TOWARD A THEORY OF STRUCTURE:
DUALITY, AGENCY, AND TRANSFORMATION

by
William H. Sewell, Jr.
June 1989
CSST Working Paper #29
CRSO Working Paper #392

CENTER FOR RESEARCH ON SOCIAL ORGANIZATION
WORKING PAPER SERIES

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"Structure" is one of the most important and most elusive terms in the vocabulary of contemporary social science. The concept is central not only in such eponymous schools as structural functionalism, structuralism, and post-structuralism, but in virtually all tendencies of social-scientific thought. It is no accident that the term structure figures in the titles of some of the most influential books in the social sciences of the past half century -- for example The Structure of Social Action (Parsons, 1937), Social Theory and Social Structure (Merton, 1949), or The Structure of Scientific Revolutions (Kuhn, 1962). My own experience convinces me that the term structure is of fundamental strategic importance in contemporary social scientific writing and conversation. We -- myself as much as others -- invoke structure constantly in our discourse, especially when we find ourselves in tight conceptual spots.

Yet if social scientists find it impossible to do without the term structure, we also find it nearly impossible to adequately define it. Many of us have surely had the experience of being asked by a "naive" student what we mean by structure, and then finding it embarrassingly to define it non-tautologically -- without using the term structure or one of its variants in its own definition. Sometimes we may find what seems an acceptable synonym -- for example, "pattern" -- but all such synonyms lack their original's rhetorical force. When it comes to indicating that a relation is powerful or important it is certainly far more convincing to designate it as "structural" than as "patterning." The term structure empowers what it designates. "Structure" in its nominative sense always implies structure in its transitive verbal sense. Whatever aspect of social life we designate as structure is posited as "structuring" some other aspect of social existence -- whether it is class that structures politics, gender that structures employment opportunities, rhetorical conventions that structure texts or utterances, or modes of production that structure social formations. "Structure" functions in social scientific discourse as a powerful metonymic device, identifying some part of a complex social reality as typifying or explaining the
whole. Structure, in short, is a word to conjure with in the social sciences. It has a persuasive power that escapes attempts at definition, a power we all feel but find virtually impossible to reduce to words. "Structure," in fact, is less a precise concept than a kind of founding or epistemic metaphor of social scientific -- and scientific -- discourse.¹

I have no ambition to reduce "structure" to some simple and crystaline definition. An epistemic metaphor so pervasive and evasive cannot successfully be hogtied and hobbled by smallminded social theorists; for the forseeable future, "structure" is bound to escape any attempt at formal definition and continue its essential if somewhat mysterious work in the constitution of social scientific knowledge. There are, however, some dangers in current usage of the term that make self-conscious theorizing about the meanings of "structure" seem worthwhile. The chief problem is that "structural" or "structuralist" arguments tend to assume a far too rigid causal determinism in social life. Those features of social existence denominated as "structures" tend to be reified and treated as primary, hard, and immutable, like the girders of a building, while the events or social processes they "structure" tend to be seen as secondary and superficial, like the outer "skin" of a skyscraper, or as mutable within "hard" structural constraints, like the layout of offices on floors defined by a skeleton of girders. What tends to get lost in the language of structure is the efficacy of human action -- or "agency," to use the currently favored term. "Structures" tend to appear in social scientific discourse as totally impervious to human agency, to exist apart from, but nevertheless to determine the essential shape of, the strivings and motivated transactions that constitute the experienced surface of social life. A social science trapped in an unexamined metaphor of structure tends ineluctably to reduce persons to cleverly programmed automatons and tends to make structural transformations appear as mysterious events occurring offstage, outside the realm of human action. I therefore believe that a reconceptualization of the notion of structure is necessary to retain -- or regain -- both the realism and the moral relevance of social science.

This article will attempt to develop a theory of structure that overcomes the two cardinal weaknesses of the concept as it is normally employed in social science, (1) restoring human agency
to social actors and (2) thereby making it possible to account for transformations of structures.

My strategy will be to begin from what I regard as the most promising existing formulations -- Anthony Giddens' notion of "the duality of structure" and, at a later point in the argument, Pierre Bourdieu's concept of the "habitus" -- and to develop a more adequate theory by means of critique, reformulation, and elaboration. I should make it clear that by "theory" I mean more or less what Giddens (1984, pp. xvii-xx) does: not a deductively related and empirically testable set of explanatory propositions about the world, but a conceptual framework and analytical vocabulary in terms of which propositions about the world might be formulated. Although the argument of this article is necessarily abstract, it is developed with the criterion of practical utility in mind. Indeed, it might be characterized as a theoretical reflection on empirical studies of social change carried out in the past both by myself (e.g., Sewell, 1980, 1988) and by other historically minded social scientists.

THE DUALITY OF STRUCTURE: A CRITIQUE AND REFORMULATION OF GIDDENS' THEORY

The most serious effort at reconceptualization of structure in recent social theory has been made by Anthony Giddens, who has been insisting since the mid-1970s that structures must be regarded as "dual" (Giddens, 1976, 1979, 1981, 1984). Giddens' notion of the "duality of structure" is not altogether novel. Among other things, it is a kind of explicit codification of Marx's famous aphorism in *The Eighteenth Brumaire of Louis Bonaparte*: "Men make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves, but under circumstances directly found, given and transmitted by history" (Marx, n.d., p. 13). But in Marx this was just a brilliant rhetorical aside. Giddens, by contrast, has attempted to make the duality of structure the keystone of a general theory of social life. I regard his conceptualization of structure as the obligatory starting point of any serious attempt to rethink the concept of structure.
What does Giddens mean when he calls structures "dual?" They are dual, he says, in the sense that they are "both the medium and the outcome of the practices which constitute social systems" (Giddens, 1981, p. 27). Structures shape people's practices, but it is also people's practices that constitute (and reproduce) structures. In this view of things, human agency and structure, far from being opposed, in fact presuppose each other. Without the practices that enact them, structures could not exist. And without structures to give content and direction to practice, human agency would be merely random fluctuations of will. Structures are enacted by what Giddens calls "knowledgeable" human agents (that is, people who know what they are doing and how to do it), and agents act by putting into practice their necessarily structured knowledge. Hence, "structures must not be conceptualized as simply placing constraints on human agency, but as enabling" (Giddens, 1976, p. 161). This conception of human agents as "knowledgeable" and "enabled" implies that they are capable of putting their structurally formed capacities to work in creative or innovative ways. And if enough people or powerful enough people act in innovative ways, their action may have the consequence of transforming the very structures that gave them the capacity to act. Dual structures, consequently, are also -- by definition -- mutable structures.

**Duality of Structure and Social History**

As a theoretically self-conscious social historian, I find Giddens' notion of structure particularly congenial. When my generation of "new social historians" turned to sociology and anthropology for inspiration in the 1960s and 1970s, we did so largely because we sensed that these disciplines, with their central concepts of "social structure" and "culture," could help us to overcome the massive voluntaristic bias inscribed in traditional historical writing. Time has proved us right in this supposition. Deploying structural notions derived from sociology and anthropology, social historians have effected a major revolution in historical scholarship. The rise of social history to dominance in the historical profession meant not just a displacement of politics as the major subject matter of history, but also a much more fundamental redefinition of history's epistemic object from the deeds of great men to the collective transformation of social and cultural structures.
But however useful, the concepts of structure borrowed from sociology and anthropology proved somewhat ungainly when applied to problems of social history. This was, in part, because most historians -- and quite properly, in my opinion -- remained wedded to at least a restrained version of voluntarism. The sociologists' concept of social structure, whether of a structural-functionalist or a Marxist variety, could help a historian to define the nature of the institutional patterns or class relations whose transformation she wished to analyse, but they also seemed to imply the production of actors whose motives and behavior were so determined by the structures that they could hardly be expected to engage in transformative acts. The anthropological concept of culture was -- if anything -- even more inimical to any notion of transformative action. Developed to display and to validate as fully human the coherence of radically exotic ways of life, the concept of culture implied that persons formed under a culture's influence would be programmed to reproduce that culture, with even their moments of liminality or their ritual rebellions ultimately serving to reinforce the system in place (Turner, 1969; Gluckman, 1954).

