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Wholes, Parts and the Objectivity of Knowledge

§ 1 Ontology Presupposed in Epistemology

Ontology has frequently been understood as the theory of the ultimate classes of existents or entities and of characteristics of and structures that belong to all entities merely as such.[1] Understood in this way acts of human cognition, for example, like all other events, obviously fall within the domain of ontology. There are thus also certain special or 'regional' ontologies, which attempt to exhibit the essential characteristics and structures peculiar to the members of each of the ultimate classes of entities – of minds (and mental acts), physical bodies, and so on. But even given these special ontologies it is still not strictly true, as Gustav Bergmann has often said, that "... epistemology is but the ontology of the knowing situation."[2] There is a normative or criteriological aspect to epistemology that is not reducible to a mere ontological analysis of cognition. It nonetheless seems plausible to suppose that an adequate ontology of cognitive acts would be a *necessary* condition for the satisfactory execution of the normative inquiries in epistemology.[3] The intent of this paper is to cast some light upon the relationship between ontology and the theory of knowledge, by explaining Edmund Husserl's use of certain general ontological structures to clarify the manner in which individual cognitive acts can have an objective 'content' – or in short, to clarify how knowledge as commonly understood is possible. In the process, some important but lesser known aspects of Husserl's philosophy will be explained. Our first step must be an explanation of how Husserl understood the problem of the objectivity of knowledge.

§ 2 Three Aspects of the Objectivity of Knowledge

Certain time-worn philosophical questions about knowledge arise from the fact that the experiences – cognitive and otherwise – of each person are a part of his and only his life, and exhibit characteristics peculiar to him alone. My present perception of that tree out of this window and from this chair is indelibly *mine*. It has features that in all probability will never be combined in just *this* way again – which is completely assured if we include its temporal locus among those features. As a particular event it is non-repeatable even within my own life stream. It also could not, of course, be a part of the life stream of any other person. No one else could have had or can have *that* particular experience, although they might have one very like it. Further, it is possible that the 'object' of my perception might not exist at all, or might actually be very different from what it appears to be. Given simply that I see that tree, even in a very clear and determinate manner, it does not follow by any rules of generally accepted logic that the tree seen exists in actuality.

With few exceptions, the points just made are conceded today in philosophical accounts of human cognitive experience. But, once conceded, they pose difficulties about other aspects of human knowledge that seem equally obvious, or even more so, before philosophical reflection sets in; and in so doing they threaten to undermine the very possibility of knowledge itself. One may reason as follows: My perception of that tree, as has just been said, is logically distinct and seems separable in essence from every other experience of mine, from every experience of any other person, and from the very 'object' of that perception itself. But, this being so, it is well on the way – along lines familiar to readers of Hume – to closing in upon itself entirely and becoming a minute Spinozistic substance or Humean 'perception', wholly self-sufficient and therefore ineluctably alone. It has nothing in common with anything else and hence is incapable of communication; and it carries within it no inherent reference beyond itself, for it has no necessary connections with any other thing. Perhaps only some loose-jointed causal creed relates its involvements with other things, and that faith can and has been shaken by plausible lines of argument. The cognitive event as an individual entity (or substance) thus becomes utterly 'subjective'.

But how, then, are we to understand certain other obvious features of

knowledge that presuppose, precisely, the involvement of the cognitive experience with things other than itself. These are the 'objective' features of experience. The tree presents itself to me as something that was there before and remains after I see it. It is hard to imagine what our experience would be like if this were not so, and unclear even what it would mean to suppose a *tree* to be produced or annihilated with the mere act of looking at it. My perception lays claim to a certain *transcendence* toward an object (that tree) which is independent of the particular experience of it, if not of all experience whatsoever. Moreover, my many experiences of the same tree are subjected to a rigorous *order* or *lawfulness*. The parts of the tree, and the perspectives which it exhibits from various approaches, dictate a determinate succession of possible experiences in relation to the tree. There are also certain obvious general conditions of my seeing the tree at all, and these must be respected as I undertake to examine the tree visually and otherwise. I cannot arrive at a perception of this tree – or of this tree from *that* angle – by just any arbitrary set of previous experiences. As Kant and many others have noticed, in such matters all roads certainly do not lead to Rome. Any variability in the routes that bring you exactly there is rigorously confined within abiding necessities. And finally, my perceptions of the tree can be verified or falsified by the perceptions of a second person. Thus *my* 'object' can also be *his* 'object', even though our experiences differ both individually and qualitatively. It is similar with other types of cognitive experiences. He can also verify my memory, check my inference, evaluate my hypothesis. With reference to most types, at least, of cognitive acts, a certain community or identity is presupposed between my cognitions and those of others. That presupposition is even a condition of our cognitive disagreements.[4]

Thus there are three apparently objective aspects of acts of knowledge: transcendence toward an independent object, conformity to general order or law, and a certain community of what is cognised. They, together with the subjective aspects previously stated, confront us with the problem of how – in Husserl's words – we are to understand '... the relationship between the subjectivity of knowing and the objectivity of the content of knowledge.'[5] The problem of the objectivity of knowledge may be viewed as the problem of how to reconcile these three objective aspects of knowledge with the subjectivity of cognitive acts, and a solution to that problem constitutes a necessary (if not sufficient) condition of any account of the possibility of knowledge.

§ 3 Husserl's First Problem: The Objectivity of Formal Methods in Arithmetic

The first aspect of the problem of the objectivity of knowledge that presented itself to Husserl was the one concerning the rigorous order or lawfulness of knowledge. This came about in the course of his mathematical studies at Berlin under Karl Weierstrass. Much in the mathematical methods of those times (the 1870s) could not be reduced to general rational procedures, but at critical points depended upon the blind (even when accurate) instincts and tact of individual mathematicians – who often held quite divergent theories about the techniques by which they nevertheless obtained identical results. Weierstrass and others of course regarded this as a deficiency in mathematical knowledge, and one which both required and admitted of a remedy.[6] It was generally presupposed that the domain of number was itself rigorously ordered, and that knowledge of that domain must possess a corresponding rigorous order. The task was only to find this order, to realize it in practice, or at least to show how it could, in principle, be realised.

