Levels and Ontological Models in Sociology

Thomas Brante
University of Örebro
Department of Social Science
701 82 Örebro
Sweden
thomas.brante@oru.sam.se

Discussion paper to be presented at the Critical Realism conference in Roskilde, Denmark, August 17-19, 2001.
One characteristic of critical realism is that it inserts what is called a transitive dimension between theories of reality and reality, the purpose of which is to emphasize that since science does not have direct access to reality it necessarily confronts something historically and theoretically variable. Thus the tripartite theory – transitive dimension – intransitive dimension, or theory – transitive dimension – reality, which has several correspondences in other philosophies of science. The most akin, and Bhaskar’s chief source of inspiration, is Louis Althusser’s concept “object of knowledge.” But there are other conceptualizations, such as *problematique, epistéme, archeology*, and more.

Concepts like these have been invoked primarily for philosophical reasons, in order to distinguish realism from idealism and empiricism. This is fine, but if such a “mediator” exists, it is a crucial fact that needs to be elaborated and specified to a much greater extent than has been done so far. Especially, the methodological implications for (social) scientific research should be explored. In this paper I attempt to make a contribution to such a task. I begin by suggesting an interpretation of this middle ground that is simplifying but hopefully not too implausible. As a second preparation, I suggest a level ontology for sociology. Thereafter I go to my main concern which is to I combine these two ideas – object of knowledge and level - not by abstract reasoning or by discussing epistemology but by exemplification; by suggesting illustrations of various sociological objects of knowledge at different levels. Thus it should be seen as a sketch to an argument. In the following I use the concept “ontological model” as a synonym for “object of knowledge.”

**ONTLOGICAL MODELS**

Ontological models comprise the most crucial entities a scientific generation has to puzzle with. It is a model since it involves a number of ordered puzzle pieces, or basic building blocks. It is ontological since it signifies what is (supposed to) exist – an ontological model does not involve “auxiliary constructions” or “heuristic devices”, or “analytical tools.”

Ontological models are sometimes formulated by means of analogies or metaphors. Lord
Rutherford is famous for imagining atoms as “small billiard balls, preferably black or red.” Harvey conceived blood circulation as a hydraulic pump. They can also be explications of the basics of a theory; indeed, Lord Kelvin insisted that the test of whether we understand a theory or problem in physics is “can you make a mechanical model of it?” (I would argue that the same type of test would be a good device for sociological theory, although perhaps “mechanical” should be discarded.)

The history of the sciences shows that ontological models change over time. Indeed, scientific revolutions are nothing but conversions to new ontological models; new paradigms are tantamount to new ontological models. For instance, the discovery of oxygen by Lavoisier (Cavendish, Priestley, Scheele) implied that the previously crucial concept of phlogiston had to be discarded, and thereafter, chemistry worked with a quite different ontological model. Kuhn (1970: 115) provides several striking examples, for instance that after Herschel’s discovery of Uranus, there were one more planet and considerably fewer stars and comets “in the world of the professional astronomer”. The ontological model, the puzzle the astronomers worked upon, had a different content. Once, God was used as a causal power in most scientific puzzles, but gradually, the concept was expelled from the models of science; God was no longer seen a legitimate epistemic factor.

In the social and behavioral sciences, distinctions between schools or traditions are often drawn on the basis of their separate perspectives or theories. However, the differences reside as much between different ontological models. For instance, the entity “the unconscious” in psychoanalysis is part of a network of other phenomena like repression, symbolic dreams, libido and so on. Together they form a number of puzzle pieces constituting the ontological model of psychoanalysis, in contrast to behaviorism’s pieces stimuli, response, reinforcement, sanction and so on. The same goes for all social scientific disciplines; they treat different “realities”, defined by their specific ontological model. Indeed, I would argue that the lasting importance of the sociological classics is neither their empirical material nor their specific theories but their ontological models, providing succeeding generations with useful and attractive maps for further social research. This is the chief merit of social-scientific paradigms like Marx Capital, Durkheim's Suicide and Weber’s The Protestant Ethic and the Spirit of Capitalism.

Karl Marx was especially explicit about his ontological model, which is the economic laws of the capitalist mode of production. In his preface to the first edition of Capital he
summarizes its properties. The area must be conceived as a natural historical process, the
dynamics of which is interaction between various social forces. Human beings are part of the
ontological model only as bearers (Träger) of social structures. Humans do not appear as
individuals but as representatives of economic forces:

“To prevent possible misunderstanding, a word. I paint the capitalist and the landlord in no
sense couleur de rose. But here individuals are dealt with only in so far as they are the
personifications of economic categories, embodiments of particular class-relations and
class-interests. My standpoint, from which the evolution of the economic formation of
society is viewed as a process of natural history, can less than any other make the
individual responsible for relations whose creature he socially remains, however much he
may subjectively raise himself above them.” (Marx 1990: 17-8)

Thus there are no individual wills in this ontological model, even though individual wills perhaps
exist in reality. You can say that the subjects are abstracted away – but you can also say that they
do not exist in the ontological model of Marxism. And thus, all the innumerable attempts to
criticize or reduce Capital by inserting various kinds of subjects are erroneous, since they break
with the presuppositions of the study. In the same vein it is a mistake to criticize Marx for not
having developed a social psychology – it was not the task he put to himself, but to find the laws
of movement of capitalism. The same thing goes for criticism of example Parsons for not
including “men of flesh and blood” in his sociology, since it seeks to explain social order by a
system of functional macro-structures.

To take an analogous example. Astronomy studies the movements of planets. In the
ontological model of astronomy, planets occur as mass points with properties like mass and
velocity. With this ontological model it is possible to calculate their movements in relation to one
another – the laws of planetary movement. Criticizing astronomy for not including attributes such
that the earth has a rough surface that consists of seas, mountains and land, or that the sun emits
rays, would be as absurd as criticizing Marx for not moralizing over single capitalists.

So ontological models provide building blocks, and are filters between theory and reality.
We can sum this up in the following simple figure, or “ontological model” for the philosophy of
critical realism:
Ontological models refer to basic entities, expressed as categorizations, of a field of research. That is, an ontological model appears as a basic categorization or as a more superficial classification of an entire area of study or a part of this area. As such it could be said to be primary to both theory and observation; the ontological model is a presupposition to both. We sort out and fill our sense-impressions by categorizations, and we explore causal relations between phenomena by departing from categories. When the categorical scheme changes, theories as well as perceptions follow (while the opposite is not necessarily true).

The relation between theory and ontological model (or archeology) is conceived by Foucault in the following typical manner: the ontological model ‘allows one to define the precise domain in which a causal relation will be able to be located’ (quoted from Davidson 1997: 13). Davidson comments: ”Without this type of systematic description … causal analysis will not have the appropriate object of explanation. It is in this sense that a structural analysis allows one to define the field within which a causal explanation has to operate.” (Ibid.) 2

I think Thomas Kuhn implicitly expresses the same idea. His says that his concept of ‘puzzle’ should be comparatively literally understood, implying that each scientific generation is confronted with a number of pieces that are to be fitted together. The aim of theory is to resolve the puzzle; to determine the content of and the internal relations between the pieces.

So ontological models provide the basic material theory works upon. Ontological models also determine, guide, or steer our observations by way of categorical perception (Gärdenfors 1994). Nowadays there are numerous well-known arguments, experiments (e.g. Bruner and Postman) as well as examples from the history of science demonstrating the theory-ladenness, or categorical dependency, of perception and facts. Gärdenfors uses the term conceptual space for denoting what I call ontological model, and conceives of it as a geometrical or topological structure. Again, Kuhn (1970: 24) has summarized it well: Discussing the “mop-up work” performed during mature and normal science, he sees it as an attempt to “force nature into the preformed and relatively inflexible box that the paradigm supplies. No part of the aim of normal science is to call forth new sorts of phenomena; indeed those that will not fit the box are often not seen at all.” (Notice that here we have one more word for the ontological model, namely “box”.)

