

RAPPORT RAPPORT

Sociology of knowledge

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SOCIOLOGY OF KNOWLEDGE – A PARADIGM OR MERELY A PERSPECTIVE?

When Kuhn in 1962 published his book “The Structure of Scientific Revolutions”, and thus the concepts paradigm and paradigm shift, this in itself meant a change of paradigm. Kuhn concentrated mainly on natural science as his object of research. Within natural science, the prevalent view was that the progress of science is cumulative. Each scientist contributes, to a greater or lesser degree, to making knowledge more comprehensive. This may happen by current research building on past knowledge. Science develops, so to speak, through this kind of gradual growth. Kuhn, however, offered the opposite theory - The progress of knowledge is not even, it takes place in leaps. For genuine new knowledge to be developed, old knowledge has to be rejected. The old paradigm has to be replaced by a new one.

I will directly get back to Kuhn’s concept of paradigm, and consider whether it may be of relevance for sociological theory, particularly the sociology of knowledge. I will also consider whether these ideas in any way may be linked to my doctoral dissertation. Kuhn himself would probably have advised against such an attempt, since he regarded social science as a pre-scientific collection of knowledge. However, as soon will be revealed from my essay, the concept of paradigm gradually acquired a less exclusive content than Kuhn intended it to have. To deprive myself, from the beginning, to study the sociology of knowledge, in light of the concepts paradigm and paradigm shift, would probably be a hasty decision. Let me therefore enter Kuhn’s theory, trying to grasp what he put into the concept paradigm, and consider how this concept – post Kuhn – has developed.

PARADIGM – A POWERFUL CONCEPT

Kuhn thus considered the idea of cumulative science as a myth. This myth had been permitted to survive, because textbooks have systematically veiled the fact that scientific revolutions had taken place (Kuhn1970). In their own good interest, writers had concealed scientific disagreement. The ruling theory within the field of science is not as clear-cut as the textbooks indicate. Within these flaws in theory lies the germ of a scientific revolution.

In simple terms, Kuhn presents his theory in the following way; at a given point in time a *paradigm* exists. It represents a conception of what should be studied within a certain field of science, and how one should methodologically proceed within one's chosen field of research. Then follows a period of *normal science*. This is a period of accumulation. Scientists work within the frames of the paradigm, expand knowledge within the field, and confirm the position of the paradigm. In this work, however, *irregularities* arise. Parts of the theory do not fit, some of the methods must be considered dubious. Over time, these irregularities become so marked that the ruling paradigm may no longer be defended, and out of this a *new paradigm* emerges. In fact, a scientific revolution has taken place.

The new paradigm, like the discarded one, has the following marks; 1. It defines phenomena of interest to science, 2. It tells the scientist where to look and 3. It tells him what he may expect to find, on the basis of methods that have been laid down and 4. During the period of normal science competing paradigms are not accepted on a scientific basis.

THE CONCEPT IS “INFLATED”

Kuhn’s work had a tremendous effect. It was hotly debated, not only within natural science, but also within other fields of science (Weinberg 1998). One side effect was that the term paradigm was constantly used more widely. In other words; the concept was “inflated”. Over the years, it became meaningful to refer to paradigm 1, paradigm 2, paradigm 3. (Smith 1998).

Paradigm 1 is the “pure” Kuhn. Less excluding is the conception within paradigm 2. Here, competing paradigms are recognised as existing, side by side. Within each paradigm the situation may in fact be described as “totalitarian”. Each paradigm has its goals, its methods, its strong supporters. The paradigms, however, are considered to be incommensurable. To change from one paradigm to another will require a “gestalt shift”

Paradigm 3 is the one which in terms of exclusiveness is furthest removed from Kuhn’s original one. We use the term about a certain scientific “school”, a direction of thought, a theoretical perspective. One perspective may, in fact, at a given point of time, be the leading one within a scientific field. But several paradigms exist side by side, and they are not regarded as incommensurable, but rather as specialities within the field (organizational sociology, regional sociology etc). A coherent scientific community does not exist.

Paradigm 3 will be my point of departure when I later in my text will discuss the problem area of this essay. So far such a discussion may appear to be quite superfluous, since paradigm 3 completely accepts the sociology of knowledge as a paradigm. But as I will try to prove, the

sociology of knowledge is much more than a paradigm in the inflated meaning of the concept. I am of the opinion that the sociology of knowledge represents a kind of revolution within the field of sociology, if not in Kuhn's conception of the term revolution. But it has opened for a radically new way in the study of social phenomena, and has given us insight that would have been difficult to acquire through other theories.

