

ARTICOLI



Reconceptualizing the Debate over Internal and External Relations: Across the Continental-Analytic Divide

di

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ABSTRACT: The debate over internal and external relations was the first attempt in the history of Western thought to use the concept of relation to undermine the metaphysical throne of substance. One hundred and thirty years later, the debate is livelier than ever, both in its continental and analytic branches. This paper offers a conceptual groundwork for the reconstruction of the debate, focalizing on the insufficiency of the Manichean vocabulary of internal and external relations, and offering in its place a richer and more consistent taxonomy of models of relationality. This is done genealogically, through a critical examination of the way Russell posed the terms of the debate in his discussion of Leibniz: Russell's fallacious arguments are not amended by those who follow him, causing a growing confusion in the terms of the debate. This reconstructive work offers five different models of relationality – supervenient, external, constitutive, vicarious and structural relations – as a first attempt to a clearer conceptualization of the debate, hoping that this new vocabulary can also create a common ground of commensurability for a renewed dialogue between the continental and analytic debate.

KEYWORDS: internal and external relations, relations, Bertrand Russell, object-oriented philosophy, structural realism

ABSTRACT: Il dibattito sulle relazioni interne ed esterne è stato il primo tentativo nella storia del pensiero occidentale di utilizzare il concetto di relazione per scardinare il trono metafisico della sostanza. Centotrenta anni dopo, il dibattito è più vivo che mai, sia nel suo ramo continentale che in quello analitico. Questo articolo offre una base concettuale per la ricostruzione del dibattito, concentrandosi sull'insufficienza del vocabolario manicheo delle relazioni interne ed esterne e proponendo al suo posto una tassonomia più ricca e coerente dei modelli di relazionalità. Questo compito è portato a termine per via genealogica, attraverso un esame critico del modo in cui Russell chiarisce i termini del dibattito nella sua discussione di Leibniz: le argomentazioni fallaci di Russell non vengono emendate da coloro che lo seguono,

causando una crescente confusione dei termini del dibattito. Questo lavoro ricostruttivo offre cinque diversi modelli di relazionalità – relazioni supervenienti, esterne, costitutive, vicarie e strutturali – come primo tentativo di una più chiara concettualizzazione del dibattito, sperando che questo nuovo vocabolario possa anche creare un terreno comune di commensurabilità per un rinnovato dialogo tra il dibattito continentale e quello analitico.

KEYWORDS: relazioni interne ed esterne, relazioni, Bertrand Russell, filosofia orientata all'oggetto, realismo strutturale

1. Introduction

The debate over internal and external relations was the first serious attempt to overcome the strong «philosophic dislike of relations»¹, which had characterized the history of Western thought since Aristotle, and «to base metaphysics on some notion other than that of substance – a task not yet accomplished»².

We may try a periodization of the debate thus. The *seminal* phase begins with the publication, in 1893, of Francis Herbert Bradley's *Appearance and Reality*³, that postulates an Absolute whose unity is so steady that relations must be eliminated if the Absolute is not to be broken; his most interesting arguments remain however those directed against relations which are merely external, especially the notorious argument known as Bradley's regress⁴, which is meant to prove that, if there are to be relations, they can only be internal. At the opposite pole from Bradley⁵, Bertrand Russell argues for a «logical atomism» of sparse particulars, that claiming the «exteriority» of relations constitutes the first real affirmation of their irreducibility to substances. To the seminal phase we may ascribe philosophers from both parties, like Harold Joachim⁶ on Bradley's side or G. E. Moore⁷

¹ B. Russell, *Principles of Mathematics*, Routledge, London 2009, p. 223.

² B. Russell, *A Critical Exposition of the Philosophy of Leibniz*, Routledge, London 2005, p. 148.

³ F. H. Bradley, *Appearance and Reality*, Allen & Unwin, London 1916; cf. id., *Relations*, in *Collected Essays*, vol. 2, Clarendon, Oxford 1935, pp. 628-675.

⁴ Cf. K. Perovic, *Bradley's Regress*, 2017, <https://plato.stanford.edu/entries/bradley-regress/> [04.12.2021].