A well-functioning ontological model is crucial for the establishment of a real science,
distinct from common-sense knowledge and perception. This has been repeatedly stressed by in particular French epistemologists and sociologists. Bourdieu, Althusser, Bachelard and several others have underscored the necessity of an epistemological break, a transition from ideology to science, as a decisive factor for the development of a scientific social science. In his introduction to Rules of Sociological Method, Durkheim (1964: xxxvii) expressed roughly the same idea:

‘If there is to be a social science, we shall expect it not merely to paraphrase the traditional prejudices of the common man but to give us a new and different view of them. … The ways of thinking to which /the reader/ is most inclined are adverse, rather than favorable, to the scientific study of social phenomena; and he must consequently be on his guard against his first impressions.’

The important point here is that theory refers to, relates to, theoretical objects, not to reality as it immediately appears. Assuming a direct relation between theory and reality is what Bourdieu (1991: 13) calls doing spontaneous sociology. Like other sciences, sociology must observe epistemological vigilance, that is, carefully reconstruct its object of research into researchable form. Just as Durkheim, Bourdieu maintains: “For the sociologist, familiarity with his social universe is the epistemological obstacle par excellence”.

What does this mean? How is the epistemological break from everyday notions and spontaneous sociology accomplished? Spontaneous sociology departs from the immediately observable, the obvious, inductively generalizing it to more general assertions, ‘laws’. I think the idea of an epistemological break is best illustrated by Marx’ simple assertion about the two ways of research:

*It would seem to be the proper thing to start with the real and concrete elements, with the actual preconditions, e.g. to start in the sphere of economy with population, which forms the basis and the subject of the whole social process of production. Closer consideration shows, however, that this is wrong. Population is an abstraction if, for instance, one disregards the classes of which it is composed.*

*These classes in turn remain empty terms if one does not know the factors on which they depend, e.g. wage-labor, capital, and so on. These presuppose exchange, division of labor, prices, etc. For example, capital without wage-labor, without value, money, price, etc, is nothing. If one were to take population as the point of departure, it would be a very vague notion of a complex whole and through closer definition one would arrive analytically at increasingly simple concepts; from imaginary concrete terms one would move to more and more tenuous abstractions until one reached the most simple definitions. From there it would be necessary to make the journey again in the opposite direction until one arrived
once more at the concept of population, which is this time not a vague notion of a whole, but a totality comprising many determinations and relations. … The latter is obviously the correct scientific method. The concrete concept is concrete because it is a synthesis of many definitions, thus representing the unity of diverse aspects. It appears therefore in reasoning as a summing up, a result, and not as the starting-point, although it is the real point of origin, and thus also the point of origin of perception and imagination. (Marx 1970: 140-1, my italics)

This quotation is one of the most elegant, thought provoking, and convincing I have ever read concerning the methodology of the social sciences. Apart from the conception of the two 'journeys’, and that a scientific mode of presentation implies commencing from an abstract ontological model from which one successively introduces more dimensions and variables, the definition of the concrete should be noted; the concrete belongs to theory and should not me conflated with reality.

Hence the method is deductive in a broad sense, and from the abstract – the ontological model - to the concrete by way of theory is the scientific mode of presentation. Indeed, this is also the way natural science operates. Popper’s thesis that science does not develop inductively but by deduction from bold hypotheses resembles this idea.

One question is of course how this abstract vantage point or ontological model is at all created, that is, the question of the ‘mode of production’ for formulating the ontological model. In general terms, the answer must be that it is a result of previous research and empirical observations; after all, induction, deep analogies and especially abstraction must be involved in order to hypothesize causal mechanisms generating the social phenomena that are to be explained. In critical realist terminology, this method is called retroduction. However, in the following I will not discuss origins but will confine myself to presenting already established sociological ontological models. To sum up the foregoing in another model:
This structure is set in motion by scientific research, that is, by matching theory with facts. If successful, it produces knowledge about the intransitive dimension, or reality.

**SOCIOMETRY DIVIDED INTO LEVELS**

One last preparation. Ordinarily we conceive of and present sociology as involving several traditions or schools or paradigms. This is still the case, as can be ascertained by studying recently published textbooks. Such introductions to sociology are most meaningful if differences between the traditions are heavily underscored; it is pedagogically effective to over-emphasize differences at the expense of similarities.

I think that nowadays this type of understanding and presentation of sociology is unfruitful, sometimes even harmful. One reason to the harmfulness is that with such a conception it appears meaningless to compare theories of different traditions purporting to explain the same phenomenon. It is observed that different traditions employ different concepts – incommensurability is observed – and then concluded that they therefore provide incompatible understandings of the subject matter, after which the issue is put to rest. For instance:

*Symbolic interactionism*  *Structural functionalism*  *Social behaviorism*
Different ‘paradigms’ are portrayed as closed, discrete, autonomous entities.

Alternatively, sociology is approached horizontally and grouped into e.g. macro- meso- and micro-sociology, disclosing that traditions have their respective strengths at different levels; symbolic interactionism at the micro level, structural functionalism at the macro level. In addition, it would be obvious that different levels treat different things, indicating that they have different ontological models. (To me at least, it is evident that Luhmann’s theory of self-reflecting and self-regulating, autopoetic systems deals with an object of knowledge at a level entirely dissimilar to e.g. Goffman’s observations of peoples’ behavior and modes of interaction in elevators.) Further, employing a division into levels facilitates systematic comparisons of theories at the same level in regards to explanatory potential. I have provided arguments for a level-division in another context (Brante 2001), and will not address this issue here but present the result, involving a division into not three but five levels.

- *International level*. Treats relations between components such as nations, multi-national corporations and organizations, often viewed in a global perspective. This level has been elaborated by peace- and conflict research, world systems analysis, center-periphery theory, dependency theory, theories of imperialism and colonialization, globalization theory.

- *Inter- institutional level* (In practice often national level.) Treats relations between institutionalized components such as organizations and collective actors, often by employing theories of historical and social development in general. The purpose is to describe and on a broad level distinguish institutional orders from the perspective of the societal order. Familiar models of categorization have been made between e.g. economic, political and ideological structures as analyzed with the concepts of mode of production and social formation, or between
state, market and civil society, or between institutionalized structural functions.

- **Institutional level.** Treats relations between formal and informal status positions, social roles, positions in networks, in everything from companies and public hierarchies to groups and families. Weber’s theory of bureaucracy was propelled a research tradition called organization sociology that seeks to account for internal and external relations and modes of function of organizations, such as contingency theory, technology theory, ’garbage can theory’. Neo-institutionalism is another example.

- **Inter-individual level.** Treats relations between individuals in direct or face-to-face encounters. This level has primarily been refined by symbolic interactionists, phenomenologists, exchange theorists, etc. However, the person who first and foremost ’discovered’ this level and formulated theories of its mechanisms is Erving Goffman. According to Goffman, the interaction order produces an order *sui generis*, following its own laws and structures. To Goffman, interactions are rituals constituting what he calls *unio mystico*, living their own lives. In various versions, this thesis has been elaborated by e.g. ethnomethodology, the object of knowledge of which is the conditions and rules providing the basis for face-to-face encounters. Sociological conversation analysis is another follower.

- **Individual level.** Treats relations between intra-individual components, and how such structures form the ground for individual autonomy and self-regulating activities. The standard example is theories about the social self, e.g. Mead’s theory about the relationship between the I, the me and the generalized other. This level also includes theories of rational choice, socio-biology, post-modern theories about identify formation, etc.

This vertical division can be supplemented by a horizontal, displaying specific relational and other key concepts for each level. I suggest the concepts of social relation, cultural scheme and actor in order to clarify that each level can be analyzed from several dissimilar perspectives. The difference is sometimes referred to as objectivism versus subjectivism, social relations versus meaning, structure versus ideology or cosmology. These conceptual pairs are supplemented with a concept of agency in the form of an actor that assumes different connotations at each level.
(Brante 2001: 180 ff). A complete explanation at one level combines these three entities:

- Social relation
- Cultural Scheme
- Actor

<table>
<thead>
<tr>
<th>International</th>
<th>Social relation</th>
<th>Cultural Scheme</th>
<th>Actor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interinstitutional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interindividual</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The figure can be extended upwards, to anthropology, or downwards, to psychology, biology, chemistry and so forth.