TWO CLASSICS

Before presenting the sociology of knowledge, however, I will focus on two of the classic, namely Durkheim and Weber. I will draw attention to Durkheim, because he, and his followers in the field, represents perhaps the starkest contrast to the sociology of knowledge. I will refer to his perspective as the *perspective of facts*. Weber is of relevance because he included the social actor, and through "verstehen" tried to get into the spirit of the actor's definition of the social world. I refer to his perspective as the *perspective of definition*. I am of the opinion that within Weber's perspective some of the germ of the sociology of knowledge is found.

THE PERSPECTIVE OF FACTS. Partly referring to his own work, Suicide (1897) being the most famous one, partly with the aim of establishing sociology as a science in its own right, Durkheim developed the term "social fact". Within any society there are social facts, and social facts should be treated as "things". Social facts do not emerge as the result of desk work, or, for the matter, through introspection. A social fact is an empirical fact that must be studied empirically. Durkheim certainly did not mean that social facts *were* things, that they had materialised in a tactile fashion. But for the individual they may nevertheless be external

and forceful. A social fact must be explained on the basis of a preceding social fact, and a psychological fact is unable to explain a social fact. Durkheim was of the opinion that the study of social facts was the domain of sociologist, not the psychologists . His firm stand against “psychologising” is seen clearly in Suicide, where Durkheim does not try to explain each individual’s motivation for suicide, but emphasises the social aspects that may explain the existence of suicide. Institutions and structures, degree of social integration, are examples of such social facts. (Østerberg, 1983).

Durkheim considered society as an independent unit, in the relation to the individual members of society, which in turn are a condition for the social existence of society. Social facts then become external in relation to the individual actor and his/her conscience. Social facts must be studied from an angle in which they appear as isolated as possible from their individual manifestations. The actor’s definition of his situation, which is so central to Weber, appears to be not only without interest, but is considered to have an disturbing effect on the work of the sociologist.

THE DEFINITION PERSPECTIVE. Weber is considered to be the pioneer of this perspective. Webers work created an interest in the way in which human beings define a social situation and, further, how this definition influences their action. The main topic of sociology is not social facts, but the way in which actors define these social facts. Hence, research has to be both intrasubjective and intersubjective. A pure stimulus-response perspective has to be discarded – namely that a given external stimulus by necessity triggers a respons. In the tension between stimulus and respons lies the actor’s definition of the

situation. In contrast to Durkheim, Weber was of the opinion that one cannot study an institution, independently of the actor's use of it. Weber put it in this way; sociology is a science that attempts to achieve an interpretation-based understanding of social action. Of particular importance to Weber was driving home the fact that an action is social. The actor is not isolated, on the contrary, other people's conception of the action will be included in a decision to act. A "verstehen" of the action is the focus of sociology. Sociology should focus on action and interaction, and not on supra-individual notions like systems. The researcher cannot be in a position external to the actors, but must so to speak "get under their skins". Through "verstehen" the scientist must try to get the best picture possible of the actors definition of the situation.

In spite of his strong interest in social action, it is moreover interesting to notice that Weber spent much time as a researcher studying social facts. He worked, then, on the basis of the perspective of facts, for example in his work on bureaucracy (Weber 1922/1971). He had obviously little difficulty going from one perspective to another, making "gestalt shifts".

THE SOCIOLOGY OF KNOWLEDGE – IMPORTANT FORERUNNERS

Perhaps we should not ascribe to much importance to Weber for providing professional inspiration for the sociology of knowledge. The paradigm of definition, however, contains certain central terms like social action, inter-subjectivity , interpretation-based understanding, all this with the focus on the actor in interaction. We also find these terms used by *George Hebert Mead* (1934/1972), whose contribution to the sociology of knowledge is indisputable. According to Mead, the individual is, through interaction, made into a social actor. Ideas are

created, regarding “mind, self & society”. Mind is the presence of significant symbols. It is the internalisations within the individual of the social process of communications in which meaning emerges. At the outset, the actor is a “tabula rasa”, he enters a social scene, where the actors perform certain gestures. When these gestures are met with consistent reactions, they acquire meaning. Over time, in a social situation, certain things will become stabilised (facts). But Mead did not consider social facts as imperative for the actors, but rather as a framework, where the socially most important takes place, namely the interaction. This position may indeed be regarded in such a radical way; society does not consist of “real” structures, existing independently of human being. Society consists rather of human actions, the social aspects being created and recreated (possibly changed) through continuous interaction. The social world is basically a fragile creation. Its members react all the time to potentially meaning-bearing symbols. If there is a mutual understanding of the most important symbols, social reality will persist. But in an open society we will, in time, achieve what was formulated in Becker’s (1962) title; “The Birth and Death of Meaning”. In such a society the members will acquire a new “meaning”. Then this is strictly speaking no longer the same society, even if the members are the same. This is an important theorem within the sociology of knowledge.

