converse intentional property of having-been-meant-by-me-to-be-a-horse. And thus it avoids the curious thesis that something can simultaneously be a horse and a non-existing object. But (6) does clash with the spontaneous conviction that it was a horse that I had "seen". However, is this clash really so unfortunate? Could it not be that on closer inspection this spontaneous conviction turns out to be erroneous, that in actual fact in my experience I did not have a horse before my mind but only something which was meant-to-be-a-horse? Ultimately, the question whether to explicate (5) in terms of (6) or in terms of (7) is a question of which philosophical analysis one prefers. Both explications go beyond common sense and entail the elaboration of a philosophical theory.

But let us now see what the two options are saying in the case of a naive hallucination. Here we may, for instance, start out with the spontaneous report of a hallucinating person:

(8) I "saw" a pink elephant.

According to my option, (8) can be explicated by the affirmation:

(9) My visual attention was focused on something which I took to be a pink elephant, but which later on turned out to have been a non-existing object.

Whereas Meinong would propose the affirmation:

(10) My visual attention was focused on a pink elephant which unknown to me did not exist.

Obviously this case differs from the previous case of a delusory perception by the fact that now both options propose explications which accept a non-existing object. Of course we can introduce a further option which does not accept non-existing objects and which explicates (8) in the spirit of the adverbial theory mentioned earlier:

(11) I was appeared to pink-elephantly.

However this third option does not interest us here.

What is important is the fact that as in the previous case Meinong's option, i.e. the explication (10), harmonizes with the spontaneous conviction but implies a startling thesis. It harmonizes with the spontaneous conviction of the hallucinating person that it was a pink elephant that he "saw", and it entails the startling thesis that something can simultaneously be an elephant and a non-existing object. And again the option which I advocate proposes an explication, namely (9), which avoids the startling thesis, but clashes with the spontaneous conviction in question. But as in the previous case, one may feel that this clash is not decisif, that as a matter of fact (9) fits best what actually was the case when the hallucination took place. For is it not plausible that the hallucinating person did not "see" a pink elephant, but that he "saw" something which he merely believed to be a pink elephant but which (in fact) was a non-existing object, namely an object that was not there?
§ 1. Preamble

It will be the thesis of this paper that there are among our mental acts some which fall into the category of real material relations. That is: some acts are necessarily such as to involve a plurality of objects as their relata or fundamenta. Suppose Bruno walks into his study and sees a cat. To describe the seeing, here, as a relation, is to affirm that it serves somehow to tie Bruno to the cat. Bruno’s act of seeing, unlike his feeling depressed, his putative thinking-about-Santa-Claus or his musing, abstractedly, about the tallest spy, has at least two fundamenta: it is, as a matter of necessity, dependent for its existence upon both Bruno himself and the cat that he sees.

This idea will naturally raise echoes of Russell’s doctrine of knowledge by acquaintance. “I am acquainted with an object”, Russell tells us, “when I have a direct cognitive relation to that object, i.e. when I am directly aware of the object itself” (1918, p. 209). And indeed a distinction in many ways like that between acquaintance and description will find a place within the theory here projected, but there are crucial differences.

Firstly, Russell’s notion of cognitive relatedness is epistemological: I am related by acquaintance to an object, on the Russelian account, when I have a certain type of indefeasible or infallible knowledge of that object. Hence Russell’s view that only sense data, universals and our own selves — objects which can in some sense occur in our thoughts — can be objects of acquaintance. Here, on the other hand, a naturalistic thesis will be defended to the effect that we may be related through mental experience, inter alia, to ordinary material objects, and this will rule out a purely epistemological approach to the problem at hand (will rule out the idea that there can be an epistemological criterion of cognitive relatedness).

Secondly, it is for Russell a certain universal, the relation of acquaintance, which serves to tie the subject to his object, generating an awkward commitment to hybrid relational complexes comprising both particulars and universals somehow fused together within a single whole. Here in contrast, it is to be particulars (particular relational acts) which tie the subject to his object, and this is a move which holds out the promise that we shall be able to lend some descriptive content to the idea of a “direct cognitive relation”: mental acts are, after all, items with which we have some independent familiarity.

§ 2. Methodological Solipsism

The ideas to be outlined here are in this respect closer in spirit to the Brentano-Husserl tradition, which has consistently emphasised the relation-like character of acts as particular existents. As is well known, however, Brentano and his successors held back from conceiving acts as relations linking subjects to the transcendent world in the face of what seemed to them to be the obvious problem raised by non-veridical acts, such as hallucinations, which lack independently existing objects. Since a relation cannot link what exists to what does not exist, it was held either that acts could not be relational at all, that they could possess only something approximating to relationality in this or that respect, or that an act consists in a relation merely to some epistemological middleman, not to any independently existing object.

Yet to draw such conclusions from the existence of hallucinations, etc., is to presuppose that an adequate account of the structure of acts must conceive all acts as constituting a homogeneous totality. Two distinct elements seem to be involved in this presupposition. On the one hand it is taken to be a mark of an elegant theory of acts that it should treat all acts as realisations of a single structural frame. On the other hand it is assumed that an adequate theory can recognize only those differences among acts which are transparent to their subjects. Since differences like that between veridicality and non-veridicality are not marked in present consciousness, they are held to reflect nothing intrinsic to the structures of acts themselves.