Husserl's early ambition was to carry out this task. He first undertook clarification of the concept of number by an intuitionally based analysis of the simpler objects that fall under it (i.e., of the smaller numbers, 2 through 12). Here he was satisfied with his results. Then, setting out from the clarified concept, he endeavoured to give a rational reconstruction of the path leading from it to the most remote truths of numerical analysis or general arithmetic. But he found this reconstruction to be impossible. The building-blocks at his disposal at the time – various sorts of 'representations' of numbers – simply were not always what was used in the epistemic progressions that occur in arithmetical practice. The employment of the artificial symbolisms and formal techniques so pervasively and accurately used in the advancement of arithmetical knowledge (in the solution of equations, for example, or in the ordinary adding up of a column of figures on paper) clearly was not a matter of *representing* or *thinking about* numbers and number relations at all, but consisted to a very large extent of a mere rule-governed manipulation of sense-perceptible symbols.[7] At this point in his career he found himself unable to explain how such formal procedures or 'calculations' yielded their uniformly and objectively correct results. What is the order in the mental processes of the working mathematician, focused almost entirely upon things other than numbers and number rela-

tions, that nevertheless allows those processes to eventuate in a grasp of truths about numbers and number relations?

But this question soon broadened into a realization that arithmetical thinking is not peculiar in this regard. He therefore found himself involved in a more general epistemological inquiry[8] concerning how ordinary as well as scientific thinking – both of which largely deal in highly partial or extrinsic determinations, or even mere symbols, of the subject matters at issue, instead of with the matters themselves – nevertheless can result in an accurate grasp of truths about *die Sachen selbst*, and in many cases even a grasp of those very *things* themselves? What are the laws of cognitive experience that account for this? It is in this form that the problem of the objectivity of cognitive experience in general first addressed itself to Husserl.

Moreover, it is the objective order[9] in the *discursive* aspect of cognitive experience that remains uppermost in Husserl's concerns at least until 1900. Thus, in the "Introduction" to the *Prolegomena to Pure Logic* he describes the problem of the objectivity of knowledge as "the cardinal question of epistemology", and then proceeds to state that it "... coincides in essence, mainly, if not entirely", with the question about the theoretical foundations of logic viewed as a technology *(Kunstlehre)* of the advancement of knowledge, and especially about the relationship of such a technology to psychology.[10] The technology in question is simply an applied logic – that is, one which furnishes criteria and techniques for distinguishing acceptable from unacceptable concepts, theories, derivations, and assertions, and also develops methods for originating acceptable ones. Hence in 1900 the question of the objectivity of knowledge is for Husserl mainly the question: What must we know, and what must therefore be the case, in order that such an applied logic should be possible? In particular, can the possibility of an applied logic be explicated – as was widely assumed at the time – solely by reference to truths established in the science of psychology, and by reference to the corresponding facts and empirical laws of the mental processes of human beings?[11]

§ 4 The Problem Generalised

In order to bring out the more important details of the overall problem of the objectivity of knowledge as Husserl eventually came to un-

derstand it, and especially to show how the questions of *transcendence* and *community* emerged to stand along with his earlier question about epistemic order or *law*, we shall examine a number of his earlier statements concerning that problem. His first published statements on the general problem of the objectivity or possibility of knowledge occur in the 1894 paper, "Psychological Studies in the Elements of Logic."[12] This paper was the first publication resulting from his move toward the reform of logic that he knew to be necessary by 1891;[13] and it is, as he later said, a "first sketch of the *Logical Investigations*, especially of Investigations III and V",[14] published six years later.

Upon first approach the paper is quite puzzling in its overall form. It appears simply as two separate "Psychological Studies." Each study is devoted to the analysis and clarification of a single distinction between very general types of contents or elements in the human mind. The first study explores the contrast between concrete and abstract sensa (or 'primary contents' as they were then often called), and the second study deals with the contrast between the intuitive and non-intuitive consciousness of an object. There is no explanation given in the paper of what, if anything, the one contrast or study might have to do with the other; nor, with regard to the former study, is there so much as a mere statement as to why the contrast between concrete and abstract "contents" is of any theoretical interest at all. However, the final section of the paper is a discussion of why the contrast between the intuition and the mere 'representation' of an object is of significance to a theory of knowledge. With what is said there – along with a knowledge of the specific failure in the *Philosophy of Arithmetic*, and of what these two "Studies" later became (the IIIrd and the Vth and VIth Investigations, respectively) – the motivation and structure of the paper becomes somewhat clearer. Simply put, by exploring some aspects of what is given in sensation, Husserl here begins to lay the foundation for an account of how that which is sensibly given functions as the foundation of a theoretical grasp of that which is not – and often cannot be – sensed or, more generally, intuited.

As has already been mentioned, the problem with which Husserl had been left in his attempt to reconstruct arithmetical thought was the problem of how the intuitive contents of the calculating arithmetician could possibly function, as they most certainly do, in the apprehension of non-intuited – and usually non-intuitable – numbers and number relations. How can the mathematician trust himself to ordered but 'blind'

operations upon groups of sense-perceptible symbols, with complete assurance that his symbolic operations will pick out numbers satisfying the relations with which he is concerned: e.g., the number which is the sum of numbers *a, b,* and *c,* or which satisfies the equation $\frac{b^2}{a} = x$? The enterprise of the *Philosophy of Arithmetic* foundered upon this question.