The fact that *Alfred Schutz* is often referred to as a phenomenological sociologist, should not be allowed to interfere with the course of the presentation. His contribution to the sociology of knowledge was in fact quite significant. Thomas Luckmann declared in an interview with me that Schutz had been a great inspirational force within his field of study. Schutz worked within the tradition of the German philosopher Edmund Husserl. According to Husserl

perception is intentional. In other words; it is directed, it has an object. In this working of the mind there are three components : The Act, its meaning, which is referred to as Noema, and the Object. Noema is the generalisation of the idea of meaning to the area of all acts. The Object alone provides only limited insight “According to Husserl, what we perceive in a given perception is under-determined by the physical stimuli that we perceive”.(Føllesdal 1982) All the time, however, we seek “essential insight”. Or, once again to quote Føllesdal (1979), we are looking for “the meaning of the objects”. We cannot, in Husserl’s view, have any realistic hope of getting to the bottom of the essence of things in as such. What we have to make the primary goal of our research is the conscience, where experience turns up. We operate reflectively but subjectively.

It was subjectivity that Schutz set to work on, namely intersubjectivity. This term refers, literally, to common subjective states. It is meaningful to talk about a dimension of conscience which is common to a group of people. Within this group of people, human beings will influence each other mutually. Intersubjectivity is the very condition for social life. We have to recognise a set of basic rules in order to relate to each other. Furthermore, the basic interpretation of social relations must be approximately the same, and there must be a mutual understanding of necessary collective tasks.

Schutz was interested in structures of conscience, those that are necessary for joint action and for common understanding of an action. A central question arises; how do actors indeed become intersubjectively competent? The answer is provided by reference to the interaction, in other words to the socialisation . The actors are socialised into a kind of collective thinking,

in relation to the social environment. Much of their action may appear “typified”. But within the conscience the typified is nevertheless experienced as a subjective reality. (Schutz 1962)

THE SOCIAL CONSTRUCTION OF REALITY

With the work by Berger & Luckmann (1967), carrying the above title, there is no longer question of forerunners of the sociology of knowledge. Numerous readers, particularly these outside the academic world, conceived of the book as THE sociology of knowledge . The title imparts perhaps the most central message of the book, namely that the non-physical world is socially constructed. This idea is even more clearly put across in a title by Schutz (1932) “Der sinnhafte Aufbau der sozialen Welt”. This world has indeed been created – with the mind as source. It is the task of the sociologist to understand the process that has been at work in the creation of a certain social reality. This reality exists only to the extent that members of society are aware of it.

The awareness of the prevailing reality, by Berger & Luckmann referred to as “objective reality”, is acquired by members of society by the process of socialisation, primary and secondary. The primary one (upbringing) has the strongest effect, because of the continuous presence of “significant others”. Secondary socialisation, meaning school/education has a more role specific and formal character. Within the sociology of knowledge, however, the following position is central; socialisation never ends, on the contrary, it is an integral part of our interaction in “everyday life”. Our many actions, great and small, verbal and non-verbal, contribute to maintaining social reality, possibly changing it. If we behave in a way appropriate to what society considers as “taken for granted”, the reality will sustain. But if we are critical to the social “truth”, this may be the beginning of a change of reality. For sociology of knowledge it is a great professional challenge to decipher the interaction, find

out which elements contribute to the maintenance of the system, and point to which elements may contribute to system change.

To relate to social reality, competence of action is acquired. In addition there is a legitimacy requirement. Reality will only exist if the actors consider it as legitimate. And since legitimacy is part of the following analysis of the paradigmatic status of the sociology of knowledge, I will give some consideration of the aspect of legitimacy.

When an actor enters into a new social reality, a new social system, e.g. a place of work, the necessary competence of action must be imparted. He must be introduced to his own responsibilities at work, but also the way in which he is expected to relate to his colleagues, the way his professional behaviour ought to be. But within this mediation there is also “meaning”. The new employee must get an ideological framework in relation to his place and his work within the organization. The goal is that he in time will accept the prevailing order and accept it as a firm reality. From the point of view of the system the actor who does not question the system, is a good actor. The responsibility for the legitimating process lies in the last instance with those responsible for the system. The greater respect they are shown, the more effective the legitimating process. If they enjoy great respect externally, within their specific field, it is difficult to avoid their spell. But in view of the legitimating process, the daily interaction is also very important. If the other actors have established a firm “meaning”, it will seem quite natural for the new employee to accept this one.