Both elements have been accepted as a matter of course, not only by the members of the Brentano tradition, but also within empirical cognitive science. A range of standard options as to the nature of mental experience has grown up, each adopting one or other variant of the position that even a veridical act may manifest no more than a contingent association with the transcendent object toward which it is directed.

Thus there is the view according to which an object-directed act has the structure of an inner description. Such an act is veridical, on this view, if there is some transcendent object which satisfies it — in just the sense of ‘satisfaction’ with which we are familiar in semantics. That there exists such an object is clearly a matter incidental to the act as such (as the existence of an appropriate referent is incidental to a term as such): an identical act-composition might equally well, in different circumstances, have been non-veridical.

Alternatively, the outward-pointing nature of an act may be identified with its directedness towards sense-data, or sense-data-like phenomena presented in imagination or in memory. Objects other than sense-data may thereby exist, but they cannot serve as immediate objects of experience. They are

1 The most sophisticated satisfaction theory to date is undoubtedly that propounded by Chisholm, e.g. in his 1981 and in his paper in this volume. On satisfaction theories in general see Kim, 1977.
relegated to the status of hypothetical posit somehow behind or beyond the sense-data. This account (which is very like Brentano’s, though it may be reformulated in the terms of a doctrine of logical constructions) yields two notions of veridicality. On the one hand an act is what we might call phenomenally veridical if its purported sense-datum exists. All phenomenally veridical acts may then perhaps be conceived as real relations in a sense close to that expounded in this essay. But they are not relations reaching out to the transcendent material objects of ordinary experience. On the other hand an act is what might be called strictly veridical if the object it posits, or which is posited in associated acts of judgment, does in fact exist, as it were per acciden
dens, in transcendent reality. And this character of strict veridicality reflects nothing intrinsic to the act itself.

Or, finally, consider Husserl’s philosophy of the noema as this is resurrected, for example, in Dennett’s idea of a ‘notional world’. This sees the intentionality of an act of presentation as residing in its directedness toward an immanent or intentional object, its veridicality in the correspondence of this object with some independently existing transcendent object. Here we have a conception of all object-giving acts as relations (tying subjects to their own intentional constructs), and we have once more a conception of veridicality or transcendent reference as something incidental to the act itself.

§ 3. The Causal Theory

On each of the above accounts the act is confined, structurally, to the immanent sphere, whether this be conceived in phenomenological or neurological terms or in some other way. Each is committed to the classically Cartesian thesis that we could in principle have exactly the same thoughts even though all transcendent objects of our thoughts did not exist. Here, however, I am concerned to develop the bare bones of a conception of the mental which is consistent with naturalistic realism, broadly conceived, i.e. with a view according to which (a) the world exists more or less as it is given to us in those of our mental acts which are externally directed, and (b) we are in normal cir-

2 What this might mean is unclear. In his “Is Existence a Predicate?” Moore defends a rather off-beat sense of “exists” according to which a sense-datum is said to exist if and only if it has a transcendental object — an account which breaks down e.g. in the face of sensory data associated with after-images.

3 Dennett, 1978, pp. 180-85; 1982, passim. Dennett’s reading of Husserl is interesting from our present point of view, since it reveals the extent to which the theories of noemata or intentional objects are a response to problems raised by non-philosophical and non-philosophical beliefs and experiences. It is not, however, the only possible reading; cf. the relevant writings of Fel
desdal, McIntyre and Woodruff Smith.
The causal theory has in addition provided no details of mechanisms by which sheer causal interaction might institute and sustain transcendent reference — other than those resting on intuitions independently derived from folk semantics. The hope has been that this problem may be overcome with the further development of the psychological and non-psychological sciences. The suggestion to be advanced here, however, is that theoretical progress may be facilitated by abandoning the (simple) causal theory in favour of a conception of (some) mental acts as *sui generis* cognitive relations. As Kim points out in his criticism of the Kripkean variety of the simple causal theory of proper names: 'To name an object you must be in some sort of cognitive touch with it.' It is impossible to explain, on the basis of a theory like Kripke's, how baptismal acts reach their objects; how they get connected up with things ostensibly named; how we may be related in a given act to, for example, a particular spoonhandle, rather than the whole spoon, or the aggregate of molecules in the spoon, or that side or surface of the spoon that is momentarily visible; how it is (Evans, 1973) that a person's use of a shared name, when he has had causal contact with both objects concerned, links up with one rather than the other in a certain context. We shall see that the commitment to cognitive relations does not deny the importance of causality to a full understanding of the interconnections between world and subject. Naturalistic realism teaches that it is mistaken to ignore the causal involvement of organism and environment. But not just any old causal involvement of subject and environment will do, it seems, if objective reference is to be secured. Such involvement must be delimited and articulated — and in precisely the ways with which we are familiar, at least obliquely, in our ordinary mental experience. The structures we shall need to consider will therefore involve a certain sort of mutual interdependence of causal and cognitive moments and the trick will be to do justice to both, without reducing one to the other.

§ 4. Mental Acts De Re

The idea of cognitive relatedness finds some support in the recent work on *de re* belief, *de re* intentionality and the like, where the presumptions at the heart of post-Brentanian methodologically solipsistic philosophy of mind are beginning to be called into question. But *de re* mental attitudes have unfortunately been considered almost exclusively from the point of view of semantics: attention has been devoted to the logic of sentences expressing or reporting cognitive relatedness or to the meanings of indexical expressions — at the expense of discussions of the ontology of the cognitive relation or of the structures of indexical acts.

