

# The Structure of Self-Reference

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Whether what it seeks is wisdom or something more modest, the manner in which philosophy goes about its work has always seemed to me *structural*. By this I mean that it is concerned with building, or with testing, or occasionally with destroying, relatively complex systems of ideas (using the term “idea” provisionally and in a neutral sense). Philosophical systems are suspect nowadays because the most familiar notion of system stresses systematic completeness, in an effort to achieve which many philosophers have been led into extravagance if not absurdity. A more acceptable notion, however, is that of systematic articulation, which involves nothing more than an explicit understanding of the relations that each element of the system bears to each other element. The system itself may be partial; if so boundary conditions must be specified, but this need not mean that any global completeness is envisaged.

Of the various systems with whose structure my own work has been concerned the most important have been scientific theory and the theory of value. Now, however, because of a comparatively recent and fairly widespread interest in the concept of structure, the question of the kind of system that philosophy itself is has come to occupy my attention. An adequate answer to this question involves theories of human language, thought, and evolution, and can therefore only be hinted at here. The basic concept is that of a “mental structure”, by which I mean not an abstraction but something specific and unique to each individual human being. This structure is presumably realized concretely in his brain, which as we know from neurophysiology has the properties of a complex homeostatic system. (A terminological clarification may be helpful here: by a “system” I mean a set of interrelated elements, by a “structure” a set of relations; if the structure is concrete it is embodied in a system, if abstract, not. Mental structures are concrete.) The term “mental” is retained, however, because the manner of this neurophysiological embodiment is not known in any detail. “Mind” has the status of a hypothetical entity, methodologically on a par with gravitational fields. It organizes although it does not explain (except in a formal sense) a class of human activities such as remembering, imagining, intending and so on. But it does not require the postulation of a category of substance in addition to the material basis provided by the neurophysiological system.

The mental structure belonging to each individual is built up slowly during the course of his experience. The relations that constitute it are determined in three different ways: some are inherited biologically as part of the innate structure of the brain, some are established by individual experience, and some are acquired from a transmitted culture. Of the last the most important group constitute the individual’s native language. The contributions from the first two of these sources have presumably been fairly constant over the last several hundred thousand years, and by themselves do not lead to a mental structure of any great complexity or interest by comparison to those made possible by externalization in language or other signiferous systems and transmission from one generation to the next. For these grow cumulatively more complex; the structural capacity of mind turns out to be very much greater than is ordinarily needed for survival in the natural world, and this fact has permitted the construction over time of mythological, social, theoretical, political, literary and other structures, most of them depending on and being codified in language, the general-purpose structure whose existence in a developed form seems to be the specific mark of the human. It is the study of language that has drawn attention most vividly to the structural character of mind: each language constitutes a different system, since each uses a different set of phonological and lexical elements, but the relations that these systems embody seem to be universal and to be capable of representing most if not all intelligible distinctions human beings are capable of making.

The reason why the development of mental structure is comparatively slow is that, to use the language of communication theory, the capacity of the input channels (i.e. the organs of sense) is very small in comparison to the storage capacity of the system. Nevertheless the availability of the code of language, especially written language, makes possible an efficient and rapid internalization

of structures once developed, as well as the external storage of virtually unlimited quantities of information (using this word in its technical sense and not restricting it to factual knowledge). By now, therefore, by far the greater part of what we know comes to us pre-structured and in linguistic form. The accessibility of this information is what permits people of ordinary gifts to acquire mental structures that would have been unintelligible to their most brilliant predecessors, and its cumulative and self-generating character accounts for the exponential growth of knowledge in the last few centuries (i.e. since the invention of printing).

This growth, however, is in one respect misleading. There are more alternatives than before in the acquisition of mental structures, but these structures themselves are not cumulative or even additive at all. Externally stored information belongs only potentially to mind; it must have belonged to a mind when it was formulated and put into storage (i.e. in most cases written down), but it remains inert unless activated by some individual. And there is little evidence that individuals arrive now at more complex mental structures, on the whole, than has been the case for the last several thousand years. The study of primitive languages suggests a relatively constant mental complexity in all known cultures. There is no phylogeny of mental structure above the level of the innate - everything is ontogeny, every man recapitulates the intellectual history of the species.

