Common sense

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I. INTRODUCTION

Consider an experience that is free from all theory, an experience precisely as it is experienced, with no superadded interpretations (derived, for example, from physics or biology or myth or religion).[1] It is Husserl's thinking on this topic that will concern us in what follows. We shall set forth initially the main features of what we shall call *common-sense experience.*[2] We shall then, by way of contrast, set forth some parallel remarks on the nature and status of *physical theory.* Finally we shall examine Husserl's "phenomenological" account of the ways in which the worlds of common sense and of physics may each be conceived as reflections or products of certain special sorts of mental acts.

As basis for our inquiries we shall adopt the second book of Husserl's *Ideas,*[3] a work stemming largely from the period 1912–15 which presents above all an account of the fine structures of perceptual experience and of the world that is given in and through perception. We shall deal also with Husserl's *Crisis of European Sciences,*[4] a work that dates from around 1935 and presents a speculative history of the development of the scientific world-conception in its relation to what Husserl calls the "life-world" of common sense. *Ideas* II, which forms the hidden basis of the later work, was held back from publication in Husserl's lifetime. Our aim in what follows is not that of textual exegesis, however, nor is it one of presenting an account of the development of Husserl's thought. Rather, we seek to elucidate as clearly as possible the most important ingredients of Husserl's ideas on the topic of common-sense experience, and to show how they form a coherent whole from which much can still be learned.[5]

It must be pointed out immediately that Husserl himself does not use the expression "common sense" as a technical term of his philosophy. He does, however, use expressions, such as "life-world," "common surrounding world," "natural attitude," etc., which are closely related thereto and which will suffice to justify our exposition of Husserl's ideas on theory-free (or "original") experience by means of the terminology of common sense. Note that these ideas, especially in their final form, are themselves far from commonsensical. This is not, of itself, problematic, as is shown by the comparable case of Berkeley, who notoriously wanted to "save" common sense via the philosophy of immaterialism. A theory of common sense is open to criticism in this respect only to the extent that the *object* of this theory deviates from common sense itself. We must, however, be on our guard against the temptation faced by all philosophers concerned theoretically with common-sense experience to import into this experience factors which belong more properly elsewhere.

The Common-Sense World: The common-sense world is the world of what appears to us in everyday perceptual experience. It is the world as it appears to us directly – free of deliberations which would dig beneath the surface of appearances. It is a world in which people work, converse, judge, evaluate; a world of people, animals, tables, clothes, food, of red and green, hot and cold (and it goes without saying that these are not objects of the sort which are treated of, for example, in standard texts of mathematical physics). The common-sense world is above all a world of objects which we put to use for various practical purposes. Yet it is not itself there (or created) for some particular purpose. On the contrary: "Every end presupposes it." It is always on hand as the same, as nature "free from all theory, as it appears and is meant in this way or that, just as it enters into the personal life of mankind and determines this life in particular forms of practice."[6]

The common-sense world, the "actually intuited, actually experienced and experienceable world, in which our whole practical life takes place" is subject to a remarkable stability. It remains unchanged in its essential structures and in its causal style whatever we may do, and it retains its principal contours and frontiers from age to age and from generation to generation. The world of scientific theorizing changes and develops. The world of common sense, in

contrast, "was always there for mankind . . . just as it continues its manner of being in the epoch of science."[7]

Primary and Secondary Theory: In his account of the world that is straightforwardly experienced in everyday life, Husserl anticipates the important distinction between primary and secondary theory drawn by the anthropologist R. Horton.[8] Horton points to empirical evidence to the effect that there is a primary core of beliefs and doctrines accepted by human beings across very many different cultures which is to a large degree invariant over time. "Secondary" theories of different degrees of sophistication become *attached* to this core. (In the western world, these secondary attachments are, above all, theories of the scientific sort.) The line between primary and secondary theory is difficult to draw. It is a line that is constantly crossed as a result of the fact that for example we in the west constantly employ theories about things, stuffs, natural kinds, and also theories about how things work (theories in engineering, geography, economics, etc.), when engaged in everyday planning and acting. What is important for our purposes here, however, are not theoretical extensions of common sense of these and related sorts. Rather, we are interested in the theory *of* common sense as such, or, in other words, in a secondary theory that would have primary theory as its subject-matter. This will be a theory in the strict and proper sense, and will employ theoretical instruments having a degree of sophistication in principle quite alien to that of common sense itself.

Such a theory can be developed as an empirical matter, for example, as a branch of psychology or anthropology. It might then be concerned with the contingent differences and similarities between, say, the beliefs about the world of an Eskimo and of a Trobriand Islander, and with the empirical question whether there are universal and culture-neutral core beliefs that can be allowed as constituting something like a primary theory in Horton's sense. Husserl, however, is concerned with common sense as an object of *philosophical* theorizing, with what belongs to the idea of common sense as such. Certainly the two sorts of question are not independent: for what belongs to common sense as such will therefore also be universally shared. The core beliefs and doctrines with which we shall deal in what follows will however have such an air of obviousness and even of triviality – thus for example they will consist of theses to

the effect that persons exist or that bodies can move – that the thesis of universality will have much of the sting removed from its tail. (It is this triviality which accounts for the fact that the matters here presented have been often neglected in the past. Interestingly, it is a consequence of the fact that such matters are by no means trivial from the computer programmer's perspective that common sense has become, of late, an important area of research in the cognitive sciences.)

Historicists and relativists will of course balk at the idea of such a "core theory," objecting that it is sheer naivety to seek to display

> a historical *a priori*, an absolute, supertemporal validity, after we have obtained such abundant testimony for the relativity of everything historical, of all historically developed world-apperceptions, right back to those of the "primitive" tribes. Every people, large or small, has its world in which, for that people, everything fits well together, whether in mythical-magical or in European-rational terms, and in which everything can be explained perfectly. (*Crisis*, 373, Hua VI, 381f.)

Husserl has an answer to this objection, however, which rests on a consideration of what is involved in establishing just those historical facts that are held to support it:

> Does not the undertaking of a humanistic science of "how it really was" contain a presupposition taken for granted, a validity-ground never observed, never made thematic, of a strictly unassailable self-evidence, without which historical inquiry would be a meaningless enterprise? All questioning and demonstrating which is in the usual sense historical presupposes history as the universal horizon of questioning, not explicitly, but still as a horizon of implicit certainty, which, in spite of all vague background-indeterminacy, is the presupposition of all determinability, or of all intention to seek and to establish determined facts. (*Crisis*, 373, Hua VI, 382)

It is this "vague background-indeterminacy," which yet stands fast, as a rock beneath all our special inquiries and purposes, which will be our concern in what follows.

II. FEATURES OF THE COMMON-SENSE WORLD

Common sense is marked first of all by the feature of *systematic holism*. This turns on the fact that the various general concepts in terms of which common sense can be articulated, concepts such as

thing, mind, body, reality, perception, change, surroundings, cause, act, experience, belief, world, are intertwined, each presupposing all the others in different, though systematic, ways – to the extent that it is difficult to know where exposition or investigation should begin.

The common-sense world is given as *real,* and this means, as Husserl sees it, that it is marked as a matter of necessity by two features: first is the feature of substantiality – the reality of the common-sense world is organized primarily around *things* (and not around sense-data);[9] and second there is the feature of *causal dependence in relational networks* – each real thing is as a matter of necessity such that its changes of state give rise in systematic ways to changes in correlated states of its neighbours.

The things of the common-sense world possess determinate real individual properties (of warmth, redness, heaviness, etc.). Each such property is, Husserl holds, of necessity changeable, or more precisely, exchangeable with other determinate real properties from the same family. It belongs to the essence of real things that they can move and be at rest, and that they can be subject to qualitative change and qualitative permanence.[10]

Real things exist further always *in situ,* which is to say in an environment of other real things, so that there are no causally isolated islands, cut off from all other realities: things are, in every case, embedded in wider circumstances of determinate sorts. To know a thing is to know, above all, its causal dependencies, which is to say, the ways in which its changes depend on changes in other real things. It is to know through experience or reasoning the sorts of stuffs it is made of, how it will change under given influences (for example, how it will behave when heated or bent). It is part of our common-sense understanding of reality that it manifests a limited repertoire of systematic regularities in these respects, in the sense that under similar circumstances similar series of changes occur. Again and again I can subject similar pieces of paper to the same series of bendings and foldings and observe and predict the same rule-governed effects in each case. The practical life of common sense to this extent involves constantly repeated inductions. This ordinary inductive knowledge is, however, "artless" compared to the "methodical" inductions made possible by natural science.[11]

We have to deal here with what Wittgensteinians call "ordinary certainty," or as Husserl puts it, with knowledge which constantly

verifies itself from within. Such knowledge is "occasional" in that it is always tied to "the 'merely subjective-relative' intuition of prescientific world-life." And as Husserl points out, "this 'merely' has, as an old inheritance, the disdainful coloring of the *doxa*. In prescientific life itself, of course, it has nothing of this; there it is a realm of good verification and, based on this, of predicative cognitions which have proved themselves, and of truths which are just as secure as is necessary for the practical projects of life that determine their sense."[12]

The things of common sense "have, so to speak, their 'habits' – they behave similarly under typically similar circumstances." The common-sense world is thus a rule-governed (a reliable) world, a world whose denizens behave characteristically, and, for the most part, as we expect them to behave. Occasionally, of course, something happens that is strikingly new. We then immediately ask why, and look around us in order to find its cause in the things and events of our familiar environment. And even if we fail in this attempt, still we continue without hesitation to assume a universal, flawless causal regulation, or in other words to assume that this world is "not merely a totality but an all-encompassing unity, a whole (even though it is infinite)." Thus, in spite of the fact that we know comparatively little of what underlies particular causal dependencies, still we assume a universal causal style of our everyday world, and this makes possible (always typical and approximate) "hypotheses, inductions, predictions about the unknowns of its present, its past, and its future."[13]

Common-sense knowledge is spontaneously inductive knowledge – it is knowledge of how things will characteristically behave. But it is also knowledge of identity, or in other words knowledge of the respects in which a thing will remain the same through given series of changes. The things or substances of the common-sense world are given to us as unities through change: the same thing can survive even though, among its individual properties, radical changes have occurred.