It is probably fair to say that most historians have not been terribly bothered by the logical problems involved in applying sociological and anthropological concepts of structure to questions of historical change. They have generally been content to narrate their way out of trouble by showing how real persons and groups, shaped and limited by the social and cultural structures of their particular time and place, actually acted in such a way that the shaping and limiting structures were changed by their action. Although probably writing more from professional instinct than from considered theoretical scruples, the historians have, in my opinion, made the theoretically correct move. In applying sociological and anthropological notions of structure, social historians have demonstrated how, in a great variety of times and places, structures are in fact dual: how historical agents' thoughts, motives, and intentions are constituted by the cultures and social institutions into which they are born; how these cultures and institutions are reproduced by the structurally shaped and constrained actions of those agents; but also how, in certain circumstances, the agents can (or are forced to) improvise or innovate in structurally shaped ways that significantly reconfigure the very structures that constituted them. Giddens has
arrived at his position by way of a theoretical critique intended to reconcile phenomenology, interactionism, and ethnomethodology with Marx, Durkheim, and Weber; he has showed no great interest in the work of social historians. Yet I believe that Giddens' notion of the duality of structure underwrites theoretically what social historians (and in recent years many historical sociologists and historical anthropologists as well) do in practice.

What Is Structure?

Giddens calls his efforts "the theory of structuration," but "structure" -- the central term of his theory -- remains frustratingly underspecified in his work. Unlike most social scientists, he does not leave the term completely undefined and simply allow it to do its accustomed magical work in his readers' minds. Especially in *Central Problems in Social Theory* (1979), he discusses "structure" at some length. But I do not think that the concept of structure he elaborates there or elsewhere is sufficiently clear or robust to serve as the foundation of a theoretical system.

Giddens defines structure formally in several places, including in the glossary to *The Constitution of Society:*

**Structure.** Rules and resources, recursively implicated in the reproduction of social systems. Structure exists only as memory traces, the organic basis of human knowledgeability, and as instantiated in action (1984, p. 377).

This far from crystaline definition requires some exegesis. The terms "rules and resources," in spite of their deceptive simplicity, are actually quite obscure and doubtful, and will have to be discussed at length. Let us therefore begin with the rest of the definition, which is arcanely worded but relatively straight-forward in meaning. By "social systems" Giddens means more or less what most social scientists mean by "societies": empirically observable intertwining social practices that link persons to one another across time and space. Social systems, according to Giddens, have no existence apart from the practices that constitute them and these practices are reproduced by the "recursive" (that is, repeated) enactments of structures. Structures, for Giddens, are not the patterned social practices that make up social systems, but the principles that pattern these practices. Structures, therefore, have only what he elsewhere terms a
"virtual" existence (e.g. 1984, p. 17). Structures do not exist concretely in time and space except as "memory traces, the organic basis of knowledgeability" (in other words, only as ideas or schemas lodged in human brains), and as they are "instantiated in action" (in other words, put into practice).\textsuperscript{2}

Structures as Rules

Structures, then, are "virtual" and are put into practice in the production and reproduction of social life. But of what do these structures consist? According to Giddens' definition, they consist of "rules and resources." Giddens' notion of rules is largely derived from French structuralism. This is especially clear in \textit{New Rules of Sociological Method} and \textit{Central Problems of Social Theory}, where he relies heavily on a typically structuralist analogy with Saussurian linguistics. Giddens' likens his distinction between structure and practice (or between structure and system, which is of course an intertwined set of practices) to the Saussurian distinction between \textit{langue} and \textit{parole} (or between the paradigmatic and syntagmatic dimensions of language). According to this analogy, structure is to practice as \textit{langue} (the abstract rules that make possible the production of grammatical sentences) is to \textit{parole} (speech, or the production of actual sentences) (1976, p.118-22). Hence structure, like \textit{langue}, is a complex of rules with a "virtual" existence, while practice, like speech, is an enactment of these rules in space and time.

For a French structuralist, structure is the complex of such rules. For Levi-Strauss, for example, structure refers to the set of rules that enables binary oppositions to be ordered into myths (Levi-Strauss, 1963). In \textit{Central Problems in Social Theory}, Giddens affirms the similarity of his concept of structure to that of Levi-Strauss (1979, pp. 62-4). But he also attempts to distinguish himself from the French structuralists, in part by insisting that because structures "bind" time and space, they must be conceptualized as including not only rules but resources as well (1979, pp. 63-4). However, Giddens leaves his discussion of rules dangling. We know that he regards his concept of the rules that make up structures as similar to Levi-Strauss' concept, but also that it he regards it as differing in certain respects. But precisely how is it similar and how different?

Unlike Levi-Strauss, Giddens fails to specify in any positive sense what structural rules are or
how they might be identified. Nor does he give examples of rules that underlie any actual social practices. All we know from Central Problems in Social Theory is that rules are virtual and that they somehow generate social practice and social systems.

In The Constitution of Society, which is the most recent general statement of his theory, Giddens retreats even farther from a specifically Levi-Straussian conception of rules. There he defines rules simply but, in my opinion, rather promisingly: "Let us regard the rules of social life...as generalizable procedures applied in the enactment/reproduction of social life" (1984, p. 21). This definition of rules as generalizable procedures could of course include "deep structural" Levi-Straussian "transformation rules," but it also implies the possibility of rules of a wide range of types. Giddens, however, does not give examples or elaborate typologies of the sorts of generalizable procedures he has in mind. Consequently, his conception of rules is if anything more impoverished in The Constitution of Society than it was in Central Problems in Social Theory, which at least implied a strong analogy with Levi-Strauss. However, I think his definition of rules as generalizable procedures can be used as a foundation for elaborating a more robust conception.

Throughout his theory, Giddens places a great deal of weight on the notion that actors are knowledgeable. It is, presumably, the knowledge of rules that makes people capable of action. But Giddens develops no vocabulary for specifying the content of what people know. I would argue that such a vocabulary is in fact readily available, but is best developed in a field Giddens has to date almost entirely ignored: cultural anthropology. After all, the usual social-scientific term for "what people know" is culture, and those who have most fruitfully theorized and studied culture are the anthropologists. Levi-Strauss, the one anthropologist Giddens has taken seriously, is very much the odd man out in anthropology. He is virtually unique in his fixation on very deep or general structures. His attempt, ultimately, is to reach by successive abstractions the structure of the human brain itself. Even some of the structuralist anthropologists who have been most profoundly influenced by Levi-Strauss (see, for example, Sahlins, 1976, 1981, 1984) have been far more interested in applying Levi-Strauss's method of seeking out recurrent patterns of binary
oppositions in order to specify the assumptions, practices and beliefs of particular peoples than in tracing such oppositions back to the structure of "the savage mind" or the human brain.

Rather than staying at the "deep structural" level preferred by Levi-Strauss, I think we should, like most anthropologists, think of rules as existing at various levels of depth. Rules nearer the surface may by definition be more "superficial," but they are not necessarily less important than the deepest structures in their implications for social life. "The rules of social life" should be thought of as including all the varieties of cultural schemas, at all levels of generality or depth, that anthropologists have uncovered in their research: not only the array of binary oppositions that make up a given society's fundamental tools of thought, but also the various conventions, recipes, scenarios, principles of action, and habits of speech and gesture built up with these fundamental tools.