Now in the final section of "Psychological Studies", by contrast, the question has become quite general in form. The 'representative' or non-intuitive function in thought is said, without reference to any specific discipline or subject matter, to be

> ... truly an occasion for astonishment. In and for itself it is certainly a fact most worthy of consideration that a psychical act can reach out beyond its own immanent content to another content which in no way is really encountered *(bewußt)*. And yet it seems that we do have consciousness *(Bewußtsein)* of these latter contents in a certain manner. For – and this again is a fact most worthy of attention – while we are engaged with the representing contents, we believe ourselves to be employed about the represented objects themselves. In the flow of conceptual thinking it is in most cases optical and acoustical sequences of words that do the representing alone or almost alone. The contents meant enter into consciousness either not at all or only in a quite rudimentary fashion. Occasionally wholly different contents, which stand in a distant relation to the contents meant, will act as a surrogate for them, as when at the mention of London merely the shape of England indistinctly comes to mind.[15]

But, Husserl notes, this is not only true of *thought*. The situation is little improved in ordinary conversations about things actually present in a common external environment: "What a sparse show of representing intuitions turns up to the unprejudiced observer in these cases! Here and there such intuitions are wholly lacking; and where they occur they are as a rule dim, decimated, often ungraspably fleeting, and inadequate even in the typical aspects of the intuitions intended."[16] Yet it seems to those involved in such conversations as if the objects referred to directly coalesce with the words occurring. Words and objects seem immediately 'together' for those who understand what is said. These are facts about cognitive experience which, according to Husserl, even the best of psychologists and logicians have failed to consider, much less understand.

> And yet here lie great, unsolved puzzles. We stand close to the most obscure parts of the theory of knowledge ... *I refer to the possibility of knowledge in*

general. Scientific knowledge – the kind of knowledge which will first come to mind – is totally based upon the possibility of being able purposively to choose such thinking, with certain precautions, over thought more closely bound to intuition. But how then is insight into the relevant subject matter possible in science? And how with such a manner of thought does one even come to mere empirically correct results?[17]

After these remarks about scientific thinking in general, Husserl turns once again to his own discipline, mathematics. It has stood for centuries as a model of exact science. But the seemingly interminable controversies between its practitioners "... over the meaning of its elementary concepts and the grounds of the validity of its methods stand in striking contradiction to the fact that its procedures supposedly carry rational insight for everyone alike." Community of technique and of results seems unperturbed by divergent or even contradictory interpretations of how the technique works and is justified. But surely this means that the technique's "... status as a *rational* procedure is – and of this there can be no doubt – mere delusion." On the other hand, the *results* of the use of mathematical techniques are not only agreed upon. They are ordinarily *correct*, and in general provide us with the truth about numbers and number relations – and, in their applications, about things of all types. Yet there existed no satisfactory account of how this all comes about, even though the problem really is one which concerns "... all of science and ordinary thought as well."[18]

This prompts Husserl to ask whether we should

... revert to Hume's scepticism as our basis, and then extend it farther than its great author did, to take in even mathematics and all *a priori* science? Vainly we turn, for the resolution of such doubts, to the old logic or the new. They leave us totally in the lurch. Logic or the 'theory of science' *(Wissenschaftslehre)* must concede, if it will be honest, that all science is a mystery to it. This is where we stand today ...[19]

Such remarks make it clear that by 1894 Husserl's initial concern with objective order in arithmetical thinking had led him to the completely general question about how an epistemic act or process transcends itself in a correct grasp of truths and objects which are not really 'present' in it and belong equally to all members of the community of inquirers. This 'astonishing' transcendence was forced upon his attention in virtue of the fact that it is precisely what as a rule is going on in the specifically arithmetical treatment of numbers and number relations. However,

having been confronted with it in arithmetic, he then discovers it on all sides.

Of course it is not as if Husserl were the only philosopher who ever concerned himself about the mind's cognisance of entities other than its own 'contents'. With all of their differences, Locke, Hume, Kant and Husserl pose and answer what is fundamentally the same problem. Closer to our time, H. H. Price raised the same set of issues – and in a very similar terminology to that of Husserl. Price held[20] that "... thinking is cognition in absence," and that: "The objects which we say we are thinking about are not directly present to our consciousness ... The problem or paradox then is this: How is it that merely by operating with symbols one can be in cognitive contact with absent objects or events? ... How can we be aware of anything beyond the symbols themselves?"[21] His book *Thinking and Experience*, published in 1962, attempts a solution for this 'problem or paradox'.

§ 5 Transcendence Becomes the Main Issue

Husserl's writings for a decade and a half following 1894 show an increasing emphasis, at least in terminology, upon the issue of transcendence in contrast to that of orderedness or law. By 1901 he had come to see that the attempt in *logical* theory to clarify the meanings of terms such as 'concept' and 'object', 'truth' and 'proposition', 'fact' and 'law' – for the purpose of elucidating the possibility of the order and community in scientific thinking – raises questions which largely coincide with the 'basic questions of epistemology'.[22] All cognition is of course directed upon objects or states of affairs that exhibit an identity over against the many real or possible acts of thought (of one or of many persons) directed upon them. To this community or sameness of objects must be added the further fact that all cognitive activities fall into general types subject to ideal (non-inductive) laws that determine whether or not the given activity can or must hold valid of relevant objects. But we must ask, then, how

> the 'in itself' of the objective comes to presentation and, thus, to a certain degree may become subjective again; what it is for the object to be 'in itself' and 'given' in knowledge; how the ideality of the universal, as concept or law, can enter into the stream of real psychical experiences and become an epistemic holding *(Erkenntnisbesitz)* of the one thinking; what the *adaequatio rei et intel-*

lectus involved in knowing amounts to in the different cases, depending upon whether the knowing 'grasp' takes in an individual or a universal, a fact or a law; and so on.[23]

