this was the Greek state. The human activities presented above as the starting point for our division of knowledge into *theoria*, *poiesis* and *praxis* can also be seen as three forms of life - *bios theoretikos*, an intellectual life, *bios apolautikos*, the felt life or material use, and *bios politikos*, the life of the citizen. In this division there lies a ranking, where the highest in life is the theoretical and for the skilled. The sensual life and material use is the lowest shared by all, while participation in a political forum is reserved for a minority.

Many have pointed out how this ranking throughout history has resulted in theoretical knowledge gaining the upper hand in the struggle with practical knowledge. From such a perspective, what has happened in the last decade is noteworthy, namely that the practical knowledge has received increased attention and become the goal for research, as well as for conceptual and theory building. One aspect of this development involves studying practical knowledge without the Aristotelian distinction between *techne* and *fronesis*, while another tradition makes this distinction clear. This concept of knowledge, connected with *bios politikos* has even been applied in different occupations and kinds of education especially those involving care. There exists a completely Aristotelian tradition, first and foremost on the American continent, it has its base in communitarianism, with its many different spokesmen both to the right and the left of the political spectrum.

One of the most notable and influential Aristotelians is Martha C. Nussbaum (1997). In her many books and articles she takes a critical position towards certain elements of communitarianism, primarily its love of hierarchical collectives, its value conservatism, and, as she asserts, its incorrect interpretation of Aristotle's concept of rationality. At the same time, she is totally ignorant to the continental and hermeneutic tradition, with its origin in the work of Martin Heidegger (1927), from whom she expressly distances herself. With Heidegger we find the second direction in which the concept of *fronesis* has been developed. The thinker who has developed the hermeneutic tradition after Heidegger is Hans Georg Gadamer (1960).

I will first describe this form of hermeneutic and in what manner it has formulated *fronesis*. With Gadamer and the Canadian philosopher Charles Taylor and his book about Hegel (1975), the Hegelian tradition has gained a new lease of life. Taylor can, in a certain sense, be regarded as a communitarian, but he separates himself from several of its defenders on the basis of his deep knowledge of the works of Hegel. In these texts it is possible to find a precondition for the Aristotelian tradition, which asserts the importance of the collective membership and traditions we have grown up with, forming the interpretation of our existence. The Hegelian tradition is the starting point for a number of different streams of thought in our time, of which pragmatism is one. In a different way they represent a return of the connection between the theoretical and the practical, which has come to be a typical trait of many who talk about knowledge in our time.

Hermeneutics and *fronesis*

Hegel's main concept for the context bound character of knowledge is civil society (1807). He regards it as the place for mankind's self-realisation which can only take place in and through society. The starting point is the individual in private, primarily in the family. However, mankind cannot totally find itself if it limits itself to this sphere and must therefore widen its horizon by stepping out in the world. People do this by objectifying themselves out into the world. The concept for this is "in-itself" and "for-itself", which we can simplify by translating as home and away from home. The way in which this is done is twofold: through physical work and through reflection. The interpretation of this idea thereafter spreads out in the history of thought like a spectrum. Marx chose to place an emphasis on physical work. Dewey (1916) used the thoughts as the basis for his pragmatic thinking that the 'in-itself' concerns the action and the practical work we do, while the 'for-itself' is our reflection on them in order to be able to repeat them. Gadamer (1960) makes this the starting point for his ideas on interpretation by regarding it as education (*bildung*). He writes: "In forming the object, that is, being selflessly active and concerned with a universal, working consciousness raises itself above the immediacy of its existence to universality - or as Hegel puts it, by forming the thing it forms itself."

The collective in this inheritance is thus, that mankind gains knowledge of itself and the world by grasping it both physically and intellectually. As we are involved in the world we cannot strictly separate ourselves from it as if we were a subject confronting an object. The pragmatist concept for man's close connection with the world is based upon our acting in the world, with things around us. The hermeneutic concept for mankind and the world rests on their inseparability, such that our interpretations of what we meet is dependent upon our pre-perceptions. We interpret in the world from the context we are in. Gadamer's central concept for this is tradition. Through the tradition or the traditions, in which we have been raised and educated, we interpret the world around us. We interpret the unknown through what we are already familiar with. There are many words for the familiar in the hermeneutic and phenomenological tradition: horizon, life world, prior understanding etc. Through them we also develop a collective understanding of the interpretative world in which we participate. This means that, even as we approach another human being or take up a text, we have already decided upon our interpretation, the interpretation is anticipated in advance. However, we do not simply acquire a tradition in general without modifying it in accordance with changing historical circumstances. It is at this point that Gadamer introduces the concept of *fronesis*.