These various schemas are, to quote Giddens, "generalizeable procedures applied in the enactment/reproduction of social life." They are "generalizeable" in the sense that they can be applied in or extended to a variety of contexts of interaction. Such rules, schemas, or procedures - whether rules of etiquette, or aesthetic norms, or such recipes for group action as the royal progress, grain riot, or democratic vote, or a set of equivalences between wet and dry, female and male, nature and culture, private and public, or the body as a metaphor for hierarchy, or the notion that the human being is composed of a body and a soul -- can be used not only in the situation in which they are first learned or most conventionally applied. They can be generalized - that is transposed or extended -- to new situations when the opportunity arises. This generalizeability or transposability of rules is, of course, the reason that rules must be understood as virtual. To say that rules are virtual is to say that they cannot be reduced to their existence in any particular practice or any particular location in space-time: they can be actualized in a potentially broad and unpredicted range of situations.

I agree with Giddens, then, that the rules constituting structures may usefully be conceptualized as having a "virtual" existence, that they consist of internalized procedures or schemas capable of being actualized or put into practice in a range of different circumstances.
Such rules should be thought of as operating at widely varying levels of depth or generality, from Levi-Straussian "deep structures" to relatively superficial rules of etiquette.

**Structures as Resources**

Surely part of Giddens' nervousness about wholeheartedly embracing Levi-Strauss' conception of structure is that he wishes to distance himself from Levi-Strauss' sublime indifference to questions of power, domination, and social change -- indeed, to questions of social practice more generally. Presumably it is largely for this reason that Giddens insists that structures are not merely rules, but rules and resources, or "rule-resource sets" (1984, p. 377). But Giddens' concept of resources is even less adequately theorized than his concept of rules. I agree with Giddens that any notion of structure that ignores asymmetries of power is radically incomplete. But simply tacking an undertheorized notion of resources onto an essentially rule-based notion of structure succeeds merely in confusing things.

In *Central Problems in Social Theory*, Giddens defines resources as "the media whereby transformative capacity is employed as power in the routine course of social interaction" (1979, p. 92). Unless I am missing some subtlety, this obscurely worded definition could be rendered into ordinary English as follows: "Resources are anything that can serve as a source of power in social interactions." This seems to me an unexceptional statement of what we usually mean by social resources, but not very theoretically informative. Besides this anodyne definition, about all he tells us about resources is that they can be classified into two types, "authoritative and allocative." In *Central Problems in Social Theory*, he defines "authorization" as "capabilities which generate command over persons" and "allocation" as "capabilities which generate command over objects or other material phenomena" (1979, p. 100). By extension, authoritative resources should be human resources and allocative resources non-human resources -- which once again seems unexceptional.

In *The Constitution of Society*, however, Giddens shifts the definition subtly so that allocative resources are defined as "material" and authoritative resources as "non-material." The glossary of *The Constitution of Society* defines "allocative resources as "material resources..."
involved in the generation of power, including the natural environment and physical artifacts; allocative resources derive from human dominion over nature" (1984, p. 373). Authoritative resources are defined as "non-material resources involved in the generation of power, deriving from the capability of harnessing the activities of human beings; authoritative resources result from the dominion of some actors over others" (1984, p. 373). I would maintain that the material/non-material distinction does not actually catch Giddens' own meaning nearly as well as the human/non-human distinction. Humans, after all, are no less material than coal or railway cars; they are different because they also have minds. Because the physical utility of the peculiar category of material objects known as *homo sapiens* depends on what is in their minds, it makes sense to distinguish human from non-human resources. Humans can be made to move or act far more efficiently and effectively by cognitive and emotional appeals than by purely physical means. Because it is impossible to convince coal to move from the ground to a coal car but it is possible to convince a human to remove coal from the ground and put it in a coal car, the nature and dynamics of human resources are fundamentally different from those of non-human resources. Because both humans and other naturally occurring or manufactured objects are material, a distinction between "material" and "non-material" resources actually blurs rather than clarifying this important distinction.  

I believe that Giddens' classification of resources is potentially useful, but that it needs to be reformulated and put into ordinary English as follows. Resources are of two types, human and non-human. Non-human resources are objects, animate or inanimate, naturally occurring or manufactured, that can be used to enhance or maintain power; human resources are physical strength, dexterity, knowledge, and emotional commitments that can be used to enhance or maintain power, including knowledge of the means of gaining, retaining, controlling, and propagating either human or non-human resources. Both types of resources are media of power, and as such are unevenly distributed. But however unequally resources may be distributed, some measure of both human and nonhuman resources are controlled by all members of society, no matter how destitute and oppressed. Indeed, part of what it means to conceive of human beings
as agents is to conceive of them as empowered by the possession of resources of one kind or another.

**Structures as Rules and Resources**

Reformulating Giddens' concept of resources does not make it clear how resources and rules combine to form structures. Here the most glaring problem is Giddens' definition of structures as "virtual." As we have seen, this makes perfect sense for structures conceptualized as rules. But are resources also virtual? Surprisingly, Giddens does not seem to have considered the point. The notion of a virtual resource seems particularly doubtful in the case of non-human (or in Giddens' terms "allocative") resources. Non-human resources would surely include such things as factories owned by capitalists, stocks of weapons controlled by Kings or generals, land rented by peasants, or stacks of Hudsons' Bay blankets accumulated by Kwakiutl chiefs. It is clear that factories, armaments, land, and Hudsons' Bay blankets have had a crucial weight in shaping and constraining social life in particular times and places, and it therefore seems sensible to include them in some way in our concept of structure. But it is also hard to see how such material resources can be considered as "virtual," since material things by definition exist in space and time. It is, moreover, only in particular times, places, and quantities that such material objects can serve as resources.

The case of human resources is only a little less clear. By definition, human bodies, like any other material objects, cannot be virtual. But what about knowledge and emotional commitments, the non-material aspects of human resources? Examples of non-material human resources might be the priest's power to consecrate the host and hear confession, ordinary citizens' ability to read and write, children's sense of obligation toward their mothers, or the fear and reverence that subjects feel for their King. Unlike factories or Hudsons' Bay blankets, such resources are not material, or at least not in the same sense. Nevertheless they seem to me actual as opposed to virtual. They exist in what Giddens calls "time-space;" they are observable and measurable characteristics of real people who live in particular times and congregate in particular places. And it is their actualization in the minds and bodies of real people that make
them resources. It is not the disembodied concept of the majesty of the king that gives him power, but the fear and reverence felt for him by his actual subjects.

If I am right that all resources are actual rather than virtual, Giddens' notion of structure turns out to be self-contradictory. If structures are virtual, they cannot include both rules and resources. And if they include both rules and resources, they cannot be virtual. He, and we, can't have it both ways. But which way should we have it? The simplest and clearest way of conceptualizing structure would be to return to Giddens' starting point in structuralism, and to assert that structure refers only to rules, not to resources, and that resources should be thought of as an effect of structures, rather than as a co-equal element in the definition of structures. In this way, structures would retain their virtual quality, and concrete distributions of resources would be seen not as structures but as media animated and shaped by structures, that is, by rules.

It is not unreasonable to claim that human resources are the products of rules. A given number of soldiers will generate different amounts and kinds of military power depending on the contemporary rules of warfare (such as chivalric codes), the notions of strategy and tactics available to the generals, and the regimes of training to which the troops have been subjected. The priest's power to consecrate the host derives from rules operating at two rather different levels. First, a priest's training has given him mastery of a wide range of explicit and implicit techniques of knowledge and self control that enable him to perform satisfactorily as a priest. And second, he has been raised to the dignity of the priesthood by an ordination ceremony that, through the laying on of hands by a bishop, has mobilized the power of apostolic succession and thereby made him capable of an apparently miraculous feat -- transforming bread and wine into the body and blood of Christ. Fear and reverence for kings are manifestations of fundamental notions about the cosmic function of kingship, notions that are woven into a multitude of discourses and ceremonies at all levels of society; similarly, obligations felt by children toward their mothers are based in notions of the bonds of nature, of nuturance, and of obedience that are encoded both in multiple routines of family life and in sermons, adages, novels, and works of political theory. And the powers of the literate citizen are actually the direct consequence of their
ability to encode in print and decode from print the rules of grammar, syntax, and rhetoric. Human resources, these examples suggest, may be thought of as manifestations and consequences of the enactment of rules.