The identity of the thing (and the corresponding "harmony" of our experience of things and processes) is explained by Husserl first of all by appeal to what he calls the "spatiotemporal skeleton," or in other words by the factor of *extension* which supports the qualities of the thing and which is experienced as identical in different sensory mo-

dalities. Indeed on Husserl's view the factor of extension is experienced as necessarily identical, where changes in the qualities themselves are merely "accidental" – even change from one quality to a contradictory quality does not prejudice the identity of the thing.[14]

Individual properties, too, can be conceived up to a certain point as unities through change – the same individual property of, say, elasticity in this tuning fork can change gradually yet remain for a time graspably the same real property. Thus, a patch of colour is a unity, as also is the corresponding area of the coloured surface. In this way it is as if the parts and moments within the thing constitute a series of strands overlapping in time. When a certain point is reached, when, for example, a coloured thing is bleached by the sun, then it is as if there is initiated a new segment of its being in virtue of the fact that it has a new colour-property in place of the old. What we have before us in such a case is a changed thing, one which preserves some properties, loses other properties and acquires new ones of a different type. It is because the overlapping segments in the duration of the thing form a dense fibre that we can grasp the thing as identical throughout its duration. That the thing does not break down into a succession of disjoint phases follows, in part, from the fact that the bulk of its properties are identical across any given temporal span: it has at every randomly selected stage in its existence a stock of lasting properties. (Later we shall discover that the mind, for Husserl, is a substance in a much stronger sense than this.)

Appearance: The things that are given to us in common-sense experience are given as distinct and distinguishable, but also as complete (thus, as completely determinate and also as well rounded in the sense that they appear, topologically speaking, as having one or other of a limited range of simple structures, generally the structure of a solid sphere). Each perceived thing is as it were present in the flesh as something which is three-dimensional, has surfaces, a (normally non-homogeneous) inside, a stuff or stuffs of which it is made. In any given case, however, only very little of the relevant whole contributes directly to the content of the relevant perceptual experience, and Husserl speaks here of the "aspects," "adumbrations" or "foreshortenings" which mark every perceptual experience of bodily objects. The perception of things is in this and other senses imperfect, and the kinds of imperfection are subject to intelligible regularities of their own. (Thus, there are different sorts of imperfections

pertaining to the different kinds of things, e.g., to animals or men, to different perceptual conditions, and so on). Each such imperfection is given as in principle surmountable, however, in the sense that, while the perception of what is physical essentially includes features and dimensions that are left undetermined, it includes them *as determinable.*

It is in this context that there arises within the sphere of common sense the distinction between "appearance" and "reality." The former pertains to the presence of imperfections in perception, to cases of mismatch between adumbration and object, which are recognized as such. Thus common sense is in at least this sense not "naive": it is fully conscious of the distinction between the way things *are* (for commonsensical purposes) and the way things *appear to be* (to different subjects and under different circumstances).[15] Common-sense experience is, as Husserl puts it, an unceasing process of reciprocal adjustment:

> each of us has his life-world, meant as the world for all. Each has it with the sense of a polar unity of subjectively, relatively meant worlds which, in the course of correction, are transformed into mere appearances of *the* world, the life-world for all, the intentional unity which always persists.
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> (*Crisis*, 245f., Hua VI, 258)

The duality of apperance and reality is seen by common sense as applicable through the whole external world, both to primary and also to secondary qualities. Thus, for example, we know that if all illumination were to cease, then colour-appearances would disappear. Yet still we believe that the real colours of the things themselves would remain as they are.[16] The duality is however applicable only locally: thus, it is not capable of being applied to the world as a whole, nor to that "horizon of implicit certainty" which is the background of all serious efforts to establish facts about reality.

Appearances are not real states or properties of the things. They are that through which such states or properties manifest themselves more or less imperfectly. Appearances are not states of the subject, either; they are transcendent with regard to our actual states, and most especially in regard to our intuitive experiences.[17] In fact, appearances are *relational entities*, dependent for their existence and nature upon both perceiving subject and appearing objects.

The perception of causes, too, is marked by imperfection, and thus

also by the opposition between appearance and reality. For the cause of a manifest change need not itself become apparent, even though the change is itself experienced from the beginning as a causal change: the causal circumstance is then co-intended in an indeterminate way. Husserl is not asserting that cause or causal circumstances are necessarily in every case given perceptually – indeterminately or not. Rather, he is asserting that the world of common sense is *taken for granted,* in every normal perceptual experience, as a homogeneously meaningful and harmonious, causally organized, whole. Its changes are given as in principle understandable and explicable, as changes that happen reliably in correspondence to rules.[18]

Not everything that we perceive is a thing or sensible quality. We perceive also holes,[19] the gaps between things, and the media (for example water, smoke) in which things move.[20] We perceive shadows, rainbows, waves, and similar phenomena. And there are also perceived phantoms (faces which we seem to see in clouds or smoke); and while a perceived thing is unthinkable without sensuous qualification, such phantoms are thinkable without materiality or corporeality (though not without extension and thus also not without dimensionality). Thus there are experienced sensuous qualifications even where there are no thingly material objects.[21] Yet the converse does not hold; for the world that is given in straightforward perception is marked precisely by the fact that it is filled through and through by sensuous qualities. Within this sensuous array there are discriminable areas of organization, marked off by "boundary regions"[22] and separated by gaps. The world can in this sense be cleaved at its joints: it is organized into separate sensible things or bodies. Bodiliness and sensation in this way go hand in hand, since the bodily aspect of things exhibits itself perceptively only in visual, tactual, acoustical, and other such sensory aspects.[23]

When we perceive a thing, accordingly, then we are aware also of sensuous qualities and of a system of associated sensory surfaces. But the latter are not there as it were alongside the physical thing; what is there before us is a unity, something which has physical and sensible properties intertwined. Thus, the thing is experienced not as a bundle of properties or congeries of surfaces, but as one, single thing. And again: as far as our experience of real things and their manifest qualities is concerned, the content of our experience is as of *real transcendent properties,* not as of images or sense-data.[24]

My body, too, is, of course, like all other things in the world of common sense, a thing located in space, with a shape and a stock of qualities, and it is involved in causal dependencies. My body, too, remains identical through changes. The system of causalities into which my body is interwoven in normal experience is such that my body retains an identity of type through all its changes. Thus, my limbs return again and again to the same basic positions. They can again and again accomplish the same sorts of things (lifting, turning, running) in the same sorts of regular ways.[25]

Among the most important changes in or involving the body are those processes we call perceptual experiences. The network of such experiences is interwoven with other networks of changes in the body, above all with changes of bodily position and orientation. Husserl here anticipates J. J. Gibson's recognition of the crucial fact of the interwovenness of perception and bodily movements on the part of the perceiving subject:

> *if* the eye turns in a certain way, *then* so does the "image"; if it turns differently in some definite fashion, then so does the image alter differently, in correspondence. We constantly find here this two-fold articulation . . . Perception is without exception a *unitary accomplishment* which arises essentially out of the playing together of two *correlatively related functions.*[26]

The body thereby plays a crucial role as concerns the spatial organization of the common-sense world. The body is that from out of which I grasp everything that is spatial and everything that is given to the senses: "each thing that appears has *eo ipso* an orienting relation to the body, and this refers not only to what actually appears but to each thing that is supposed to be able to appear."[27]

Inner Sensation: While perception is directed primarily to external objects in their external environments, this does not of course exclude the fact that we may also perceive, externally, certain parts of our own bodies: our legs, fingers, arms, etc.[28] In addition, however, the body is given in commonsensical experience also *from the inside,* in the sense that each case of external perception is correlated in systematic fashion with a sensation by the subject of the subject's own body. Material things can touch one another; but only when the body is involved do sensations occur. This is then always (as Husserl maintains) in such a way that we can talk of both inner and outer sensations, as also of inner and outer perceptions and

feelings.[29] Thus, I see the apple and am simultaneously aware of my eyes and of myself as visually perceiving subject; I touch the table and am simultaneously aware of my own finger. Such bodily sensations are, of course, not normally attended to as such; they are rather experienced *on the side,* as part of a naturally unfolding system of regularities intertwined with the system of regularities unfolding on the side of the things perceived.

The organs of perception function in seeing, hearing, etc. always in such a way as to be bound together with an "I move" or an "I do" in a single comprehensive unity. As the experienced thing is given in successive series of aspects, so the body of the experiencing subject is given in successive kinaestheses, the two series running not simply alongside each other but being again such as to form a remarkable harmony.[30]

The Horizon of Perception: The two successive series are moreover in a precise sense open-ended. Each individual thing that is given in perception has the significance that it has for the perceiving subject through what Husserl calls an "open horizon" of possible perceptions, possible future continuations of the ways in which the object exhibits itself to the subject. As Husserl puts it,

> a hidden intentional "if-then" relation is at work here: the exhibitings must occur in a certain systematic order; it is in this way that they are indicated in advance, in expectation, in the course of a harmonious perception. . . . This is the intentional background of every straightforward certainty of being of a presented thing. (*Crisis,* 161f., Hua VI, 164)

In addition to the horizon of possible perceptions of the thing there is also what Husserl calls the "external horizon" of the thing as a thing within a field of things, something which points, in the end, to the whole world as perceptual world. Each perceptual experience picks out a certain group or field of simultaneously actually perceived things. Such a group is not given as isolated and as independently existing. Rather, the momentary field of perception, "always has the character for us of a sector 'of' the world, of the universe of things for possible perceptions."[31]

> The world is pregiven to us, the waking, always somehow practically interested subjects, not occasionally but always and necessarily as universal field of all actual and possible practice, as horizon. To live is always to live-in-certainty-of-the-world. (*Crisis,* 142, Hua VI, 145)

This horizon of perceptions, extending out from what is presently given to what is taken for granted (with "straightforward certainty") as capable of being given, has its analogue also in other spheres of experience. (Thus, the scientist experiences the world within the horizon determined by his theoretical end.)