⁵ Cf. S. Candlish, *The Russell/Bradley Dispute and its Significance for Twentieth-Century Philosophy*, Palgrave Macmillan, London 2007.

⁶ H. Joachim, *The Nature of Truth*, Clarendon, Oxford 1906.

⁷ G. E. Moore, *External and Internal Relations*, «Proceedings of the Aristotelian

on Russell's, but also outsiders like William James⁸, who will defend a «pluralism» far more sophisticated than Russell's, admitting both «conjunctive» and «disjunctive» relations and attacking both monists' insensitivity for real separations in the world and classical empiricism's insensitivity to relations that are immediately experienced.

The seminal phase is overall transversal to the divide between continental and analytic philosophy, which was in part a byproduct of the debate itself⁹. After this first phase, the bifurcation of the two traditions forbids a single treatment, but in both areas the debate is still alive at the heart of metaphysical issues. Due to its micrologic attitude, an overall periodization of the analytic debate is almost impossible, but some fundamental steps may be traced¹⁰. The most important analytic philosopher to cope with internal and external relations was Ludwig Wittgenstein, who was obliged to refute his teacher, Russell, and to admit that philosophy could not proceed without admitting internal relations¹¹. Discussions of the opposition between internal and external relations are found also in other classic exponents of the tradition such as Ayer¹² and Ryle¹³; Quine's semantic holism¹⁴ can be almost read as a renewal of the idealist views on knowledge that Russell's external relations were meant to refute; Kit Fine's elaboration of "neutral relations"¹⁵ will foster internalist attitudes; idiosyncratic uses of the distinction between internal and

Society» 20 (1919), pp. 40-62.

⁸ W. James, *A Pluralistic Universe*, University of Nebraska Press, Lincoln 1996; id., *Essays in Radical Empiricism*, University of Nebraska Press, Lincoln 1996. Cf. L. McHenry, *Bradley, James, and Whitehead on Relations*, «The Journal of Speculative Philosophy» 3/3 (1989), pp. 149-169.

⁹ Cf. P. Hylton, *Russell, Idealism, and the Emergence of Analytical Philosophy*, Clarendon, Oxford 1990.

¹⁰ For an overview of the analytic debate, cf. A. Marmodoro-D. Yates (eds.), *The Metaphysics of Relations*, Oxford University Press, Oxford 2015; F. MacBride, *Relations*, 2020, <https://plato.stanford.edu/entries/relations/> [14.04.2021].

¹¹ Cf. J. Mácha, *Wittgenstein on Internal and External Relations: Tracing All the Connections*, Bloomsbury, London 2015.

¹² A. J. Ayer, *Internal Relations*, «Aristotelian Society Supplementary Volume» 14/1 (1935), pp. 173-85.

¹³ G. Ryle, *Internal Relations*, «Aristotelian Society Supplementary Volume» 14/1 (1935), pp. 154-72.

¹⁴ W. V. O. Quine, *Two Dogmas of Empiricism*, «The Philosophical Review» 60/1 (1951), pp. 20-43.

¹⁵ K. Fine, *Neutral Relations*, «The Philosophical Review» 109/1 (2000), pp. 1-33.

external relations – for instance David Lewis’, whose effects, as we will see, reach the continental debate as well, or Ingvar Johansson’s distinction between internal, external and *grounded* relations¹⁶ – will help to clarify the implications of the debate.

The genealogy of the continental branch of the debate is more clear-cut. We may call the *classical* phase the one in which thinkers such as Bernard Bosanquet¹⁷, Brand Blanshard¹⁸ and Alfred N. Whitehead¹⁹ elaborated their systems. This phase went on, mainly in the English-speaking world, until the end of the sixties, with the last discussions between Blanshard and his critics on the *Review of Metaphysics*²⁰.