But while we might reasonably speak of human resources as rule-generated, it is harder to see how non-human resources could be conceived of as generated by rules. Factories, land, and Hudsons' Bay blankets have material qualities that are certainly not generated by rules. But it is also true that their condition as resources capable of producing and reproducing disparities in social power is not wholly intrinsic in their material existence. What they amount to as resources is in fact a consequence of the rules that govern their use. To take perhaps the most obvious case, an immense stack of Hudsons' Bay blankets would be nothing more than a means of keeping a large number of people warm if it were not for the cultural rules that constituted the Kwakiutl potlatch; but given these rules, the blankets, given away in a potlatch, became a means of demonstrating the power of the chief, and consequently of acquiring prestige, marriage alliances, military power, and labor services (Sahlins??, Boaz, 1966). In this case, it is clearly the rules constituting the potlatch that determine the value, extent, and effects of Hudsons' Bay blankets as a resource. But I would argue that this is true of non-human resources in general. For example, the extent and kinds of resources generated by a factory will depend on whether it is owned by an individual capitalist or by a workers' cooperative -- in other words on rules defining the nature of property rights and of work-place authority. The resources gained by peasants from the land they use will be determined by the rules of land tenure, the exigencies of customary law, the sets of obligations owed to kinsmen, and the known agricultural techniques. Examples could be multiplied at will. Non-human resources have a material existence that is not reducible to rules, but the activation of material things as resources, the determination of their value and social power, is dependent on the rules of social conduct that govern their use.

It is clear, then, that resources can plausibly be thought of as effects of rules. It therefore would certainly be possible to clean up Giddens' concept of structure by defining structure as rules with a purely virtual existence and resources not as co-equal elements in structure but as media
and outcomes of the operation of structure. But notice that if we adopt this definition, the rhetorical power of the term structure insinuates a single direction of causality. That which is termed structure is, by this act of denomination, granted power over that which is not structure. Stocks of material goods and peoples' knowledge and emotional commitments become inert, mere media for and outcomes of the determinative operations of rules. If we insist that structures are virtual, we risk lapsing into the de facto idealism that continually haunts structuralism however much its exponents -- for example, Levi-Strauss (1966, p. 130) -- protest their materialist credentials and intentions. Rules -- mental structures -- become the only form-giving entity, and agents become agents of these mental structures, actors who can only recite pre-existing scripts. To define structures in this way threatens, in short, to deny their duality, and consequently to annihilate the central premise of Giddens' theory.

The Duality of Rules and Resources

If the duality of structure is to be saved -- and as far as I am concerned the notion of duality of structure is the main attraction of Giddens' theory in the first place -- we must take the other alternative and conceive of structures as having (appropriately) a **dual** character. Structure, then, should be defined as composed simultaneously of rules, which are virtual, and of resources, which are actual.

If structures are dual in this sense, then it must be true that rules are the effects of resources as much as resources are the effects of rules. This seems to me a perfectly reasonable claim, one whose plausibility can be demonstrated by considering a few examples. A factory is not an inert pile of bricks, wood, and metal. It incorporates or actualizes rules, and this means that the rules can be inferred from the material form of the factory. The factory gate, the punching-in station, the design of the assembly line: all of these features of the factory teach and validate the rules of the capitalist labor contract. Or take the priest's performance of the mass. When the priest transforms the host and wine into the body and blood of Christ and administers the host to communicants, the communicants are suffused by a sense of spiritual well-being.

Communion therefore demonstrates to the communicants the reality and the power of the rule of
apostolic succession which made the priest a priest. In short, if resources are instantiations or
embodiments of rules, they therefore teach and justify the rules as well. Resources, we might say,
are read like texts, to recover the rules they instantiate.

Rules, then, are effects of resources as much as resources are effects of rules. If rules are
to be sustained or reproduced over time -- and without sustained reproduction they could hardly be
counted as structural -- they must be validated by the accumulation of resources that their
enactment engenders. Rules not empowered or regenerated by resources would soon be
abandoned and forgotten, just as resources without rules to direct their use would soon dissipate
and decay. Sets of rules and resources may properly be said to constitute structures only when
they mutually imply and sustain each other over time.

THE TRANSFORMATION OF DUAL STRUCTURES: OUT OF BOURDIEU'S HABITUS

A definition of structure as made up of both rules and resources avoids both the material
determinism of traditional Marxism and the ideal determinism of traditional French structuralism.
But how it can enhance our ability to understand transformations of structures is not immediately
apparent. Indeed, one could argue that if the enactment of rules always creates resources that
teach and validate the rules, rules and resources should simply reproduce each other without
change indefinitely. The claim that dual structures engender stasis is far from fanciful; such an
argument has in fact been made with great panache in Pierre Bourdieu's brilliant and widely
influential Outline of a Theory of Practice (1977). Any attempt to argue that duality of structure
improves our ability to understand social transformations must confront Bourdieu head on.

Duality and Stasis

Although he uses a different terminology, Bourdieu has powerfully illustrated the mutually
sustaining relationship between rules and resources (what he calls "mental structures" and "the
world of objects"). For example, his well-known discussion of the Kabyle house shows how the
design of the house and the placement of objects in it reproduces fundamental Kabyle cultural
oppositions, such as between high and low, male and female, fire and water, and light and dark,
and thereby patterns all activities conducted in the house in terms of such oppositions. Bourdieu remarks that

all the actions performed in a space constructed in this way are immediately qualified symbolically and function as so many structural exercises through which is built up practical mastery of the fundamental schemes... (Bourdieu, 1977, p.91).

The house is given its shape by the application of rules ("mental structures" in Bourdieu's vocabulary), and the house in turn inculcates these rules by assigning tasks, objects, persons and emotional dispositions to differently coded spaces. As Bourdieu puts it, in his characteristically ornate and paradoxical style,

...The mental structures which construct the world of objects are constructed in the practice of a world of objects constructed according to the same structures. The mind born of the world of objects does not rise as a subjectivity confronting an objectivity: the objective universe is made up of objects which are the product of objectifying operations structured according to the very structures which the mind applies to it. The mind is a metaphor of the world of objects which is itself but an endless circle of mutually reflecting metaphors (Bourdieu, 1977, p. 91).

In many respects, Bourdieu's "theory of practice" is fully compatible with the conception of the duality of structure for which I am arguing in this paper. Bourdieu recognizes the mutual reproduction of rules and resources that constitutes temporally durable structures -- what he calls the "habitus." His discussion of the habitus powerfully elaborates the means by which mutually reinforcing rule-resource sets constitute human subjects with particular sorts of knowledge and dispositions. Moreover, Bourdieu's Kabyle subjects are not cultural dopes. They are endowed with the capacity to engage in highly autonomous, discerning, and strategic actions. (See, for example, Bourdieu's discussion of gift exchange, pp. 4-10, and matrimonial strategies, pp.32-53.) Bourdieu's Kabyles would seem to be exactly the sort of knowledgeable actors called for by Giddens' theory.
Yet Bourdieu's habitus retains precisely the agent-proof quality that the concept of the duality of structure is supposed to be capable of overcoming. In Bourdieu's habitus, rules and resources so powerfully reproduce one another that even the most cunning or improvisational actions undertaken by agents necessarily reproduce the structure.