In this statement of 'the basic questions of epistemology' the problem of transcendence by the cognitive act toward an object that is *an sich* is clearly the dominant element. Indeed, of the four separate questions listed, only the third bears upon the aspects of community or of law or oderedness in knowledge. In the 1907 lectures on *The Idea of Phenomenology*, it is flatly declared that '... transcendence is both the initial and the central problem of the critique of cognition.'[24] While this obviously marks *some* shift from the 1900 statement already quoted, according to which the 'cardinal question of epistemology' concerns the theoretical foundations of applied logic, the change is in fact less than the two statements may suggest. The community and order or lawfulness in thought and knowledge is, after all, one type of transcendence of individual acts of thought. It is simply not intentional transcendence toward an *object*. On the other hand, transcendence toward an object is something that is shareable – since many persons can grasp the same object – and occurs only through a complex act or series of acts rigorously ordered in a definite manner. Association between the three aspects of the general problem of the objectivity of knowledge as outlined above is so close, on Husserl's view, that any apparent shift from one to another can only be a matter of emphasis.

A more balanced expression of the three aspects of the problem of objectivity in their interconnection is given by Husserl in 1910 in his *Philosophy as a Rigorous Science*:

How can experiences as consciousness present or make contact with an object? How can experiences be mutually legitimated or corrected by means of each other, and not merely replace each other or confirm each other subjectively? How can the play of a consciousness whose logic is empirical *(das erfahrungslogische Bewußtsein)* make statements objectively valid for things that are in and for themselves? Why are the rules of play, so to speak, of consciousness not irrelevant for things? How is natural science to be comprehensible in absolutely every case, in its claim at every step to posit and to know a nature that is in itself – in itself in opposition to the subjective flow of consciousness?[25]

The issues of *transcendence* ('... things that are in and for themselves,' '... a nature that is in itself'), *law* ('... the rules of play ... of conscious-

ness,' 'experiences ... mutually legitimated or corrected by means of each other'), and *community* (as this occurs in a 'natural science') are all brought out in this passage; and here once again the related questions are marked as the ones which epistemology is supposed to answer. But Husserl observes that "... up to the present, despite all of the thoughtfulness employed by the greatest scholars in regard to those questions, that discipline has not answered in a manner scientifically clear, unanimous, and decisive," as would befit a "rigorous science."[26]

But it must be added that for a correct appreciation of Husserl's central problem one must not take his question about transcendence to be merely the question about the *intentional direction* or vectoral character of an experience with regard to a specific object. It is not the question: What is it about a given experience that makes it to be an experience of or about one object rather than another? This is not, of course, to say that Husserl had no interest in the question about mere intention, or even that it was of little importance to him. It was indeed of great importance to him, and he dealt with it early and often.[27] However, the *mere* directionality of an experience does not involve transcendence, although transcendence may be associated with it. Intentional direction is a *wholly immanent* matter, on Husserl's view. That an experience is directed specifically upon one object rather than upon another is simply a matter of what *its* parts and properties are. What he found 'truly astonishing', on the other hand, was that an object transcendent to the experience or experiences directed (more or less mediately) upon it could nonetheless be, and could be known to be, *accurately* conceived of in that experience, and could in many cases even be 'bodily' present to consciousness precisely *as* it was thought of – and, moreover, could be known to be so present. How all of *this* is possible is what constitutes the problem of epistemic transcendence for Husserl.

§ 6 The Beginnings of a Solution

If knowledge is to have the objective characteristics commonly assumed and is therefore to be possible – or, indeed, even if it is not – then that must rest at least in part upon the general nature of the cognitive act as such. That is, it must rest upon the type of event or entity such an act is. I have found no evidence that the early Husserl clearly put this *general* point to himself and then directed his researches accordingly. However, it is a fact that the writings produced from the early 1890's to 1901 pro-

ceed to work out a categorial or ontological analysis of the cognitive act (and sequences of such acts), and to show the possibility of objective knowledge by reference to that analysis. Further examination of the "Psychological Studies in the Elements of Logic" will show that it not only provides a general statement of the problem of the possibility or objectivity of knowledge as this was conceived by Husserl, but also lays down the framework of a solution to it by initiating the treatment of the cognitive act as a complex *whole* exhibiting *necessary connections* between its *parts* as well as in relation to other acts – necessary connections which are, moreover, treated as open to rational insight *(Evidenz)*.

The first "Study" seems to have been intended merely as an analysis of certain general structures of independence and dependence involving *sensa*[28] and their elements. For example, intensity and quality are considered as elements in the sensa associated with tones:

> If we represent the quality to ourselves as wholly suppressed, then the intensity is also suppressed. And this is not a mere fact, but rather is a rational *(evidente)* necessity. Likewise in the converse case. Also, a change of intensity ineluctably signifies a certain modification of quality, even though the generic type of the quality remains the same. Here we simply are not dealing with a totality [of sensa] in which the one term can be varied while the other remains identically the same – instead of merely generically so, as in the case just mentioned. The two terms interpenetrate. They exist within each other, not outside of each other. Again, the cessation of the intensity conditions a total annihilation of the quality; and this is no mere fact, but rather is a rational necessity.[29]

Other cases of necessary dependence are provided, for example, by extension in relation to color, by shape in relation to both, and – to take a very different type of case – by a judgment in relation to the representation which serves to provide the object which the judgment is *about*. In general, Husserl concludes, a sense content or sensa element is dependent if and only if "... we have *a priori* insight *(Evidenz)* that change or suppression of at least one among the contents given with (but not included in) it *must* yield a change or suppression of that content itself."[30] Further, if an element in a whole of sense contents is dependent in relation to some other element in the whole, then it is *abstract* in relation to that whole. Otherwise it is *concrete*.[31] Thus 'abstract' and 'concrete' are defined by reference to dependence and independence.