This is particularly clear from Woodfield's collection *Thought and Object*, a sample of recent work on *de re* mental attitudes (though our general complaint does not apply to Woodfield's own brief but excellent statement of the issues in his Foreword to the volume). It is clear also from various writings of e.g. Fallesdal, Woodruff Smith, Mcintyre, and, in a different vein, Mohanti, in which attempts are made to formulate a doctrine of *de re* intentionality on the basis of Husserl's philosophy of the noema and of Husserl's account in the *LU* (I § 26, VI § 5) of the meanings of occasional expressions — though it is difficult to see how the qualities of directness or definiteness which they discuss could serve as anything more than distant analogues of a true cognitive relatedness, since they allow that the relevant object may not exist, i.e. — and more precisely — that there need be no relevant res, and yet an act could still be *de* it. (Woodruff Smith and Mcintyre, 1982, *passim*.)

One further strand of thought on the issue of *de re* mental attitudes is that canvassed by Chisholm (*op. cit.*, ch. 9), a continuation of the Russellian, epistemological approach. Here again a central role is played by the notion of indexicality, though an indexicality that is effectively restricted, for epistemological reasons, to self-directed acts. The remarks set forth below may indeed illuminatingly be conceived as an attempt to provide working materials for an ontological approach to the problem raised by (non-self-directed) indexical acts — in contrast to the semantic and epistemological approaches that have hitherto predominated.

§ 5. Varieties of Intentionality

The thesis that our acts themselves may serve to tie us to material objects in the world cannot, certainly, be defended as an account of every act, not even of every veridical act. It will be possible to claim only that relationality is a characteristic of a restricted sub-class of veridical acts belonging, for each given individual, to what may be recognised from the outside, by suitably qualified observers, as a central or arterial core of his experiences. Acts external to this core, if they are directed towards objects in transcendent reality at all, will typically depend for their directedness (for their quality of pointing beyond themselves) upon the substrate of connections that is established by this central core. Thus for example I may direct myself to an object by description, as 'the owner of this elephant' or 'the initiator of that explosion' in virtue of the fact that elephant and explosion are objects with which I am in relational contact. Only in the rarest of cases ('the tallest spy') will I be directed to a transcendent object in a descriptive act independently of any particular prior relational contact with the world.
I am interested particularly in what both Russell and the philosophers of the Brentano tradition called presentations, acts of singular reference, perception or memory directed towards (what is given as) a single object, bearing within themselves a presupposition of the existence of the object and typically occurring as components of larger acts or complexes of acts. (An act of singular reference, for example, will normally occur as part or moment of an act of judging, questioning, etc.) Acts of desire and other acts given as being merely potentially directed towards what might or ought to exist, or acts directed towards, say, clocks in general or numbers in general, will therefore fall outside our purview, though they will of course have to be treated in any complete account.

An act is intentional if it is to its subject as if he is directed toward some object or objects. All acts of presentation are intentional in this sense; indeed, members of this category may be said to come closest to the original significance of 'intentio' as a 'stretching out' or 'reaching towards' (with the connotation of an exertion of will). An act of presentation is veridically intentional where not only is it the case that it is to its subject as if he is directed toward some object, but there is in fact an object toward which he is directed — and that object, which, in the given act, he was aiming to hit. An act of presentation is non-veridically intentional where it is to its subject as if he is directed toward some object and there is no such object. The veridical/non-veridical opposition is of course generalisable beyond the narrow class of presentational acts to embrace also for example acts of judgment bound up with these (cf. Husserl, LU VI §§ 4 f.) and in principle also associated states of conviction or belief. It cannot, however, be extended to encompass all mental acts and states. (Consider, besides desires, etc., also acts of recognition and other act- and state-complexes reported by factive verbs.)

To admit relational acts, now, is tantamount to accepting that there is a further distinction to be drawn amongst veridically intentional acts between (i) those acts whose directedness toward a given factually existing transcendent object is effected indirectly, for example by means of descriptions, theories, representations, images (or — in ways still to be made clear — by means of other transcendent objects); and (ii) properly relational acts whose connection to the relevant object is in some sense direct. This distinction having once been made clear, the objects of acts might then accordingly also be divided into (i) those objects which can only be given indirectly; and (ii) those objects with which cognitive relational contact is in principle possible (which can of course also be given indirectly).

Precisely where the line is to be drawn will be a matter of detailed reflection. Are objects which no longer exist, for example, objects with which we may achieve relational contact? Are we right to think of the various sorts of abstracta as objects to which reference can be made only via language? Could an act effect relational contact with an object even though the content of the act embodies presuppositions which are false? Or could there be something like a content-free relational act, parallel to the connotation-free appellations promoted by advocates of the causal theory of names? And would such an act deserve the title 'cognitive relation'? 5

For our present purpose it will be enough to assume (naturalistic realism, again) that the broad mass of our ordinary perceptual experiences are relational acts. It will follow, correspondingly, that material objects in the perceptual world are all of them possible objects of cognitive relations.

§ 6. A Theory of Relations I: Material vs. Formal Relations

The commitment to relational acts is, as will by now be clear, at odds with Husserl's properly phenomenological philosophy. It is, however, close to many elements in the earlier and still neglected pre-phenomenological work of Husserl, and it is from this source, specifically from the 3rd Logical Investigation on the theory of wholes and parts, that we shall draw the basis of our ontology of relations. The force of Husserl's slogan 'zurück zu den Sachen selbst' is here taken to consist not only in the exhortation to suspend presuppositions, but also in the commonsensical insistence that to see a cat is to enter into a direct relation with the cat itself and not with some cat-description or -noema or -sense-datum-complex.