As an acquired system of generative schemes objectively adjusted to the particular conditions in which it is constituted, the habitus engenders all the thoughts, all the perceptions, and all the actions consistent with those conditions, and no others (1966, p. 95).

Although he avoids either a traditional French structuralist ideal determinism or a traditional Marxist material determinism, he does so only by erecting a combined determinism that makes significant social transformations seem impossible.

But is this powerful implication of stasis really warranted? After all, the Kabyle society in which Bourdieu carried out his field work produced a momentous anti-colonial revolution shortly after Bourdieu returned to France to analyze his data. It seems to me that, in spite of his devastating attacks on Cartesian and Levi-Straussian "objectivism" (1977, esp. pp. 1-30), Bourdieu's own theory has fallen victim to an impossibly objectified and over-totalized conception of society. Only in the idealized world constructed by the social scientific observer could the habitus engender "all the thoughts, all the perceptions, and all the actions" consistent with existing social conditions "and no others." In the real world of human struggles and strategems, plenty of thoughts, perceptions, and actions consistent with the reproduction of existing social patterns fail to occur and inconsistent ones occur all the time.

Why Structural Change Is Possible

It is, of course, entirely proper for Bourdieu to insist on the strong reproductive bias built into structures -- that is the whole point of the structure concept and part of what makes the concept so essential for theorizing social change. After all, as Renato Rosaldo (1980) and Marshall Shalins (1981, 1985) have brilliantly demonstrated, the same reproductive biases of structures that explain the powerful continuities of social relations also make it possible to explain the paths
followed in episodes of social change. What gets Bourdieu off the track is his unrealistically unified and totalized concept of the habitus, which he conceptualizes as a vast series of strictly homologous structures encompassing all of social experience. Such a conceptualization, which Bourdieu in fact shares roughly with many structurally inclined theorists, cannot explain change as arising from within the operation of structures. It is characteristic that many structural accounts of social transformation tend to introduce change from outside the system and then trace out the ensuing structurally shaped changes, rather than showing how change is generated by the operation of structures internal to a society. In this respect, Marshall Sahlins' (1981) analysis of the effect of Captain Cook's voyages on the Hawaiians is emblematic. It is my conviction that a theory of change cannot be built into a theory of structure unless we adopt a far more multiple, contingent, and fractured conception of society -- and of structure -- than Bourdieu's. What is needed is a conceptual vocabulary that makes it possible to show how the ordinary operations of structures can generate transformations. To this end, I propose five key axioms: the multiplicity of structures, the transposability of rules, the unpredictability of resource accumulation, the polysemy of resources, and the intersection of structures.

The multiplicity of structures. Societies are based upon practices that derive from many distinct structures, existing at different levels, operating in different modalities, and based on widely varying types and quantities of resources. While it is common for a certain range of these structures to be homologous, like those described by Bourdieu in *Outline of a Theory of Practice*, it is never true that all of them are homologous. Structures tend to vary significantly between different institutional spheres, so that kinship structures will have different logics and dynamics than religious structures, productive structures, aesthetic structures, educational structures, and so on. There is, moreover, important variation even within a given sphere. For example, the structures that shape and constrain religion in Christian societies include authoritarian, prophetic, ritual, and theological modes. These may sometimes operate in harmony, but they can also lead to sharply conflicting claims and empowerments. The multiplicity of structures means that the knowledgeable social actors whose practices constitute a society are far more versatile than
Bourdieu's account of a universally homologous habitus would imply: they are capable of applying a wide range of different and even incompatible rules and have access to heterogeneous arrays of resources.

The transposability of rules. Moreover, the rules to which actors have access can be applied across a wide range of circumstances. This is actually recognized by Bourdieu, but he has not, in my opinion, drawn the correct conclusions from his insight. Rules were defined earlier in this paper as generalizeable or transposable procedures applied in the enactment of social life. The term "generalizeable" is taken from Giddens; the term "transposable," which I prefer, is taken from Bourdieu. At one point Bourdieu defines the habitus as

a system of lasting transposable dispositions which, integrating past experiences, functions at every moment as a matrix of perceptions, appreciations, and actions and makes possible the achievement of infinitely diversified tasks, thanks to analogical transfers of schemes permitting the solution of similarly shaped problems (p. 83, emphasis Bourdieu's).

The slippage in this passage occurs in the final phrase: "permitting the solution of similarly shaped problems." Whether a given problem is similarly shaped enough to be solved by analogical transfers of schemes cannot be decided in advance by social-scientific analysts, but must be determined case by case by the actors, which means that there is no fixed limit to the possible transpositions. (This is in fact implied by the earlier phrase "makes possible the achievement of infinitely diversified tasks"). To say that rules are transposable, in other words, is to say that they can be applied to an inherently unpredictable range of cases outside the context in which they are initially learned. After all, in ordinary speech one cannot be said to really know a rule simply because one can apply it mechanically to repeated instances of the same case.

Whether we are speaking of rules of grammar, mathematics, law, etiquette, or carpentry, the real test of knowing a rule is to be able to apply it successfully in unfamiliar cases. Knowledge of a rule by definition means the ability to transpose or extend it -- that is, to apply it creatively. If this is so, then agency, which I would define precisely as the capacity to transpose and extend
rules to new contexts, is inherent in the knowledge of rules that characterizes all minimally competent members of society.6

The unpredictability of resource accumulation. But the very fact that rules are by definition capable of being transposed or extended means that the resource consequences of the enactment of rules is always unpredictable. A joke told to a new audience, an investment made in a new market, an offer of marriage made to a new patriline, a cavalry attack made on a new terrain, a crop planted in a newly cleared field or in a familiar field in a new spring: the effect of these actions on the resources of the actors is never quite certain. Investment in a new market may make the entrepreneur a pauper or a millionaire; negotiation of a marriage with a new patriline may result in a family’s elevation in status or its extinction in a feud; planting a crop in the familiar field may result in subsistence, starvation, or plenty. Moreover, if the enactment of rules creates unpredictable quantities and qualities of resources, and the reproduction of rules depends on their continuing validation by resources, this implies that rules will in fact be differentially validated when they are put into action and therefore will potentially be subject to modification. A brilliantly successful cavalry attack on a new terrain may change the battle plans of subsequent campaigns or even theories of military tactics; a joke that draws rotten tomatoes rather than laughter may result in its suppression from the comedian’s repertoire; a succession of crop failures may modify routines of planting or plowing.

The polysemy of resources. The term polysemy (or multiplicity of meaning) is normally applied to symbols, language, or texts. Its application to resources sounds like a contradiction in terms. But given the concept of resources I have been advocating in this paper it is not. Resources, I have insisted, embody rules. Like texts or ritual performances, however, their meaning is never entirely unambiguous. The form of the factory embodies and therefore teaches capitalist notions of property relations. But as Marx points out, it can also teach the necessarily social and collective character of production, and thereby undermine the capitalist notion of private property. The new prestige, wealth, and territory gained from the brilliant success of a cavalry charge may be attributed to the superior discipline and \( \text{Ian} \) of the cavalry officers and thereby
enhance the power of an aristocratic officer corps or it may be attributed the commanding general and thereby result in the increasing subordination of officers to a charismatic leader. Any array of resources is capable of being interpreted in varying ways, and therefore of empowering different actors and teaching different rules. Again, this seems to me inherent in a definition of agency as the capacity to transpose and extend rules to new contexts. Agency, to put it differently, is the actor's capacity to reinterpret and mobilize an array of resources in terms of rules other than those that initially constituted the array.