It is especially important to notice that *being abstract*, as thus explained, has nothing essentially to do with *being known*. *Abstract* is pre-

sented as an ontological, not as an epistemic concept, even though it is here analysed in its application to the sense contents of cognitive acts. In a note published in 1897 Husserl states that the analyses of his first psychological study "... must be given an objective twist, in a very obvious manner," to provide a 'law of objects in general'; and that "... the crucial distinction [dependence/independence] here is not one restricted to contents, but rather is one which applies to objects in general. This makes it *metaphysically* significant. But the same then is also true of the remaining distinctions connected with it which are dealt with in that study."[32]

While this statement was published three years later, in the "Psychological Studies" itself, not only – as we have noted – does Husserl not define 'abstract' epistemically, but he also *explicitly* rejects definitions of that term by reference to special abstracting acts or ways of noticing a content or object.[33] In the second "Study" he further rejects the commonly held view that the abstract cannot be intuited, insisting that the concepts of *independence* and *dependence* (and of *concrete* and *abstract*) contain no reference at all to the contrast between intuitionality and non-intuitionality.[34] He was perhaps led to this view by a conviction that he had himself intuited the abstract elements of sensa in their dependencies and independencies upon one another, as recorded in the first study.

Thus, by 1894 Husserl believed himself to have found inspectable and necessary (though non-analytic) connections between certain abstract elements within whole cognitive acts. Indeed, the case of judgment and founding representation, noted above, shows that he already recognised such 'material *a priori*'[35] connections between psychical elements other than sense contents. However, he here deals systematically with sense contents only; and, although he clearly knew that there were other components of cognition – principally the psychical acts of which he learned from Brentano – he apparently did not yet see how they were all to be fitted together.

That this is so is well brought out by an admission also contained in the 1897 publication referred to above. He there states: "Since the appearance of my essay, I have become aware of the essential distinction between abstract contents (as parts of intuitions) and abstract *concepts* – a distinction which, unfortunately, I did not notice at all."[36] He then explains that the first study in fact dealt with abstract *contents* only, and that its claims hold true when so understood. However, to fail to see

that a concept is not a sense content – even an abstract one – demonstrates how unclear Husserl remained at the time about the cognitive act as a whole. The unclarity had deep roots, no doubt; for already in the *Philosophy of Arithmetic* of 1891 he had distinguished between the concept as an *abstractum* underlying a general name and concept as the 'thought correlate of the name.'[37] Notwithstanding the residual obscurities, however, the essential points disclosed in analyses of sense contents in the first "Study" stood firm in his later views and were later extended to the remaining components of cognitive acts – which, after all, do also belong among 'objects in general'. The first "Psychological Study", though narrow in scope, brings to light a general ontological structure – necessary synthetic connections between parts of a whole cognitive act – which eventually will serve as one of the two main supports for Husserl's solution to the problem of the objectivity of knowledge.

The second main support emerges in the second "Psychological Study". As the first study exhibits a 'material *a priori*' structure between elements of one cognitive act, so the second study exhibits such a structure between two or more whole cognitive acts of certain specific types.

A basic concept in this second study is that of an intuited 'content' (object) being also an *immanent* content. On Husserl's view, when I see this sheet of paper before me under normal conditions, the whiteness that I see (intentional 'content') in the paper is *also* present as one abstract element in the sensa which I 'use' to see the white paper. Of course the qualities of the perceived object and those of my sensa customarily diverge to some extent, and are only more or less similar. (I still *see* a white sheet of paper at dusk, when my sensa exhibit some shade of grey.) When and insofar as the qualities of our sensa and of our object as intended are identical we have, on Husserl's view, an *intuition* of the object; and this means that "... the object itself is actually put before us in such a manner that that object is *itself* the subject of psychical activity."[38] In such a case "... the intended content becomes immanent content,"[39] and "... an immanent object of the act simultaneously appears to us as that which is intended by the act."[40]
By contrast:

Certain psychical experiences, in general called 'presentations' *(Vorstellungen)*, have the peculiar character of not including their 'objects' in themselves as im-

manent contents (and thus as present *in* consciousness). Rather, in a certain manner which must still be more precisely characterised, they *merely intend* their objects ... The phrase 'merely intend' here signifies precisely that a content is a content not given *in* consciousness, but one aimed at, meant, or consciously referred to, by means of some contents that are given in consciousness. These latter contents are consciously used as surrogates of the former; and, indeed, they are so used without the intervention of conceptual knowledge of the relationship which obtains between the surrogates and the intended object. Such presentations we will call 'representatives' *(Repräsentationen)*.[41]

From these words we see that the second "Psychological Study" is also to some extent a study of acts by reference to their sense contents, for the distinction between intuition and mere representation of an object is drawn in terms of a difference bearing upon the sense contents involved in the two cases. However this is not to say that the distinction is *merely* a difference of sensa. Husserl insists that such a view would be quite wrong. The 'witness of inner experience' makes it clear that in addition to sensa "... there exists in the two cases in question a different manner of psychical engagement with or in the [sense] content."[42] The component of the single cognitive experience other than sensa is, no doubt, the still unclarified Brentanian 'act'.