"The particular is that the actor must see the concrete situation in the light of what is demanded of him in general. It is not the norms for acting in general which are interesting, to the exclusion of the manner in which we have applied them in given situations. That which is right and good cannot be decided independently of the situation in which it is demanded."

This view of interpretation and knowledge can also be found in Heidegger. It is this politically controversial German thinker who marks the move from phenomenology as Husserl formulated it, to hermeneutic. Husserl uses the concept of life world to cover what we are immersed in, in our everyday life, the customary and the natural. For Heidegger the "context of significance" is the central point of departure for our interpretations. Heidegger makes an ontology of our knowledge and regards our interpretations as already part of the world into which we are thrown. Being immersed in existence and judging and interpreting it, is here an existential condition for us. It always happens in the meaningful situations in which we find ourselves, but the central thing for the authentic person are the skills acquired with new

interpretations. This is the openness which creates the angst often mentioned in the existential philosophical tradition. This openness is also the source of our freedom to choose. This willingness to admit all the different possibilities of interpretation in our surroundings is a thought, which Heidegger takes from Nietzsche. Here is where the line can be drawn between different types of hermeneutics.

The foreign here is made familiar, nature is made human, the deviant other is made the same, which in terms of power means that the other is incorporated in our own world. History is a process in which reason incorporates and empowers all the larger parts of itself. This thought is found again in Gadamer when he asserts that the goal of conflicting interpretations is consensus and arriving at a collective meaning

The decisive difference between Hegel and Heidegger is that for Hegel we must enter that which is thought in order to create a synthesis of it, while for Heidegger this is a case of thinking the unthought, which comes beyond metaphysics but which is also achieved through thought. Thereby, the concept of truth is another, namely to get at that which has been hidden in the metaphysical tradition by opening it, *aletheia*.

The decisive move, that the "the other" is to remain the same and not become 'the same', is taken by Emmanuel Levinas in a critique of Heidegger (1982). Levinas criticises his source of inspiration for being ethically indifferent. Through the celebration of the peasant, his way of life and the neutral earth the relationship to 'the other' is sub-ordinate. He places radical ethics in front of ontology, which has important consequences for the perspective of knowledge. Ethics consists of the making problematic of my own world through the presence of the other. In ontology, the other is reduced to the same. The other's invasion of my world is a necessary pre-requisite if we are to have a wider knowledge of reality, since I know only my own 'home' unless the other is not invited to meet me. The other must be met in full freedom and face to face.

Practical wisdom

Fronesis is developed in its own way by the hermeneutic tradition. Practical wisdom becomes a part of the interpretation and practiced primarily in the actual situation. The ethical dimension is with Aristotle imminent in the customary and the action. We realise the ethical quite simply through acting in an ethically correct manner. Just as we become real house builders by constructing a house, we become courageous by acting in a courageous manner. Ethical knowledge is formulated in hermeneutics partly in the making of new interpretations, partly through practice in concrete situations.

For Aristotle, we can only achieve the wise by working for the good. The goal of wisdom is to realise a good life for people, to increase the human sense of well-being and experience happiness (*eudaimonia*). This represents a different concept of happiness than the one we are accustomed to in utilitarianism, where utility leads to happiness and happiness is to increase desire or reduce suffering. Happiness in the Aristotelian perspective is rather, to make it possible for people to realise their potential and develop their latent capabilities.

Consequently the question arises as to how knowledge and ethics are connected. In the Anglo-Saxon tradition we are accustomed to making a separation between assertions of fact and value. In the modern world knowledge comes first and ethics are a second thought, as a regulative correction of what goes against the so-called humane or permissible. In the Aristotelian tradition, the ethical is already imminent in what we do, in our habits, mores and

the ways we are. The norms and the world which we inhabit cannot be separated from what we do, the actions we carry out.

This perspective raises the question of the universal, the generally valid in our interpretations and norms. In the debate on knowledge and norms this question has been answered in several different ways. On the one hand the principles for justice can be presented as universal, as has been the position of John Rawls. On the other hand the principles for communication can be presented, as Jurgen Habermas has done. In a similar manner, many of the participants in the debate on scientific theory have asserted that knowledge is universal. A common criterion is the testable experiment.

Martha C. Nussbaum is one thinker who has found a way of saying what practical wisdom involves and what can be characterised as important in *fronesis* as knowledge. The starting point is the local collective to which we belong. But the norms and world in which we grow up cannot automatically be taken as given conventions. The revolutionary new in the tradition founded by Socrates was the necessity of critical reflection. Nussbaum supports Socrates's view that a life without reflection is not worth living. By critically reflecting on our local community we increase our ability to meet the foreigner. With a critical perspective we move beyond the one which is ours, we are able to meet other cultures and horizons of interpretation. Ethics, asserts Nussbaum, cannot be reduced to a number of obligations, feelings of bad conscience and what people should do in abstract imagined situations. Ethics involves a wider sphere and deals with life's form and texture as a whole stretched out 'time'. The alternative becomes, *eudaimonia*, human well-being, a good and valuable life, as the goal of ethics. Ethical education therefore, becomes something other than letting yourself be useful, or following a set of rules and norms. To make the difficult decisions in life, or to give form to one's life, cannot be reduced to the rational maximisation of utility. Such choices include the whole of mankind, rationality, passions, desire, all our spiritual abilities and the complexity of human life.

