BELIEF RELATIONS

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RESUMO

O problema metafísico das relações possui ligações fortes com o problema epistémico da crença. As relações de crença são de diversos tipos e dependem fortemente dos seus objectos. As formas da crença reproduzem as formas estruturais – as relações certas – dos objectos acreditados. Lidaremos com três destas formas: relações externas, relações internas e relações mistas (relações externas/internas).

ABSTRACT

The metaphysical problem of relations has strong ties to the epistemic problem of belief. Belief-relations are of different kinds, and they depend heavily on their objects. Belief forms reproduce the structural forms – the proper relations - of the believed objects. We shall deal with three of these forms: external relations, internal relations and mixed relations (external/internal relations).

"Our reason contains only *relationes*."
Kant, Reflexion 3969
"All perceptions will be gratified volitions."
J. M. E. McTaggart, The Nature of Existence, II, p. 165

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BELIEF AND RELATIONS

I shall begin with a dogmatic proposition. Any belief act implies a provisional internalization of the presupposed relations in the external world, through their presentation in consciousness. This is an ontologically neutral statement: I do not make any assumptions about the terms of the relations. It is even neutral in what concerns the externalist/internalist (see Guttenplan, 1995b) debate on the nature of propositional attitudes: even if externalism were true, one should admit something like an internalization process (akin to Dennett's "intentional stance": see Dennett, 1989) in order to render propositional attitudes such as belief less opaque to their possessors. In other words, a straightforward and uncompromising causal theory of representation (Putnam, 1984: Chap. XII, inspired by Kripke's causal theory of reference (Kripke, 1980)) simply won't do (cp. Fodor, 1981: Chap. IX; but see Dretske, 1999)[2].

This internalization corresponds to an equally provisional admission of the necessary character of relations. Certainly, as Russell put it one day, "the fact that a thing has relations does not prove that its relations are logically necessary" (Russell, 1983: 84). But to believe in a certain relation is, at least in some sense, to believe it necessary.

Belief relations belong to that family of the "operations of the mind", of the "intellectual operations", of "mental acts" (Valéry, "L'homme et la coquille", in Valéry, 2002, vol. 2, 541-569; Boole, 2003, 1 ff; Geach, 2001, against Ryle, 1988) which proceed through construction. Interesting beliefs concern interesting relations, relations having some useful property[3]. What Russell wrote about mathematical relations, also applies to other forms of thought: "The question how to construct relations having some useful property by means of operations upon relations which only have rudiments of the property is one of considerable importance" (Russell, 1993: 43).

Belief relations are actions. As Peirce said, "thought is an action" and "it consists in a relation" ("How to Make Our Ideas Clear", in Peirce, 1966: 122); "all the cognitive faculties we know of are relative, and consequently their products are relations" ("Questions Concerning Certain Faculties Claimed for Man", in Peirce, 1966: 37) [4]. But belief

[2] On these topics, see Tunhas, 2000.

[3] Paul Grice, when using Kantian categories in his discussion of conversational implicatures, puts *relevance* under the category of relation (Grice, 1991: 27; on relevance in discourse, see also Blakemore, 1988: 237-245). In the particular context of the logic of research, relevance is connected, as Michael Polany phrases it, with the property of being "*intellectually* precious", which belongs to "empirical relations" having "scientific interest" (Polany, 1974: 134, 135). Valuable propositions in science possess "systematic relevance (profoundity)" (Polany, 1974: 136).

[4] This paper will deal neither with Peirce's logic of relations (see Leo, 2002) nor with any questions belonging to logic proper. For a rather technical discussion of some logical problems, from a Russellian standpoint, see Quine, 1981 (Chap. V). Nor will it deal with the psychology of relations. For a discussion of relations as feelings, see Spencer, 2000, # 65; James, 2007, I: 242-250; and Bergmann, 1967a: 277-299. Metaphysics is neither logic nor psychology.

relations are of different kinds. They depend heavily on their objects. Mental acts, in general, vary with their object. As Dewey put it: "The problem fixes the end of thought and the end controls the process of thinking" (Dewey, 1991, 12). And, in Husserl's words, every objective unity has a law. Being-part-of-a-particular-species-determination <*das Teil-dieser-bestimmten-Art-sein*> is founded in the pure generic determination of its contents according to aprioristical or essential laws. But the content of the law is determined by the material particularity of the species of the founding contents (LU, 3d Investigation, "The Whole and the Parts", # 23; Husserl, 1992, II: 290; see Asenjo, 1962).