The Continuum of Sense: The common-sense world, extending, in its horizons, out into infinity, has further the character of *multidimensionality:* in the unity which is the real thing, and in the totality of the experienced world at any given time, we can make out different strata of sensuous determinations corresponding to the different senses of vision, hearing, smell, etc. Each such stratum can be considered as homogeneous and as running its harmonious course and suffering characteristic types of alterations in and of itself. The different strata are, in terms of our access to them, separate, and essentially so, in the sense that colour, for example, is given perceptually only in seeing and never, for example, by means of hearing or touch. In themselves, however, the things we experience in common sense are not built out of separate or separable seen, heard and touched constituents, but are, rather, unities tied together by common strands. There is but one thing that is perceived as a unity along with its properties, "some of which are predominantly or exclusively (as, e.g., colours and their distinctions) grasped by vision, others by touch."[32]

On the subject side, too, the totality of inner sensations deriving from each of the different sensory modalities is similarly cemented together into a single harmonious unity, the "unity of consciousness":

> As the image, *stream of experience* . . . already indicates, the experiences, i.e., the sensations, perceptions, rememberings, feelings, affects, etc., *are not given to us in experience as annexes, lacking internal connection, of material bodies,* as if they were unified with one another only through the phenomenal link to the body. Instead, *they are one by means of their very essence.* (Hua IV, 92)

Extension: The different strata are cemented together primarily through the fact that the boundaries of what is seen, touched or tasted come again and again into coincidence with each other in virtue of the existence of the common sensible of shape. For as we saw, the multidimensional sensory continuum is unified in the first place by the

feature of extension. Extension is the axial determination of the thing in Husserl's eyes, and whatever other determinations the thing has, both as a whole and in its parts, it has these determinations across some relevant extent: "Every corporeal quality of a thing 'fills the spatial body'; the thing spreads itself out in the quality."[33] Thus the coloration of an opaque thing covers the entire outer surface of the thing in its specific fashion. Warmth fills the warm body in another, quite different fashion, and matters are different again as concerns hardness, texture, weight, and so on.[34] All such extensions are sub-extensions of the total infinite extension of the world.

The fact that the things of the common-sense world are extended and continuous, that they are not atoms or bundles of atoms, implies further that they can be subjected to actual or imagined *division into pieces,* the results of actual division being themselves such as to serve as things.[35] The parts of a thing do not exist merely side by side within the compass of the thing; they, too, are subject to systematic mutual relations of reciprocal action. The different parts are interlocked; they react in a unified way in face of external causal influences. In certain circumstances, however, this unity of reaction is lost and the thing "breaks up" (or "breaks down") into its parts. To divide a thing into pieces is, of course, to bring about also a corresponding fragmentation of its colouring and of its other real properties. This fragmentation applies not merely to the real determinations but also to the *appearances* of the thing and of its properties: for just as real colour and real extension are unthinkable in separation from each other, so also is their appearance.[36]

III. MIND AND BODY

One of the major components of common sense is what has been called "rational" or "folk" psychology, an area of "practical induction" which we treat here primarily from the point of view of ontology, or, in other words, in light of the question of the nature and status of the mind and of mental experience. The mind, for Husserl, is something that is affected by the outer world through perception and something from which acts issue forth. It is marked further by the fact that, as denizen of the common-sense world, it is tied to a certain body. Note that in his account of mind, Husserl adopts a conception of experience that rests on Cartesian dualistic assump-

tions which some (e.g., Heidegger or Ryle or Merleau-Ponty) would regard as alien to common sense. Thus Husserl talks of human souls as "animating" physical living bodies.[37] Husserl attempts, however, to minimize the force of these assumptions by stressing that the unity of man encompasses the two components of mind and body "not as two realities externally linked with one another but instead as most intimately interwoven and in a certain way mutually penetrating." Thus "one can understand that states and properties of either of these components count as ones of the whole, of the 'I as man' itself."[38]

Common sense is, one might say, *intrinsically underdetermined* in this respect, in that it leaves open the nature of this interwovenness of the two domains of mind and matter and is thus consistent with a variety of different positions as to their interrelation. Thus, common sense seems to be consistent also with Cartesian positions on this issue, though it would be an error to impute Cartesian dualism to common sense itself. Common sense is intrinsically underdetermined also in other respects. Thus, for example, despite our default assumption of universal causal regularity, the events within the world of common sense are marked by incomplete explainability (a lack of causal closure). Moreover common sense believes that material things can be divided into pieces, but it has no view as to whether, in this way, indivisibles will ultimately be arrived at. (This gives rise to the tricky problem of specifying the *limits* of common sense – of specifying the point or region where the determinations of primary theory come to an end and secondary theories must take over.)

Freedom: In planning manipulations of and interactions with other things we presuppose that our bodies, too, are things. Moreover, from external observation, mirrors, etc., we possess knowledge of our bodies' thingly qualities, and we also possess inner perceptions and inner feelings, e.g., of our hand and fingers when we grasp an apple. Through the experience we have as willing, acting subjects, however, we are in possession of knowledge of our bodies of a further kind. For our body is also given as a "freely moved totality of sense organs":

> I know through experience that the parts of my body move in *that* special way which distinguishes them from all other things and motions of things (physical, mechanical motions); i.e., they have the character of subjective movement, of the "I move." (Hua IV, 56, 259)

Each human ego

> experiences "its" physical body, not merely in general, as a particular physical body, but in a quite peculiar way as "living body," as a system of its "organs" which it moves as an ego (in holding sway over them); how it thus "takes a hand" in its consciously given surrounding world as "I strike," "I push," "I lift" this and that, etc. (*Crisis*, 211f., Hua VI, 215f.)

Each subject is "free" in the sense that it can change at will its (bodily) position in relation to other things and other subjects. The body is a self-moved mover which is at the same time somehow integrated into the causal nexus of material nature. The body can be "freely" moved, just as it can be affected also by passive bodily processes in which freedom plays no part[39] (though common sense is underdetermined also in this respect: that it has no precise understanding of the nature of this "integration" – it has no *theory of freedom*).

Norm Kinds: The common-sense world, with its things, their real states and appearances, is determined further by the following feature: there is a distinction that is drawn in all its spheres and dimensions between what is *"normal"* and what is to a greater or lesser degree *"abnormal."* This is, again, not a mere contingent matter in Husserl's eyes, but belongs to the marks of the common-sense world as such. Thus, there are abnormal experiences that occur, e.g., when the different sensory strata fail to unify, or when sensation and judgment stand in contradiction to each other.[40] Common sense is then marked crucially by the fact that it does not draw conclusions from abnormal experiences which would lend it to reject its own central principles. Common sense is in this sense not "fallibilistic." Rather it is constantly self-verifying, excluding what does not harmonize with its central principles as mere appearance.[41] Abnormal experiences are, as it were, passed over without comment, in the sense that they are not held to yield data that is relevant to the understanding of the general, characteristic features of the common-sense world (not such as to give rise to the need to change our global understanding).

Consider the ways in which colour-appearances differ under different lighting conditions. Here "certain conditions prove to be the 'normal' ones: seeing in sunlight, on a clear day, without the influence of other bodies which might affect the colour appearance. The 'optimum' which is thereby attained then counts as the *colour it-*

self."[42] Appearances which fall outside the realm of what is normal are taken by common sense as secondary to or as deformations of that optimal appearance which alone counts as an appearance of reality. "The features which pertain to the thing 'itself' are the 'optimal' ones. This applies to all features, to the geometrical as well as to the sensuous qualities."[43]

In normal experience, then, we have access to (what count as) the real states themselves. What counts as real and what is real are for common sense identical (or the issue of their identity is reserved for the realm of what is left undetermined) – though this identity is qualified by the fact that common sense *is* fallibilistic in the sense that what counts as real at one time may at another time come to be seen, as a result of new experiences or of new information deriving from others' experiences, as having rested on error. Common sense is thus willing to subject itself to local but not to global revision (judgments as to individual matters of fact can be overturned in course of time, not however the general beliefs which stand fast, as it were, at the heart of common sense).[44]

The common-sense world is divided into "circles of similars": kinds or species, similar things, similar properties, similar events. All such kinds or species are subject to the opposition between normal (standard, typical) and abnormal (non-standard, non-typical) instances.[45] The normal instances of such species are marked by familiarity, they are part of what is taken for granted by common sense, both in regard to what they are and also in regard to what they will do (in regard to their regular patterns of behaviour in normal and regular circumstances).[46] Thus I perceive a door, or a leaf, *in one stroke,* and I know already the sorts of future ways in which this thing is likely to behave and to be perceivable in further acts. Normal instances are also stable: we can imagine them being deformed along different axes and yet as still remaining instances of the kinds in question. Abnormal instances, in contrast, are typically highly sensitive to deformations (as for instance a bluish red, on intensification of its blueness, may cease to be an instance of the colour red). Moreover, they may in different ways be assimilated in experience to the normal case (they may have normality thrust upon them, as it were), as when ambiguous figures, such as the duck-rabbit figure, are assimilated successively to one or other alternative "normal" reading.

We also have more or less abnormal *subjects* (in cases of colour-blindness and the like), and then the real thing of common sense is precisely the object that is given to the normal subject in relevant normal conditions.[47] The *real features* of the thing are those features which are experienced (in appropriate foreshortenings) by normal subjects in such normal conditions. Our bodies, too, are more or less normal or abnormal, and to talk of normal subjects is to talk also of bodies which are normal in relevant respects. Normal persons may, certainly, differ in their mental and bodily constitution, and such differences common sense allows for; but it allows for them along certain dimensions and to certain degrees only.

IV. CULTURE

The very existence of a stable structure called "common-sense world" carries with it the implication that this world appears to all normal persons in more or less identical ways. Differences of certain sorts do indeed make themselves apparent, e.g., when we compare the descriptions of the same event given by different individuals. But such differences can become apparent only because there is, as Husserl puts it, an underlying "intersubjective harmony of experience," a harmony, a general and unquestioned agreement, as to what sorts of features count as real, what sorts of conditions count as normal, in what sorts of ways given features can manifest themselves:

> normality is related to a multiplicity of persons in a communicating association, persons who, on the whole, in conformity with a predominating regularity, agree with one another in their experiences and consequently in their assertions about experience.[48]

The common-sense world includes not only my own body and various non-bodily things. It contains animals and plants; but more importantly it contains *other human bodies*, which is to say: material things of the same type as my own body. These I can perceive as I perceive other material things and as such they enjoy the same sorts of familiarity, normality, etc. Certainly our fellow human beings can surprise us in what they do, but not (characteristically) in the *types* of things they do, for these are restricted to the familiar repertoire of speaking, running, lifting, eating, killing, and so on. Human beings are of course not only material things: I can grasp them also (or so

Husserl argues) by means of a special mode of apprehension which he calls "*empathy*," the capacity to know how another person feels, what it is like to experience as this other is experiencing, etc. Through empathy I grasp – at least in normal circumstances – that these other bodies have a mind or ego like my own, along with everything that pertains thereto. Now it is a mark of those acts in which the common-sense world is given that they are characteristically and for the most part, *not subject to deliberation.* Empathy, too, is an act of this sort; automatically, as it were, it posits my and your consciousness and will as being of the same determinate and intelligible sort. My apprehension of the human being over there, as a whole human being with a life and mind very much like my own, spontaneously shapes and enlivens my perception of his body. There is an interesting parallel here to the way in which, in hearing words of a language which I thoroughly understand, my perception of the sounds is bound together completely with and is thoroughly shaped by my grasping of the associated meanings. As Husserl points out, "the word-sound is 'body' for the animating 'sense,' " the whole process spontaneously organizing itself in such a way that "each sense refers to a new sense and to new words in anticipation," in reflection of the ways the relevant words are joined together into sentences and other word-formations of higher order.[49]