The function of mental structures is to mediate between stimulus and response, between experience and action, between hearing or reading and speaking or writing. One might distinguish structures of belief (which control assent and assertion) from structures of behavior (which control action and reaction), although they are obviously interrelated. The need for philosophy arises when the externalization of knowledge has gone far enough to make it likely that individuals will acquire ready-made structures of belief and behavior uncritically, so that instead of merely reacting to exigencies of the physical and social environment they undertake intellectual or religious or political enterprises that spring from factitious sources in language, tradition and the like. These enterprises may be innocent, but they often have social consequences that are undesirable on the face of it and on reflection appear unnecessary.

Philosophy since Socrates has taken as one of its chief tasks the criticism of mental structures - the linguistic forms, logical inferences and conceptual connections that guide thought in its relation to belief and action. Philosophical activity has not, of course, usually been described in this way, but a brief survey of the types of thing philosophers have traditionally done, from Milesian cosmology to ordinary language analysis, does not yield any cases not easily assimilable to this view. (Whether or not looking at philosophy in this light is always illuminating is another question, although I have found it so.)

Three kinds of structural activity in philosophy require to be distinguished from one another; they might be called construction, destruction, and reconstruction. In addition to criticizing mental structures already established and operating in some community, philosophy has frequently proposed structures of its own, metaphysical as grounds for belief, moral as grounds for action; the tendency to turn this speculative construction into grandiose system-building has already been remarked on, but again the construction of partial systems is still a viable part of philosophy. The critical activity may be purely destructive, reducing structures to absurdity by uncovering their incoherence, but it may also take the form of reconstruction, the replacement or rearrangement or reformulation of elements of some system of ideas. And all this may take place under one or both of two modalities, which may be called respectively intellectual and moral. Under the former the principal concern is the intelligibility of mental structures, under the latter their correctness as guides to action; the notion of their truth or adequacy can be inscribed under one or the other according to the preoccupation of the philosopher. To these I would add a fourth kind of activity, which consists in completing or complementing mental structures, not so much by uncovering their presuppositions as by realizing a structural setting within which their intelligibility or correctness can be more readily judged than is the case if attention is restricted to the structures themselves. This activity becomes particularly important at the junctures between different disciplines.<sup>11</sup>

It must be clear that while this activity, whether speculative or analytic, is initially directed at what I may call referential structures, i.e. those which claim adequacy to some empirical aspect of the world or to some demand upon behavior (whence the

philosophy of science, of law, of language, of religion etc.), it proceeds in virtue of mental structures just as concrete as those it seeks to build or to correct or to dismantle. The referential structures ordinarily thought of as philosophical (those of metaphysics or ethics, for example) might simply take their place alongside other structures of belief or behavior, and be distinguished from them only in terms of their greater generality; but philosophy has the further property of being necessarily self-referential, precisely because it is the mental structure whose concern is the adequacy of mental structures, whether this adequacy is thought of as intellectual or moral. And it must be remembered that mental structures are not abstract but concrete, not general but individual. Philosophy is not timeless, but it is always contemporary, and what there is of it at any moment is just what is embodied in philosophers (whether or not they have this title). And the mental structure in each philosopher that functions as philosophy has itself been built up slowly over time, and bears to his other structures of belief and behavior relations that are not irrelevant to its adequacy as philosophy. Philosophy cannot therefore be dissociated from the lives of its practitioners, on whom in consequence a moral or at any rate intellectual burden is placed quite unlike that placed on the practitioners of other referential disciplines.

For my own part I am unable to separate the intellectual and moral modalities. Men *ought*, I think, to have reasons for doing what they do and for believing what they believe, and these reasons ought to be the best possible. The central self-referential preoccupation that emerges from this conviction is precisely the examination of the reasons for thinking so, as well as the reasons for taking the offered reasons as reasons, and the reasons for thinking them the best among the available reasons. But to follow up this set of questions would be to engage in philosophy rather than to discuss it.

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<sup>1</sup> The examination of concepts (such as entropy, order, explanation, freedom) that belong to the interstitial region between scientific theory and the theory of value, as carried out in my *Science and the Theory of Value* (Random House, New York 1967), is an example of this supplementary construction.