The classical phase is followed by the *French conjunction*: starting from the twenties, Jean Wahl spreads in France both the verbs of Hegelianism (in an existential fashion that stressed the figure of unhappy consciousness) and of pluralism, insisting on the importance of the relations debate for any further development of philosophy²¹. Then, in a time when relations were used to deny the possibilities of a metaphysics rather than to build philosophical systems, Gilles Deleuze will retrieve from Hume and Russell the cry of external relations, in order to affirm the radical independence of relations and the end of the philosophy of substance in favor of a thought of difference in itself²².

¹⁶ I. Johansson, *Ontological Investigations: An Inquiry into the Categories of Nature, Man and Society*, De Gruyter, Berlin 2004.

¹⁷ B. Bosanquet, *Logic, or The Morphology of Knowledge*, vol. 2, Clarendon, Oxford 1911.

¹⁸ B. Blanshard, *The Nature of Thought*, vol. 2, Allen & Unwin, London 1939.

¹⁹ A. N. Whitehead, *Science and the Modern World*, Cambridge University Press, Cambridge 1929; Id., *Process and Reality*, The Free Press, New York 1979; Id., *Adventures of Ideas*, The Free Press, New York 2010. Cf. J.-P. Alcantara, *On Internal Relations in Leibniz, British Neo-Realism and Whitehead*, «Logique et Analyse» 54/214 (2014), pp. 173-209; W. P. Alston, *Internal Relatedness and Pluralism in Whitehead*, «The Review of Metaphysics» 5/4 (1952), pp. 535-558; C. Frigerio, *Power, Possibility, and Agency: Speculative Realism and Whitehead’s Theory of Relations*, «Eidos: A Journal for Philosophy of Culture» 4/3 (2020), pp. 5-22.

²⁰ B. Blanshard, *Internal Relations and their Importance to Philosophy*, «The Review of Metaphysics» 21/2 (1967), pp. 227-236; B. Aune, *Blanshard and Internal Relations*, «The Review of Metaphysics» 21/2 (1967), pp. 237-243; A. Lazerowitz, *Internal Relations*, «The Review of Metaphysics» 21/2 (1967), pp. 256-261.

²¹ J. Wahl, *The Pluralist Philosophies of England & America* (Engl. transl. by Fred Rothwell), Open Court, Chicago 1925; Id., *Le malheur de la conscience dans la philosophie de Hegel*, PUF, Paris 1951. His most representative work remains *Vers le concret*, Vrin, Paris 2004.

²² See especially G. Deleuze, *Empiricism and Subjectivity* (Engl. transl. by C. Boundas), Columbia University Press, New York 2001; Id., *Difference and Repetition* (Engl. transl.

Finally, the *contemporary* phase in the continental debate begins in 2002, with the publication of Manuel DeLanda's *Intensive Science and Virtual Philosophy*²³, that recovers Deleuze's external relations, in which DeLanda's subsequent *assemblage theory* is grounded. The debate rapidly regains its importance, especially thanks to Graham Harman, the champion of *Object-Oriented Ontology* (OOO), which agrees «with those who accept nothing but external relations. Nothing is allowed to contain anything else; all objects are mutually external to other objects»²⁴. Today, «speculative realism» – the heterogeneous movement that has given new life to metaphysics in the twenty-first century²⁵ – presents a «profound internal gulf» between «those who take individual entities as primary and those who view them as derivative»²⁶ – that means, between those who take relations to be external and those who take them to be internal. After almost one hundred and thirty years, the debate over internal and external relations is livelier than ever.

Now, whoever has a bit of familiarity with the debate knows that it has been much more articulated than the simple opposition between “internal” and “external” relations: it is almost impossible to find two philosophers who, by internal and external relations, mean exactly the same thing. Relations are the agents of the complexity of the world; as such, they are irreducible to any simplistic treatment that opposes two rival perspectives. Every history of the debate over internal and external relations should begin by admitting the inadequacy of the Manichean vocabulary of interiority and exteriority, and by providing a new vocabulary for a more consistent discussion.

Take for instance the literature about Deleuze. The latest works on Deleuze's theory of relations are Arjen Kleinherenbrink's *Against Continuity*²⁷, and Laura Candiotta and Giacomo Pezzano's *Filosofia delle*

by P. Patton), University of Minnesota Press, Minneapolis 1995; G. Deleuze-C. Parnet, *Dialogues* (Engl. transl. by H. Tomlinson-B. Habberjam), Columbia University Press, New York 1987.