Empathy is a quite different matter from the grasping of natural causality in that it has both a physical and a psychic dimension. I grasp the other person as having mental and bodily behaviour and capacities like mine.[50] The two dimensions of empathy do not exist merely side by side, however. They are combined together in that special sort of unity which allows us to grasp a person as combining physical and psychic features in such a way that the latter are *brought to expression* in the former.[51] Such expression is possible in virtue of the fact that our bodily movements are restricted to a certain familiar repertoire of types, and among these types (with their normal and abnormal instances) are those which are associated in rule-governed ways with corresponding psychic experiences.[52]

Motivation: The totality of my experiences is bound together dynamically with the objects of the common-sense world. This holds first of all causally. There is a mechanical side to my experiences of the objects in the world and of the ways in which they impinge upon my own body and upon its sensory organs (and one possible criti-

cism of recent research in "naive physics" is that its account of the dynamics of the common-sense world is restricted to features of this sort). But experiences and objects are bound together dynamically also in a second sense: the objects of this world, in being experienced, exert additional positive and negative forces upon me, subtle but compelling forces of attraction and repulsion, belonging not to the sphere of causality but to that of human (and animal) salience. When I perceive things and persons and surrounding circumstances I am determined (automatically, which is to say: non-deliberatively) by what Husserl calls a "web of motivations."[53] A skyscraper steers my regard onto itself through its special form. A butterfly draws attention to itself through its beautiful colour or texture. The noise of the cars out there makes me close the window. The glass of beer over here makes me reach out my arm to grasp it. "In short, in my theoretical, emotional, and practical behaviour – in my theoretical experience and thinking, in my position-taking as to pleasure, enjoyment, hoping, wishing, desiring, wanting – *I feel myself conditioned by the matter in question.*"[54] The object motivates the subject: it "intrudes on the subject" and stimulates him or her in a wide range of different though characteristically understandable and familiar ways. There are also examples of purely psychic motivation. Thus, I can be motivated to do this and that by an idea or a memory that occurs to me independently of my present experience of external objects. Indeed, as Husserl points out, everything that goes on in my mind is linked together through relations of motivation of this sort: through relations of significance. I *surmise* that *A* because *I know* that *B*. I *conclude* that *D* because *I discover* that *E* and *F*. I *desire* that *G* because I *learn* that *H*, and so on.[55]

To the causality which is the fundamental lawfulness of the purely material world, motivation now comes to be added as fundamental lawfulness of the world as this is determined by and for our mental life. And as in the case of physical causality so also here: the lawfulness turns on the fact that the similar motivates the similar under similar circumstances. The (normal) actions of (normal) subjects are *understandable* by other (normal) subjects in virtue of the similarity of motivations to which each of them is subjected in similar circumstances, as also in virtue of the similarity of the causal and bodily features involved.

Value: We can, if we exert ourselves, present to ourselves the ob-

jects of the common-sense world merely perceptually (as mere material targets of disinterested perception). As subjects of this world, however, we are not merely perceiving but also *acting* beings and are constantly subject to corresponding motivations. This means that under normal circumstances we automatically effect evaluations of the objects by which we are confronted in a way which amounts to a sort of *value-perception:* "the value-character itself is given in original intuition."[56] We directly (and thus pre-theoretically) experience the world as containing values and counter-values, and therewith also we acquire mediate and immediate goals. These give rise in turn to new motivational connections in light of the presuppositional connections between the sub-goals in whose realization we are at any given time engaged.

These values, goals, and motivations can now be seen (on the metacommonsensical, theoretical level) as a new dimension of being within the common-sense world itself. They are, of course, not commonsensical objects in the way that people, apples, houses are: but we can nonetheless pursue the theory of values and of rational practice as theoreticians of what belongs to the world of common sense in its total structure.

Our goals and values and the motivations which give rise to them lead us not least to transform the objects and stuffs of the common-sense world into new objects, the results of such transformation entering once more into the common-sense world as products or works. The world of objects of common sense is hereby marked by an intelligible opposition between natural things and *artifacts.* Such products may be recognized as valuable in different ways. They may serve as tools for further processes of production, leading us to new products and new evaluations as well as to new possibilities for future goals. And all of this is, as part of the human world of common sense, both familiar and understandable:

> [E]ach work, each product, each action expresses an activity and is characterized as work, as act: one sees how the cigar is rolled, one discovers therein the expression of a manipulation and, on the other hand, the "visible" aim. (Hua IV, 321; cf. 188)

The importance of Heidegger's *Being and Time* resides not least in its contribution to our understanding of these and related aspects of our common-sense experience (our experience of tools, of how they

become extensions of our bodies, of how they work and fail to work).

Culture and Society: I am dependent in my behaviour on things, for example on their automatically (non-deliberatively) grasped pleasant or dangerous properties, their sweetness or bitterness, redness or greenness, on their usefulness as equipment, and so on. Tools, buildings, plants, animals motivate in different ways. They occasion and help to steer my behaviour. But I am dependent in an even more striking way on other *persons.* For human beings, too, exercise on one another immediate effects. They have "motivating power" for each other. Sometimes persons (or parts of human bodies) have effects on us in the same way as do physical things, i.e., through mere causality. And sometimes they have effects which involve both physical and mental components (for example in cases of sexual attraction). Persons influence each other also, however, in primarily mental ways, often via those deliberately constructed edifices of motivation we call uses of language. Persons direct their activities toward one another, "they perform acts with the intention of being understood by the other and of determining the other, via his understanding grasp of these acts, . . . to certain personal modes of behaviour."[57] There are, as Husserl tells us, *social acts,*

> in which the ego turns to others and in which the ego is conscious of these others as ones toward which it is turning, . . . perhaps adjust their behaviour to it and reciprocate by turning toward that ego in acts of agreement or disagreement, etc. It is these acts, between persons who already "know" each other, which foster a higher unity of consciousness and which include in this unity the surrounding world of things as the surrounding world common to the persons who take a position in regard to it.[58]

Thus, there are not merely personal motivations in the narrow sense (ensuing, say, from this man who is my friend or from that man who strikes me as honest and reliable); there are also webs of motivation that pertain to communities of persons as such and hold social institutions together. Among these are what we might call *transcategorical* motivations, patterns of motivation that link together not only our mental and bodily experiences but also social and especially linguistic acts, laws, contracts, and so forth.

From all of this it follows that the persons in the common-sense world are determined by the fact that they belong to different per-

sonal unities of a higher order. The human being, as creature of the common-sense world, is a being marked by his dealings with others in relation to institutions, laws, morals, customs, etc., and human beings know each other as such:

> The members of the community, of marriage and of the family, of the social class, of the union, of the borough, of the state, of the church, etc., "know" themselves as their members, find themselves dependent upon them in their consciousness and affect them in their consciousness in turn.[59]

To this extent, then, (and analogously to what holds in the case of values), institutions and related personal unities of higher order can be seen at least on the metacommonsensical (theoretical) level to constitute a new dimension of being within the common-sense world itself, analogous to the level of persons proper. Institutions have their own lives, they endure through time, despite acquiring or losing members; they have their own qualities and states, and their own ways of functioning in collaboration or in interaction with each other.[60] And like things on lower levels, they are through and through dependent on circumstances and are subject to more and less regular and intelligible patterns of change, to normality and abnormality.

Levels of Common Sense: In summary we can say that the common-sense world includes at least the following spheres or levels:

1. normal intuitive spatio-temporal nature, the earth and natural things and stuffs, both organic and inorganic, having real qualities and states and giving rise to sensations and also to practical motivations of various sorts;
2. people and animals, moving and behaving in determinate ways, at rest, thinking, working, speaking, writing;
3. artifacts, goods, implements, cultural objects, which presuppose deliberate, intelligent activity on the part of man;
4. values and goals affecting our behaviour and at the same time giving sense and structure to our activities over time;
5. morals and customs, languages, various social units and socially constituted entities with their particular norms and conventions.

The elements of (2) and (3) are grasped by common sense itself as standard constituents (denizens) of (1). There are elements of (4) and

(5), however, which seem to be distinguishable as such on the meta-commonsensical (theoretical) level only.

V. PHYSICS

So where does *theory* come from? Theory gets superadded to common sense in a variety of ways: we might use it in cooking, in building bridges, or for other practical purposes. Or we might use it as a way of making sense of natural calamities or of the history of our tribe. Husserl, however, is concerned not with theory as an ephemeral protagonist in the history of this or that society but in the idea of theory as such, with what makes theory theory, with the form which theory must take if it is to be theory in the most perfect sense.

What, then, does the idea of perfect theory involve? It involves, first of all, the idea of a total shareability of knowledge, of a knowledge for all, and for all times, as contrasted with the "occasional" knowledge of everyday existence. Second, it involves the idea of exactness, as contrasted with the vague forms – characterized by appearance, by normalcy and abnormalcy, and by the boundedness to sensory intuition – of common sense. Third, it is marked by the idea of total explainability (of closure under causal laws) and thereby of total prediction.

The goal of establishing a nature or reality valid for everybody arose at a certain point in the development of human culture. Each human being had until then taken for granted his own (his own society's) surrounding world, "with its traditions, its gods, its demons, its mythical powers, simply as the actual world." Then, however, there appeared a new idea of truth: "not tradition-bound, everyday truth, but an identical truth which is valid for all who are no longer blinded by traditions, a truth-in-itself."[61]

The goal of establishing such a truth-in-itself was fulfilled by making experienced *nature* thematic not as qualitative, but purely as *res extensa.* Nature became reduced to a mere mathematical manifold, each thing became reduced to a mere body, a mere extension. A garb of mathematical ideas, or of symbolic mathematical theories, came to be developed, which claimed by degrees to encompass the entirety of the everyday world and to represent all that is "objective" within it.

Where the common-sense world, then, is marked by empirical intuitable forms, the objective world yielded by the mathematical method (as Husserl conceives it) amounts to an infinite totality of ideal objects, pure extensions "which are determinable univocally, methodically, and quite universally for everyone . . . an infinity which is determined, decided in advance, in itself, in respect to all its objects and all their properties and relations."