However, the distinction between intuitive and non-intuitive cognitions in terms of a difference of internal quality or structure is only one part of Husserl's findings in his second study: one which lays the foundation for what is yet more important with regard to the problem of the objectivity of knowledge. For having distinguished acts of intuition from acts of presentation, he then discovers an essential relationship between them as they bear upon the same object. This is the relationship of "fulfillment" of the presentation by a correlative intuition of the same object:

If a representative goes over into its correlative phenomenon, e.g., into an intuition immediately intended by it, then the immediate psychical experience of the fact that the intuited is *also* the intended shall be designated as consciousness of the *fulfilled* intention. Of the representative we say, more simply, that it has found its *fulfillment*. This latter term will be used by us in general to designate the direct or indirect correlate of a representative.[43]

It is commonly the case, however, that a 'representative' does not lead *directly* into a full intuition of the relevant object, but only to another representative with a more intuitive content than the original one. In

many cases, a *full* intuition of the represented object is not possible at all. The concept of a^n (a to the nth power) directly leads to the concept of a product of n factors of a. The latter concept then extends the intention onward, as it were, toward the specific number in question. If a and n are not *very* small numbers, the number referred to by 'a^n' can only be approached through a series of representatives, but can never be fully brought to an intuitive grasp. Even in such a simple case as this we really have a series of presentations referring more or less directly to a corresponding intuition. Husserl calls

> ... the correlative phenomenon most nearly adjoined to the representative its *proximate fulfillment*. The *ultimate* fulfillment of any representative is the *intuition* proper to it. To say that it is a *pure* intuition expresses the fact that a content bears no representative function whatsoever. In contrast to this, we speak of an intuition which is *impure* or representational where a presenting content, in virtue of the identity or similarity of its content with what is presented, temporarily serves us as a provisional replacement of the latter. In such a case ... we then are turned to the presenting content itself in precisely the manner characteristic of pure intuition. An impure intuition is said to be *incomplete* when the immanent content of the representative consists of a part of that which it represents.[44]

Now of course the relation of fulfillment mentioned here is a very complicated one, and Husserl did not have its details worked out fully until several years after 1894. But it is clear that for every 'representative' of an object there will be an associated possible sequence of more or less intuitive experiences of the *same* object, converging more or less directly upon the case where the object *itself* is present in experience – or, conversely stated, where experience has transcended itself toward its object. Husserl holds the *possibility* of such a transcendence (the precise nature and extent of which varies with the kind of object) to be essential to every representative act: "... each representative ... points to an intuition that corresponds to it, but is not necessarily actual."[45]

The complexity of cognitive acts together with the essential relationship of (possible) fulfillment discovered by Husserl to hold between them and corresponding intuitions directed upon the same object are the principal elements in his solution to the problem of transcendence. In 1901 he holds recourse to the cognitive act *as* a "... web of partial intentions, fused together in the unity of a single total intention" directed upon the object, to be the *only* way in which we can "... understand how consciousness reaches out beyond what is actually lived through

(das wahrhaft Erlebte): [how] it can, so to speak, mean beyond itself, and the meaning can be fulfilled."[46]

Now it will be recognized that this distinction between intuitive and non-intuitive (or 'representative') cognitions coincides in extension with Hume's distinction between impressions and ideas. Hume also held to an essential correlation of every idea with some impression or group of impressions. Moreover, his 'principle of the priority of impressions to ideas' did not in general disallow the emergence of ideas from other ideas. For: "As our ideas are images of our impressions, so we can form secondary ideas which are images of the primary ... Ideas produce the images of themselves in new ideas ..."[47] The result is a sequence of possible ideas corresponding and more or less directly related to each impression, quite as is the case with Husserl's representatives and their intuitions.

So these two philosophers cover the same ground and divide it into two parts along the same lines. Beyond such obvious and superficial similarities, however, they have different concerns and hold *widely* divergent views. It will be useful to discuss one of their main differences here, where we are concerned to explain the general lines along which Husserl worked toward an account of the possibility of objective knowledge. This is the difference over the role of *complexity* in the cognitive act. For Hume, the complexity of an idea – or, in general, of a 'perception' or experience – is always something inherently problematic, for which an explanation is required. That is mainly due to the fact that, for him, "... the mind never perceives any real connexion among distinct existences."[48] For Husserl, on the other hand, complexity as such is not a problem. Not only connections, but even necessary connections, are simply *found* by him. He is a *radical empiricist* in the sense stated by William James, and so "... must neither admit into ... constructions any element that is not directly experienced, nor exclude from them any element that is directly experienced." Hence, "... *any kind of relation experienced must be accounted as 'real' as anything else in the system.*"[49]

The complexity of the representations and intuitions (and series thereof) that constitute the flow of both scientific and ordinary thinking is, precisely, but one application of the ontological schema of whole and part applicable to objects in general: "Every object is either actually or possibly a part, i.e., there are actual or possible wholes that include it."[50] Husserl is at peace with complexity both inside and outside of the stream of cognitive events. Moreover, he has discovered certain *neces-*

sary relationships (relationships of foundation[51]) between parts and parts, as well as between parts and wholes. Such necessary relationships also govern elements in that cognitive flow. With this we have the general framework for an explanation of how cognition transcends itself – or, in the misleading language of the "Psychological Studies", for an explanation of how an intended object becomes an *immanent* content. We likewise have a framework for the explanation of the necessary order within, and the possibility of a community of content between, the many particular cognitive acts which occur in the course of human events. We shall now very briefly summarise the main elements in the explanations that Husserl ultimately devised.