²³ M. DeLanda, *Intensive Science and Virtual Philosophy*, Continuum, London 2002.

²⁴ G. Harman, *Prince of Networks. Bruno Latour and Metaphysics*, Re-Press, Melbourne 2009, p. 135.

²⁵ For an overview, see L. Bryant-N. Srnicek-G. Harman (eds.), *The Speculative Turn: Continental Materialism and Realism*, Lightning Source Inc., La Vergne 2011.

²⁶ G. Harman, *Response to Shaviro*, in L. Bryant et al., *op. cit.*, pp. 291-303, p. 294.

²⁷ A. Kleinherenbrink, *Against Continuity: Deleuze's Speculative Realism*, Edinburgh University Press, Edinburgh 2019.

*relazioni*²⁸, both from 2019. The first is a provocative reading that makes Deleuze adhere to OOO, thus eliminating relations; the second is an “interaction” between Deleuze and Ladyman and Ross’s (2007) *Ontic Structural Realism* (OSR)²⁹, that argues that matter is *relations without relata*, relations being the only reality. What is disturbing is that both these diametrically conflicting interpretations – «Ladyman and Ross are perhaps the most anti-object-oriented philosophers one could imagine»³⁰ – claim to be loyal to Deleuze’s exteriority of relations.

The possibility of such divergent readings of a single thesis is explained by the conceptual drift that the distinction between internal and external relations undergoes after its initial elaboration. This plurivocity is reinforced both synchronically, with the breakup between analytic and continental philosophy, and diachronically, with a dialectical alternation of doctrines for which this paper will briefly account. The interiority and exteriority of relations are not well defined “axioms”; they are merely nominal groupings of intuitions and tendencies, that often share nothing and sometimes even contradict one another.

The aim of this paper is to offer a new conceptual framework to interpret this proliferation of meanings of the distinction between internal and external relations, through a genealogical inquiry into some fundamental joints of the debate³¹. It will focus especially on the continental branch because, as we will see, in the analytic field the use of the distinction between internal and external relations remains until recent years the same imposed by Russell at the beginning of the debate, whilst in the continental debate the question is much more complicated right from the start. However, the concepts

²⁸ L. Candiottio-G. Pezzano, *Filosofia delle relazioni: Il mondo sub specie transformatio-nis*, Il Nuovo Melangolo, Genova 2019.

²⁹ J. Ladyman-D. Ross, *Every Thing Must Go: Metaphysics Naturalized*, Oxford University Press, Oxford 2007.

³⁰ G. Harman, *I Am Also of the Opinion that Materialism Must Be Destroyed*, «Environment and Planning D: Society and Space» 28 (2010), pp. 772-790, p. 773.

³¹ This genealogical approach is what above all distinguishes this paper from other attempts to clarify the heterogeneity of the distinction between internal and external relations: cf. J. M. Dunn, *Relevant Predication 2: Intrinsic Properties and Internal Relations*, «Philosophical Studies» 60/3 (1990), pp. 177-206; J. Schaffer, *The Internal Relatedness of All Things*, «Mind» 119 (2010), pp. 341-376; F. Clémentz, *Internal, Formal and Thin Relations*, 2012, <http://www.unige.ch/lettres/philo/mulligan/festschrift/Clementz-paper.pdf> [08.03.2022]; P. Rojek, *Internalisation of Relations*, «Philosophia» 48 (2020), pp. 1575-1593.

that we will extract from the continental debate can be used to treat the analytic debate as well: one of the results of this investigation should be the construction of a common ground of commensurability between the two branches, so that the intuitions of thinkers from different traditions can interact once again.