> By means of pure mathematics and the practical art of measuring, one can produce, for everything in the world of bodies which is extended in this way, a completely new kind of inductive prediction; namely, one can "calculate" with compelling necessity, on the basis of given and measured events involving shapes, events which are unknown and were never accessible to direct measurement. Thus ideal geometry, estranged from the world, becomes "applied" geometry and thus becomes in a certain respect a general method of knowing the real.[62]

In making precise the common-sense world, two (Newtonian) principles are imposed upon it with methodical thoroughness: that similar consequences follow under similar circumstances, and that there is no change without cause. Natural science as Husserl conceives it orients itself strictly around these principles in such a way that the idea of necessary explainability is held to govern the world in all its aspects. Uncaused change is for Husserl ruled out by science *a priori*, even though a change that had no grounds might be possible *idealiter*.[63] The world of scientific theory is thus a world of self-enclosed causality in which everything that happens is determined in advance.

The sort of object which would be suitable for *theoretical* grasping in the fullest and most perfect sense is called by Husserl the "physicalistic" thing. The world of physicalistic things is grasped not via sensation but via theory, and it consists of entities all of whose properties are capable of being grasped with theoretical perfection. From this it follows, in Husserl's view, that there are no sense-qualities in the world of physicalistic things.[64] There are, certainly, physical facts which correspond to our qualitative distinctions of red and green, warm and cold, etc. But these physical facts are a matter of purely quantitative distinctions pertaining to reflectance, temperature, etc., and they serve merely as the basis on which qualitative appearances are produced by psychophysical processes of cer-

tain special sorts (these processes themselves being determinable with purely quantitative exactitude).[65]

The world of physicalistic things differs from the world of common sense in that the former is ruled entirely by causality. This relates always what is real to what is real, where the motivation which we encounter with causality in the common-sense world may involve what is not real, as for instance when I am moved by something that is merely remembered or even imagined. In this respect there is a fundamental distinction between real causal relations on the one hand and motivation-relations on the other: motivation is a matter of intentionality.[66]

The world of physicalistic things differs from the world of common sense further in that the former knows no opposition between the normal and the abnormal, and it is similarly free of values, and of all that belongs to the realm of practice:

> Concepts such as the valuable, the beautiful, the amiable, the attractive, the perfect, the good, the useful, deed, work, etc., as well as, similarly, concepts like state, church, right, religion, and other concepts, that is, objectivities to whose constitution valuing or practical acts have essentially contributed – all these have no place in natural science, they are not concepts pertaining to nature. (Hua IV, 25)

Exact vs. Morphological Science: The science of the common-sense world is a science of a different kind from physicalistic science. The latter is "exact," in Husserl's special sense, which is to say it is a theory built up logically from a small number of primitive concepts and axioms which together suffice to determine completely the entire domain of research. It is essential to this domain that the totality of all its possible constituent formations is determined "completely and unambiguously on lines of pure analytic necessity."[67] Such a domain – Husserl is thinking here above all of Euclidean geometry – is "mathematically exhaustively definable."

The science of the common-sense world is in contrast what Husserl calls a morphological science: it is a science which employs a large number of concepts of "vague Gestalt-types which can be apprehended only with the aid of sensory intuition"; it has to do with the "bodily shapes of rivers, mountains, buildings, etc."

> The most perfect geometry and its most perfect practical control cannot help the descriptive student of nature to express precisely (in exact geometrical concepts) that which in so plain, so understandable, and so entirely suitable a way he expresses in the words: notched, indented, lens-shaped, umbelliform, and the like – simple concepts which are *essentially and not accidentally inexact*, and are *therefore* also unmathematical.[68]

Exact concepts are ideal; they express something one cannot (or not in normal circumstances) see, and they are built up from simple concepts in a strict hierarchical order. (We leave unexplored here the question of whether Husserl is right to conceive mathematical concepts as built up in this sense.) Morphological concepts, in contrast, are grasped via direct intuitive experience and bear within themselves a sort of "occasional" or "indexical" component; they are concepts of this world, of the here and now of human beings. They are not capable of being exhaustively grasped in axioms or laws of any theory. Moreover, they are related to each other not hierarchically but holistically, i.e., in networks of mutual dependence. Thus they are not reducible to one another, and the bulk of the laws governing their interrelations are synthetic rather than analytic in nature.[69] Finally, and again in contrast to exact concepts, morphological concepts are subject to normal and abnormal instances.

The causality of nature as this is determined by the natural sciences under Husserl's conception can be expressed in exact and exceptionless laws (called "laws of nature"), and on the basis of these laws we can determine in principle what has to follow from given initial conditions. Exact prediction, then, and the sort of explanation which goes hand in hand with prediction as its converse (*p* happened *because q, r and s* had happened earlier) are at the heart of the physicalistic conception of reality.

The motivation which is allied with causality in the sphere of common sense (and in the sphere of the human sciences, which have the theory of common sense as their presupposition) is in contrast not exact and can be captured in no exact mathematical laws. Moreover, in common-sense experience both causality and motivation are always only partially and imperfectly apprehended. While, certainly, causality holds sway also in the human world of common sense, still, human scientists can make no exact predictions but can at best (for example) clarify motivations; thus they can make intelli-

gible how given individuals or groups came to behave in such and such ways under such and such circumstances.[70]

From the perspective of the natural scientist it is only what can be grasped exactly, and mathematically, that is truly real. Only as far as concerns the primary qualities of mass, shape, motion, etc. can we grasp the real states of things. Our experience of secondary qualities, in contrast, corresponds to nothing truly real in the physical sense at all. From this perspective, indeed, *the entire common-sense world is reduced to the level of mere appearance* – an appearance of true, physicalistic nature – and this is the case even though there is an opposition between "appearance" and "reality" running through the common-sense world itself.

Qualitative Physics: The physicalistic world is a world denuded of that sort of intuitive and emotional richness which characterizes our everyday experience. Above all sensory qualities are excluded from the realm of physicalistic nature since they cannot be directly treated by the methods of the natural sciences. Instead, the place of tones, colours, etc., is taken by tone-vibrations, warmth-vibrations, etc., i.e., by events belonging to the world of shapes. As Husserl points out, the thickness, tension, etc., of a vibrating string are all measurable factors. It is such factors which allow us to adapt the common-sense world to the just-mentioned "well-fitting garb of ideas":

> through a method which (as we hope) can be really carried out in every particular and constantly verified, we first construct numerical indices for the actual and possible sensible plena of the concretely intuited shapes of the life-world, and in this way we obtain possibilities of predicting concrete occurrences in the intuitively given life-world, occurrences which are not yet or no longer actually given. And this kind of prediction infinitely surpasses the accomplishment of everyday prediction. (*Crisis*, 51, Hua VI, 51)

As a result of this process of adaptation, however, the thing, formerly given intuitively, becomes reduced to an empty something determined exclusively through the forms of space and time and through the associated primary qualities of energy, motion, etc. It becomes an *X* awaiting determinations of the sort which are capable of being established in the course of natural-scientific investigations.[71] The fact that real physical determinations are always a matter of mathematically exact functional connections between one thing and another, and the fact that the world of physicalistic nature is

exhausted by such determinations, together imply a variety of functionalism as concerns the objects of this world. The latter are what they are only in reference to other such objects in the interweavings of causality. The thing as object of theoretical physics is nothing other than a node in a system of causalities, and physical reality itself is a system of functional relations (a "system of relativities" in Husserl's terms). From this, however, it follows that real nature is in a certain sense anonymous: *no physicalistic thing has individuality in itself. "The physical thing of the natural science has only a formal essence;* it has only its *formula."*[72] Physical things (for example electrons, quanta of energy) are mere *examples* of species; they are fungible, substitutable one for another, repeatable at will.

Anchorage: What is it, now, which brings this "anonymous" relational framework into connection with the world of common-sense experience? And how can our will and practical actions become related to the physical world thus conceived? How, furthermore, can the mind be entwined in physical causality through its relation to the body and to its physiological processes? Two answers to these questions have been floated already:

1. the physical world is a *making precise* of the common-sense world that arises via processes of theorizing; it is a *product* of theorizing activity (of a sort which takes place, alongside other activities, within the everyday world of common sense);
2. the physical world is the *reality* of which common sense is the *appearance.* "The quantitative is not merely in the appearing extensional processes; the quantitative is also therein something indicated by what is merely qualitative. And it is possible that the quantitative be subsequently exhibited sensibly through sensible manners of appearance (somehow 'clothed' qualitatively)."[73]

Husserl draws these two seemingly incompatible strands together by introducing a new perspective, the perspective of the *subject.* Only subjects engage in processes of theorizing, and only in relation to the subject are there "appearances" of any sort. Only subjects engage in "producing" activity, and only subjects can provide a point of orientation in relation to which the framework of time, space and motion can acquire a necessary anchor.

What distinguishes two things that are alike is the real-causal nexus, which presupposes the here and now. And with that we are led back necessarily to

an individual subjectivity, whether a solitary or an intersubjective one, with respect to which alone determinateness is constituted in the positing of location and of time. (Hua IV, 299)

The subject is, if you like, absolute individuator. Subjects (and subjects alone) are not mere *examples of universals.*

Thus, where analytical philosophers have only in recent years learned to ask questions about the nature of internal experience and of the individuating role of subjects (for example when Nagel asks what it is like to be a bat, or when Perry talks of the "essential indexical") – conceiving subjects (quite naturally, given the fundamentally materialistic perspective which forms the background of their work) as an incidental extra, from the perspective of German idealist philosophy the subject (or "subjectivity," "spirit" or *Geist*) stands at the very beginning of the philosophical enterprise. Husserl's move to place the subject at the starting-point of his philosophizing – where in the first edition of his *Logical Investigations* the subject plays no role at all – therefore amounts to an emigration into the German tradition.