Standard systems of part-whole theory, for example the mereology of Lesniewski or Goodman's calculus of individuals, are in effect theories of one

5 op. cit., p. 614. The term 'cognitive' in the present paper is taken to signify those acts which are either themselves judgmental in form or are potentially bound up with judgments inferentially, as when Macbeth's (apparent) perception of a dagger licences his inference to 'there is a dagger before me now'. On the nature of the inferential connection between presentations and (true or false, positive or negative) judgments see Reichenbach, op. cit. Part I.

6 On the context and conditions of ordinary perceptual experiences much of Husserlian phenomenology may still be of value, see e.g. the papers by Falbeson collected in Dreyfus, ed. and now also Woodruff Smith, 1982.

The problem of contents is not centrally at issue in a discussion of act-relationality, since the contents of relational and non-relational acts are not in general distinguishable. For a line of approach on contents that is consistent with the views defended here see however Simons, 1983.
single (transitive) relation of the part to whole. Husserl, in contrast, puts forward a theory which deals also with a family of non-transitive, non-extensive, as it were, lateral, relations amongst the parts of a single whole. We may understand what Husserl is getting at intuitively as follows. Parts of a whole may exist merely side by side, like trees in a forest. Each tree is then independent of its neighbours, can in principle be detached or separated from the whole forest without detriment to the residue. The parts of a whole may also however interpenetrate, in a range of different ways, so that they are dependent upon and inseparable from their neighbours, and this not simply as a matter of fact but necessarily. Given parts may be such that they can exist only in specific types of combination with each other in a single whole. The parts in question — for example the individual colour and shape of a perceived visual datum — will then perhaps not be recognisable as 'parts' ('pieces') in the usual sense of the term, precisely because the term normally carries the connotation of detachability. Yet Husserl saw that such items bear relations to their respective wholes which are formally indistinguishable from the part-whole relations of standard mereology — and that there are important advantages to be gained from developing a richer theory of part and whole in which the simple and relatively degenerate theory of mereological piece-whole relations would be extended to embrace also the family of relations amongst dependent or inseparable parts.

It would take us too far afield to present more than a minimal skeleton of Husserl's theory here. It rests upon the two basic notions of part and foundation or dependence. Foundation can be defined modally as follows:

(D1) a is founded on b if and only if a is (de re) necessarily such that it cannot exist unless b exists and b is not a part of a.

"a" and "b", here, are to be understood as standing in for names of objects which exist merely contingently, in space and time. The final clause is included in order to avoid the implication that every object is trivially a founded object, in virtue of foundation relations in which it would then stand to its (proper and improper) parts. (And in this context it is worth noting the terminological similarity of the given definition to the principle of mereological essentialism defended by Chisholm and others, to the effect that every object is necessarily

such that it depends for its existence precisely upon the existence of its parts. See e.g. Chisholm, 1976, Appendix B.)

The classical infinite regress argument in the theory of relations shows, in effect, that every complex whole must involve some ultimate relation or relations of connection, in virtue of which the parts of the whole are configurated together to form that whole. This relation cannot be itself a part, since we could then always go on to ask how it is related to the other parts of the relevant whole. Relations of foundation, Husserl claimed, are precisely such ultimate relations of connection or configuration. Indeed he went so far as to claim (LU III § 22) that everything that is unified involves relations of foundation. To say that foundation relations are not themselves parts of the wholes whose parts they configure, in the present context, is to affirm that they are not material but rather purely formal relations. Like the primitive is a part of itself, and like number and the logical constants and the relation of set-membership, foundation is defined without reference to any specific material notions; it is applicable in principle to all matters, irrespective of their specific qualitative determinations.

What concerns us here is exclusively the implication of Husserl's theory for the problem of understanding cognitive relatedness. Every act is in the sense of the definition (D1) a founded object, an object cum fundamentum in re, since every act is (presumably) such that it cannot exist unless its subject exists. 8

The foundation between act and subject is one-sided: an act is founded on its subject; but neither a subject nor an organism seems to be the kind of thing that could be founded on an act. Foundation relations may also, however, be mutual: the thesis that sensory data are secondary qualities consists, in effect, in the assertion of a mutual relation of foundation between an act of sensation and its datum of sense: this act cannot as a matter of necessity exist without that datum; but nor either can the datum exist without this act. (This is just one example of a range of metaphysical theses which can be formulated economically in foundation-theoretic terms. 9

What, now, in the case of a relational act? Here the subject, act and object form a complex whole whose parts are configurated together by means of two

7 For the sake of simplicity we shall here ignore the technical distinction which Husserl draws between foundation on the one hand and dependence on the other. Details of the formal ontological theory of part and whole, including references to Husserl's writings and a range of possible applications, are presented in the papers collected in Smith, ed., 1982. Cf. also the works by Sokolowski listed in the bibliography of writings on part-whole theory appended to that volume.

8 This 'presumably' is inserted in order to mark the fact that nothing in what follows will turn on any particular view as to the nature of the subject, self or ego. The theory of relational acts could indeed in principle be made consistent with a non-self theory of the kind which Husserl himself embraced in the 1st edition of the Logical Investigations, though then the subject-term of the relation would need reinterpreting as e.g. the brain or the entire human being.