Abandoning the polar opposition of internal and external relations, we will multiply the distinctions between various *models* of relationality. With «model» we mean a minimal grouping of features that defines a certain idea of what a relation is and what a relation does. No one in the debate displays a model in a pure form: models are specified, declined in heterogeneous manners, melted and superimposed; models must be treated as archetypes, of which the effective theories of relations participate more or less. The minimal features defining them will be expressed as *theses*, assumptions around which the whole debate revolves. This proliferation of models and theses aims to “deconstruct” the oppositive vocabulary of internal and external relations: we will find only one model (Russell’s model of external relations) which is uniquely associated to one of the two parties. Depending on the phase of the debate, on the continental or analytic context and on the philosophic idiosyncrasies of the authors, the same model may be grouped now on the side of interiority, now on that of exteriority, and the participants to the debate themselves tend to use internal and external relations more as banners, a symbol of certain intuitions or philosophical temperaments than as defined concepts. The following genealogy aims to furnish a conceptual vocabulary that may be used as a base vocabulary for any further discourse around relations.

2. A Drift of Relations

In the oldest use of the distinction, internal relations are meant as those between the components of an entity, and external relations as those between that entity and what surrounds it³². With Levi Bryant³³, we will refer to this difference as that between *endo-relations* and *eso-relations*:

ENDO-RELATIONS: the relations between the components of an entity, the relations that compose it.

³² Cf. F. H. Bradley, *Ethical Studies*, King & Co., London 1876; H. Spencer, *The Principles of Psychology*, vol. I, Appleton, New York 1896, p. 387.

³³ L. Bryant, *The Democracy of Objects*, Open Humanities, London 2011, p. 68.

ESO-RELATIONS: the relations between an entity and its environment.

For instance, the endo-relations of an organism are those between its organs, its eso-relations are those with its environment; the endo-relations of a state are those constituting its structure, its eso-relations are the international ones. The problem animating the debate is transversal to this distinction: to ask if relations are internal or external will mean to ask simultaneously which is the nature of the endo-relations constituting an entity and of the eso-relations that link it to the other elements of the world.

It is with this question that the conceptual plurivocity of relations explodes. In a classic examination of idealism, A. C. Ewing³⁴ distinguished ten different meanings of internal relations, and according to someone this is an understatement³⁵. Without exceeding in analytical zeal, in the first instance we will stick to the distinctions which are necessary to the elaboration of a functional vocabulary for the exploration of the debate.

Let us consider the core thesis of the main traditional theories of relations:

REDUCIBILITY THESIS: relations are reducible to monadic properties of substances, and relational statements are rewritable as statements including only non-relational properties.

Russell defined the axiom of internal relations that according to which «Every relation is grounded in the nature of the related terms»³⁶. Thus, according to Russell, the models of internal relationality are those that accept the reducibility thesis. We will call this meaning of interiority the model of *supervenient* relations:

SUPERVENIENT RELATIONS: relations supervene on non-relational properties that inhere in some kind of substance – analytically speaking, relational statements have non-relational truthmakers – and are thus *reducible* to those properties.

³⁴ A. C. Ewing, *Idealism: A Critical Survey*, Methuen & Co., London 1934.

³⁵ Cf. J. Schaffer, *op. cit.*

³⁶ B. Russell, *The Monistic Theory of Truth*, in *Philosophical Essays*, Longmans, Green & co., London 1910, pp. 150-169, p. 160.

For instance, in the statement *Paris loves Helen*, there is actually no relation called *love* that lies *between* the two terms. The relational statement is a shortened way of expressing two statements indicating monadic properties of the terms: Paris's *love for Helen* and Helen's *being loved by Paris*. Identically, on A's property of *being blue* and B's property of *being black* the relational statement *B is darker than A* supervenes.

The model of supervenient relations is typical of the ontologies based on the inherence of properties in a substance. Thus, it is tied to the subject-predicate form in logic:

This claim that relations are to be grounded in the natures of their terms is really a claim that all propositions are to be of the subject-predicate form, so that instead of saying 'A and B have such-and-such a relation', we should say 'A has such-and-such a property and B has such-and-such another; these properties being part of the natures of A and B'³⁷.

Relations according to this meaning are a sort of ontological holograms: they «are not an ontological addiction», «They are an ontological free lunch»³⁸. From the reducibility thesis we may get a supplementary thesis, one of the reasons of the traditional subordination of relations to substances³⁹:

DEPENDENCY THESIS: relations can change only if the terms change.