From Husserl's new perspective, everything which affects and determines the mind as a natural reality is exemplary and universal. Subjects may thus enjoy similar experiences, yet each subject remains "ineluctably distinct from every other by means of an abyss."[74]

Husserl's account of this individuality is difficult to follow. First, it is held to reside in the fact that the mind is itself given in mental experience. It is not (like physical things) given as the individual that it is *only in relation to other individuals:* rather it is self-given, with evidence, as something unique. It is however difficult to see how this epistemological fact should have implications of the ontological sort which are involved in individuation. Second, the mind is held by Husserl to be unlike any mere node in a network of causalities in that it is an active centre, a source of freedom: "it has *its motivation in itself.* It does not have individuality only by being in a determinate place in the world."[75] Third, Husserl offers a transcendental argument to the effect that subjects must be more than mere interchangeable nodes of the sort that can be made the objects of theoretical natural science:

Subjects cannot be dissolved into nature, for in that case what gives nature its sense would be missing. Nature is a field of what is through and through

relative, and it can be so because these are always in fact relative to an absolute, the mind, which consequently is what sustains all the relativities [relatives]. (Hua IV, 297)[76]

From this metaphysical perspective, the subject (mind or ego) is not a substance in the sense in which this is true of physical or material things: it is not an *X* available for exact theoretical determinations, and neither is it an object of sense, a mere bearer of qualities; "it has neither a mathematical nature in the manner of the thing of physics, nor a nature like the one of the thing of intuition."[77] The mind endures as something self-identical. It affects the body and thereby also has effects in and is affected by the world of physical nature. Its identity is manifested also in the regular patterns of its sensations, behaviour, feelings, etc. But the mind or subject is, in Husserl's eyes, a substance also in a much stronger (metaphysical) sense. Not merely is it a source of intentionalities in its own right. It is also essentially such as to have a history. For the mind undergoes "a continuous new formation or re-formation of dispositions under the familiar titles of: association, habit, memory, motivated change of meaning, motivated change of convictions, of direction of feeling . . . and will," etc. This occurs always in a cumulative fashion, i.e., always in such a way that my present stock of experiences is a totality dependent on my earlier experiences. Thus, "it pertains to the essence of *psychic reality* that as a matter of principle it *cannot* return to the same total psychic state."[78] Physicalistic things, in contrast (at least as Husserl conceives them), are in a certain sense history-less realities (they are subject, if you like, to the law of eternal return).

VI. CONSTITUTIVE PHENOMENOLOGY

Recall the holistic embranglement which we mentioned at the beginning of this essay and which echoed and re-echoed throughout the pages which followed. This holism gives rise to quite peculiar problems, problems which Husserl sought to resolve, we can now say, by appeal to a conception of the subject as "constituting ego" (hence the sub-title of Book II of Husserl's *Ideas: Studies in the Phenomenology of Constitution*).

The basic axiom of constitutive phenomenology is this: *All ob-*

jects refer back to corresponding acts in which they are (or can be) given. All entities, on whatever level, are correlates of corresponding acts. Only from the perspective of this basic axiom will we be in a position to understand Husserl's thesis to the effect that not only the physicalistic world but also the world of everyday appearances "require" the subject. Note that this basic axiom leaves open the issue as to whether the constitution of the world is or is not a matter of creation (as an idealist might suppose). This issue will be resolved in due course.

"A correlate as such," as Husserl says, "has its support in persons and in their experiences."[79] The absolute being of the latter precedes the relative being of the former. Above all, the individuation of the correlates as such – of "appearances" – depends on the absolute individuation of the subject and its experiences. On the other hand, however, a subject, with its acts, is thereby directed towards correlates in its turn, indeed toward a world of correlates, for: "As person I am what I am (and each other person is what he is) as *subject of a surrounding world.* The concepts of ego and surrounding world are related to one another inseparably."[80]

From the basic axiom it follows that physical things, too, can be nothing other than the correlates of certain acts, namely of the theoretical acts of physicists. Physical nature is then itself the common "surrounding world" of physicists, precisely as they know of it in their theories and conceived as extended *in infinitum* and in perfect regularity. Other such special "surrounding worlds" can be distinguished also, including private worlds (of dreams, etc.) as well as the stable, public worlds which are of interest to us here. For there are different sorts of relations of mutual understanding through which a conscious mutual relation of persons is produced, different sorts of normal institutional groups and associated normal attitudes which involve also a corresponding relation to a precisely suited world of objects. Thus, for example, there are the ideal worlds of mathematical or legal objects, of financial instruments, folk tales, chess, and so on. Each such realm of objects is an interpersonal, cultural accomplishment, presupposing a certain association of human beings.[81]

The world of common-sense, too, is an accomplishment of a community of persons recognizing each other (or better: taking each other for granted) as normal, as similar, as in agreement. And again, the things of the common-sense world, taken exactly in the way

they present themselves to us in this world, are not anonymous objects as in the case of the natural sciences, mathematics, or chess. Rather, they are direct correlates of intuitive experiences, "things we see, grasp, and touch, just as we, and other people, see them, grasp them, etc."[82] But more, the common-sense world is the most general world; it corresponds to the most general community of persons, and serves as the presupposed background of all the special, institutional worlds which may arise. The theory of the common-sense world is accordingly "a universal morphology of the natural world as the common world of a people, of any society whatever."[83] This theory is an important part of the foundations of the human sciences in general (including history, as we have seen).

If the world of physicalistic nature presupposes the subject, however, and if the latter comes along only hand in hand with this "common surrounding world," then mere common sense – the *doxa* so often disparaged in the course of philosophical history – "now suddenly claims the dignity of a foundation for science, for *episteme.*"[84] Philosophers have, in general, not thought through the consequence of the fact that human beings live in the world of common sense and can put all their practical and theoretical questions only to it, a fact which serves as the necessary presupposition of all of natural science. For it implies that all our scientific knowledge, all knowledge of laws,

> could be knowledge only of predictions, grasped as lawful, *about occurrences of actual or possible experiential phenomena,* predictions which are indicated when experience is broadened through observations and experiments penetrating systematically into unknown horizons, and which prove themselves in the manner of inductions. To be sure, everyday induction grew into induction according to scientific method, but that changes nothing of the essential meaning of the pregiven world as the horizon of all meaningful inductions. It is this world that we find to be the world of all known and unknown realities. To it, the world of actually experiencing intuition, belongs the form of space-time together with all the thingly shapes incorporated in it; it is in this world that we ourselves live, in accord with our bodily, personal way of being. But here we find nothing of geometrical idealities, no geometrical space or mathematical time with all their shapes. (*Crisis*, 50, Hua VI, 50)

All empirical inquiries of the natural scientist presuppose visible measuring scales, scale-markings, etc. They rest on the premise of

something "which actually exists in the life-world, as something valid."[85] The scientific world is a purposeful structure – a structure made by human beings, and like every practical world, it presupposes the world of common sense.

Natural Sciences and Human Sciences: As a result of the activities of different specialized communities of persons (scientists, artists, mathematicians, etc.), the common-sense world comes to be extended in correspondingly specialized ways. From this perspective "the natural sciences, as sciences, are enclosed within the human sphere, the sphere of the mind."[86] They are a part of human culture. But now we have another twist of the wheel: by the basic axiom of constitutive phenomenology, they must be constituted as such in special acts – the acts of human scientists.

From the perspective of natural science there are no persons, no culture, no personal and cultural accomplishments such as theories and works of art. Human sciences, in contrast, posit persons, culture, works, theories, as dependent not on physicalist nature but on the world of common sense – on acts and on the "normal" surrounding world of persons, objects for use, etc. The natural sciences, too, are parts of this human world. This implies in turn, however, that these very sciences, as really existing institutional creations, must fall short of the ideal of perfection that is their guiding principle.

Physicalistic nature is a theoretical and rational construction. It is a mathematically objective nature, which enjoys only an asymptotic reality; it is "an idea lying in the infinite," an idea to which we, in an infinite historical process, strive by degrees to approximate.[87] Natural science falls short of its intended perfection in a number of ways. Above all it is affected by a sort of routinization, which inevitably comes into play as the same methods are repeated over and over again and which implies that scientific validations with true evidential force are no longer sought for systematically.[88] Assertions are taken over merely passively, meanings are combined together in empty association, whereby it often happens that

> a meaning arises which is apparently possible as a unity – i.e., can apparently be made self-evidence through a possible reactivation – whereas the attempt at actual reactivation can reactivate only the individual members of the combination, while the intention to unify them into a whole, instead of being fulfilled, comes to nothing. (*Crisis*, 361, Hua VI, 372)

Psychophysics: Hence, according to Husserl, we should not (or not without much further ado) take the haphazard productions of the natural sciences for realities. Such productions are at best soundings from the depths, *abstractions* yielded up by the application of a method. In light of this, however, the old problem of mind and body takes on new meaning. It raises in new form the question whether we could even in principle succeed in determining mind as part of nature understood in the natural-scientific sense after the manner of psychophysics. The latter starts out from the thesis that the mind, too, is a unity of dependencies in the sense that the mental is dependent on things and events in the physical world – not only via perceptual experience but also via other bodily processes (sleep, the intake of chemicals, etc.) which affect our conscious life:

> the psychic is given as localized in the body and as temporalized in the unity of natural time. If we investigate this real unity thematically, specifically aiming at a knowledge "valid for everyone," then we have to determine the body as a physical-chemical, biological thing and determine the soul in relation to this physicalistic corporeality. (Hua IV, 391)

Such a view is now seen to be incoherent – it is defeated by the realization that the world of physicalistic things is itself a world of abstracta: "the last residuum of the Cartesian theory of two substances is defeated simply because abstracta" – the ideal products of the exact, mathematical method – "are not 'substances'."[89]

Contrast, now, the "human" science of mind. This is not a natural science, but it embraces within its subject-matter all the sciences of nature themselves as cognitive and cultural formations, accomplishments of determinately ordered cognitive communities with determinate human goals. Like all human sciences, it deals not in exact explanations but in descriptions formulated in "morphological" terms and resting on data that is intuitive in nature.

But there is a still more radical science of mind, the science of phenomenology, whose basic axiom asserts that every variety of object has a certain sort of conscious act correlated with it. More precisely, we can distinguish a range of varieties of act-object correlation, from the (ideally) most perfect sort of givenness to that sort of more or less empty directedness which is effected via language (via meanings built upon meanings in more or less associative fashion).

All such acts, together with the objects posited in them, become for Husserl the subject-matter of a new type of scientific investigation:

> all the species of acts which the researcher of any kind of science accomplishes, all the species of meanings which in such acts mediate the relation to objectivities, all the modes of appearances in which these objectivities enter into the researcher's consciousness, all the modes of thoughtful grasping and noetical qualification which emerge therewith – all these become in phenomenology theoretical objects. Phenomenology does not investigate the objects investigated by the researcher in other sciences; on the contrary, it investigates the total system of possible acts of consciousness, of possible appearances and meanings related to precisely those objects. (Hua IV, 312)

Human science is concrete and historical; it is marked by its concern with this specific case: the world of you and me. Phenomenology, in contrast, is the investigation of constitutive subjectivity in general, a science directed to lawful universality; it is concerned with *world as such, experience as such, theory as such,* wherever these might be realized.