The foregoing is an attempt to formulate an ontological model for explaining sociological theory. It classifies relations between level-specific theories related to level-specific objects of knowledge. Hence, in its turn the figure above constitutes an ontological model for reflecting over the nature of sociological theory; a way of breaking with the ordinary spontaneous image of sociological theory as having a direct correlation to social reality.

**ONTLOGICAL MODELS IN SOCIOLOGY**

And now to illustrations of ontological models in sociology. I employ four criteria for the following selection, which of course is very subjective and random. My point is to concreticize by examples and to stimulate to other suggestions. The objects of knowledge:
• Are of broad scope.
• Are simple and ‘pure.’
• Have stimulated or potentially will stimulate much theoretical development.
• Have been or can be employed within several empirical fields.

To warm up and explain what I am driving at, I want to start by presenting a simple model of Foucault’s works on madness and criminology. Foucault’s books are replete with examples and illustrations, of digresses etc - a multitude of fascinating terms are introduced. In many interviews he has been asked about the basic thrust of his endeavors and has offered sometimes drastic answers, for instance that he always has sought to describe the historical conditions for the constitution of the subject. He never or seldom uses terms like causality. Nevertheless I maintain that beyond the amount of words and illustrations we find a rather simple causal model that can be illustrated as a dialectics between three entities, called discourse, technique and apparatus.

Let me take Madness and Civilization as an example. In this book, one of Foucault’s basic assertions is that modern psychiatry, which he defines as ’the talk about madness’, has its historical origin in the ’construction’ of madness as a social and theoretical object, an object of knowledge. One presupposition for talking about madness is the emergence of rationalism as a thought-form. Speaking about madness presupposes a first distinction between the reasonable/normal and the unreasonable/abnormal. Not until this distinction exists will it be possible to separate the mad individual and make him an object of research.

This separation is accomplished in a very concrete manner, by the construction of Hôpital gèneral in 1656. After this construction the science of psychiatry could be introduced; it was provided with an observable and systematizable object (the interns) and could develop discourses and techniques for explanation and treatment of this object. A scientific discourse is constituted, involving a system of categorization, theories and facts pertaining to an object. The system of categorization sorts observations, enabling differentiated diagnoses of symptoms and specific methods of treatment. By differentiation of the object, such as the sorting of patients in different sectors and rooms in accordance with the content of the system of categorization, reality tends to confirm theory; indeed, the order is now observable! Simultaneously, the order implies that scientists and other professionals can be divided into specialties; each disease obtains its label, its experts and its professional treatment personnel:
These three entities form a self-reproducing and self-expanding circle; the phenomenon is institutionalized. The result is a particular ontological model that can be used as a starting point for elaborating theories about discipline and power; indeed, the entire welfare system, its schools and institutions of care and supervision, can be analyzed from this perspective.

Foucault expresses the general situation in the following political vocabulary:

"The judges of normality are everywhere. We are in the society of the teacher-judge, the educator-judge, the social worker – judge; it is on them the universal regime of normality is based, and each individual, wherever he may be, subordinates his body, his gestures, his behavior, his aptitudes, his actions under these. (Foucault 1979: 304)"

In the following I will provide some examples of ontological models at each level of sociological theory. I try to illustrate different points in each example.
THE INDIVIDUAL LEVEL

Opening the individual level implies plunging into a plethora of philosophical, psychological, sociological, biological and other notions; indeed, the issue at hand is nothing less than the true nature of the individual! Hence we find numerous categorizations of such theories, for instance those which claim that man is Egoistic versus Altruistic, is equipped with a Free will versus is Determined. We have Biologism versus Sociologism, Atomism versus Holism as ways of sorting among the amount of theories, making a first separation of them on the basis of a criterion. I will not go into these matters here but will merely illustrate the issue in sociology by presenting some alternative ontological models. The formulas below simply means that (a), signifying social action, is a function (f) of certain components:

Some components of individual action:

- Coleman: $a = f(r, p, k)$
  
  Rationality, preference, knowledge

- March/Olsen: $a = f(s, s)$
  
  Situation, suitability

- Weber: $a = f(is, i)$
  
  Interpretation of situation, intention

- Mead: $a = f(I, m, go)$
  
  I, me, generalized other

- Bourdieu: $a = f(s, h)$
  
  Situation, habitus

- Parsons: $a = f(v, n, r, s)$
  
  Value, norm, role, sanction

- Freud: $a = f(s, e, i)$
  
  Superego, ego, id

- Skinner: $a = f(s, r, r)$
  
  Stimulus, response, reinforcement

- Blumer: $a = f(i, s, i, r)$
  
  Interpretation, stimulus, interpretation, response
• Festinger: \( a = f(dr) \)
  Dissonance reduction
• Scheff: \( a = f(p, s) \)
  Pride, shame
• Collins: \( a = f(ee, r, gs) \)
  Emotional energy, ritual, group solidarity
• Sociobiology: \( a = f(nd, d, i) \)
  Need disposition, drift, instincts

Obviously there are numerous suggestions and models. The enumeration above can of course be multiplied and supplemented by exchange theory, postmodern notions of postmodern identity, and so forth. The common denominator of the models is that they all describe the content of and relations between a few basic intra-individual components. As a next step, these models are set in motion with the help of theories of their inner dynamics, generating explanations of individual action.

Summarizing basic components in this way facilitates exploring which models, despite different terminologies, are in fact expressing the same or similar meanings. For example, in sociology, one major difference goes between those that ascribe a ’rich inner life’ to the individual and those that do not. According to the former, a lot is happening within the individual, such as interpretations and meaning-creating processes, inner dialogues and reflection followed by intentional, autonomous actions (e.g. symbolic interactionism), while the latter locates the causes to internal life and external behavior to factors outside the individual (e.g. social behaviorism). Middle forms are e.g. theories of rational choice, providing the individual with a very strong, not to say hegemonic, internal mechanism, viz. rational calculation, while the raw material for the calculation, knowledge and preferences, are brought in from the outside.

I would like to advocate a model of the individual from the 1950s that apparently has been overlooked in contemporary discussions but is considerably more subtle than the crude and untimely but via the economic sciences well-anchored theory of rational choice, namely Leon Festinger’s theory of cognitive dissonance. The thrust of the underlying model is simply that human beings seek to avoid tensions of various kinds. Tensions may be perceptual, cognitive, social, or emotional, and various mechanisms are triggered in order to reduce dissonance. In our
context, social dissonance is of primary interest, and Festinger (1957: 177) writes:

“The social group is at once a major source of cognitive dissonance /and consonance, TB/ for the individual and a major vehicle for eliminating and reducing the dissonance, which may exist in him. … Processes of social communication and social influence are, hence, inextricably interwoven with processes of creation and reduction of dissonance /and consonance, TB/”

Thus individuals seek to preserve harmony between one’s own cognitions, attitudes etc and those of the reference group.

A second source of dissonance is cognitions, beliefs incompatible with one’s own. There are a number of mechanisms reestablishing cognitive consonance disturbed by other cognitions, e.g. to deny the truth of impulses that are negative in relation to one’s own cognitive system, or simply to disregard the impulse in question, or to change one’s own cognitive system.

A third source of dissonance is perceptions not in harmony with one’s own perceptual system. Harmony is preserved or reestablished by the mechanism of selective perception such as neglecting or reinterpreting phenomena not in harmony with one’s own image of reality (alternatively, negative instances are simply not seen, whereby the problem never arises).

Hence, in this model a basic psychic mechanism is postulated that may be called the principle of consistency. If imbalance, dissonance, or tension arises, several sub-mechanisms are triggered off that in one way or the other seek to restore the balance within each system or between the systems. (interestingly, Piaget’s psychology displays clear resemblances with Festinger’s.)