I shall try to distinguish three of these species (see also Tunhas, 2000 and 2003b). Each of them exhibits particular forms of relations, and each of them suggests particular forms of beliefs. I will begin with external relations; then, I will move on to internal relations; finally, I shall deal with a mixed type of relations. I shall be making a rather free use of some concepts developed by Husserl in the third of his Logical Investigations

EXTERNAL RELATIONS

According to Whitehead , the doctrine of external relations "between the existences which are the ultimate constituents of nature" states that the "character of each of these ultimate things is (…) conceived as its own private qualification. Such an existent is understandable in complete disconnection from any other such existent: the ultimate truth is that it requires nothing but itself in order to exist. But in fact there is imposed on each such existent the necessity of entering into relationships with the other ultimate constituents of nature. These imposed behaviour patterns are the Laws of Nature. But you cannot discover the natures of the relata by any study of the Laws of their relations. Nor, conversely, can you discover the laws by inspection of the natures" (Whitehead, 1948: 135; on external relations, see also Whitehead, 1979: 307-309). Whitehead is critical of external relations. This is not D. A. Armstrong's case. The principle of external relations is stated thus: "Two or more particulars are externally related if and only if there are no properties of the particular which logically necessitate that the relation, or any relation which is part of the relation, holds" (Armstrong, 1980, II: 85). Contrary to internal relations, which are reducible to properties, external relations, or "polyadic universals" (id., II: 80), are irreducible (id., II: 86, 88) – that is, they are genuine relations (id., I: 134; see also Lewis, 2001: 67). In David Lewis words, an internal relation "is one that supervenes on the intrinsic nature of its relata"; an external relation "does not supervene on the natures of the relata taken separately, but it does supervene on the nature of the composite of the relata taken together". If a relation doesn't even supervene on the composite of the relata taken together – as, for instance, the relation of having the same owner -, it is not even

an external relation (Lewis, 2001: 62; cp. also 200); such relation is something like Strawson's "non-relational ties", which "demand of the terms they bind a degree of type-heterogeneity greater than that which relations will generally suffer" (Strawson, 1959: 167).

Russell is undoubtedly the most vehement proponent of external relations. Two factors contributed to Russell's conversion to the doctrine of external relations: the influence of G. E. Moore (Russell, 1985: 42; see Moore, 1922, Chap. VI), and the application of Peano's methods to the logic of relations (Russell, 1978: 147; cp. Vuillemin, 1968: 45). From Russell's point of view, the irreducibility of relations is the true subject-matter of mathematics (Russell, 1903: # 27). One of the main aims of *The Principles of Mathematics* is precisely the development of an intensional logic of relations (Vernant, 1993: 103). This development is of one piece with the critique of the idea of necessity (Vernant, 1993:116 ff) and with a pluralistic rejection of monism. The need for the admission of diversity predates Russell's conversion to pluralism. In *An Essay on the Foundations of Geometry* (1897) he could already write that "all knowledge involves a recognition of diversity in relation" (Russell, 1996: 181). The *Essay* also points to the necessity, for the existence of relations, of some given form of externality (Russell, 1996: 194).

According to *The Principles of Mathematics*, relations can be: symmetrical; transitive; not symmetrical; asymmetrical; not transitive; intransitive (Russell, 1903: #208; cp. Russell, 1914: 56 ff; Russell, 1993: Chap. V; see also Strawson, 1974: 84-94, and 1977: 202-210; for a more complex typology, see Carnap, 1967: 21-22). Those relations which are the most important from Russell's point of view are asymmetrical relations (e.g. if a is a part of b, b is not a part of a) (Russell, 1903: Chap. XXVI, ## 208-216; cp. Russell, 1993: Chap. V; Russell, 1980: 35 ff; see also Reichenbach, 1957: 136 ff, for the importance of asymmetrical relations for the definition of the order of time). "From the point of view of the classification of relations, being asymmetrical is a much more important characteristic than implying diversity. Asymmetrical relations imply diversity, but the converse is not the case" (Russell, 1993: 44). Relations are real: "The relation [north of], like the terms it relates, is not dependent upon thought, but belongs to the independent whole which thought apprehends but does not create" (Russell, 1983: 56). Either atomic or molecular (Russell, 1927: 116), they are as real as predicates (Russell, 1927: 238). "It seems that there is no escape from admitting relations as parts of the non-linguistic constitution of the world; similarity, and perhaps also asymmetrical relations, cannot be explained away, like «or» and «not», as belonging only to speech. Such words as «before» and «above», just as truly as proper names, «mean» something which occurs in objects of perception" (Russell, 1993: 344-345).