If the legitimating process is profound and successful, a social system will appear as an institution, and institutions tend to survive. The actors develop a personal interest in the institution and their actions will, generally, tend to conserve the system. However, the relationship with external, competing institutions (systems) will be antagonistic. Only their own institution (system) will be regarded as being in the possession of “the truth”.

THE PARADIGMATIC STATUS OF THE SOCIOLOGY OF KNOWLEDGE

In the introduction I presented the perspective of facts as probably the clearest contrast to the sociology of knowledge. I referred to the term Durkheim developed, namely “social fact, and emphasised Durkheim’s position; social facts should be treated as “things”. Within the perspective of facts institutions and structures are the most basic forms of social facts. They make up make up the primary research area of sociology. I will also mention the later structural functionalists, at least in their early years, almost exclusively focused on the *function* one social fact has for another.

I have no difficulty accepting the similarity that may exist between social fact and objective reality. The stronger one stresses this similarity, the smaller, apparently, the contrast between the perspective of fact and the perspective of the sociology of knowledge. I nevertheless stand firm on my contention about a basic contrast. In the perspective of facts actors are regarded almost as interfering element, while in the sociology of knowledge it is the actors, their interaction, their formation of a common consciousness, their mutual construction of a social reality, which is the very essence of theory formation. Considering this argument, the perspectives become virtually incommensurable.

I could go on and evaluate the sociology of knowledge against perspective like behaviourism and exchange theory. But I consider it much more exiting to apply the perspective og sociology of knowledge on science as such, and simply try to assess whether this perspective has altered our view on the process of scientific production, if it has changed our conception on the characteristic of scientific communities. In this discussion I will use Smith (op.cit.) as my starting point.

The classic conception of natural science is that it is absolutely objective. The scientist formulates his hypotheses without direction of any kind. He chooses the methods most appropriate to throw light on these hypotheses, and not the methods he has a partiality to. The data are handled equally objectively, and no attempt is made to extracting the data most likely to confirm the hypotheses.

The sociology of knowledge challenges this “non-contextual” perfect image. It shows in fact exactly how social context influences the development of knowledge. Different groups of scientist placed in different social contexts, may get different ideas about a certain topic. The development of knowledge in fact takes place *within* a certain culture, *within* a certain language, which is acquired by the scientists on joining a scientific community. Work within such a scientific community has a certain basic legitimacy. It simply explains what serious science is, how one should relate to the methods of this science, who should profit from it, etc. The scientist who does not accept this legitimacy, will be marginalizes within this milieu.

According to the sociology of knowledge, however, science is not absolutely objective. On the contrary, scientific knowledge must be considered as a product created within the framework of a number of social factors. The actors within this social reality are only to a limited extent conscious of which mechanism build up and sustain reality. For them it becomes largely an objective reality, or, to quote from Smith (op.cit., p. 209); “Collin concludes that scientific knowledge is a social construct and that science is tied to definite social and historical conditions, so when conditions change so does knowledge.” For the researcher whose task it is to study science, the challenge lies in “deciphering” the objective reality, disclose the taken-for-granted assumptions of science, reconstruct the process that has produced a give scientific result, and which is considered as objective.

But if science is not objective, is there anything at all in our social world which is objective ? It is with this question as a starting- point I will now try to draw conclusions as to the paradigmatic status of the sociology of knowledge. We recall from earlier in the text that from the point of view of paradigm 3, the problem area of the essay must be considered as completely futile. Paradigm 3 indeed opens completely for classifying the sociology of knowledge as a paradigm. It is, though, more than a perspective. I expressed my position so; “I am of the opinion that the sociology of knowledge represents a kind of revolution within sociology”. Might this assertion open up for a place within paradigm 2? At the first glance, the answer has to be no. The sociology of knowledge has never been a dominating movement within social science, like for example Keynes models within economics. I will nevertheless, not let go of my assertion about a kind of scientific revolution

The scientific revolution is related to the way the social world is considered and analysed. We recall Shutz' title; "Der sinnhafte Aufbau der sozialen Welt". Society is created in the human mind, and exists only for as long as the human mind is conscious of it. Stated in its most extreme form; despite the presence of an objective reality, this one only exists for as long as the actors realise it. It will again, stated most extremely, be invisible to actors who have not been socialised to it.