The intersection of structures. One reason arrays of resources can be interpreted in more than one way is that structures or structural complexes intersect and overlap. The structures of capitalist society include both a mode of production based on private property and profit and a mode of labor organization based on workplace solidarity. The factory figures as a crucial resource in both of these structures, and its meaning and consequences for both workers and managers is therefore open and contested. The intersection of structures in fact takes place at both the rule and the resource levels. Not only can a given array of resources be claimed by different actors embedded in different structural complexes (or differentially claimed by the same actor embedded in different structural complexes), but rules can be borrowed or appropriated from one structural complex and applied to another. Not only do workers and factory owners struggle for control of the factory, but Marx appropriates political economy for the advancement of socialism.

Structures, then, are sets of mutually sustaining rules and resources that empower and constrain social action and that tend to be reproduced by that social action. But their reproduction is never automatic. Structures are at risk, at least to some extent, in all of the social encounters they shape -- because structures are multiple and intersecting, because rules are transposable, and because resources are polysemic and accumulate unpredictably. Placing the dynamic relationship between resources and rules at the center of a concept of structure makes it possible show how social change, no less than social stasis, can be generated by the enactment of structural rules in social life.
PUTTING THE THEORY TO WORK

Although the argument of this article has been relentlessly abstract, I have in fact been guided by the principle of practical analytical utility. It is impossible in the space available to give extended examples of how the theory might inform social scientific practice. But I would like to illustrate its utility briefly by two means: first, by attempting to apply it schematically to a well known case of social change and, second, by showing how its language and categories can be used to clarify the characteristics and dynamics of three important types of structural complexes.

Duality of Structure and the Protestant Ethic

Let me begin by showing how Max Weber's argument in The Protestant Ethic and the Rise of Capitalism (1958) could be recast in terms of the transformative dynamics of dual structures. This by no means establishes the superior utility of my theory, but it at least indicates that it has some plausibility as a means of talking about social transformations.

The account would begin with rules initially elaborated in the context of theological dispute and religious practice: the Calvinist concepts of calling and predestination. These rules are applied in a new context: the commercial operations of urban merchants and petty manufacturers. The consistent enactment of theologically generated rules in this context also has definite but unexpected resource consequences: by working hard and living ascetically, urban bourgeois accumulate capital. This has the "normal" or expected reproductive effects: it validates the moral rules of Calvinism and the virtue of those who practice them. But the continuing accumulation of capital also has an effect in the distinct structural complex of production and exchange, where Calvinist merchants become increasingly powerful in markets. It also tends to enhance their power in other realms of life, for example in politics. These effects make possible an alternative reading of the resources: a valuation of capital accumulation for its own sake or for the social power and authority it brings. Hence the spirit of capitalism breaks free of its origins in the Protestant ethic. In this case I begin with a transposition or application of a rule, but I could just as easily have begun with a reading of resources. One could argue that before the coming of
Calvinism, merchants already had traits of probity, self-discipline, and piety, had a capacity for abstract calculation, and possessed sizeable accumulations of wealth that were not fully validated in a Catholic and aristocratic culture. This pattern of resources, the argument would continue, meant that the new theology of Calvin could be appropriated to make a particularly cogent reading of their social situation, and therefore resulted in a widespread adoption of Calvinism by the urban mercantile classes.

It should be evident even from this very brief and telescoped example that the concept of structure as a duality of rules and resources, supplemented by the principles of the multiplicity and intersection of structures, the transposability of rules, the unpredictability of resource accumulation, and the polysemy of resources, makes possible a neat restatement of a classical argument in historical sociology. This implies that it might be a useful for conceptualizing other sequences of social transformation as well.

**Analysing Variations in Structural Dynamics**

The concept of structure I elaborate in this paper is very general and therefore could be applied to structures of widely differing character -- ranging in import from structures that shape and constrain the development of world military power to those that shape and constrain the joking practices of a group of Sunday fishing buddies or the erotic practices of a single couple. This immense range in the scope and character of the structures to which this article's concepts can be applied is appropriate, given the premise that all social action is generated by structures. But it suggests a need for some means of distinguishing the character and dynamics of different sorts of structures. I will not offer a detailed typology of structures -- both because space is short and because I feel that any such typologies should arise out of attempts to analyze real cases of social change. Instead, I shall simply indicate two important dimensions along which structures vary -- depth and power -- and try to demonstrate that thinking in terms of these dimensions can help to illuminate the very different dynamics and durabilities of three important types of structures: those of language, states, and capitalism.
Depth is a key metaphor of linguistic and structuralist discourse. To designate a structure as "deep" implies that it lies beneath and generates a certain range of "surface" structures, just as structures underlie and generate practices. Deep structures are those rules that can be shown to underlie ordinary or "surface" structures, in the sense that the surface structures are a set of transformations of the deep structures. Thus the structural rules for the performance of a fertility ritual may be shown to be particular transformations of a deeper set of oppositions between wet and dry or male and female that also underlie the structures governing other institutionally distinct practices, from housebuilding, to personal adornment, to oratory. Consequently, deep structural rules are also pervasive, in the sense that they are present in a relatively wide range of institutional spheres, practices, and discourses. They also tend to be relatively unconscious, in the sense that they are taken-for-granted mental assumptions or modes of procedure that actors normally apply without being aware that they are applying them.

Different structures also vary enormously in the resources, and hence the power, that they mobilize. Military structures or of structures shaping state finance create massive concentrations of power, whereas the grammatical structures of a language or the structures shaping schoolchildrens' play create much more modest power concentrations. Structures also differ in the kinds of power they mobilize. For example, the power created by apostolic succession is based primarily (although by no means exclusively) on persuasion, while that created by the military government of a conquering army is based primarily on coercion.

Language. I believe that thinking about structures in terms of their depth and power can lead to significant insights about the structures' durability and dynamics. Consider, for example, linguistic structures, which have tended to be used by scholars in many disciplines as the prime example of structure in general. Linguistic structures, which of course tend to be remarkably durable, actually fall at the extremes on the dimensions of both power and depth. Linguistic structures are extraordinarily deep. The syntactical and sematic structures of language underlie all the multitude of structures that rely at least in part on speech and writing -- which is to say the immense preponderance of all structures. Moreover, there may be depths beneath the depths
of linguistic structure: Chomsky (1972) has posited a universal generative grammar that underlies all human languages. The power of linguistic structures, on the other hand, is unusually slight. The enactment of syntactical and semantic structures in speech or writing in itself has only the most modest resource effects. It confirms the speaker's membership in a linguistic community and reinforces the rules that make the generation of grammatical sentences possible. Assuming that an utterance is made to other competent speakers of the language, the speaking of a grammatical sentence in itself creates no significant power disparities, but rather establishes an equality among the conversants. Language of course serves as a medium for all kinds of enactments of power relations. But at the level of syntax and semantics, it is as close as we are likely to get to a neutral medium of exchange.

Indeed, I would argue that this very neutrality with respect to power helps to account for the other peculiarity of linguistic structures: their extraordinary durability. If the enactment of linguistic rules serves only to sustain the linguistic empowerment of speakers without shifting resources toward some speakers and away from others, then no one has much incentive to engage in linguistic innovation. I also believe that thinking about the power dimension of language can help explain why change in semantics, although glacial by comparison with changes in most structures, is far more rapid than changes in syntax. While it is virtually unheard of for social conflicts or social projects to center on rules of grammar, it is obviously far more common for the meaning of words -- "nation," "work," "Mrs.," "science," "subsistence," or "liberate," to mention a few obvious cases -- to be at issue in social action. The recent expansion of the meaning of "gender" from its specialized grammatical usage to its usage as a general marker of sexual difference has been the result of feminists' concerted efforts to enhance the power of women in political and intellectual life. It is such social actions -- with their mobilizations of and effects on power -- that make semantic changes occur more rapidly than syntactical changes.