Given their lack of autonomy, with supervenient relations «when you are given the terms of the relation, you are given the relation»⁴⁰.

The extreme instance of this model is represented by Leibniz's denial of «extrinsic denominations»: according to Leibniz, every extrinsic denomination – that is, every relational property – is grounded in an intrinsic denomination – that is, a non-relational property⁴¹. The terms of the debate are defined precisely by the publication, in 1900, of

³⁷ Id., *The Nature of Truth*, «Mind» 15/60 (1906), pp. 528-533, p. 530.

³⁸ D. Armstrong, *Sketch for a Systematic Metaphysics*, Oxford University Press, Oxford 2010, p. 25.

³⁹ For Aristotle (*Met.* 1088a 30-1) only relative terms have no form of movement which is their own.

⁴⁰ D. Armstrong, *Sketch for a Systematic Metaphysics*, cit., p. 25.

⁴¹ Cf. A. Jauernig, *Disentangling Leibniz's Views on Relations and Extrinsic Denominations*, «Journal of the History of Philosophy» 48/2 (2010), pp. 171-205.

Russell's *A Critical Exposition of the Philosophy of Leibniz*, that restates the reducibility thesis as the thesis that «no relation is purely external»⁴². Exploiting the resources offered by Frege's renewal of logic⁴³, Russell develops his model of *external* relations – we will retain this name since in this model relations are *literally* external to terms – in order to refute this thesis, affirming the «independent reality of relations»⁴⁴:

EXTERNAL RELATIONS: relations are ontologically fundamental; the truthmakers of relational statements are relational themselves. Relation is a *third* entity that lies *between* the terms and is ontologically autonomous; it can therefore change without the terms changing, just as terms may change without relations changing.

Here begins the semantic slipping that immediately gives to the interiority of relations a meaning which is different from the supervenient one. The confrontation with Leibniz hides a deeper controversy with idealistic monism, represented in the anglophone world by Bradley. Russell's critique aims to show that «Leibniz fell into Spinozism whenever he allowed himself to be logical»⁴⁵, that monadology and monism share the same theory of internal relations, allowing Russell to attack with the same arguments two apparently irreducible perspectives.

Let us consider the relation of *diversity*, which should ground pluralism. Admitting external relations, diversity may be accounted for as a single relation *between* the terms. But the supervenient model must explain it using only the attributes of the different entities. However:

if there really are two things, A and B, which are diverse, it is

⁴² B. Russell, *A Critical Exposition*, cit., p. 45.

⁴³ «The dominance of the Aristotelian logic of terms was a very strong supplementary reason for the attractiveness of the supervenience-thesis. In the frame of this logic there was no easy and natural way to express a relation that would not reduce to certain monadic properties of its terms and thus it was a very natural tendency to interpret all relations as so reducible. Frege's notation, operating with quantifiers, individual terms and n-adic predicate symbols of the arbitrary adicity, changed this picture dramatically. In the frame of this notation there is indeed nothing easier than to concatenate an n-adic predicate-symbol with n individual terms. Since Frege there was therefore nothing in the logic itself which could support the supervenience-thesis» (A. Chrudzimski, *Internal, External and Intra-Individual Relations*, «Axiomathes» 15 (2005), pp. 487-512, p. 489).

⁴⁴ B. Russell, *A Critical Exposition*, cit., p. 17.

⁴⁵ Ivi, p. XVI.

impossible to reduce this diversity wholly to adjectives of A and B. It will be necessary that A and B should have *different* adjectives, and the diversity of these adjectives cannot, on pain of an endless regress, be interpreted as *meaning* that they in turn have different adjectives⁴⁶.

If this were the case, «different from A» should bear the adjective «different from (different from B)», that should be different from «different from (different from A)», in an infinite regress. This is why,

if there is to be any diversity, there must be a diversity not reducible to difference of adjectives, i.e. not grounded in the “natures” of the diverse terms. Consequently, if the axiom of internal relations is true, it follows that there is no diversity, and that there is only one thing. Thus the axiom of internal relations is equivalent to the assumption of ontological monism and to the denial that there are any relations. Wherever we seem to have a relation, this is really an adjective of the whole composed of the terms of the supposed relation⁴⁷.