Of course, the relevance of this model to sociology needs closer examination, but let me here just state the following. Firstly, the model is considerably more basic and comprehensive than e.g. the theory of rational choice. As is often pointed out concerning the latter, the problem is that economists and teaches us to treat rationality as an assumption … while it in reality is a variable in need of explanation. Human beings are more rational in some situations than in others. In other words rationality must be understood as one mechanism, one solution of several possible in situations of dissonance. For example, the tension between legitimate goals in a society, let us say to make a lot of money, and the difficulties of reaching this goal, may be resolved by adhering to legitimate means of the type work hard, save, invest rationally, obtain information about horses and calculate your bets, and so on. But the tension can also be resolved by rejecting legitimate means, e.g. to forge money, commit burglary, or join the Mafia. A third
way is to reject the goal, for instance by setting the Elsterian mechanism ‘sour grapes’ in motion. There is a set of social conditions that can explain which route is taken – ritualism, conformism, innovation, escapism, rebellion - but from the point of view of the individual, they are all examples of dissonance reduction, not rationality in the ordinary sense of this term. Subsuming all these reactions under an overall concept of rationality would imply a quite extraordinary departure from its common meaning. Surely, most affective actions also constitute examples of dissonance reduction. Festinger’s model has the advantage of linking individual biography, personal dispositions and social conditions into one plausible explanatory account of individual action. Jon Elster (e.g. 1998) is one sociologist that in several respects has followed Festinger’s social psychology.

THE INTER-INDIVIDUAL LEVEL

This level has primarily been studied by social psychology and symbolic interactionism, but also by e.g. exchange theory. In this context I would like to address a recently established research area that connects Ervin Goffman’s studies of interaction rituals with the new sociology of emotions.

According to Randall Collins, everything from micro-encounters in the street to ceremonies like marriages and funerals, family dinners, initiation rites, couples in love, political and religious meetings and so forth should be analyzed as rituals in Durkheim’s and Goffman’s sense. A ritual is oriented towards something sacred to its practitioners, binding them together for a moment or a longer period of time into a goffmanian unio mystico; the ritual expresses something specific and profoundly human. Collins (1988: 193) formalizes the constituent components of rituals in six points:

- The physical assembly of a group of people
- Their common focus of attention and mutual awareness of it
- A common emotional mood
- Sacred objects; symbols which represent membership in the group

This in turn result in:

- Enhanced emotional energy and confidence for individuals who participate in the ritual
and/or who respect its symbols

- Righteous anger and punishment against persons who show disrespect for sacred objects

The thrust of Collin’s model is that successful interaction rituals create *emotional energy* (a concept that may seem metaphysical, but as a rule, most new concepts are initially experienced as dubious). Chains of successful interaction rituals generate a generally enhanced emotional energy, i.e. enhanced well-being, while negative chains engender decreased emotional energy, resulting in low self-esteem or depression.

This model comprises some other components, such as the importance of group solidarity, that differences in power and status in a ritual implies that while it may be successful for one party it is a failure for the other, and so on. Although Collin’s model is of recent date, it has already stimulated empirical research and it is a reasonable guess that it will be usefully applied in studies of deviance and medical sociology, to name just two possibilities.

A figure of Collin’s general theory of interaction rituals looks like this (Collins 1993: 207):
Jonathan Turner has developed a more complicated model, placing the phenomenon of depression in a larger context in which several core concepts in the new sociology of emotions are inserted. Turner summarizes his model in a figure that I include here partly because it is very interesting, partly to illustrate how an object of knowledge should probably not be portrayed; the pedagogic value decreases unless one abstracts one more level and is content with fewer components (or talk to electro-engineers):

![Diagram](image)

Although the inter-individual level possesses a certain autonomy, it is of course linked to its context. A recently conducted study that in an excellent manner explores the relation between the inter-individual and the institutional level is Arlie Hochschild's controversial *The Time Bind* (1997).

Hochschild, one of the founders of the sociology of emotions, studied a large manufacturing firm in the US. She began her study with the puzzle that the employed did not use parental leave and other family-friendly arrangements. In the following I make my own, free
interpretation of her study, and include some claims that are not Hochschild’s.

During the course of the study, Hochschild’s original question led her to something quite different, namely to identify alterations in patterns of interaction as causes to institutional change. To make a long story short, Hochschild demonstrates that the emotional epicenter of modern society has changed places, it has been transferred from the family to the work place. Once upon a time, home and family were regarded as the site where the husband could return to get tenderness, intimacy, a safe harbor and so forth after having suffered at a hard, cold and alienating work place. Nowadays, Hochschild claims, this is no longer the case. The home has been transformed into a running mill. There are children that must be picked up at the day care center, pre-packaged food that can quickly be thrown into the micro oven is picked up at the mall, one child is taken to a piano lesson and the other to football practice. There is a binding arrangement with the spouse concerning whose turn it is to pick up the children again and take care of dinner, laundry, read fairy tales, etc. Later, the couple is scheduled to go to family therapy in order to clear out their domestic and emotional problems.

At work, however, it is possible to relax. (Note that the study was undertaken at a modern work place involving employees of the middle classes, and that the personnel is sexually mixed, that is, approximately the same amount of men and women.) There are coffee breaks and time to gossip. In the corridors, people often stand two and two, engaged in conversations. Personal problems or interesting intimate details are ventilated with the best friend behind a closed office door. At night, when the children finally have gone to sleep, telephone or E-mail is used to continue conversations with colleagues. The family is a burden, and work is the new emotional epicenter. And this is caused by changes in the interaction order; most positive micro-rites are carried out at the work place, not in the family or during leisure time. Emotional energy is refilled at work and decreases at home.

So we have two institutional contexts – the family and the work-place – and two types of interaction, one that is stressful and permeated by external demands and situations in which the individual has no real control of her/his own, and one which is flexible, relaxed, full of interesting new meetings and possibilities. The first type of interaction generates low emotional energy, the second positive emotional energy. A variant of the Coleman diagram elaborated by Peter Abell (2000) depicts the major causal mechanisms:
In our example, 1) could be causal mechanisms altering institutional structures, such as on the one hand the introduction of new technologies that open up for more professional office-work plus the increase of female labor, together generating new, more flexible and interactive job situations, and on the other work-time scarcity at home, generated by the same mechanism. 2) would be interactive causal mechanisms at the micro-level, which leads to new individual performances, expectations and ideals, and 3) the mechanisms which cause new organizational performances (Abell 2000: 520).

Hochchild’s study could be tested by examining whether divorce is more frequent if one or both of the spouses work at sexually mixed places, compared to when both work at places dominated by one sex, for instance at the floor of Ford and at a hospital.

The inter-individual level has primarily been studied by general social psychology. In recent decades it has been the object of intensified research, which is a result of partly the stabilization and formalization of Goffman’s insights into a fruitful object of study, partly the breakthrough for the sociology of emotions.

THE INSTITUTIONAL LEVEL

The concept of institution is one of the most central in sociology, not least because it constitutes a mediating link between micro- and macro-levels. (Durkheim even defined sociology as the
The concept has been defined in many ways. I suggest that it is defined as “a specific pattern of relation and interaction, reproduced by behavior that harmonizes with the rules of the same pattern.” (For an elaboration see Brante 1994).

The autonomy of this level has recently been emphasized by neo-institutionalism, for instance by James March and Johan Olsen in works like *Rediscovering Institutions* (1989). Their object of knowledge is political institutions. They show how sociologists frequently commit the mistake of reducing this level, either upwards to its macro-context, as done by for instance some Marxists in conceiving politics as an epi-phenomenon to class and economy, or downwards to the individual level, for instance to aggregates of rational choices. March and Olsen base the autonomy of institutions on the level-specific rules, norms, values, moral beliefs, mores, and rites constituting crucial causal mechanisms for institutional development.