Russell's decision for the reality of external relations must be set against the background of his diagnosis of the traditional philosophical dislike of relations, which manifests itself in their reduction to the subject-predicate form (on the topic of the

philosophical "distrust and contempt for relations", see also Austin, 1979: 49; Bergmann, 1967a: 297, and 1967b: 48)[5]. Traditional logic fails to understand relations (Russell, 1914: 54 ff), and there is no reason why they should all be regarded as reducible to the subject-predicate form (Russell, 1903: #426; but see Geach, 1981: 319-321). This reduction can take two forms: the monadistic view (Leibniz, Lotze) and the monistic view (Spinoza, Bradley) (Russell, 1903: # 212; cp. Russell, 1983: 54 ff; for the monadistic view, cp. Russell, 1903: ## 213-214; and for the monistic view, cp. Russell, 1903 #215). The sense of relations is lost if one adheres to the reduction to the subject-predicate form: "Thus the distinction of sense, i. e. the distinction between an asymmetrical relation and its converse, is one which the monistic theory of relations is wholly unable to explain" (Russell, 1903: #215).

Russell's "logical atomism" is entirely dependent on his decision for the externality of relations (cp. "The Philosophy of Logical Atomism" (1918), in Russell, 2001: 177 ff; "Logical Atomism" (1924), in Russell, 2001: 323 ff). According to Russell, reality consists of separate things externally and non-essentially related to one another. The search, through analysis, for the things that are absolutely simple leads us to particulars, properties and relations which are not further analysable (cp. Pears, 1995: 279)[6]. The principle of the externality of relations has its place in Wittgenstein's Tractatus: "the idealist's appeal to «spatial spectacles» is inadequate to explain the seeing of spatial relations, because it cannot explain the multiplicity of these relations" (4.0412).

One can find another version of the principle of the externality of relations in James' *A Pluralistic Universe*. Pluralism "means only that the sundry parts of reality may be externally related (…) The relations are not all what the French call solidaires with one another. Without losing its identity a thing can either take up or drop another thing (…) For monism, on the contrary, everything, whether we realize it or not, drags the whole universe along with itself and drops nothing" (James, 1984: 367-8).

[5] Neopositivism - e. g., in the constructive theory <*Konstitutionstheorie*> of Carnap's *Aufbau* – will follow Russell's stance. Relations are the "actual basic concepts of the constructional system" (Carnap, 1967: 13). "Relation descriptions", in contradistinction to "property descriptions", "constitute the basis of a unified science", and "it is the goal of each scientific theory to become, as far as its content is concerned, pure relation description" (Carnap, 1967: 20). See also the contingency of structure description upon relations (Carnap, 1967: 21) and the necessity of relation theory to the construction of a "logic of individuality" (Carnap, 1967: 23-24).

[6] Russell's doctrine of the externality of relations was criticized from the very beginning by Harold Joachim in *The Nature of Truth* (Joachim, 1906). According to Joachim, "a purely external relation is in the end meaningless and impossible" (Joachim, 1906: 11). Joachim maintains that "every relation at least qualifies its terms, and is so far an adjective of them, even if it be also something besides" and that ""so far as *A* and *B* are related, they are *eo ipso* interdependent features of something other that either of them singly: and, on the other hand, that if *A* and *B* really are each absolutely simple and independent, it is nonsense to say that they also are really related" (Joachim, 1906: 11-12). That is, absolute simplicity precludes, according to Joachim, any kind of relations: elements cannot form a unity and, simultaneously remain independent of each other (Joachim, 1906: 49). The doctrine of external relations is not a solution: it "is a name for the problem to be solved" (Joachim, 1906: 49). For Russell's response to Joachim's criticisms, see Russell, 1921: 267-268, and Russell, 1985: 43 ff.

The distinction between pluralism and monism amounts to the difference between the "each-form" and the "all-form" of reality: "Pluralism lets things really exist in the each-form or distributively. Monism thinks that the all-form or collective-unit form is the only form that is rational. The all-form allows of no taking up and dropping of connexions, for in the all the parts are essentially and eternally co-implicated. In the each-form, on the contrary, a thing may be connected by intermediary things, with a thing with which it has no immediate or essential connexion" (James, 1984: 368).

Three points may be mentioned. First, our belief in external relations, as stated in Russell's logical atomism, is a belief in non-believing entities. This is self-explanatory, and no comments are needed.

Second, it is a representative belief in the strong sense, because it assumes some kind of isomorphism between thought and reality. Wittgenstein's formulation is stronger than Russell's: "A picture has logico-pictorial form in common with what it depicts" (T, 2.2), there is an "inner similarity" between the symphony, the score and the grove on the gramophone record (T., 4.0141). "The pictorial relationship consists of the correlations of the picture's elements with things" (2.1514). The effectiveness of the representation in the Tractatus is increased by a principle of internal relations among the propositions: "A proposition about a complex stands in an internal relation to a proposition about a constituent of the complex" (3.24). "If the truth of one proposition follows from the truth of others, this finds expression in relations in which the forms of the propositions stand to one another: nor is it necessary for us to set up these relations between them, by combining them with one another in a single proposition; on the contrary, the relations are internal, and their existence is an immediate result of the existence of the propositions" (5.131). "The structures of propositions stand in internal relations to one another" (5.2). The very possibility of the projective relation (3.11 – 3.13, 4.0141) lies in this enlacement of internal and external relations which is pervasive in the Tractatus.