9 Cf. Smith, ed., passim. Note that, as Husserlian phenomenology has so convincingly demonstrated, there are one-sided and mutual foundation relations also amongst acts and amongst the parts of acts: mental experience is not a collection of unproblematically isolable units, but a complex dynamic flow.
relations of one-sided foundation between act and subject, and between act and object, respectively. The whole exists only to the extent that and for as long as the material relation linking subject and object exists. Both subject and object exist independently of their configuration in the given whole. The act itself, in contrast, is necessarily such that it could not have existed except in the context of this whole with (these) two other parts. It is in this sense that it is relational in structure.  

§ 7. A Theory of Relations II: Direct Foundation

An account of relational acts in terms of the simple notion of foundation specified in the definition (D) above remains inadequate, however, even to serve as the basis of a formally acceptable notion of act-relationality (i.e. leaving aside all questions of material adequacy). Two major difficulties present themselves. It is necessary, first of all, to take account of the fact that the relational act is in direct contact with its object. We shall then need to delineate the sense of foundation which is at issue here from a more general sense according to which every veridical act may be said to be (trivially, analytically) founded on its object.

With regard to the first difficulty, note that a descriptive act, too, may be founded on its object. Such an act may inherit from other acts the character of being necessarily such that it cannot exist unless its object exists. Suppose you see two persons in process of becoming reconciled in such a way that there is a relational act of perceiving the event of reconciliation that is taking place. And suppose your curiosity leads you to the descriptive act of wondering about the disagreement on which this reconciliation is based. Then the latter act is founded on the former, which is itself, as a relational act, founded on the reconciliation which is its object — and this object is in its turn as a matter of fact founded on the disagreement which is the object of the given descriptive act. Since the part-theoretic constraints on the transitivity of foundation are here trivially met, it follows that the given descriptive act is founded, as it were indirectly, upon its object. Here a diagram may, perhaps, be some help:

The individual frames signify material parts of the complex in question, including material relations; single lines connecting broken to solid walls signify formal relations of one-sided dependence. (I have ignored, for the sake of simplicity, the foundation relations which obtain between reconciliation, disagreement and the persons involved therein.)

As the diagram should make clear, a properly relational act is founded directly upon its object, i.e., intuitively and provisionally, is founded upon its object in a relation of foundation that does not involve any mediation via other relations of foundation. This formulation is provisional only, first of all because relations of direct foundation as here intuitively understood may obtain in conjunction with other relations of indirect foundation between the same objects. That is: there may be distinct foundational routes, of different lengths, between given objects, and this is something which must be recognised in any complete account.

Again a diagram may be of help:

\[ a \rightarrow c \rightarrow b \]

b here is indirectly founded on a, according to the definition just supplied, yet we should surely wish to insist that b is also directly founded on a. b is, for example, a particular judgment (judging act), formulated by a subject a and therefore dependent upon a, but also formulated in Greek, and therefore dependent upon that particular complex cognitive state, c, which is a's knowl-

10 This account of the relational act, so far as it goes, recalls the account of de re thoughts given by Woodfield in his Foreword to Thought and Object:

a de re thought has the following features: it is about an actually existing object, and it is tied to that object constitutively, so that the thought could not exist without the very object's existing. The kind of impossibility alluded to is logical or metaphysical rather than causal. The thought could not exist without the object because it is individuated in a way that makes its relatedness to that object essential to its nature. (p. v.)

But even at this stage there are important differences. Above all, there can be no suggestion that the impossibility of independent existence of a relational act should be a logical or analytic impossibility, or an impossibility that flows from the manner of individuation of the act. (Cf. § 8 below.)

11 On the provenance of such diagrams see Smith, ed., op. cit., pp. 81-91, and the references there given.

12 a is directly founded on b in this sense if and only if a is founded on b and there is no c such that a is founded on c and c on b.
edge of Greek. Alternatively: b is a's recovery from an illness c, illness and recovery being alike one-sidedly founded on a and related to each other via a further relation of one-sided foundation.

Even presupposing an adequate definition of direct foundation, however, it would not do simply to restrict relational acts to those directly founded on their objects. What needs to be excluded, it seems, are only certain kinds of transmission of relationality, above all those which occur through foundation relations amongst independent intermediary objects. For relationality may in some circumstances be preserved in transmission, most obviously where the medium of foundation is constituted entirely by other acts of the subject in question. Thus let us suppose that a given perceptual experience a of an object b is sufficient to establish my relational contact with this object. Subsequent memories directed towards b must then surely inherit relatedness to b to the extent that they are founded directly upon a — and this, on being iterated, opens up the possibility of a \textit{historical} theory of cognitive relatedness, a theory of the transmission of relationality.\textsuperscript{13}

All of which brings us back to the question mooted earlier, whether relational contact is restricted to presently existing objects. This restriction is dictated by our present account, but only if a tensed reading of 'exists' is adopted in the definition of foundation (D1) above. Husserl's original theory is however perfectly consistent with an untensed reading, which would allow relational contact not only with past but also, in principle, with future objects. The term 'complex whole' — for example as this is used in the final paragraph of the preceding section — would then embrace also wholes not all of whose parts exist simultaneously.