A good example of how general institutional analysis can be conducted is provided by Arthur Stinchcombe (1968). Taking up the case of ‘institutional inertia’, Stinchcombe shows how institutions comprise self-reproducing mechanisms that may be described as causal loops. Let me briefly present this example while at the same time illustrating that a nowadays older theory, which is indeed very simple, typically ‘square’ and not formulated in a modern, fashionable manner, nor is ‘drastically revealing’, nevertheless should perhaps not be discarded since it offers a plausible account of how institutional inertia may be explained. It should also be stressed that institutional inertia is the other side of institutional change, that is, reproducing mechanisms are simultaneously the ones that are counteracted or cease to function in periods of change, implying that the model has general and basic validity claims.

Stinchcombe’s point is primarily methodological; he argues for the importance of causal loops for functional analysis, that is, how “an effect created by causes at some previous period becomes a cause of that same effect in succeeding periods” (Ibid: 103). (For instance, most women are married to a certain man this year because they were married to him last year.) First a few figures showing how causal loops, self-replication and homeostasis may be portrayed. In the figures below, X signifies the historical origin or ’conquest’, the historical cause to A, F is ‘delayer’ so that A at every point in time operates as a cause in the ensuing time period, and 1 signifies that A as a cause reproduces itself as effect. The effect ’bows back’ to its cause.

In the next figure, S signifies structure, H homeostasis, that which is being preserved. Figure three is a hypothesis asserting that when tensions M occur, S is activated to preserve H:
This pattern is created because of a number of simple and well-known mechanisms which concern the adaptation of components to a given set of role positions, that is, to a structure. Let me here momentarily disrupt the abstract presentation to use an example, borrowed from Stinchcombe and transferred to Sweden. Our question is: Why has Protestantism continued to be the predominant religion in Sweden? Is it because the Swedish people since the 16th century after careful reflection and calculation has found that Protestantism is the one true religion? Firstly, there are historical reasons why Sweden became protestant – power struggles in Europe, the Reformation etc (X). (After the Reformation, European states that turned Protestant have remained so, while states that remained Catholic have not altered their religion either.) A plausible explanation is that Protestantism after its classical 'conquest' of Sweden has tended to reproduce itself. The organization/church has control over a number of internal and external mechanisms explaining the reproduction:

**Internal mechanisms:**
- Control of the *selection* of incumbents, that is, establishing criteria for what must be fulfilled by potential members.
- Control of *socialization* of incumbents, that is, of the content in the education brought to
- the disciples.
- Control of recruitment of the coming elite, that is, of the selection and training of those that will take over the top positions of the organization.

To these mechanisms can be added another well-known mechanism pertaining to the ‘components’ that will assume the roles the organization comprises, viz:

- *Anticipatory socialization*: potential members of the organization in advance tend to adapt their behavior, their values and norms (*habitus*) to what they assume to be the wishes of the organization.

March and Olsen (1989: 23) launches a sharp critique of the assumptions of rational choice theory concerning the nature of individuals. Individual behavior in an institutional or organizational context is not characterized as answers to questions like: 1. What are my alternatives? 2. What are my values? 3. What are the consequences of different alternatives for my values? 4. Choose the alternative that has the best consequences. Rather, answers to the following question provides a better account: What kind of situation is this? 2. Who am I? How suitable are different actions for me in this situation? 4. De what is most suitable. According to March and Olsen, organizational behavior is better understood as an issue of adaptation to the expectations and rules surrounding the role in question. Hence, to the other mechanisms we can add:

- *Adaptation*: organizational behavior compatible with the expectations linked to a specific position.

Since organizations are embedded in an inter-institutional context or network of other organizations and institutions, mechanisms are also developed for the reproduction of the organization “upwards”, in relation to its context.

*External mechanisms:*

- *Alliances* with other organizations and power holders (the state, political parties, interest
organizations, the monarchy)

- **General propaganda:** considering the example of the church and Protestantism, this mechanism may involve e.g. mandatory religious education in school and at home.

- **Opposition to alternatives,** e.g. critique of other religions, condemnation of non-believers, punishment of heretics.

A self-reproducing structure ‘survives’ by elaborating its components and its context. Reproduction leads to institutionalization and the creation of traditions. Mechanisms of these kinds are found in most institutions in the world of corporations, governmental agencies, public bureaucracies, universities, political parties. A crucial point here is that they are completely natural. Power holders tend to select persons they regard competent and suitable, which ordinarily amounts to choosing men and women adhering to the same values as themselves. Moreover, the positions of power holders are more secure if ‘the young turks’ are on the same side as they are. Conversely, “ambitious men come to believe whatever is necessary to get ahead, and produce evidence in speech and behavior that they love the right things.” (Ibid.: 110).

Finally, and to return to my outline of specific levels. While March and Olsen focuses upon what I call cultural schemes at the institutional level, Stinchcombe focuses upon social structures. Thus they supplement each other. Concerning actors, both approaches emphasize the anticipating, adapting, socialized, educated, trained and carefully selected characteristics of role incumbents. This implies at the institutional level, actors should be understood as institutionalized subjects, bearers of positions, or role takers, and not as self-centered, rationally calculating individuals.

**THE INTER-INSTITUTIONAL LEVEL**

In several respects this is the classic level, not least since it was the main concern of the classics. In the following I will present several well-known illustrations of various ontological models that are typical of this level. Commencing with modern Marxism and structural functionalism, I then go on address some more specific conceptualizations, primarily in inequality research and the sociology of revolutions.
I.

Marxism is a comprehensive conceptual system, based on an ontological model involving entities like value (exchange and use), surplus, profit, profit rate, exploitation, classes, class struggle. The over-arching concepts of mode of production and social formation denotes its ontological model at the inter-institutional level.

From the concept ‘mode of production’, three general classifications or ontological models are inferred. The first is class typology, the second refers to the components of class dynamics, while the third is a typology of institutional orders.

A. Class typology.

In classical Marxism, three classes are typically distinguished: capitalists, workers and the petty bourgeoisie. Erik Olin Wright is one of the modern sociologists that in several works has tried to elaborate the Marxist class typology by exploring ‘the problem of the middle class.’ In accordance with traditional Marxism, the basic difference between capitalists and workers is defined on the basis of the mechanism of exploitation, operating within the structure of ownership versus non-ownership of the means of production. The middle classes have ‘contradictory class locations’; on the one hand they do not own means of production but are employed and controlled by capital, on the other hand they indirectly exploit the working class. In order to nuance the analysis of the middle classes, Wright introduces two additional criteria: relationship to authority and possession of skills or expertise. The first concerns location in vertical hierarchies of domination, involving various degrees of control and surveillance of subordinates: examples are managers, supervisors, and foremen. The second concerns possession of scarce assets entailing strategic locations within the organization of production. Employing these three criteria, Wright (1997: 25) formulates the following ‘extended’ class typology:
It should be noted that this typology does not multiply the number of classes but is a map of class locations within the capitalist class structure. Wright’s elaboration of the Marxist class typology has been applied in a number of empirical studies, the foremost of which is a comparative study of class differences in the U.S., Japan, and Sweden. (Ibid.)

B. Typology of dynamic components
A comparatively static scheme of Wright’s kind constitutes a foundation for studies of real developmental processes in terms of contradictions of power and interests between classes, layers, and locations. The entities displayed above are the basic components for understanding social stability or change. The next figure does not provide a nuanced picture of social dynamics but rather depicts the standard view of the Marxist conception of the relation between class conflict and state control:
C. The apparatus typology

In my opinion, the classification of a social formation according to Marxism’s classical distinctions between economy, politics, and ideology culminates with Althusser’s article *Ideology and Ideological State Apparatuses*, which is basically an elaboration of the base-superstructure metaphor. We here find a typically Marxist systematic of societal institutional orders. Althusser sets out from the concepts of production and reproduction. Reproduction of the capitalist system is secured by two types of apparatuses, the Legal-Political and the Ideological. These are the two ‘floors’ of the superstructure that are erected upon the infrastructure, the economic base. The economic base is the ‘determinant in the last instance’ of the system as a whole. The superstructure has a relative autonomy in relation to the base and there is a reciprocal causality between the base and the superstructure.