Dissolution: We said that motivation can involve also what is not real, as for example when I experience fear in relation to an object which I merely imagine. And now – in a final twist of the wheel – it turns out that from the perspective of constitutive phenomenology the object-pole of motivation *always* has this unreal character:

> If we examine the structure of the consciousness that constitutes a thing, then we see that all of nature, with space, time, causality, etc., is completely dissolved into a web of immanent motivations. In the unity of the lived total experience, which comprises consciousness of a thing there and of an ego here with its body, we find distinguishable objectivities of many kinds, and we also find functional dependencies which are not dependencies of an actual thing on the actual body and the actual ego in the world, which, in short, are not natural-scientific psychic and psychophysical dependencies. But then neither are they dependencies of subjective appearances . . . on real objectivities that are posited or received as real. (Hua IV, 226f)

There are experiences of an ego, experiences which stand to each other in relations of motivation. There occurs within the stream of consciousness a procession of positings, regulated by strict rules. But there is, as Husserl sees things, *nothing else.* There is a certain harmonious play of motivations, unfolding itself consequentially, but there is no "world" of common sense, and no world of physics either.

Husserl's much-mooted *epoché* amounts, indeed, to the overthrow of common sense:

> Every interpretation of . . . , every opinion about "the" world, has its ground in the pregiven world. It is from this very ground that I have freed myself through the epoché; I stand *above* the world, which has now become for me, in a quite peculiar sense, a *phenomenon*. (*Crisis*, 152, Hua VI, 155)

And the *epoché* takes away from physics, too, its claim to objective reference. Earlier we said that the physicalistic thing "has only its formula." From the perspective of the *epoché*, the essence of the physicalistic thing turns out to lie in this: that it is an intentional unity, regulated *according to this very formula*, of an infinite variety of appearances "of all men."[90] Admittedly, Husserl seeks to thwart the obvious objections which here arise by placing this "*aller Menschen*" in quotation marks. He succeeds thereby, however, only in drawing inadvertant attention to the problematic character of this most "radical" of standpoints. For the problem with all transcendental idealist views is of course the problem of *intersubjectivity* – of accounting for the existence of harmony among the different worlds which arise when "world" is relativized to your and my subjective appearances and of accounting for the possibility of a single universal science which would govern the modes and manners of such appearing. In a review of *Ideas* II, Alfred Schutz reports that Husserl held back from publishing this work precisely because of problems in this respect.[91] Husserl's attempts to resolve these problems, above all in the *Cartesian Meditations*, are brilliant indeed. Unfortunately however they fall far short of what would be needed if the ontology of transcendental idealism – of "constitutive" phenomenology – were to acquire a firm foundation.

NOTES

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2 This terminology and focus are adopted for two reasons: (1) We hold that an important reason why Husserl was neglected for so long by Anglo-Saxon philosophers lies in the fact that those responsible for the translation and exegesis of his work in English have made too little effort to

counteract the effects of Husserl's idiosyncratic terminology; (2) We would like to exploit Husserl's work on the structures of common sense as a contribution to the exploration of this topic within the context of work on folk psychology and on artificial intelligence. See, on this, my "The Structures of the Commonsense World," in A. Pagnini and S. Poggi, eds., *Gestalt Psychology. Its Origins, Foundations and Influence* (Florence: Olschky, 1994); P. J. Hayes, "The Second Naive Physics Manifesto," in J. R. Hobbs and R. C. Moore, eds., *Formal Theories of the Common-sense World* (Norwood: Ablex, 1985), 1–36; and D. W. Smith, C. Dement, and P. M. Simons, *Manufacturing Metaphysics* (forthcoming).

3 References are given to the Husserliana edition, the pagination of which is included also in the English translation by R. Rojcewicz and A. Schuwer: *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy,* Second Book (Dordrecht/Boston/London: Kluwer Academic Publishers, 1989).

4 Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology. An Introduction to Phenomenology,* translated by David Carr (Evanston: Northwestern University Press, 1970). References are given also to the Husserliana edition.

5 On the historical and textual background, see the chapter "Husserls Göttinger Lebenswelt," in Manfred Sommer, *Lebenswelt und Zeitbewusstsein* (Frankfurt: Suhrkamp, 1990), 59–90, and Bernhard Rang, *Husserls Phänomenologie der materiellen Natur* (Frankfurt a. M.: Klostermann, 1990).

6 *Crisis,* 382, 319, Hua VI, 461, 298f. Cf. Hua IV, 186, 285f. and also Husserl's *Experience and Judgment,* § 10.

7 *Crisis,* 50f., 123, Hua VI, 51, 125.

8 See his "Tradition and Modernity Revisited," in M. Hollis and S. Lukes, eds., *Rationality and Relativism* (Oxford: Blackwell, 1982), esp. 227ff.

9 So central are things to the common-sense world that Kotarbiński was led to propound the doctrine that common-sense is "reist" in the sense of a doctrine which accepts only things as entities. See his "The Humanities without Hypostases," in T. Kotarbiński, *Gnosiology. The Scientific Approach to the Theory of Knowledge* (Oxford: Pergamon Press, 1966), 481–91.

10 "A thing can, e.g., be unmoved and unchanged *de facto,* but it would be countersensical to claim that it is unmovable and unchangeable in principle" (Hua IV, 36).

11 *Crisis,* 51, Hua VI, 51. The regularity of changes in the world, the fact that things fall within a limited repertoire of familiar and recognizable

types, goes hand in hand with the fact that this world and *language* "are inseparably intertwined" (*Crisis*, 359, Hua VI, 370). Thus, it is a mark of things that they can serve as objects of judgments which involve a claim to being *true* of the corresponding things. (Cf. Hua IV, 82)

12 *Crisis*, 125, Hua VI, 127f.

13 *Crisis*, 31, Hua VI, 28f. Such reasoning has been dealt with at length in recent work in folk psychology; for an overview of the literature see Ernest Davis, *Representations of Commonsense Knowledge* (San Mateo, Cal.: Morgan Kaufmann, 1990).

14 Cf. *Crisis*, 307, Hua VI, 285.

15 It goes without saying that standard representations of "naive realism" are in need of reconsideration in this light. See, on this, the discussion of Thomas Reid in L. Forguson, *Common Sense*, London: Routledge, 1989, 38, and also S. A. Grave, *The Scottish Philosophy of Common Sense* (Oxford: Clarendon Press, 1960), 108.

16 Cf. Hua IV, 71.

17 Cf. Hua IV, 201.

18 Cf. Hua IV, 48.

19 See R. Casati and A. Varzi, *Holes and Other Superficialities* (Cambridge, Mass.: MIT Press, 1994), chap. 10.

20 See Fritz Heider, "Thing and Medium," in Heider, *On Perception, Event-Structure and Psychological Environment, Psychological Issues*, I, No. 3, 1959.

21 It is, as Husserl points out, "a mere phantom that faces us when we learn, in a stereoscope, to bring fitting organizations into corporeal fusion. We are then seeing [Husserl means: seeming to see] a *spatial body*, regarding which meaningful questions can be raised about its [apparent] form, its colour, and even about it smoothness, and other, similarly classified, determinations." (Hua IV, 36)

22 These are regions of accumulation of sensory qualities, where "accumulation" is to be understood in the topological sense: see J. Petitot and B. Smith, "New Foundations for Qualitative Physics," in J. E. Tiles, G. T. McKee, and C. G. Dean, eds., *Evolving Knowledge in Natural Science and Artificial Intelligence* (London: Pitman Publishing, 1990) 231–49, and also "Physics and the Phenomenal World" in R. Poli and P. M. Simons, *Formal Ontology* (Dordrecht: Reidel, forthcoming). Compare B. Russell, *Human Knowledge. Its Scope and Limits* (London: George Allen and Unwin, 1948), especially Russell's "Postulate IV" (510f.).

23 Cf. *Crisis*, 106, Hua VI, 108.

24 Cf. Hua IV, 43, 176.

25 Cf. Hua IV, 61, 68.

26 Hua IV, 58. Cf. J. J. Gibson, *The Senses Considered as Perceptual Sys-*

tems (Boston: Houghton-Mifflin, 1966), 56f. The similarity between Husserl and Gibson becomes even more clearly apparent in Husserl's lectures on "Thing and Space," for example, in the following passage: "All spatiality is constituted and comes to givenness in motion, in the motion of the object itself and in the motion of the 'I,' with the change of orientation that is given thereby." (*Ding und Raum*, Hua XVI, 154.) See also *Analysen zur passiven Synthese*, Hua XI, e.g., 13f.) See also the considerable philosophical literature on the unity of action and perception, e.g., B. O'Shaughnessy, "The Diversity and Unity of Action and Perception," in T. Crane, ed., *The Contents of Experience* (Cambridge: Cambridge University Press, 1992), 216–66, and G. Evans, *The Varieties of Reference* (Oxford: Clarendon Press, 1982), 154ff. Cf. also Evans' essay "Molyneux's Question", in his *Collected Papers* (Oxford: Clarendon Press, 1985), 383ff. (on the concept of "behavioural space").

27 Hua IV, 56.

28 The ways in which our bodies can appear to us externally are restricted in a very definite way:

> certain of my corporeal parts can be seen by me only in a peculiar perspectival foreshortening, and others (e.g., the head) are altogether invisible to me. The same body which serves me as means for all my perceptions obstructs me in the perception of it itself and is a remarkably imperfectly constituted thing. (Hua IV, 159)

Compare the famous drawing on p. 19 of Mach's *Analysis of Sensations* (New York: Dover, 1959).

29 Cf. Hua IV, 146 and also the extended treatment in Part One of Merleau-Ponty's *Phenomenology of Perception* (London: Routledge and Kegan Paul, 1962).

30 Cf. *Crisis*, 106, Hua VI, 108.

31 *Crisis*, 162, Hua VI, 165. Cf. *Crisis*, 35, Hua VI, 33, on the "total form" of the world as universal configuration of all bodies with their individual constituent forms.

32 Hua IV, 70, cf. 39f. The thing itself does not have a visual element which it could gain or lose. Moreover (against Berkeley): "It makes no sense to assign to each sense its property-complexes as separate components of the thing, any more than it makes sense to claim that the 'primary' properties [of size, shape, etc.] are somehow *doubled* when grasped by the different senses" (Hua IV, 70).

33 Hua IV, 30.

34 We can conceive each real property of a thing as a single ray of the thing's being. The extension of a thing, in contrast, is not a ray of being in this sense; rather, as Husserl puts it (and now we can pause to note a

first element of Cartesianism in Husserl's approach to common sense): "it is an essential form of all real properties" (Hua IV, 31).