§ 8. \textit{A Theory of Relations III: Synthetic Foundation}

What makes my thought of b a thought of b (b an object not identical with myself) is therefore either:

(i) that this thought is itself a direct cognitive relation in which I stand to b, that b is the direct object of my thought (which will imply, in normal circumstances, that b is an object of a present perception or of some similar act);

(ii) that this thought stands in foundation relations to previous perceptual and other experiences having b as direct object; or

(iii) that the thought is not relational at all, but that as a matter of fact b (and b alone) satisfies its descriptive content.

There remains one further obvious formal difficulty confronting this account, however, turning on the fact that any veridical act may be conceived, under a description formulated by use of appropriate correlative terms, as being necessarily such that it cannot exist unless its object exists. Thus a descriptive act of thinking about the owner of a given cap, for example, is necessarily such that it cannot exist, \textit{as such}, unless the owner of the cap himself exists. Clearly there is a need to find some means of rendering harmless such cases of analytic or logical necessitation. Husserl's own preference is to exclude analytic cases from the class of foundation relations by definition, but this presupposes that he has some independent demarcation of analyticity and it is far from clear that the account he offers is of general applicability (cf. LU III § 10 ff). Not all analytic propositions involve an analytic connection which is so clearly manifest as in the case of correlative terms. Here, therefore, I should like to suggest an alternative approach. This will involve the theoretical expedient of accepting the objects denoted by correlative terms as \textit{bona fide} objects standing in \textit{bona fide} foundation relations. I shall then show that it is possible to define a narrower notion of what I shall call \textit{absolute foundation}, in terms involving no appeal to a notion of analyticity, which will capture that type of non-correlative dependence which is of interest here.

The approach is best explained by means of an example. Consider the relation between husband Hans and his wife Erna. Should Erna cease to exist, then as a matter of necessity her \textit{husband} Hans will also cease to exist. And vice versa. A husband is, according to our working definition (D1) above, mutually founded on a wife. But Hans can of course perfectly well continue to exist \textit{as a human being} even after the death of his wife (and naturally he had so existed long before his marriage). Hans is, we might say, merely relatively founded on Erna (founded on Erna \textit{as a husband}, but not \textit{as a human being}). An act, in contrast, is absolutely founded on its subject; it cannot exist as something else, cannot be individuated in such a way that it would be cut adrift from its role or status as an act. And a relational act is absolutely founded both upon its subject and upon its object: the same act could not have existed in some other capacity in the absence of this object.

It is this concept of absolute foundation which we need to isolate here. To this end we must first of all say something about the relation between a given object and its correlative \textit{Doppelgänger} (between Hans, say, and Hans \textit{in his capacity as husband}). This relation is one of ontological coincidence:

\textsuperscript{13} Standard historical theories of reference, for example the Kripkean theory of causal transmission, or the information-based theory put forward by Evans, 1982. ch. 5, are radically more ambitious in allowing transmission also from person to person, via communicative utterances.
The concept of absolute foundation may now be defined follows:

D3: If and only if there is some such that is founded absolutely on it.

Material relations proper are distinguished from other material items in the world — nuts and bolts, pieces of string, contracts, treaties — which may serve to connect together objects in reality, by the fact that the former but not the latter are absolutely founded objects. They are unable to exist except in the context in which they serve as relations.

An absolutely founded object in the sense of our definition corresponds to what Husserl calls a moment:

D4: If and only if there is some such that is founded absolutely on it.

And we may define conversely:

D5: is a fundament if and only if there is some such that is absolutely founded.

All relational acts are moments in the sense of D4, exhibiting one-sided relations of direct or act-mediated absolute foundation upon both subject and object, which may themselves exist independently of the relational complexes thereby constituted.

§ 9. Remarks on Material Ontology

This (still rudimentary) account of the formal ontology of the relational act will perform be insufficient to distinguish relational acts from other kinds of material relations sharing an identical formal structure. It is precisely in this, however, that there lies one benefit of the present approach. For if relational acts can be assigned to a wider category, other members of which are for different reasons well-understood, then by paying attention to the similarities and differences between relational acts and other members of this category we may hope to understand them better and so cash out some of the metaphors of ‘acquaintance’, ‘direct contact’, or ‘epistemic intimacy’, and the like, which have been used to describe them.

Relational acts are, in particular (and modulo differences in degree of complexity), formally indistinguishable from relational actions and events such as promises, fights, thefts, conversations, kissings, hittings, weddings, greetings, and so forth. And they resemble relational events also in a number of material respects. (Both categories are alike distinguished, for example, from that of static relational qualities: love, marriage, authority, obligation, etc.) My hope is that from the perusal of relational events in general it would be possible to extract principles which, in being made precise, may be applied to the further elucidation of the structure of relational acts. What follows is, as will rapidly become clear, nothing more than a crude first venture into this field.

Relational events in the categories that interest us are emergent entities, existing with other like entities on levels of stability of structure above the level of the purely physical, and forming part of the subject-matters of the various higher level sciences (linguistics, legal theory, military history, etc.). Such sciences have the task of determining precise criteria of individuation for the emergent objects in their respective domains, objects which are not normally demarcated from each other in ways so manifest and so clear cut as we are used to in relation to the everyday objects of perception. Relational events are spatio-temporal complexes, comprising within themselves other more or less

14 These remarks on correlatives should be compared to the theory of ‘qua objects’ developed by Fine and sketched in his 1982. On coincidence see also Doepke, 1982. Of course, a systematic employment of the notion of coincidence as defined above would be of value only to the extent that there is a fully worked-out theory of part and whole whose comprehension axioms are appropriately weak.