Finally, our beliefs in external relations are subject to certain revision conditions, which suppose that very same externality.

Natural science is, at least prima facie, the domain of this kind of beliefs. Let's take an example from D'Arcy Thompson's *On Growth and Form*: "The skeleton begins as a continuum, and a continuum it remains all life long. The things that link bone with bone, cartilage, ligaments, membranes, are fashioned out of the same primordial tissue, and come into being pari passu with the bones themselves" (D'Arcy Thompson, 1994: 263). Here we have an enunciation of certain aspects of the external world: bones, cartilages, ligaments, membranes. They are, of course, non-believing entities which relate to one another. And Darcy Thompson's description aims at an accurate report of these forms of externality. Externality supposes – even in Darcy Thompson's morphological view, with its insistence in the continuum - the existence of independ-

ent parts and, to use Husserl's words, non-perfectly enlaced moments in the sphere of contingent singularities. Darcy Thompson's report, and his theory of the continuum, is subject to forms of revision which depend upon externality conditions.

This, however, is not enough as a description of our belief in the propositions of natural science, even from the very narrow viewpoint adopted here. We must move on to the doctrine of internal relations.

INTERNAL RELATIONS

From Whitehead's point of view, it is necessary to "construct a plausible metaphysical doctrine according to which the characters of the relevant things in nature are the outcome of their interconnections, and their interconnections are the outcome of their characters. This involves some doctrine of Internal Relations" (Whitehead, 1948: 134-135). More ambitiously: "We have to discover a doctrine of nature which expresses the concrete relatedness of physical functionings and mental functionings, of the past with the present, and also expresses the concrete composition of physical realities which are individually diverse" (Whitehead, 1948: 186; on internal relations, see also Whitehead, 1979: 58-59, and Asenjo, 1962: 97 ff). This is a fine statement of the principle of internal relations. But one can find a more straightforward version in Ayer's critical discussion of the conflict between monism and pluralism. First, according to the doctrine of internal relations, "everything in the world (…) is related to everything else in some way or other"; and, secondly, "every relation is internal to its terms", that is, all the properties of a thing "including all its relational properties, are constitutive of its essential nature" (Ayer, 1983: 193, and, in general, 193-198; see also Rorty, 1967: 125). D. A. Armstrong puts it in a similar way: "Two or more particulars are internally related if and only if there exist properties of the particulars which logically necessitate that the relation holds" (Armstrong, 1980, II: 85).

Leibniz (at least a simplified Leibniz) is undoubtedly one of the major influences behind the doctrine of internal relations, mainly through the importance that the principles of continuity, plenitude and sufficient reason have in his thought (see Lovejoy, 1973: Chap. V). But Hegel's import is even more notorious. First, the very idea of contradiction in Hegel's system represents an internalization of the relation of difference <*Unterschied*>: through the logical and ontological movement which conducts purely external and indifferent difference, diversity <*Verschiedenheit*>, through opposition, to contradiction, active relational difference, all relations are internalized in the Absolute conceived as subject (Hegel, 1929, II: 43-70; and Hegel, 1986, I: 239-247; on Hegelian contradiction, see also Taylor, 1977: 105-109). This "bacchanalian whirl in which no member is not drunken", as the Preface to the *Phenomenology of Mind* puts it (Hegel, 1970: 46), is necessary for real conceptual determination. Second, the

role of teleology and internal (as opposed to external) finality, as stated in the *Science of Logic*, is crucial to his thought (Hegel, 1929, II: 374-394; see also *Enzyclopädie*, 1830, paragraphs 204-212, Hegel, 1986, I: 359-367). Third, Hegel's system as a whole is conceived as an active integration, through anamnesis, *Erinnerung* – see his comments on Plato's Meno in the *Lectures on the History of Philosophy* -, of all the past differentiated moments of human experience; their integration in Hegel's system reduces them to internal moments of a whole: Absolute Knowledge proceeds through the recollection <*Erinnerung*> of past spiritual experience and its conceptual organization (see Hegel, 1970: 590-591). *Telos* and *Erinnerung* are complementary moments in Hegel's system: necessary conceptual development works through necessary conceptual recollection, and vice-versa[7].

From a Freudian point of view, as expressed in *Totem and Taboo*, the absolute primacy of internal relations (as exhibited, for instance, in Hegel's system) is a sign of a "general over-valuation of all psychic processes", of "an attitude towards the world which according to our understanding of the relation of reality to thought must appear like an over-estimation of the latter" (Freud, 1999: 105), that is, as a surrender to the primitive belief in the "omnipotence of thought". But such "over-valuation" rests on a natural intellectual function: "An intellectual function in us demands the unification, coherence and comprehensibility of everything perceived and thought of, and does not hesitate to construct a false connection if, as a result of special circumstances, it cannot grasp the right one" (id.:117; see also Tunhas, 2008).