The skill of *fronesis* has its foundation in life's own complexity, diversity and richness. It begins with the very perception of existence, in the development of a 'kind of complex feeling for the characteristic traits in a concrete situation' (1990). The unique has primacy over general principles and necessitates a different measure than the straight line. The measure must be sensitive to that what is to be measured. This means that the evaluation of the actual situation requires obedience, imagination and feeling for the complexity of the unique.

A question that arises is how *fronesis* is realised as knowledge? In traditional cultures this is organic and intrinsic. I have personally witnessed this in South Africa and Latin America, like the, bricoleur, a human who can do many different things in practice, described by Levi-Strauss in *The Savage Mind*. The characteristic thing is that this form of knowledge builds upon long experience. It cannot really, as many have noted, be learnt in the same way as a skill or a science. But it can be shown through examples, patterns and images worth imitating. Nevertheless, just as we can become good house builders by practicing our skills in constructing houses, we can practice *fronesis*. The question of how it is possible to practice obedience and imagination is answered, by many philosophers, as art. Gadamer uses art as the perfect, as exemplary for the kind of knowledge, which is open to new interpretations. The ability to enter into dialogue involves forgetting oneself, as in play, in order to expose and risk one's own interpretation in the meeting with the other. Nussbaum takes literature as her main example. The life experiences that we have not experienced in our own personal lives are possible, to a certain extent, through the experiences of others. She calls this skill narrative

imagination. It is a knowledge of the possibilities and involves what might happen, and not what has actually taken place.

Narrative knowledge

Providing a narrative is central to our understanding of our position in time, of knowing where we find ourselves in the history of which we are a part. In our personal history, the now, as our interpretations of the now, is a product of the past. What we have earlier experienced constitutes a part of our horizon, a limitation in our way of seeing. But at the same time the interpretation we make at a certain point in time apprehends the future. Our life is interwoven along the three dimensions of time we call the now, the past and the future. We recount stories of what we have been through, but the narrative is told differently at different points in time, it changes with our changing interpretations. The narrative provides us with a way of imagining what has taken place.

If we adopt a perspective on the collective level to grasp what happens with respect to social and cultural development, then this has consequences for our relationship to knowledge. It also has consequences for how we regard the relationship between explanation and understanding, natural science and human science. The person who has developed this line of thought the furthest is the French philosopher Paul Ricoeur. The whole of his philosophical project (1985) is based upon seeking a bridge between natural science and the phenomenological tradition. With this goal, he takes as his point of departure two perceptions of time, what we call physical, cosmological time and experienced, phenomenological time. The bridge between these two time dimensions is the calendar, the traces from the past, the change in generations and the narrative.

The narrative links people together with time. Life cannot be grasped without narrative and man is defined as 'a being who tells stories'. Life as a biological event is a raw material, which is interpreted through narratives and through them we leave our lonely existence and become social beings. When we create narratives we unite fact with fantasy. The element of fiction which exists in all knowledge opens at the same time the path to enable us to think beyond the factual and to think of the possible. The narrative "opens a world before the text".

With such a point of departure we can discuss the relationship between the forms of knowledge which have been described in this article. They are naturally in no way mutually exclusive and there is no watertight difference between them. We can regard them as three spheres in which knowledge is discussed in different ways, but by bringing them together we can broaden our perspective on the meaning of knowledge and how we can apply this knowledge to the goals and practical problems which we face.

At the same time there exist limits to the different forms of knowledge, which entail risks if transgressed. A latter day criticism of supporters of practical knowledge has been that practice in modern times has been distorted, becoming the application of technical control over mankind and existence, reduced to mechanical problem solving. And yet, the criteria for objectivity and value freedom in knowledge as *episteme*, can be developed to include both explanation and understanding. At the same time, it is important to keep in mind that *fronesis*, as practical wisdom, should never be made into a scientific theory with an objective terminology. The precision and the demands for proof which exist in science can be replaced by adequacy and a permanent openness to criticism. This is because what has been wrong, can

be the social or cultural context in which, the practical wisdom has been conceived and practiced.

What remains to develop is a way of creating activities and an education capable of creating a good balance between the three forms of knowledge we have discussed. And this requires in all societies and in all activities, knowledgeable, insightful and wise people.

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