15 Note that the relational events in each of these categories are crucially distinct from the relational changes (John’s becoming taller than Mary) more commonly discussed in the literature on events. The latter, but not the former, are nothing more than pairs or sums or logical constructs out of non-relational events or processes.
complicated happenings at various levels, and coincident with the aggregate of such happenings (as a promise, for example, is coincident with the aggregate of given utterance/auditory phenomena and delineates and articulates the latter in a certain way). Thus relational events may be compared, in many respects, to institutions in society.

There is no relational event between two or more given objects unless there is some causal involvement of these objects, though it is important that this involvement may be mediated via other objects: the Hamburg representative of a Sao Paulo coffee company may sign contracts on behalf of his principal in virtue of which the latter becomes involved in relational events with third parties with whom he is never causally in contact.

Applying these remarks, crude as they are, to the mental sphere, yields the following provisional picture of the material ontology of relational acts.

Like acts in general, relational acts are emergent objects. (There is contact between subject and object not only on the level of physical events, but also at the proper cognitive level. We may keep track of objects in the world not only as a result of involuntary causal interaction, but also via deliberate activities of mind.) Each relational act, that is to say, is a complex spatio-temporal, but not thereby straightforwardly physical/causal, entity. Each has an external cause (in the most general sense of this term) and each also coincides with or comprehends within itself an array of causal goings on, which it serves both to circumscribe and to articulate. To this array some specific mediate or immediate causal involvement of subject and object is indispensable. The objects of relational acts will therefore be restricted to those items in the material world which are such that they, or their parts and fundament, can stand in causal relations. It is in this sense that relational acts manifest a mutual interdependence of causal and cognitive elements, as mentioned in § 3 above.

In embracing the notion of coincidence the way is opened for a stratified view of spatio-temporal reality in which what is materially (causally) the same thing, process or quality may reappear, at different levels, in different foundation-theoretic guises. Of course, before remarks like these might coagulate into theory they must clearly be supplemented, first of all by a rigorous treatment of coincidence, and also by a rigorous treatment of causality — perhaps along the lines of Ingarden’s theory of relatively isolated systems in Vol. III of The Controversy over the Existence of the World (1974). Note that the distinction between coincidence and identity is needed for present methodological purposes even if one allows that it may prove ultimately to be dispensable. Naive physicalism may be true, and then coincidence collapses into identity; all so-called higher level structures are nothing more than the micro-level physical systems in which they are realised. But to assume already at this stage that coincidence and identity are one — an assumption characteristic of almost all contemporary analytic philosophy — and to fail to exploit the resources put at our disposal by the notions of coincidence and foundation is premature, to say the least, and may conceivably foreclose important options.

What, now, of the material differences between relational acts and other members of the category of relational events? Relational acts are distinguished, first of all, by the fact that they necessarily involve a subject as fundament, and by their necessary asymmetry: they are directed from the subject towards his target object, and not vice versa. Both features are shared also by relational actions such as promises or hittings. Acts are however distinguished materially from actions by the fact that all actions are necessarily such that they can serve as terms in by-relations: one can do one thing by doing another (kill Hans by pulling the trigger) — where an act, on the other hand, may serve as term in a by-relation only to the extent that it is part of an action (e.g. of a use of words). It is the material by-relation which structures both individual actions and the realm of actions as a whole, and it is this relation also which sets this realm apart (inter alia) from the realm of acts. All of which suggests that great caution is required in attempts, for example in his contribution to this volume, to reduce the acts canvassed by Searle in his book Intentionality (1983), to our understanding of the material structures of cognitive acts by drawing analogies between acts and actions.

6 Our understanding of relational actions and events is derived from the work of Adolf Reinach, an early follower of Husserl who, in applying the theory of foundation relations to legal phenomena such as promissory acts, etc., anticipated much of what later became known as the theory of speech acts. Cf. Reinach (forthcoming), together with Smith, ed., pp. 169-313, and the references there given.

7 The clause between commas is inserted to remind the reader of what has been said in § 3 above, that relational contact is not confined to things. It embraces also moments of things as well as higher order entities containing both things and moments as parts — and all manner of beast between these two extremes. On the perception of moments see Mulligan, Simons and Smith, 1983.

8 It may by this means be possible to give sense to the still somewhat metaphorical talk of ‘higher-level properties being realised in micro-level systems’ of the sort engaged in by Searle, for example, in his contribution to this volume.

9 This account is provisional only. Further details are provided by Mulligan in his “Acts and Actions”. A by-relation is a truth-maker of a sentence of the form ‘F-ing by G-ing’ where (i) the F-ing and G-ing in question are not simply causally related, (ii) the F-ing and G-ing are not related as whole to part, and (iii) ‘F’ and ‘G’, when fully specified, are not related as determinable to determine. The by-relations thereby determined are all, Mulligan argues, irreversible.
§ 10. Against Cartesianism

Consider the spectrum of veridical presentations directed towards (what are given as) material objects. At the one extreme we have what might be called purely descriptive presentations, above all veridical acts of singular reference involving expressions like 'the tallest spy' used by persons who are innocent of any knowledge as to who in particular the tallest spy might be. At the opposite extreme we have acts which belong to the hard core of relational presentations, particularly acts of ordinary perception. Between these two extremes there is encountered a complicated variety of mixed and defective cases. My hope is that the theory of relational acts might provide means for generating a non-trivial understanding of this spectrum, puzzling cases included. But note that there is an analogous, if somewhat truncated spectrum of cases of non-veridical presentations. I may use an expression like 'the tallest werewolf' in the serious but mistaken belief that it has a referent; or I may suffer an illusion that there is a cat staring at me in my study. And what is important is that the mental experiences then involved are, as they occur, phenomenologically indistinguishable from corresponding veridical experiences. It is for this reason that the prejudice has arisen that as acts veridical and non-veridical experiences are to be described identical, that the existence or non-existence of an object is entirely incidental to the act as such.