35 The treatment of matter or stuff would belong here too: stuffs are, we might suppose, what remains of objects when they are subjected to a process of maximal division and to related operations of blending, grinding, mixing.

36 There is an analogue of continuity, extension and fragmentation also on the subject side: a sensation-content is, as Husserl puts it, "unified with the moment of spread (we do not here mean spatial extension, talk of which makes no sense with regard to sensation-contents)" (Hua IV, 154). Brentano draws in this connection a distinction between what is *continuously many* (e.g., the surface of a disk divided into continuously many segments of different colours) and what is *continuously manifold* (e.g., the central point of this disk, a boundary shared in common by each of the given segments). An experience of a complex colour array is not itself spatially extended; but it has an analogue of such extension nonetheless. The mind, Brentano concludes, is a continuously manifold zero-dimensional entity which endures through time. See F. Brentano, *Philosophical Investigations on Space, Time and the Continuum* (London: Croom Helm, 1988), 32ff.

37 *Crisis*, 211f., Hua VI, 215.

38 Hua IV, 94.

39 Cf. Hua IV, 159.

40 Here a range of perceptual illusions has its place (as, e.g., in the case of the stick that appears bent when immersed in water).

41 See *Crisis*, 124, Hua VI, 126. Compare P. K. Feyerabend, "In Defence of Aristotle: Comments on the Condition of Content Increase," in G. Radnitzky and G. Andersson, eds., *Progress and Rationality* (Dordrecht: Reidel, 1978), 143–80.

42 Hua IV, 59.

43 Hua IV, 77.

44 See Avrum Stroll, "How I See Philosophy: Common Sense and the Common Sense View of the World," in *Certainty and Surface in Epistemology and Philosophical Method*, eds., A. P. Martinich and M. J. White (Lewiston/Queenstown/Lampeter, The Edwin Mellen Press, 1991), 185–201. Compare also G. Evans, Commentary on Fodor's "Methodological Solipsism":

> although the statement "it seems to *S* as though there is food to the right, in front of him" entails nothing about *S*'s current environment, it could not be true if *S* did not eat, and if *S*'s movement in the world, forward or backward, to the left or to the right, were not systematically

dependent upon information from its environment. (Evans, *Collected Papers*, Oxford: Clarendon Press, 1985, 402)

45 Cf. the concept of "norm kind" introduced by N. Wolterstorff in his *Works and Worlds of Art* (Oxford: Clarendon Press, 1980), 56f.

46 Our remarks here are related to recent work on the (still relatively little understood) role of prototypes in early learning, as also to work of Gestalt psychologists on the notion of "*Prägnanz*" (see, e.g., G. Kanizsa, *Organization in Vision: Essays on Gestalt Perception* (New York: Praeger, 1979)) and the discussion of typicality in A. Schutz, "Type and Eidos in Husserl's Late Philosophy," in his *Collected Papers*, Vol. III (The Hague: Nijhoff), 92–115.

47 Cf. Hua IV, 60, 82. From this it follows that the *qualities* of material things as objects of the common-sense world are dependent on the nature of the body of the normal subject and on its normal sensibility.

48 Hua IV, 207, cf. 315f. The later Wittgenstein, again, caught something of what is involved in this thesis. See, e.g., *Philosophical Investigations*, (Oxford: Blackwell, 1953), Part I, para. 242, *On Certainty*, (Oxford: Blackwell, 1969), e.g., paras. 156f.

49 Hua IV, 240f.

50 Thus I grasp the other as having a body that is located in the same common surrounding space, our respective locations being in principle interchangeable. Cf. Hua IV, 202 and also § 51 of the *Cartesian Meditations*.

51 In fact, the other's mind or ego exists as object of nature available for determination in theoretical operations *only* as something that is expressed in the human body.

52 One should not suppose that we have to do here with a simple dichotomy between man and thing (only the former being subject to empathy). For there may be a sort of empathy also in relation to other animate entities, and (as D. Dennett has stressed) even to machines. Human beings stand out, however; so much so "that mere animals have ontic meaning only by comparison to them, as variations of them," (*Crisis*, 277, Hua VI, 230).

53 *Ideas* I (Hua III, 1), 101.

54 Hua IV, 140, cf. also 219. Cf. the Gestalt-theoretical notion of "requiredness" discussed by Wolfgang Köhler in his *The Place of Value in a World of Facts* (New York: Liveright, 1938), 250ff.

55 Cf. Hua IV, 230. Note that the causal intervolvement of mind and body is quite different from the motivational relations here discussed:

> the physiological processes in the sense organs, in the nerve cells and in the ganglia, do not motivate me . . . What I do not "know," what does not stand over against me in my lived experiences, in my representing, think-

ing and acting, as the represented, perceived, remembered, thought, etc., does not "determine" me as a mind. And what is not intentionally included in my experiences, even if unattended or implicit, does not motivate me, not even unconsciously. (Hua IV, 230f.)

56 Hua IV, 186.

57 Hua IV, 192.

58 Hua IV, 194. The theory of such social acts, which corresponds in certain respects to modern speech act theory, was worked out in detail by Adolf Reinach as part of a general *a priori* ontology of social interaction. See his "The A Priori Foundations of Civil Law," first published in 1913, Eng. trans. by J. Crosby, in *Aletheia* 3 (1983): 1–142, and compare also K. Mulligan, ed., *Speech Act and Sachverhalt. Reinach and the Foundations of Realist Phenomenology* (Dordrecht: Nijhoff, 1987). A view of social ontology in many ways parallel to that of Reinach is defended in M. Gilbert, *On Social Facts* (New York: Routledge, Chapman and Hall, 1989).

59 Hua IV, 182, cf. 141, 315f. As the phenomenologist Aurel Kolnai points out, a human society

> is not only composed of various parts – it is composed of various parts in a multiplicity of ways; and consequently its component parts cannot but *overlap*. In other words, it consists ultimately of individuals, but only in the sense that it divides into a multitude of individuals across several social subdivisions, such that it comprehends the same individual over and over again in line with his various social affiliations, – some of them factual, natural and "statistical," some of them largely or wholly a result of voluntary choice.

See A. Kolnai, "Identity and Division as a Fundamental Theme of Politics," in B. Smith, ed., *Structure and Gestalt. Philosophy and Literature in Austria-Hungary and Her Successor States* (Amsterdam: John Benjamins, 1981), 317–46, 319.

60 On this, see K. Schuhmann, *Husserls Staatsphilosophie* (Munich: Alber, 1988), Chap. 1.

61 *Crisis*, 286, Hua VI, 332.

62 *Crisis*, 32f., Hua VI, 30f. Cf. Hua IV, 41ff., 47f., 353. This is another example of the Cartesianism at the root of Husserl's thinking. See also Beilage VIII to Husserl's *Formale und transzendentale Logik* (Hua XVII), 444.

63 Cf. Hua IV, 52.

64 It could be argued that Husserl here falls victim to a confusion between sense qualities and *appearances thereof*, for even if sense qualities are dependent upon sense organs for their appearance, this does not imply

that they have no place in the physicalistic world. For a defence of a realist view of colour see D. Hilbert, *Color and Color Perception* (Stanford: CSLI, 1987).

65 Cf. Hua IV, 84, and compare Petitot and Smith, "New Foundations for Qualitative Physics," *op. cit.*

66 Cf. Hua IV, 233.

67 Hua III, 1, 152.

68 Hua III, 1, 155; *Crisis*, 27f., Hua VI, 24f.

69 See W. Żełaniec, "Fathers, Kings, and Promises: Husserl and Reinach on the A Priori," *Husserl Studies*, 9, 1992, 147–77.

70 Cf. Hua IV, 229. A similar opposition has been drawn within the philosophy of the social sciences, for example, by F. A. Hayek in his "Degrees of Explanation" (see Hayek, *Studies in Philosophy, Politics and Economics*, (London: Routledge and Kegan Paul, 1967), 3–21).

71 Cf. Hua IV, 88, 355.

72 Hua IV, 376, cf. 298f.

73 *Crisis*, 308, Hua VI, 286.

74 Hua IV, 309.

75 Hua IV, 299.

76 As Husserl puts it: "The mind, and indeed only the mind, exists in itself and for itself, is self-sufficient; and in its self-sufficiency, and only in this way, can it be treated truly rationally, truly and from the ground up scientifically." (*Crisis*, 297, Hua VI, 345)

77 Hua IV, 345.

78 Hua IV, 136f. Thus also there is, "for essential reasons, no zoology of peoples. They are spiritual unities; they do not have, and in particular the supranational unity of Europe does not have, a mature shape that has ever been reached or could be reached as a shape that is regularly repeated." (*Crisis*, 275, Hua VI, 320)

79 Hua IV, 302.

80 Hua IV, 185.

81 Such associations are conceived by Husserl as being such that all persons are in principle able to partake in them. Compare the essay on "The Origin of Geometry," where Husserl points out that geometrical existence

> does not exist as something personal within the personal sphere of consciousness; it is the existence of what is objectively there for "everyone" (for actual and possible geometers, or those who understand geometry) (*Crisis*, 356, Hua VI, 367).

82 Hua IV, 287.

83 Hua IV, 376.

84 *Crisis*, 155f., Hua VI, 158.

85 *Crisis*, 126, Hua VI, 129. This was stressed by Sellars, too, in his account of the relation between the "scientific" and "manifest" image; see "Philosophy and the Scientific Image of Man," in W. F. Sellars, *Science, Perception and Reality* (London: Routledge and Kegan Paul, 1963), 1–40.

86 Hua IV, 392.

87 Hua IV, 353, cf. 372. From the perspective of constitutive phenomenology the idea of true being goes hand in hand with the idea of a personality that would sustain itself, in principle, into the infinite, either as an endless community of persons (Hua IV, 363) or as an infinite God (cf. M. Scheler, *Formalism in Ethics and Non-Formal Ethics of Values* (Evanston: Northwestern University Press, 1973), 396f.)

88 Cf. *Crisis*, 48, Hua VI, 48.

89 *Crisis*, 229, Hua VI, 232.

90 Hua IV, 376f. See also *Ideas* I (Hua III, 1), 100f.; *Cart. Med.* (Hua I), 89ff., 138; *Crisis*, 179, cf. 220, Hua VI, 182f, 223f.

91 See A. Schutz, "Edmund Husserl's Ideas, Volume II," *Philosophy and Phenomenological Research* 13, 1953, as repr. in Schutz, *Collected Papers*, Vol. III (The Hague: Nijhoff, 1975), 15–39, 17.