According to the doctrine of internal relations, consciousness is at the centre of the world: its centrality is the very condition for the existence of the world (Bosanquet, 1913: 58). Following Bosanquet, "a mind is a whole, that is in its nature and intent; an object is a fragment. This fact forebodes a difficulty in assessing the reality of objects apart from mind, and so in drawing a line between them. For what is real must surely be a whole, whatever else may be its character" (Bosanquet, 1913, 28; on the whole/parts relations, see Bosanquet, 1928, 54-58).

"Thus [as Russell summarizes the Leibnizian position] relations and aggregates have only a mental truth; the true proposition is one ascribing a predicate to God and to all others who perceive the relation" (Russell, 1937: 14). And "Leibniz is forced, in order to maintain the subject-predicate doctrine, to the Kantian theory that relations, though veritable, are the work of the mind" (Russell, 1937: 14). Furthermore, there is an integration of relations in the complete notion of every subject (Vernant, 1993: 116). It is the realm of Leibniz's, and Chisholm's, "mereological essentialism": every part of a genuine object is essential to it (Chisholm, 1976: 145-158; see also Simons, 1995: 377; for contemporary discussions on mereology, see Mann and Varzi, 2006).

[7] Hegel's very style of thought reflects this internalization of the differences. It is resolutely non-spatial, as opposed to the Kantian style, where spatial metaphors abound (see Tunhas, 2003a: 11).

This seems to be self-destructive, as shown – from the monistic standpoint - by Bradley's argument against the reality of relations. From the standpoint of Bradley's parmenidean Hegelianism, as shown in *Appearance and Reality*, relations are unintelligible (Bradley, 1902: 32-34). Peter Geach puts it succinctly: "Bradley (…) held that our thinking is both inescapably relational in character and on that very account inescapably erroneous" (Geach, 1981: 319). But "the relational form implies a completion beyond itself" (Bradley, 1902, 180-182; cp. Russell, 1903: # 99; Russell, 1914: 16 ff). It points to the Absolute, to reality: appearances are facts, which somehow must qualify reality, there is a "positive fragmentariness" in appearances (cp. Bradley, 1902: 131-132, 226-227; on Bradley, see Hamlyn, 1998: 106, 111, 116-119). In a similar sense, in McTaggart's *The Nature of Existence* – although McTaggart, contrarily to Bradley, accepts the reality of relations, which are indefinable but indispensable (McTaggart, 1921-1927, I: 79, 80), and rejects Bradley's Absolute - our "cognitive relations to other selves in present experience" are marked by a natural indirectness; but "in absolute reality every self will love every other self whom he directly perceives" and "all perceptions will be gratified volitions" (McTaggart, 1921-1927, II: 146, 155, 165).

Bradley's position was widely criticized. Cook Wilson, for instance (cp. Cook Wilson, 1926, II: 255), fought against some of its aspects, and Whitehead, although sympathetic to Bradley, accused him of falling in the pitfall of describing the theory of internal relations "in terms of language adapted to the presupposition of external relations of the Newtonian type" (Whitehead, 1948: 186).

But Bradley's most important critic is undoubtedly Russell. Bradley's stance is clearly stated - "relations, according to Mr. Bradley, are found on examination to be self-contradictory and therefore impossible" (Russell, 1914: 17) -, and its contradictory character sharply denounced: "And hence we find monists driven to the view that the only true whole, the Absolute, has no parts at all, and that no proposition in regard to it or anything else are quite true – a view which, in the mere statement, unavoidably contradicts itself" (Russell, 1903: #215; cp. Ayer, 1983: 194). If one adopts an internal relations approach, all relations, and with them all intelligibility, simply vanish: "Asymmetrical relations are unintelligible on both the usual theories of relation", the monadistic and the monistic (Russell, 1903: #216). Mathematics would be inexplicable should one follow such a path: "We can hardly hope for a satisfactory philosophy of Mathematics so long as we adhere to the view that no relation can be 'purely external'" (Russell, 1903: #216). (For the criticism of Bradley's doctrine of internal relations, see also Russell, 1985: Chap. 5; cp. also Vuillemin, 1968: 167 ff, 223-224; and Vernant, 1993: 109 ff; and for Hegel's, cp. Russell, 1983: 82ff).