Overall, it is clear that linguistic structures have much less power and are much deeper and more durable than most structures. For this reason, we should be wary of the widespread tendency to use linguistic structures as a model or paradigm for structures in general. The
elegance of the linguistic model sets an enviable standard, but structures that operate nearer the surface of social life and that are more thoroughly implicated in its power relations may be very different from linguistic structures in their principles and dynamics. One of the dangers that arises from uncritically accepting the linguistic model is a tendency to think of structures as composed purely of rules, ignoring the resource dimension altogether. This tendency is perhaps clearest among the Levi-Straussian structuralists, but it touches Giddens as well, especially when he claims that structures have only a virtual existence. In studying the syntactic structures of languages, where the enactment of rules has virtually negligible power consequences, it probably doesn’t matter much if the resource aspect of structure is neglected. But when we try to make sense of the multiple arenas of social life that are permeated with power relations, it may be downright crippling to apply the linguistic analogy and conceptualize structures purely as rules.

**States.** Particularly poor candidates for the linguistic analogy would be state or political structures, which commonly generate and utilize large concentrations of power, and which are usually relatively near the surface of social life -- that is, are consciously established, maintained, fought over, and argued about rather than taken-for-granted as if they were unchangeable features of the world. Although one might initially imagine that large power concentrations would tend to assure a structure’s durability, this may not actually be true. Although centralized states with massive coercive power impose high costs on those who would challenge them, it is far from clear that centralized and coercive states have generally proved more durable than relatively decentralized and uncoercive states. Compare, for example, France to Britain between 1750 and 1850, the United States to Germany from 1870 to 1950, Costa Rica to Nicaragua, El Salvador, or Guatemala since World War II, or India to China over the same time span. And even the relatively stable states are subject to periodic structural transformations. Although the the United States has had a single constitution since 1789, it has experienced a succession of fundamental political crises that produced at least five sharply distinct party systems over the past two centuries (Burnham, 1967). One might argue that state structures are relatively mutable
precisely because the massiveness (power) and obviousness (lack of depth) of their resource effects make them natural targets for open struggles.

But if most political structures are characterized by both high power and low depth, an inverse relationship between power and depth is by no means necessary. There are some political structures with immense power implications that are nevertheless relatively deep, that have become "second nature" and are accepted by all (or nearly all) parties as essentially power-neutral, taken-for-granted means to political ends. Such structures also appear to be unusually durable. This would appear to be true of political structures as diverse as the American constitutional system, the French public bureaucracy, or the English community legal structures whose remarkable persistence Margaret Somers has traced from the fourteenth to the mid-nineteenth century (Somers, 1986). Durability, then, would appear to be determined more by a structure's depth than by its power.

Capitalism. How do structures with massive power effects become or remain deep, since one would normally expect the massiveness of the effects to make social actors aware of and willing to contest the structures' rules and resource accumulations? I will approach this question by examining the case of capitalism, perhaps the most spectacular case of a power-laden yet long-enduring structure. Capitalism is, of course, a highly dynamic, ever-changing system. Yet it is commonly maintained that the past two hundred fifty to three hundred years -- if not the entire period from the sixteenth century to the present (according to Wallerstein, 1974) -- constitutes a unified capitalist era with a continuous dynamic of capital accumulation guided by an essentially unchanged core structure, what in Marxian parlance is called the capitalist mode of production.

Marx himself noted the extraordinarily dynamic and changeable character of capitalist development, but he saw the change converging on a single form: the large-scale, mechanized factory staffed by an increasingly homogeneous proletariat. Recent developments have tended to make the changability of capitalism seem more radical and permanent. Far from registering the onrush of the classic factory, the current era of world economic growth has been characterized by increasing use of subcontracting, sweat-shops, out-sourcing, and "cottage industry" and by the
bourgeoning of services at the expense of manufacturing. At the same time, scholars are increasingly pointing out the unevenness, contingency, and openness of development patterns under capitalism, whether in the past (Samuel, 1977; Sabel and Zeitlin, 1985; Sewell, 1988) or in the present and future (Piore and Sabel, 1984). Sabel has even suggested that forms of economic change in the so-called capitalist era are so indeterminate that the very concept of capitalism, with its implication of underlying regularity, is misleading and should be abandoned (1988). I think Sabel is right as far as he goes: that a wide variety of institutional arrangements and property relations are compatible with "capitalism" and that never in its history has capitalism obeyed uniform "laws of motion." Capitalist development has always been a messy and uneven affair. But I think that the messiness has been at the level of secondary or surface structures and that beneath the surface flux lies a far more stable deep structure of rules that are continually reinforced by flows of resources -- even on occasions when the surface structures are revolutionized.

Unlike most Marxians, I see the core rules not as those defining the wage-labor relationship but as those governing the conversion of use value into exchange value. The core procedure of capitalism -- the conversion of use value into exchange value or the commodification of things -- is exceptionally generalizeable or transposable. It knows no natural limits; it can be applied not only to cloth, tobacco, or cooking pans, but to land, housework, bread, sex, advertizing, or knowledge, each of which can be converted into any other by means of money. The surface instability of capitalism arises precisely from this interconvertability, which encourages holders of resources to trade them for different kinds of resources as relative values change, and which always makes it possible for resources not previously treated as commodities to be commodified -- that is, to enter the circuit of monetized exchanges. To put it otherwise, the commodity form, by making almost all resources readable as exchangeable commodities, organizes a virtually universal intersection of structures, which means that changes in any one structure -- an increased or decreased accumulation of resources or a new procedure -- can affect an indefinitely vast number other structures that intersect through the medium of money. Changes at any point
in the circuit of exchange will give rise to resource effects and innovations elsewhere. And these
changes are not necessarily constrained to follow any particular institutional form, so long as they
are profitable: thus the rise of the automobile industry stimulated the simultaneous development
of rubber plantations based on indentured or forced labor, steel mills based on immense factories
manned by wage-earning proletarians, and a proliferation of repair shops run by self-employed
petty capitalists.

But this chronic instability or unpredictability of capitalism's surface structures actually
reinforces its deeper structures. An alteration anywhere along the vast chain of commodity
exchanges is a new incitement to invest; the logic inherent in the commodity form makes any new
array of resources or new procedure a potential opportunity for profit. And of course any new
investment results in further changes. Even investments that fail create new opportunities that
can be seized by following the normal procedures of capitalist investment and exchange -- when a
firm goes under there is plant and equipment to be bought up at bargain prices, a residual market
for the firm's ex-competitors to exploit, and so on. Consequently, the procedures themselves are
remarkably impervious to -- indeed paradoxically are reinforced by -- the failures of particular
capitalist enterprises or industries. Persons, firms, regions, and nations rise and fall, but
capitalism spins on. The displacement of hand-weavers by the power loom or of coal by petroleum
may have destroyed skills, wrecked businesses, or blighted the economies of certain localities. But
it simultaneously proved that following the logic of the commodity form creates wealth for those
who do so, and even -- over the long run and in spite of important local exceptions -- for the
capitalist economy as a whole. Unpredictable resource accumulations continually and routinely
undermine local or surface structures of capitalism, but because of the virtually unlimited
interconvertability of resources under the commodity form, the same unpredictability actually
validates its deep structures. Hence, under certain particular circumstances, structures can
combine depth with great power, and consequently can shape the experiences of entire societies
over many generations.
CONCLUSION

Besides its practical utility in explicating the reproduction and transformation of structures, I believe that the theory of structure outlined in this article has certain theoretical advantages. The vocabulary and conceptual framework I have developed in this article can help us to clarify three long-standing and elusive problems in social theory. It enables us to explain both social stability and social change within a unified framework and vocabulary; it furnishes a clear and workable concept of agency; and it can help us to overcome the venerable but sterile dichotomy between the ideal and the material.