§ 7 Wholes, Parts and Properties in the Objectivity of Knowledge

Community: The complexity of cognitive acts in general breaks down into wholes of various types, depending upon the number, type and manner in which those wholes contain other acts and elements that are not acts. As a helpful analogy, one can think of the complexity of sentences in a formal or a natural language: extending from those that have parts, to be sure, but no sentences as parts, to those that have many different sentences as parts, combined in several different ways. A similar complexity is to be found in cognitive acts, where the experienced elements involved may in general be either dependent or independent (abstract or concrete) as explained above. However no such element, being individual, can be repeated or shared. What can be repeated and shared on Husserl's view are of course the 'significational species' or essences (concepts, propositions, theories) that enter into cognitive experiences as their intentional *qualities* or determinations. The familiar ontological schema of the subject and its predicates (the individual and its qualities and relations), together with that of whole and dependent part (moment), provides the solution to how the conceptual content can be had by many persons at many different times.[52]

Law: The connections between the ideal singulars (universals or species) embedded in cognitive acts of various types and in their parts dictate relevant necessities and possibilities for the acts in which they are embedded. Discussing the forms of *fire, heat, snow,* and *cold* in his *Phaedo*, Plato had Socrates say: "... When snow ... is under the influence of heat, they will not remain snow and heat; but at the advance of

the heat, the snow will either retire or perish ... And the fire too at the advance of the cold will either retire or perish; and when the fire is under the influence of the cold, they will not remain as before, fire and cold."[53] Now the same general ontological structure of necessities and possibilities determined for subjects by their properties also governs within and between cognitive acts. The forms of the thoughts *that all men are mortal* and *that Socrates is a man*, along with their truth, necessitate truth in the possible thought *that Socrates is mortal*. 'And', 'extra', and 'across', taken in their normal senses, of necessity do not, in 'and extra across', express a thought capable of truth or falsity – if indeed they express any thought at all. A perception of a chair at any moment admits of only a restricted range of subsequent experiences which may constitute experiences of the same thing (the chair seen). To return briefly to Husserl's problem in the *Philosophy of Arithmetic*, an essential correlation between arithmetical symbol systems and the number series makes it possible for the 'blind' use of the former to found – in Husserl's special sense – a correct and justified conceptual apprehension of the latter. And so on.[54] The necessities and possibilities in the relevant individual cognitive events follow from the qualities and relations embedded in those events.

Transcendence: The part/whole structures and ideal law connections *(wesensgesetzliche Verbindungen)* already referred to as making community and law possible for the various cognitive acts of one or many persons also function in Husserl's explanation of the possibility of the transcendence of such acts toward an object intended. The complexity in an act of representation of a table, for example, is to be understood in terms of intentional qualities and sensa (noetic and hyletic data) correlated to the parts and aspects of just *such* an object. The act is said by him to be capable of transcendence toward an object that is *an sich*, in virtue of the act's essential correlation with an intuition of the appropriate type: one in which *that* object is 'bodily' present in the manner dictated by its nature, the qualities of the object coinciding in the greatest possible measure with the qualities of the sensa present in the intuitive act.[55]

A very great part of the power of Husserl's philosophy resides in his insight that the problem of the possibility of knowledge is essentially (though not wholly) a problem in general ontology. He saw that knowledge must be treated as one segment of being, if its *objective* characteristics are to be explained. Perhaps it is correct to say that we cannot

settle the fundamental ontological questions about *complexity* (whole and part), about *substance* and *quality*, and about *necessary relation* by talking about ideas or experiences only, or about words and their complications only; for in all such talk we shall only assume positions on those questions as they concern, precisely, 'ideas' or words themselves. To overlook this was, I believe, one main error in the historical turn of philosophy to subjectivity as that turn was in fact executed, and in all its offspring – including the linguistic turn in whose shadow we still live today.

Notes

[1] Aristotle, *Metaphysics*, Book IV.

[2] Bergmann, 1964, pp. 126 and 304.

[3] On the relation between normative and theoretical analyses in general, see Husserl, 1900/01, pp. 74–89.

[4] In Sellars, 1968, p. 91, the importance of this point is recognized as follows: "... The 'content' of representings – individual contents, general contents, state-of-affairs contents, etc. – must be construed as *ones* in *manys* in order to do justice to the inter-subjectivity of thought, the fact that different persons, and the same person at different times, can represent the *same* even though the representings (the acts) are numerically different. Thus one and the same content must be capable of existing 'in' – in some sense of 'in' – many representings." Cf. pp. 62–63.

[5] Husserl, 1900/01, p. 42.

[6] Schuhmann, 1977, p. 7.

[7] Husserl, 1891, pp. 257–258.

[8] Husserl, 1900/01, pp. 41–42.

[9] Husserl, 1900/01, pp. 64–68.

[10] Husserl, 1900/01, pp. 56–57.

[11] Hence, as we have said, it is first and foremost the objective order in the *discursive* aspect of cognitive experience that Husserl seeks to clarify. It is also necessary to emphasise that it is clarification, not justification, that he seeks. When he asks how knowledge is possible, the 'how' is not a generally or specifically sceptical 'how'. Rather, he is inquiring only about the means – the nature of the specific structures and processes – through which subjective experiences succeed in cognitively grasping independent and publically accessible objects. He does not doubt that they ordinarily *are* grasped, or that they do exist. In this respect his conception of the task of the theory of knowledge differs in emphasis (at least) from that of other important philosophers. A general sceptical 'how' is not *the* question to be answered in the theory of knowledge, and a *general* scepticism is regarded by him as a demonstrably absurd position. See Husserl, 1900/01, pp. 135–145.

[12] Husserl, 1894, pp. 297–320.

[13] His explicit statement on the need for reform is in an 1891 letter to Stumpf, quoted in part on pp. 41–42 of Biemel, 1959. The statement on reform is not quoted by Biemel, and the letter as a whole is, unfortunately, still unpublished. On Husserl's move toward reform in logic see Willard, 1979.