Just a few sketchy comments on the ideal character of relations according to Leibniz. From Leibniz's point of view, relations are the product of the mind : *les qualités ne sont que des modifications des substances et l'entendement y ajoute des relations (Nouveaux Essais, II, xii, 3)*. Relations are beings of reason – *Gedankendinge*, as Kant

would have put it – but they are well-founded: *Les relations et les ordres ont quelque chose de l'être de raison, quoiqu'ils aient leur fondement dans les choses; car on peut dire que leur réalité, comme celle des vérités éternelles et des possibilités, vient de la suprême raison* (N. E., II, xxv, 1). Donald Rutherford aptly summarizes Leibniz's position on the subject of relations: "Relations (…) are not in the world, but are rather «modes of conceiving», or what a mind imposes on the world in apprehending the agreement and connection of singular things. Abstracted from their relata, relations are merely «beings of reason» (entia rationis), whose reality is limited to their expression of the ideas and the eternal truths constitutive of God's understanding (…) [R]elations are merely ideal: they are not themselves created beings, but merely ways the world is capable of being known (perceived, thought) by minds" (Rutherford, 1995: 148-149).

One should note that Ockham's attempt at ontological reduction – only substances and qualities are real entities (see Courtenay, 1999: 24) - somehow anticipates Leibniz's attitude towards relations. Ockham's attack on relations is directed against Scotus' defence of their reality (see Martin, 1966: 198). Scotus' examples of real relations include the traditional Aristotelian example of the pros ti: fatherhood (cp. Aristotle, Categories, 7, and Metaphysics, Delta, 15; and Barnes, 1995: 80). As Paul Vincent Spade has it, "Ockham is prepared to say things really act or are acted on, are really related to one another, and so on, but he does not think the truth of these statements requires us to postulate real entities in the categories of action, passion, or relation. Things really act, but there are no actions; things are really related without relations (…) Ockham «eliminates» all the Aristotelian categories in this way – except for substance and quality." There are, however, some theological limits on the ontological reduction of relations: "The doctrine of the Trinity, as Ockham understood it, requires us to posit such relations in God. Likewise, the Incarnation requires a real relation of union between Jesus' human nature and the Divine Word. And the Eucharist, understood according to the theory of transubstantiation, requires that the «inherence» of accidents in a substance be construed as a real relation distinct from its relata" (Spade, 1999: 105). In any case, these are exceptional situations: there are no relations which are really distinct from the things related. In Gustav Bergmann's words, Ockham would only accept nexus, not relations: "A nominalist is (…) forced to assay as nexus rather than as relations all the connections, if any, whose ontological status he is prepared to recognize" (Bergmann, 1967b: 49; on Ockham's ontological disposal of relations, see Bergman, 1960: 154).

Although Ockham's view is close to Leibniz's, Leibniz's position in respect to Ockham's razor is reasonably mitigated (see Martin, 1966: 196-206). The controversy between Leibniz and Clarke clearly illustrates this (cp. Martin, 1966: 203-204; and Sklar, 2000: 462), and the correspondence with Des Bosses on the vinculum substantiale may be read as showing the complexity of Leibniz's attitude (see Rutherford, 1995: 162). As a matter of fact, Leibniz seems to adopt an intermediate stance between Ockham – relations are beings of reason – and Scotus – they are well-founded. The

very same thing may be said about Locke (*Essay*, II, xxv; see Aaron, 1955: 179-192; and Martin, 1966: 198). And, although Kant's view on relations is substantially different from Leibniz's, it shares with it some general assumptions, namely that relations are not to be found in the objects themselves, they belong to the phenomenal world – that is, they depend upon the subject – and they don't give us any clue as to the realm of things in themselves.

In aesthetic beliefs – I take them to be the most comfortable to the doctrine of the internality of relations -, we deal with a belief in our own beliefs, that is, in our own feelings. And our relation to ourselves as believing entities is, in principle, an authoritative one.

Aesthetic beliefs are also non-representative beliefs (see Tunhas, 2004: 128 ff.). Representation supposes exteriority. Absolute internality absolutely precludes representation. There is no need for any kind of isomorphism here, since the believed and the believer are one. Truly, beauty is in the eyes of the beholder.

And, finally, what are the revision conditions for aesthetic beliefs? How can they be conceived? They cannot rely on any form of externality. They depend entirely on the aesthetical experience of the person – the socially and culturally formed person, I mean. I can begin by preferring, of all the three Schubert cycles, *Die schöne Müllerin*. And, after some years hearing Schubert's songs, I can decide – there are aesthetical decisions - that, after all, *Winterreise* is the best song cycle he ever wrote, the one which I enjoy the most. I have certainly been influenced in my aesthetical revision by the books I have read and by the conversations I have had with other people. But it remains a personal (even if slightly artificial) decision.