The commitment to relational acts implies, however, that there are properties of mental acts that are not transparent to their subjects. Since relationality itself is one such property, it must follow (pace Chisholm, 1981, ch. 9 on "Knowledge and belief de re"), that no epistemological criterion of relationality can be supplied. But this is not to say that relationality is somehow an extraordinary feature of acts, of which the subject is simply unaware. Rather, as proponents of naturalistic realism have long insisted, our acts are already imbued with objective significance. A tacit — normally fully justified — supposition of relationality is the norm or default, and it is deviations from this norm — for example when perceptually generated expectations are frustrated — which are marked in the experiences of the subject. To put the matter in another way, we normally assume without question that our thoughts are not merely veridical but that they are in fact de the relevant res. Further, we normally assume that our acts are de the relevant res even where the objects of our acts are of such a kind that they could not even in principle serve as the objects of relational acts. How exactly our mediate cognitive access to such objects (to abstracta, for example) is built up on the basis of direct cognitive access to realia, is a large problem, to the solution of which inspiration may be sought, perhaps, from Husserl's and Ingarden's work on constitutive phenomenology.

It is now possible to draft a first account of non-veridical presentations: all such presentations are, in our earlier terminology, descriptive or mixed acts the criteria of satisfaction of which are not met. The fact that such presentations are given to their subjects as relational is neither here nor there, since, as we have already argued, it is true also of non-relational veridical acts that they standardly present themselves to their subjects as if they were relational. Just as there is a tendency for our veridical experience to approximate to the status of relationality, so there is a tendency, illustrated by what Evans calls the "conniving use of empty singular terms" (op. cit., p. 123), for our non-veridical experience to approximate to the status of veridicality.

If we now ask what is the object of a non-veridical presentation, then we must at last bite the bullet of naturalistic realism — in a way which should bring no comfort to the phenomenologists of 'intentional objects' or 'notional worlds' — and insist that such an act has no object; it is merely to its subject as if it has an object. The subject thinks that it is thinking (de re or de dicto) about something. But the subject is wrong.22

20 As Woodfield conceives the matter, this may extend even to the object of the act: According to a de re theorist, the subject can have full conscious access to the internal subjective aspects of a thought while remaining ignorant about which thought it is. This is because a de re thought also has an external aspect which consists in its being related to a specific object. Because the external relation is not determined subjectively, the subject is not authoritative about that. A third person might well be in a better position than the subject to know which object the subject is thinking about, hence be better placed in that respect to know which thought it was. (p. viii.) — which brings us back to the fact that it is possible that an act should effect relational contact with an object even though its content is inappropriate to this object.

21 It is for this reason that conversations like the following are absurd:
Ralph: I believe that the man with the bottle is drunk.
Orca: But about the man with the bottle, do you believe he is drunk?
Ralph: No, I never said that. That would be a de re belief and I have merely a de dicto belief. I never said (a) About the man with the bottle I believe he is drunk. But only (b) I believe the man with the bottle is drunk.
(Seattle, 1981, p. 725.)

22 The paper has benefited from the relational contact it has had with David Bell, Cynthia MacDonald, Mark Sacks, John Searle, Jeremy Shermer, Edward Swiderski and Andrew Woodfield.
REFERENCES


Mulligan, K.: (unpublished MS) "Acts and Actions".


Barry Smith

OBJECTS, ACTS, AND ATTITUDES

by Rudolf Haller *

Summary

In this article the thesis is defended that all objects of intentional attitudes are of one sort, while the thesis is rejected that episptic attitudes can be assimilated.

Résumé

L'auteur examine les thèses selon lesquelles d'une part tous les objets d'attitudes intentionnelles, d'autre part toutes les attitudes intentionnelles idées-mêmes sont de même type. La première thèse est défendue, la seconde rejetée également en ce qui concerne les attitudes cognitives.

Zusammenfassung

In dieser Abhandlung wird einerseits die These geprüft, ob alle Gegenstände von intentionellen Einstellungen gleichartig sind, und andererseits, ob alle Einstellungen von gleicher Art sind. Die erste These wird verteidigt, die letztere auch in bezug auf erkenntnismäßigse Einstellungen vereinigt.

§ 1 When we form an idea of something we may distinguish our having the idea of it, the objects which are the constituents of this idea, the relations between these objects and their relations to other objects. But we may also distinguish the ways these objects and the relations between them and to other objects are presented to us and the ways we take them to be what they are or what they appear to be. The ways how the objects are presented to us we may distinguish from the modes the objects are as objects of our attitudes towards them, because possibly the latter do not conform to the former.

If we want to get a clearer idea how we should describe these relations and how we may establish an order of these objects and attitudes, we have to ask some simple-sounding questions and to try to answer them.

* Karl-Franzens-Universität Graz. A first version of this paper was delivered in a lecture (Austro-German-Seminar) at Oxford, May 23, 1981.