The general function of the political apparatus is to reproduce the relations of production by repression. Ultimately, it ‘functions by violence.’ The ideological apparatus has the same general purpose but primarily ‘functions by ideology’, that is, by maintaining the ideology of the ruling classes.

Corresponding to these apparatuses are different forms of practice. The general definition
of practice is the transformation of raw material to products by using extant means of production. Economic practice involves transformation of “material raw material” to products like commodities, political practice the transformation (or maintenance, reproduction) of social relations, and ideological practice transformation (or maintenance, reproduction) of beliefs, consciousness.

Althusser’s works offer a first delineation of the nature of apparatuses, or institutions, distributed in accordance with their roles in a social formation. To Althusser they constitute structures providing specific functions in and for a specific social formation:

**Mode of Production and Social Formation**

<table>
<thead>
<tr>
<th>Determinant in the last instance</th>
<th>Reproduction</th>
<th>Reproduction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economic apparatuses</strong></td>
<td>--&gt;</td>
<td>--&gt;</td>
</tr>
<tr>
<td><strong>Political apparatuses</strong></td>
<td>&lt;--</td>
<td>&lt;--</td>
</tr>
<tr>
<td><strong>Ideological apparatuses</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Production and reproduction of material conditions:
- Agriculture
- Industry
- Transport
- Trade
- Service

Production and reproduction of social conditions:
- Police
- Military
- Courts
- Prisons

Production and reproduction of social consciousness:
- School
- Family
- Media
- Political parties
- Labor unions
- Churches

II. Structural functionalism, particularly in Parson’s version, strongly resembles Althusser’s classification. This is especially true in regards to Parson’s AGIL-schedule: the combination of structures and functions regulating a society’s Adaptation to its material surroundings (economy), its Goal attainment in terms of collective mobilization (politics), its Integration by means of organizations of different kinds (bureaucracies, prisons etc) and its pattern maintenance (Latency)
by means of cultural, socializing institutions (media, schools etc):

The AGIL-schedule

<table>
<thead>
<tr>
<th>A</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economy</td>
<td>Politics</td>
</tr>
<tr>
<td>Culture</td>
<td>Organization</td>
</tr>
</tbody>
</table>

Althusser as well as Parsons identify general functions that must be fulfilled for the reproduction of class society/social order. The functions are fulfilled by structured apparatuses/institutions, serving to integrate society by means of repression/sanctions and by indoctrination/socialization. The main difference between Althusser and Parsons is of course their completely different conceptions of the nature of modern society. Where Althusser sees a society based on conflict of interest, Parsons sees a society based on value consensus. One example of many indicating this is their respective definitions of the concept of power. While Althusser understands power as relations of dominance and subordination ('power over') Parsons understands it as a precondition for collective resource mobilization, i.e. as something necessary and positive ('power to').

III. During the 1960-70s, both these typologies served as vantage points for macro-sociological explanations of social phenomena. They functioned like Chinese boxes that could be opened and further explored. However, at the end of the 60s, the AGIL-typology was thoroughly criticized and rejected, and Althusser’s typology disappeared at the end of the 70s, due to the crisis of Marxism and Althusser’s personal destiny. In both cases the reasons were political as well as
theoretical. Despite e.g. neo-parsonianism there are as yet no obvious alternatives, but one good attempt is Mary Douglas’ grid-group schedule, another Luhmann’s classification of medias of communication. Especially Douglas’ model is a significant macro-sociological breakthrough, primarily because of its coupling of social structure and cosmology, or culture. The model facilitates a sophisticated approach to on the one hand the relationship between institutional orders and beliefs about what is right, good, natural, i.e. the relativity of moral convictions, on the other hand issues concerning the relationship between, for instance, state, market and civil society. At present, much research is undertaken based on Douglas model, which in its general form looks like this:

![Diagram of grid-group schedule](image)

While grid signifies the vertical order, the amount of decision levels and hierarchies, group signifies the strength of borders between a group and outsiders. Both dimensions can assume high or low values, and taken together they portray specific institutional structures corresponding to specific cosmologies. In the figure above, the first line in each box represents a general characteristic of a social structure, the second line provides an example, and the line in parenthesis refers to specific cosmology.
One of the merits of this classification is that its dimensions are derived from theoretically-based criteria. Douglas employs Durkheim’s distinction between mechanic and organic solidarity to define the dimensions of grid and group, and his social epistemology (“the classification of things reflects the classification of human beings”) to link specific cosmologies to the social categories.

Douglas’ model has been applied in several substantial areas. One application is found in Freddy Castro’s (1991) analysis of modern professions:

<table>
<thead>
<tr>
<th>Low</th>
<th>high</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsumed and</td>
<td>Welfare State</td>
</tr>
<tr>
<td>Marginalized</td>
<td>Professionals</td>
</tr>
<tr>
<td>Professionals</td>
<td>high</td>
</tr>
</tbody>
</table>

INTEGRATION

<table>
<thead>
<tr>
<th>Low</th>
<th>high</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Professionals</td>
<td>Partisan professionals</td>
</tr>
</tbody>
</table>

These models provide a first order or blueprint that in a second step can be detailed by bringing the analysis to more concrete levels and start formulating explanations, i.e. identifying causal relations between phenomena classified and sorted at higher levels of abstraction. I will not proceed with this example but turn to another area, often regarded as the pivotal task of sociology: studies of inequality.
III. Inequality research seeks to identify the mechanisms behind stratification. (There are social scientists holding that knowledge of markets plus stratification covers what social science should and can obtain scientific knowledge about.) I will here illustrate by examples from the American tradition but want to point out that of course, this type of research is central for Marxism, for Bourdieu, and indeed for all forms of class- gender- and ethnicity studies.

The following figure exemplifies one way of forming an object of knowledge for explaining gender divisions. Janet Salzmann Chafetz (1993) categorizes this type of inequality by departing from the concepts of political economy, production and reproduction of institutionalized gender tensions:

Of methodological interest here is that as a next step, Salzman Chafetz zooms in every box and details their contents. In an excellent way this method demonstrates, à la Marx above, how theoretical determinations are successively included on the journey down to more concrete accounts of which mechanisms reproduce gender inequality. Below we have the content of the box “gender organization of production”:
Another interesting attempt to identify the basic mechanisms causing durable inequalities is offered by Charles Tilly (1998). Tilly focuses upon ‘paired categorizations’, which refers to institutionalized dualisms such as capitalist/worker, white/black, male/female, citizen/foreigner, Muslim/Christian, and so forth, that is, categorical inequalities of strong and lasting impact, shaping micro- as well as micro structures in and between societies.

Tilly identifies four basic mechanisms: Exploitation, Opportunity hoarding, Emulation, and Adaptation. Exploitation has the usual Marxist connotation; the appropriation of surplus value of labor by elites in control of productive resources. Opportunity hoarding operates when members of a categorically bounded network acquire access to a valuable resource. Emulation signifies the diffusion of models of inequality, for example when power holders find it profitable to import external, asymmetrical categories to their own organization. Adaptation implies that people on both sides of the boundary tend to act in accordance with the categorization. The
inequality becomes institutionalized when both sides view it as ‘natural’ or ‘inevitable’ and thus, social behavior reproduces the categorization.

These general mechanisms can and should be concretized by the introduction of theories of more limited scope, that is, again we zoom in. The mechanism of exploitation can be explained by ‘ordinary’ Marxism, such as theories of the creation and appropriation of surplus value, elaborated by e.g. E O Wright or G A Cohen. Opportunity hoarding can be operationalized by the theory of social closure that emanates from the Weberian tradition and has recently been elaborated by Raymond Murphy. Paired and unequal categorizations can be formally established by the law, implying that segments of the population are excluded from certain values and goods. Another way of substantiating this mechanism is to apply Bourdieu’s theory of different forms of convertible capital.