Let us take as an example Emily Dickinson's *A little Madness in the Spring*: "A little Madness in the Spring / Is wholesome even for the King / But God be with the Clown – / Who ponders this tremendous scene – / This whole Experiment of Green – /As if it were his own!". Here, as in Bradley's Absolute, we have something that is immediately present. It would be sheer nonsense to pretend that the poem relies on "an ultimate ontology of externally related, or atomistic, perceptible facts" (cp. Stock, 1995: 59). We have a perfect "experience of togetherness", to use Samuel Alexander's expression (Alexander, 1966, I, 20). Here, relations are entirely the work of the mind (not, as a matter of fact, for Alexander, nor for Cook Wilson; for Alexander's theory of relations, see Alexander, 1966, I: Chap. IV; Cook Wilson also adopts a realist stance). They are definitely internal. The parts of the poem are not really parts in the usual sense: they live in the whole, in intimate enlacement (cp. Aristotle, Poetics, 1451 a 30-35; cp. also Metaphysics, V, 26)[8]. They don't refer to anything external. Talking about "aes-

[8] The same applies to the novel. See Henry James' "The Art of Fiction": "A novel is a living thing, all one and continuous, like any other organism, and in proportion as it lives will it be found, I think, that in each of the

thetic wholes" – his example is Browning's poem *Any Wife to any Husband* -, Bosanquet speaks of wholes "constituted by a pervading identity which exhibits itself in the congruous or co-operating nature of all the constituent parts" (Bosanquet, 1928, 57). In aesthetic wholes, as the Scottish neo-Kantian philosopher Robert Adamson once put it, speaking about the expression "reality as a whole", "nothing is given without intelligible connexion" (Adamson, 1903, I: 350). It is a fundamental tenet of the monistic attitude, concomitant to the doctrine of internal relations, that every event must be causally connected with every other (cp. Ayer, 1983: 197 ff). Poetry is exceedingly intelligible because it depends on this kind of intimacy, Husserl's *Innigkeit*. One can think of Wittgenstein's "dawning of an aspect": "not a property of the object, but an internal relation between it and other objects" (Ph. I., II, xi; see Tunhas, 2003c). Our belief in this enlacement – a perfectly internalized belief - is absolute.

This is also Dewey's position. "The characteristic of artistic design is the intimacy of the relations that hold the parts together (…) In the work of art, the relations cannot be told apart from what they relate except in later reflection" (Dewey, 1980, 117). Aesthetic relations are "dynamic" and "energetic", not merely "intellectual": "«relation» is an ambiguous word. In philosophic discourse it is used to designate a connection instituted in thought. It then signifies something indirect, something purely intellectual, even logical. But «relation» in its idiomatic usage denotes something direct and active, something dynamic and energetic. It fixes attention upon the way things bear upon one another, their clashes and unitings, the way they fulfil and frustrate, promote and retard, excite and inhibit one another. Intellectual relations subsist in propositions; they state the connection of terms with one another. In art, as in nature and in life, relations are modes of interaction. They are pushes and pulls; they are contractions and expansions; they determine lightness and weight, rising and falling, harmony and discord (…) Mutual adaptation of parts to one another in constituting a whole is the relation which, formally speaking, characterizes a work of art" (Dewey, 1980, 134-5).

But it is not only in aesthetic judgments that belief internalization is operative. Even in the domain of the natural sciences, for relations to be comprehensible they must be the product of the activity of the mind, as shown in Valéry's *L'homme et la coquille*. No reasonable theory of human understanding can explain away internal relations. We recognize the separate existence of parts, but also their melting in the whole (for such a view of nature, see Humboldt's *Kosmos* (Humboldt, 2006)). Independent parts must be reconstructed as non-independent parts, non-independent moments, if they are to be true belief contents. Disjoint moments must be enlaced. The sphere of contingent singularities must give way to a co-penetration of all the moments, an enchainment of enlacements.

parts there is something of each of the other parts" (*in* Leitch *et alii*, 2001: 862).

The danger lies in that a radical adoption of the principle of internal relations would blur Hume's famous distinction between relations of ideas and matters of fact (cp. *Enquiry concerning Human Understanding*, IV, i, 20-21). D. M. Armstrong has plausibly suggested that Hume's distinction is akin to the distinction between internal and external relations (Armstrong, 1980, I: 50; II: 84) [9]. The very ground for this distinction would simply disappear, as there would be no reason to discriminate between operations of thought and independent realities. Through all its mediations, one such attitude is at the core of Hegel's logic. Thought itself – at least, in the usual sense of the word - would disappear, through the dissolution of extra-linguistic reality: "if thought succeeded in transcending dualism, it would perish as thought", as Bradley puts it (Bradley, 1902: Chapter XV).

EXTERNAL-INTERNAL RELATIONS

We shall consider now a mixed kind of relations, neither purely external nor purely internal. I propose (not very ingeniously) to call them external-internal relations (Armstrong speaks of "mixed relations", "partially internal and partially external", in a sense not entirely coincident with mine; see Armstrong, 1980, II: 85). They are simultaneously not entirely dependent upon thought – they are not the simple product of the activity of the mind - and not entirely dependent upon the non-linguistic constitution of the world – they are not given as such in the world. They do not agree with the conditions of internality – but they are also alien to the strict conditions of externality.