Part of the aforementioned revolution is related to the fact that one consistently regard social phenomena as created by humans. If an actor states; "this is how it is", the sociologist will be looking for the process that have produced this firm conviction. He is in fact that a social creation might have been completely different. A basic theorem within the sociology of knowledge is that nothing biological may explain a social phenomenon.

The sociology of knowledge represents perhaps more a mental orientation than a method. A sociologist in this field can very well work with anthropological methods, ethnomethodological methods etc. But, nevertheless, it may offer a theory with an insight that, at least to a certain extent, take it out of paradigm 3 and brings it into paradigm 2. In the same way that Freud gave a new theory for understanding man, the sociology of knowledge has given us a new theory for understanding. society. I find it a little "unfair" to offer the sociology of knowledge only a paradigm 3 status. In spite of its lack of theoretical dominance

THE SOCIOLOGY OF KNOWLEDGE IN MY DOCTORAL DISSERTATION.

My doctoral dissertation is entitled “The Industrial wonder at Sunnmøre”. What I am going to attempt to explain is how an exceptional industrial development (an industrial “wonder”) has taken place in a Norwegian region (Sunnmøre).

It would seem natural first of all to approach the problem using a traditional theory about “location of industry”, consider the supply of raw materials, capital, labour and, further, chart transport routes, point to access to markets etc. I soon becomes clear, however, that explanations with a base in the above-mentioned facts, are incomplete. One is justified in pointing out that industry at Sunnmøre has not been developed in good material conditions, but rather the contrary it would seem. We then need to consult more sources, a different theoretical basis, to achieve convincing explanations.

My theoretical sources are three altogether. I will be considering the theory about so-called industrial clusters (Porter 1990). I will be looking at different theories on entrepreneurship, and, finally, the explanatory factor social capital. It is particularly the latter I will focus on in the concluding part of the essay, for here we are dealing with a special form of social reality. It is social capital that renders action possible, or, to quote Coleman (1990, p. 302) “Like other form o capital, social capital is productive, making possible achievements of certain ends, that would not be attainable in its absence”. On the other hand Granovetter (1973) and Woolcock (1998) put a lot of emphasis on the relational aspect of social capital, that social relations within a system and between systems, should be positive and marked by trusts. But in relation to my own project, it would be a grave omission not to focus on norms, more particularly on the norms that initiate economic development. Expresses in more

popular terms; I must try to trace the social reality, the one that has created the so-called “industrious man of Sunnmøre”.

Methodologically, I face the challenge that I, vis-à-vis the reality that I am trying to decipher, am “ a stranger”, to use Schutz’ term. My first will be, consequently, to get as much acquainted with the reality as possible. I will need the ability to get into the spirit of this, and get on the tracks of central factors in the interaction process. It will be of little use, at the preliminary stage, to use surveys, since I in the beginning will not have sufficient insight to ask basic questions. But after some time I may carry out in-dept interviews , which may put me on the track of social mechanism which obviously led to the starting up and the further development of industry as “taken for granted”.

I used the term “on the track” with reference to Yin (1981), who, in his reference to case studies (my study is a case study) compares the position of the researcher to that of a detective. His starting point is theory about causal relations. He is, however, all the time obliged to collect new “evidence”, and must continuously restructure the existing on. While in case of interviews the facts are found in the words and the formulations of the respondent. The “evidence” will in a sense be found outside the language, and will consequently need “deconstruction” (Derrida).

CONCLUDING REMARKS

The methodology outlined above may seem excessively ambitious, and will only partially be undertaken by me. I have, however, already experienced the value of taken the least possible for granted and all the time getting behind what is in “taken for granted”. It is also important

to realise the dimension of age within a social reality, not for a moment believing that what is “truth” for one who is 60, is the same “truth” for one who is 30, even if both of them operate within the same industrial region. I will also suggest that the factors that led to the industrial development, some 50 years ago, were different from those that today maintain and further develop the industry. So I shall probably also have to consult Mills (1970), his “use of history”.

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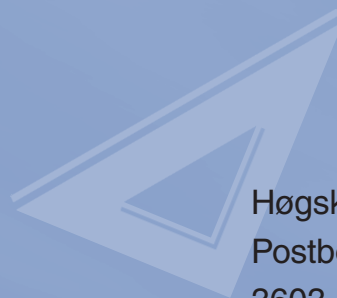
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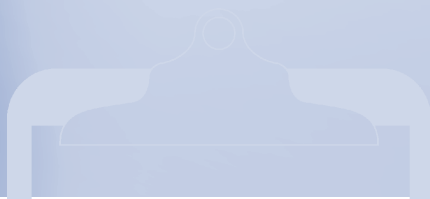
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