(1) Stability and Change. One abiding problem of theories of social change is that change and stability have typically been cast as opposing categories and explained by different theoretical principles. Stability, for example, is typically regarded as a consequence of structure or value consensus and is analyzed synchronically, while change is conceptualized as a consequence of contradictions, breakdown, or exogenous influences and is analyzed diachronically. The theory of structure elaborated in this article encompasses both stability and change in a unified conceptual universe, enabling us to explain both with the same vocabulary. Stability, reconceptualized as reproduction, is as much a temporal process as transformation, and both transformation and reproduction are consequences of the dialectical production of resources through rule enactment and of rules through resource accumulation. Both stability and change are processual notions; they are not opposing principles, but rather varying relative positions on a single scale.

(2) Agency. Thinking about structure as a duality of rules and resources also makes it possible to define more clearly what is usually a rather mysterious term in social theory: agency. Rather than entering the theory as a primordial quality of the will, agency is defined as the relationship of human beings to structures, in both their rule and resource senses. All members of society are agents, according to this theory, because all of them have some knowledge of the rules of social life and control over some measure of human and nonhuman resources. Agency, therefore, can be defined as the actor’s knowledge of rules, which means the capacity to apply them to new contexts; alternatively, the same thing can be said the other way around, by defining
agency as the actor's control of resources, which means the capacity to reinterpret or mobilize an array of resources in terms of rules other than those that constituted the array. In this theory, then, agency is not an occult quality that exists apart from and in opposition to structure, but the constitutive stuff of structure.

(3) *Idealism and Materialism*. This conceptualization of structure also points toward a transcendence of the perpetually vexing question of idealism and materialism. Most contemporary social theorists are uncomfortable with the conventional distinction between material and ideal, or material and mental, or base and superstructure. One reason for this discomfort is that it is so hard to draw the line separating them in practice. Is the material merely the economic? If so, does that mean that state oppression or patriarchal oppression is somehow not material, and hence by implication not as fundamental or as important as economic oppression? Nearly all social theorists nowadays in fact recognize the power of culture or symbols or discourse in the shaping and transformation of social life. This is as true of Marxists as of non-Marxists: on this point the titanic enemies Louis Althusser (1971) and E. P. Thompson (1978) are actually in accord. But there remains a certain epistemological angst about how the power of culture is to be justified theoretically without embracing some kind of idealism. Perhaps the most common move is to expand vastly the notion of the material until it has absorbed those phenomena normally regarded as ideas. Thus Althusser insists that ideology "has a material existence" because it is derived from the material practices (rituals, gestures, actions) of an ideological apparatus (1971, pp. 165-70) or Giddens talks about "organic memory traces," rather than "ideas" (1984, 377).

The definition of structures elaborated in this article implies that the distinction between opposed ideal and material categories is actually quite misplaced and should be replaced by two apparently analogous but in fact significantly different distinctions. The first is a distinction between human and non-human resources. Here "human" would appear to be analogous to "ideal" and "non-human" to "material," and Giddens, as we have seen, makes this fateful elision. Yet the "human" category includes both the material bodies and the minds of human beings. What makes it useful to distinguish human bodies from other material objects is precisely that
they are inseparable from human minds. This means that they have utterly different dynamics as resources than other material objects; that their material powers and resistences are inextricably intertwined with "ideal" factors -- their thoughts, knowledge, desires, fears, intentions, memories, and so on. Accepting the distinction between human and non-human resources implies that it is incorrect to think of some aspects of human behavior (production and perhaps military action) as "material" and others (writing, oratory, science, or politics) as "ideal." Production, no less than science, involves knowledge, intentions, and puzzles; oratory, no less than military action, burns calories and requires the development of bodily gestures and muscular prowess. All human action, in whatever sphere, is an inseparable mix of the "ideal" and the "material." Indeed, the "ideal" and "material" labels should probably be dropped entirely in favor of the term "human," so long as we remain keenly aware that every human activity involves both ideation and physical activity.

The other distinction retained by this theory is between virtual and actual structures. Again there is a certain analogy between this distinction and the commonplace distinction between the ideal and the material. All resources are material, in that they occupy specifiable locations in space and time. And because rules are virtual they are transposable from one time-space location to another. This transposibility of rules might be said in an idealist vocabulary to define the spirituality of structure -- its "freedom" from the constraints of time and space. But notice that the distinction between virtual and actual aspects of structure is a duality, not a dualism.

Whereas the ideal and the material are posited as metaphysically distict modes of being, the virtual and the actual are posited only as analytically distinguishable aspects of structures whose being is always an inextricable combination of both rules and resources. A duality of the virtual and actual leads us to explicate the mutual determination of rules by resources through the medium of human agency; a dualism of the ideal and material would lead us into sterile arguments about how either the ideal determines the material or the material the ideal -- in either case banishing human agency from social life. By adopting instead the notion of the duality of structure, we can restore humans to the central place they actually occupy in history.
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1. Although I am far less knowledgeable about the discourse of the natural sciences than of the social sciences, "structure" seems to play an essentially identical role there. The origin of such usages was, as far as I am aware, in seventeenth and eighteenth century Botany, whence it spread to other natural and social sciences. See Foucault (1973, pp. 132-8).

2. If I understand Giddens properly, it is as true of memory traces as it is of practices that they are not structures but "instantiations of structures". In other words, structures may be mental, but they do not exist whole in the mind of any actor. Rather, the knowledge lodged in any single brain is a particular instantiation of structures that are transpersonal, just as the rules of grammar of the English language are not the same as the rules known by any particular English speaker.

3. It is not possible here to list a representative example of the anthropological works that elaborate various "rules of social life." The most influential formulation of the anthropological concept of culture is probably Geertz (1973). For a superb review of recent developments in cultural anthropology, see Ortner (1984).

4. A distinction between material and non-material resources, if taken seriously, would require an endless and totally unrealistic conceptual hairsplitting that would divide minds from bodies. It would, for example, force us to classify soldiers' bodies with guns and grenades, but would separate them from the knowledge and emotional commitments that make soldiers' bodies useable in warfare.

5. To generalize a rule implies stating it in more abstract form so that it will apply to a larger number of cases. The verb "transpose" implies a concrete application of a rule to a new case, but in such a way that the rule will have subtly different forms in each of its applications. This is implied by three of the *Oxford English Dictionary*'s definitions: "To remove from one place or time to another; to transfer, shift," "to alter the order of or the position of in a series...to interchange," and, in music, "to put into a different key." "Transposer," in French (which was of course the language in which Bourdieu wrote), also has an even more appropriate meaning: "faire changer de forme ou de contenu en faisant passer dans un autre domaine," (to cause something to change in form or content by causing it to pass into another domain" *Le Petit Robert*, p 2007). I would like my use of "transpose" to be understood as retaining something of this French meaning.

6. Here my thinking has been significantly influenced by Goran Therborn's *The Ideology of Power and the Power of Ideology* (1980, esp. pp.15-22). Therborn, who begins from the problematic established by Althusser in his essay on "Ideology and Ideological State Apparatuses" (1971) insists that the operation of ideology in contemporary society results not only in the the creation of subjects willing and able to do their part in the reproduction of capitalism. Individuals are subjected by ideology, but also "qualified" by it. "The formation of humans by every ideology, conservative or revolutionary, oppressive or emancipatory, according to whatever criteria, involves a process simultaneously of subjection and qualification. The amorphous libido and manifold potentialities of human infants are subjected to a particular order that allows or favors certain drives and capacities, and prohibits or disfavors others. At the same time, through the same process, new members become qualified to take up and perform (a particular part of) the repertoire of roles given in the society into which they are born, including the role of possible agents of social change." (17)

7. John Roemer has proved to my satisfaction that capitalist exploitation can occur even in the absence of wage labor (Roemer, 1982).