The mechanism of emulation can be concretized by originally Durkheimian theories of diffusion, social imitation etc – successful modes of organization tend to be introduced in several areas, see e.g. Eduard Shils.

The mechanism of adaptation, finally, can be substantiated by a number of recent elaborations, such as theories of social conformism, psychological mechanisms such as dissonance reduction, Douglas’ theory of what is held to be good and right – natural borders – from the point of view of the grid-group model.

The strength of Tilly’s model is its syntheticizing capacity, its power to integrate apparently disparate theories into a unity that can be deepened and applied in empirical studies and tests. Another merit is that it does not set out from the obvious, for instance by approaching paired inequality by studying the content of these categories, which would easily entail speculations about attitudes like discrimination, prejudices etc as causes to inequality. Tilly understands inequality as organizational phenomena that must be explained by sociological analysis: ‘attitude follows structure.’
Paired categorizations

- Exploitation
- Opportunity hoarding
- Emulation
- Adaptation

Neomarxism: Cohen, Wright
Neoweberianism: Murphy, Bourdieu
Neodurkheimianism: Shils, Alexander
Neoinstitutionalism: March/Olsen, Douglas

IV. As a last example of an object of knowledge at the inter-institutional level I will present Jonathan Turner’s summary discussion and analysis of conflict theories in historical-comparative sociology, with a focus on the conditions of revolutions. Emanating from the works of Marx and Weber, this type of theorizing is represented by macro-sociologists like Barrington Moore, Gerald Lensky, Theda Skocpol. In our context, Turner’s summary has several interesting features. One is that there exists a clear and simple object of knowledge, a conflict-theoretical sub-paradigm guiding this type of research. Secondly, Turner undertakes a detailed categorization of propositions, arguments and sub-arguments advanced by different sociologists in his field, a categorization I regard as exemplary for explicating the basic components of these theories, although the absence of historical illustrations makes the presentation dry and perhaps less fascinating. However, this technique increases the possibilities of systematic comparisons of theories in regards to their explanatory capacity, which should be seen as a great advance in our discipline. A first simple summary of the basic components of this object of knowledge can be
depicted in the following way (Turner 1998: 196):

Barrington Moore can be summarized in the following way.

*The potential for mass mobilization will increase when:*

The subordinates constitute a coherent whole in their physical location, their daily routines, and their lived experiences.

B The subordinates experience collective solidarity. This sense of solidarity will increase when:

Subordinates experience a sense of threat from those who dominate them.

Subordinates can avoid divisive competition with each other over e.g. land, tenancy rights, markets buying their labor, etc.

C. The traditional interconnections between the communities of subordinates and superordinates
are weakened. This weakening will increase when:

Subordinates and superordinates are placed in more direct competition with each other for resources.
Subordinates are no longer perceived as providing indispensable and otherwise unavailable resources.

Subordinates’ relations to superordinates have moved from a paternalistic to market-driven form.
Superordinates become increasingly removed and absent from the daily routines of subordinates.

D. The subordinates perceive that superordinates are exploiting them. This sense of exploitation will increase when

Subordinates are forced to provide ever more of their resources to external powers, whether to the state or to those who own the means of their production.

One of Theda Skocpol’s theses is based partly on the following propositions:

*The likelihood that the mass mobilization of subordinates will escalate into a full-scale and successful social revolution increases when:*

The central coercive apparatus of a society is weak and cannot, therefore, suppress revolts by subordinates or power-plays by elites.

The weakness of the central coercive apparatus increases when the state is defeated in a war.

The state experiences fiscal crises and cannot, therefore, finance reforms or suppress revolts by subordinates and power-plays by elites.

The state’s power relative to the dominant segments of the society decreases when
The networks among the elites are dense and strong. The control over the military is weakened. Elite segments have both short-term interests and sufficient organizational strength to prevent the state from instituting reforms that would lessen the fiscal crisis or appease subordinate segments of the population. Elite segments are threatened by the state’s activities, that is, when the elites fear erosion of their privileges and wealth. Elites remain dependent on the central state for their wealth, prestige and power. Elites feel that their opportunities for mobility are restricted by the state. Elites see efforts at social reform by the state as undermining their traditional resources of power, prestige, and wealth.

Hopefully, this summary of Turner’s summary (Turner makes the same systematic explication of the works of Paige and Tilly) is sufficient to indicate the fruitfulness of a simple and stabilizing object of knowledge, or puzzle, as a starting point for theoretical as well as substantive research. Moreover, the studies mentioned sometimes overlap but also adds something new or provide refinements to the others, indicating the possibility of cumulativity in a subject like sociology.

THE INTERNATIONAL LEVEL

International or global sociology is as yet underdeveloped and has not yet found a clear model or paradigm of classification. As the rapidly increasing amount of publications in the field show, a number of paradigm candidates are now formulated (see e.g. Held et al, 1999, for one overview of many). Several reviewers have pronounced Castells (1998) to be such a breakthrough. In my opinion there are crucial weaknesses in his work, such as his extremely vague definition of the core concepts, such as ’new global economy’, and the lack of discussion of causal relations. Although I will not discuss it here, I would argue that there is no explicable model in Castell’s work.

Most works on globalization discuss what I would call ephemeral phenomena, for instance whether globalization is a new phenomenon or not, if it is only economic or if other
dimensions should be included, the importance of new technologies of communication, etc. Of course such issues are important but they should be discussed from the vantage point of a deeper theory, or a robust ontological model including causal mechanisms. Therefore, I would like to point out Immanuel Wallerstein’s Marxist inspired world systems analysis as a step in the right direction. Key concepts are core, semi-periphery and periphery, the causal relations of which Wallerstein analyses employing classical Marxist theories of exploitation. Hence Wallerstein’s model can easily be drawn, e.g. in the form of concentric circles and network relations between these whereby we obtain figures resembling the solar system or an atom. A causal model of the global dynamics that is partly inspired by Wallerstein, decomposing the core into three parts and the core/periphery structure into four components, is the following (Chase-Dunn, 1998, p. 278):

![Causal model diagram](image)

This model provides a simple but forceful beginning of theoretical as well as empirical elaboration, and it is comparatively easy to see how each box can be zoomed in and further developed by introducing more concepts and mechanisms, signifying political, cultural, technological etc factors.
So far I have illustrated objects of knowledge for the horizontal account of the levels. But of course, the development of models seeking to explain vertical connections between levels are of equal importance. And of course there are numerous suggestions – Hochschild’s study referred to above is one example – but because of lack of space I will only touch upon two models, simultaneously trying to show the similarity between two seemingly very disparate sociological traditions.

A purification of Bourdieu’s sociological framework leaves us with three basic concepts: capital, field and habitus. Habitus belongs to the individual level, capital is a concept connecting the individual (or group or class) to positions in fields, and fields are arenas where the individual (group, class) act and interact by using his/her/its capital. These three concepts link the three lower levels of the level division to one another.

It is interesting to note that Robert Merton employs more or less exactly the same basic model. To Merton, the individual is socialized, structured, have dispositions entailing that his choices are socially structured. That is, not merely the choice possibilities confronting an individual but also the basis of the choice is already socially structured. Bourdieu’s social capital is tantamount to what Merton calls status and prestige; there are different forms of status and prestige that should be understood as effects of others’ evaluations of the property in question. Field, finally, corresponds to Merton’s ‘institution’; structured spheres within which individuals act and compete about positions.
Generally speaking, the relationship between levels is the following. If we are interested in a certain level (I), the level(s) above (A) form the context or macro-conditions, and the level(s) below (B) provides the dynamic components of (I). (The mistake of methodological individualism is to reduce level (I) and (A) to level (B) and the mistake of holism is to reduce (I) and (B) to (A).) So a full-scale explanation of a social phenomenon can be written as:

\[ Sp = f(I, A, B) \]

The relation between levels can also be modeled by reformulating the Coleman diagram. I would suggest the following:
For example: Merton and Bourdieu lays down a macro-environment called institution, organization, or field, let’s say the fields of science, art, or politics, characterized by certain enabling and constraining structures, rules of competition, etc. In this domain there are stratified positions, of dominance, power, subordination etc that potential incumbents can assume. These positions are of unequal value and are “conquered” according to status, prestige, cultural, scientific, or political capital. Thus they determine the interrelations and interactions between individuals. Similarly, the individuals occupying the positions are in possession of varying degrees of status, skills, or proper habitus, determining their respective position, ways of relating and performing.