[14] Husserl, 1956, p. 295.
[15] Husserl, 1894, p. 315.
[16] Husserl, 1894, p. 316.
[17] Husserl, 1894, p. 316, italics added.
[18] Husserl, 1894, p. 316.
[19] Husserl, 1894, p. 316.
[20] Price, 1946, pp. 83–84.
[21] Price, 1946, pp. 84–85.
[22] Husserl, 1900/01, p. 253.
[23] Husserl, 1900/01, p. 254.
[24] Husserl, 1958, p. 28.
[25] Husserl, 1910, p. 87.
[26] Husserl, 1910, p. 87.
[27] Husserl, 1913, § 86.
[28] We use the word 'sensa' here in the meaning made common by C. D. Broad (1960, pp. 180–183). See also H. H. Price (1932, pp. 2–5), for elaborations of a view identical with Broad's. The sensa of Broad and others are identical with the primary contents, sense contents, or sensate matter of which Husserl speaks.
[29] Husserl, 1894, p. 299.
[30] Husserl, 1894, p. 299.
[31] Husserl, 1894, p. 301.
[32] Husserl, 1894, pp.319–320; cf. the opening paragraphs of the IIIrd Logical Investigation.
[33] Husserl, 1894, pp. 302–303; cf. Husserl (1900–1901), pp. 443–448.
[34] Husserl, 1894, pp. 305f.
[35] See Husserl, 1900/01, pp. 455–458 on this terminology; and for the positivistic reaction, Schlick, 1930/31, pp. 277–285.
[36] Husserl, 1894, p. 320.
[37] Husserl, 1891, p. 78.
[38] Husserl, 1894, p. 304.
[39] Husserl, 1894, p. 305.
[40] Husserl, 1894, p. 307.
[41] Husserl, 1894, p. 307.
[42] Husserl, 1894, p. 313; cf. p. 320.
[43] Husserl, 1894, p. 308.
[44] Husserl, 1894, pp. 308f.
[45] Husserl, 1894, pp. 308; cf. Husserl, 1913, final paragraph in § 142.
[46] Husserl, 1900/01, p. 701. (Cf. p. 513 of Volume II of the first German edition, where the statement is seen to be essentially the same as of 1901.)
[47] *A Treatise of Human Nature,* Book I, Part I, Section I, next to last paragraph.
[48] *Treatise,* Appendix.
[49] James, 1947, p. 42.
[50] Husserl, 1900/01, p. 436.
[51] Husserl, 1900/01, pp. 474–475.
[52] Husserl, 1900/01, pp. 329–332; cf. Husserl 1913, § 15.
[53] Stephanus pagination, no. 103.
[54] Husserl, 1913, §§ 2, 6, and 7.
[55] Husserl, 1913, §§ 142 and 143; cf. Husserl, 1900/01, pp. 701, 761f. For further elaboration see § 5 of ch. 5 of my *Studies in Husserl's Early Philosophy* (to appear).

Bibliography

Bergmann, G. 1964: *Logic and Reality,* Madison, Wisconsin: University of Wisconsin Press.

Biemel, W. 1959: "Les phases décisives dans le développement de la philosophie de Husserl", in *Husserl,* Cahiers de Royaumont, Paris: Minuit, 32–62.

Broad, C. D. 1960: *The Mind and Its Place in Nature,* Paterson, N. J.: Littlefield, Adams and Co.; 1st ed., 1925, London: Routledge and Kegan Paul.

Husserl, E. 1891: *Philosophie der Arithmetik,* Halle: C. E. M. Pfeffer (Robert Stricker); 2nd ed. in vol. XII of *Husserliana*, Haag: Nijhoff, 1970.

– 1894: "Psychologische Studien zur elementaren Logik", *Philosophische Monatshefte,* 30, 159–191. English translation by D. Willard, "Psychological Studies in the Elements of Logic", *The Personalist*, 58, 1977, 297–320.

– 1900/01: *Logische Untersuchungen*, 2 vols. Halle: Niemeyer. A second edition of the first volume and of the first five Investigations from the second volume appeared in 1913. The second edition of the Sixth Investigation did not appear until 1921. English translation by J. N. Findlay, *Logical Investigations*, 2 vols., New York: Humanities Press, 1970.

– 1910: "Philosophie als strenge Wissenschaft", *Logos*, 1, 289–341. English translation by Q. Lauer, "Philosophy as Rigorous Science", in Lauer, ed., *Phenomenology and the Crisis of Philosophy,* New York: Harper, 1965, 71–147.

– 1913: *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie,* in volume one of *Jahrbuch für Philosophie und phänomenologische Forschung,* Halle: Niemeyer. English translation by W. R. Boyce Gibson, *Ideas: General Introduction to Pure Phenomenology,* London: George Allen & Unwin, 1931.

– 1956: "Persönliche Aufzeichnungen", edited by Walter Biemel, *Philosophy and Phenomenological Research,* 16, 293–302. The notes here published were composed by Husserl in 1906–1908.

– 1958: *Die Idee der Phänomenologie: Fünf Vorlesungen,* Haag: Nijhoff. These lectures were first delivered in 1907. English translation by W. Alston and G. Nakhnikian, *The Idea of Phenomenology,* Hague: Nijhoff, 1964.

James, W. 1947: *Essays in Radical Empiricism and A Pluralistic Universe,* New York: Longmans, Green and Co.

Price, H. H. 1932: *Perception*, London: Methuen and Co. Ltd.

– 1946: "Thinking and Representation", *Proceedings of the British Academy,* Oxford: Oxford University Press.

Schlick, M. 1930/31: "Gibt es ein materiales Apriori?" in *Wissenschaftlicher Jahresbericht der Philosophischen Gesellschaft an der Universität zu Wien für das Vereinsjahr 1930/31.* Reprinted in Moritz Schlick, *Gesammelte Aufsätze: 1926–1936,* Hildesheim: Olms, 1969. English translation by Wilfrid Sellars, "Is There a Factual *a Priori*?" in *Readings in Philosophical Analysis,* ed. H. Feigl and W. Sellars, New York: Appleton-Century-Crofts, 1949, 277–285.

Schuhmann, K. 1977: *Husserl-Chronik*, Haag: Nijhoff.

Sellars, W. 1968: *Science and Metaphysics,* London: Routledge and Kegan Paul.

Willard, D. 1980: "Husserl on a Logic that Failed", *Philosophical Review,* 89, 46–64.