Consider the case of our believing to know the beliefs of other people. According to a very reasonable epistemological theory – the so-called "simulation theory" – "we understand the psychologies of others by using our own psychological processes to simulate those of others"; in other words, "we know about the beliefs of others by a natural extension of our capacity to know about our own" (Segal, 1995: 148). This is not only valid, or at least very plausible, in the psychological domain. It is also valid, or very plausible, in other fields, such as history and anthropology. But such an approach has intrinsic limitations. For we can never be sure of being right in our simulation of the psychological states of other people (or social meanings, in the case of historical and anthropological studies).

All we can have, in such cases, is quasi-representative beliefs. Pure representative beliefs depend heavily on the externality condition. Due to its relative absence, and to

[9] Resemblance, proportion in quantity and number, degree in any quality and contrariety would qualify as internal relations; identity, relations of time and place and causation would count as external relations. See also Tunhas, 2006.

the inevitable pervasiveness of the internal dimension, our beliefs cannot be wholly representative. The sense of the beliefs held by other people can only be partially grasped. We can make sense of them – but it is, fatally, our sense.

There surely are certain revision conditions for this last kind of beliefs. But they are not identical with those we are familiar with in the natural sciences. Take as an example the notion of "class struggle" (cp. Tunhas, 2003b: 31). (It is good to have a Marxian example here, because Marxism is first and foremost a theory of social relations; see Hunt, 1996.) Here we have a notion with a strong explanatory power in sociology. But: was there ever something distinctly definable as "class struggle"? In a certain sense, yes; in another sense, no. And how can we retrospectively revise Marxian considerations on the fundamental character of this notion? It is a meagre consolation to say that it once was a fundamental explanatory notion, although it doesn't work nowadays. Compare with the physicists discussions on ether.

But let's choose a better example, taken from J. G. Frazer's *The Golden Bough*: "Unable to discriminate clearly between words and things, the savage commonly fancies that the link between a name and the person or thing denominated by it is not a mere arbitrary and ideal association, but a real and substantial bond which unites the two in such a way that magic may be wrought on a man just as easily through his name as through his hair, his nails, or any other material part of his person" (Frazer, 1978, 321-322). How can we attribute precisely those beliefs to the "savage" (the word is not important)? Obviously, one imagines the savage's beliefs from the viewpoint of our own beliefs, even if in contradistinction to our own beliefs. For sure, Freud, namely in *Totem and Taboo* (Chap. III, passim), clearly established something like a continuity principle amongst beliefs. Nevertheless, there is an abyss between our own beliefs and the beliefs of other people. How can we put ourselves in their place? How can we know that for the "savage" "the link between a name and the person or thing denominated by it is not a mere arbitrary and ideal association"? What are the limits of the "simulation theory"? The constellation of belief-relations in human societies is not an absolutely external constellation of relations. It is always defined from the viewpoint of our own system of beliefs. That is, it refers to the previously mentioned system of internal relations. Relations are the work of the mind, of our mind – but also of other inexpugnable minds. Externality intrudes in the very world of internality. Yet, it is always possible to have some kind of enlacement with the mind of the "savage", to have some kind of co-penetration. After all, history and anthropology are well-established fields of knowledge. It is not, though, an immediate co-penetration, an abolition of the sphere of contingency, as in the case of aesthetic experience[10].

[10] As Peter Winch has it, in *The Idea of a Social Science and its Relation to Philosophy*, "the notion of a human society involves a scheme of concepts which is logically incompatible with the kinds of explanation offered in the natural sciences" (Winch, 2003: 72), and one of the main features of sociological thought is that it has to consider the internality of social relations (Winch, 2003: Chap. V). (Winch uses "internal relation" in a

CONCLUSION

I can only repeat what I have said at the beginning. The metaphysical problem of relations has strong ties to the epistemic problem of belief. Belief-relations are of different kinds. They depend heavily on their objects. Belief forms reproduce the structural forms – the proper relations - of the believed objects. Beliefs are internalized in different ways. The maximal internalization – as illustrated by aesthetic beliefs – aims at a maximal intelligibility, but, as shown by Russell's criticism of Bradley's Absolute, it can lead us to the total loss of intelligibility. Belief acts must be attentive to their inherent risk, a risk they cannot completely eliminate without losing their driving force: the risk of over-evaluation of the psychic processes.

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sense akin to my "internal-external relation", and he opposes internal relations to external relations, the latter being those that are observed in nature (Winch, 2003: 125)). See also Searle, 1996. Sociological thought has, of course, devoted considerable attention to the nature of social relations (see, for instance, Parsons, 1991; Luhmann, 1995; and Elias, 1970 and 1987).

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