SUMMARY

During the 20th century, sociology has ramified into a number of different directions, making it difficult to find clear paths of linear or cumulative development. In this paper I have stressed one possible stabilizing route forward; more focus on robust ontological models. My “arguments” have been in the form of illustrations, not philosophy, nor discussion of the various models.

The models presented above suggest some simple examples at different levels of sociology. Some of them are deep-going and denote invisible mechanisms beyond the surface, such as Collin’s model of connections between rituals and emotional energy, or Althusser’s and
Parson’s models of the functions of social structures, while others are as yet merely descriptive
typologies, such as Turner’s summary of studies of revolutions. What they have in common is
that they at least potentially provide a shared platform for a generation or school of research.

Of course it would be important to elaborate the concept of ontological model. It should be
more clearly defined, and it goes without saying that they are of different kinds, thus
classifications of various types are possible. However, definitions run the risk of foreclosing
interesting uses of the concept. Nevertheless, a few points are in order. Ontological models
should:

1. Explicate the basic causal mechanisms of (a theory of) reality.
2. Categorize empirical precedents and antecedents, or conditions and effects, of causal
mechanisms (e.g. empirical regularities).
3. By means of theory-derived criteria, formulate categories for sorting empirical
phenomena.
4. Suggest a crude explanation of (part of) social reality that can be worked upon, i.e. tested,
refined, and applied.

I think two key terms for describing the fruitfulness of ontological models are: simplification,
maybe even over-simplification, and relative durability. One primary function of an ontological
model is that it allows going beyond the surface of words, to the basic skeleton of, let’s say, a
four-volume treatise in sociology. With the “bare bones” at hand, it is considerably easier to
evaluate its explanatory merits. Thus I agree with Lord Kelvin’s insistence that we don’t
understand a theory until we can make a model of it, and also with Peter Abell (2000: 519), who,
discussing model-making, argues that “One consequence is that much of the phenomenological
tradition in social theory is entirely beside the point.” Relative durability implies that an
ontological model steers theory-building and empirical observation over a longer period of time,
increasing the possibilities of deepening and refining theory as well as significant facts.

In conclusion, let me be impudent enough to suggest a set of sociologies comprising
viable ontological models:
The names above refer to research traditions, ongoing or forgotten. The direction of the arrows signifies whether I regard the development as going forward (arrow to the right), backwards (arrow to the left) or if stagnation reigns (arrow both ways). I also want to mention that the somewhat solemn word *epistéme* is deployed here just to denote a vantage point, a mountain top from which the sociologist can get an overall view of the social landscape. (*Epistéme 1* represents the works of the classics.) I end with the following assertion:

In conclusion, let me make the following assertion. If the sociological community, instead of restlessly searching for new concepts for referring to putatively new social phenomena, would have rested content with one or a few basic and shared ontological models and developed theory and observation from such vantage points when looking out on the social landscape, I think the likelihood that sociology or social science at large would have matured and become a genuinely explanatory, cumulative science would have been much greater. (At the same time I hasten to add

<table>
<thead>
<tr>
<th></th>
<th>EPISTÉME II</th>
<th>EPISTÉME III</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>International:</strong></td>
<td>Wallerstein</td>
<td>? ? ?</td>
</tr>
<tr>
<td><strong>Interinstitutional:</strong></td>
<td>Parsons/</td>
<td>Douglas</td>
</tr>
<tr>
<td></td>
<td>Althusser</td>
<td></td>
</tr>
<tr>
<td><strong>Institutional:</strong></td>
<td>Merton</td>
<td>Bourdieu</td>
</tr>
<tr>
<td><strong>Interindividual:</strong></td>
<td>Goffman</td>
<td>Collins</td>
</tr>
<tr>
<td><strong>Individual:</strong></td>
<td>Festinger</td>
<td>Elster?</td>
</tr>
</tbody>
</table>
that surely there are other suggestions that may be better – my point is merely that sociology should be deepened by some shared models instead of being caught in restless search for new bold perspectives and conceptual reconstructions of what is already known. Sociology is a young science. The road forward is, unfortunately – deepening by continued work and patience.)

Lastly, and to return to the introduction. Bhaskar’s insertion of a transitive dimension between theory and reality is important to demonstrate the realist turn in the philosophy of science and to illustrate the difference between realism, positivism and idealism. It is just as vital, however, to exploit the potentials of this concept by transforming it into a research tool, to explore its methodological consequences. Presumably, the predominance of positivism has blocked this rather obvious route forward. However, many positivists have in fact noted the lack of such a middle concept. For instance, Walter Buckley observes:

“Scientific work, analytically speaking, goes on at three, not two, levels; besides empirical research and logico-deductive theory we have the equally important, though all too implicit, frameworks, models or philosophies that inform our approach to both of the former.” (1967: viii)

Buckley is searching for what I have called ontological models, something positivist philosophy with it’s idea of isomorphy between theory and data does not leave space for. But as John Skvoretz (1998: 250-1) insists, “In sociology, we must encourage the construction of these missing links … The real trick in scientific problem-solving is the creation of models with interesting properties.”
SOME REFERENCES


---

1 Kuhn’s (1970) expressions, for instance that after the discovery of Uranus, “the world of the professional astronomer” changed (Ibid: 115), and also that after the discovery of oxygen, ”Lavoisier worked in a different world” (Ibid: 118), is somewhat unfortunate if we want to avoid idealism. The world or the intransitive dimension of the astronomers or the chemists did not change, rather it was their ontological model that had undergone a radical switch. Of course, from a subjective point of view their world in the sense of their image of reality had changed.

2 I must confess that I do not understand what “structural analysis” implies in this context, but will let that issue rest.

3 **Social relation** refers to the classic object of study of sociology; comparatively enduring patterns between social ‘components’, for example divisions of labor (differentiation) or relations of dominance and subordination; power, status, prestige (stratification). **Cultural scheme** signifies what have been called ideology, *Weltanschauung*, cosmology, perspective: meaning-carrying and meaning-providing symbolic networks. While patterned social relations has been the object of e.g. the Durkheimian, Marxian and Parsonian traditions, the Weberian tradition, symbolic interactionism, ethnomethodology, and more recently, cultural studies, have had social meaning as their main concern. Ordinarily, both strands have defined their fields of study as relatively autonomous phenomena. Conversely, the **relationship** between the social and the cultural has been the traditional focus of study for the sociology of knowledge. Finally, **actor or agent** refers to socially positioned and culturally permeated dynamic components of each level (individuals, organizations, nation-states). In the vocabulary of systems theory, the mutual dependence between these three entities at each level constitutes the foundation for a conceptual framework for studying each level as a relatively autonomous, structured system.

4 One weakness of the theory is that Tilly does not elaborate the relations between the four causal mechanisms, except by claiming that emulation and adaptation reinforces the two former respectively.

5 Generally speaking, modern philosophy of science is hampered by familiar and deep-rooted positivist definitions of core concepts for discussing science, like “causation”, “mechanism”, and “explanation. Therefore, several new philosophies of science discard such concepts, and often also the phenomena of cause, etc. However, positivism has no monopoly of these concepts and it is vital to recapture them. The same goes for another concept akin to the discussion in this paper: “causal modelling”, which is defined by dictionaries and textbooks as an exclusively
quantitative form of research, primarily as path analysis. However, I would say that one basic strategy for all kinds of research, quantitative or qualitative, is causal modeling, something which should be clearly stressed by realism.