Russell’s argument allows him to group monism and monadism under a single label, that of internal relations, attributing to monism the reducibility thesis, the subject-predicate form in logic and thus the model of supervenient relations⁴⁸. We may formalize the argument starting from these premises:

1. pluralism requires a strong concept of diversity;
2. diversity is a relation;
3. the model of supervenient relations reduces every relation to the properties of its relata.

From these premises, Russell makes the following inferences:

⁴⁶ B. Russell, *The Monistic Theory of Truth*, cit., p. 163.

⁴⁷ *Ibidem*.

⁴⁸ Otherwhere Russell gives the same argument starting from the end: when the subject-predicate point of view «is confronted by a relational proposition, it has two ways of dealing with it, of which the one may be called monadistic, the other monistic. Given, say, the proposition aRb , where R is some relation, the monadistic view will analyse this into two propositions, which we may call ar_1 and br_2 , which give to a and b respectively adjectives supposed to be together equivalent to R . The monistic view, on the contrary, regards the relation as a property of the whole composed of a and b » (B. Russell, *Principles of Mathematics*, cit., p. 223).

4. in order to account for the relation of diversity, the model of supervenient relations must reduce it to a diversity between the attributes of the terms;
5. thus, we find a new relation of diversity asking to be grounded, generating an infinite regress;
6. therefore, if the model of supervenient relations is true, no genuine relation of diversity can exist;
7. monadism, adopting this model, cannot include diversity and is brought back to a monism of the universal substance.

Up to here, the argument has a certain plausibility, even if premise (2) may be discussed⁴⁹. But Russell makes two further steps:

8. monism and monadism share the model of supervenient relations;
9. monism, like monadism, denies the irreducible reality of relations.

The last two steps are evidently fallacious. The argument can demonstrate that the supervenient model reduces to monism, but in no way it demonstrates, as Russell seems to assume, that in turn every monism shares the supervenient model and the reducibility thesis⁵⁰. It is true that Russell can corroborate his thesis with Bradley's denial of the reality of relations; but this is an idiosyncrasy of Bradley's rather than a general feature of monism. The «axiom of interiority» attacked

⁴⁹ From the perspective of substance ontology, the major view is on the contrary that relations *presuppose* numeric difference rather than producing it, that an ontology of bare particulars can include irreducible substances with no need for any relation (cf. E. Allaire, *Another Look at Bare Particulars*, «Philosophical Studies» 16/1 (1965), pp. 16-21). In fact, a possible reading of Aristotle's foundation of substantialism in the *Categories* is that he was defending the priority of substance over relation because any relation presupposes an initial difference, irreducible to its relata (cf. F. Morales, *Relational Attributes in Aristotle*, «Phronesis» 39/3 (1994), pp. 255-274; R. Dipert, *op. cit.*).

⁵⁰ Russell only once tries to distinguish in the interiority axiom «two possible meanings, according as it is held that every relation is really constituted by the natures of the terms or of the whole which they compose, or merely that every relation has a ground in these nature» (*The Monistic Theory of Truth*, cit., p. 162). It may be that Russell was here referring to something similar to the distinction between supervenient and constitutive relations, but he immediately drops it, so that it is not clear how he can assume that both the supervenient model and the constitutive one eliminate relations: «that would be the case only if relations were not simply grounded in the intrinsic properties of their terms but completely reducible to them» (N. Griffin, *Bertrand Russell et Harold Joachim*, «Philosophiques» 36/1 (2009), pp. 109-130, p. 124).

by Russell is thus purely nominal, an arbitrary grouping of monism, supervenience and elimination of relations, without there being any necessary link between these elements and the thinkers embracing them.

The confusion will be reinforced by the monist thinkers that, polemicizing with Russell's external relations, will adopt the banner of internal relations, with a meaning that is however very different from that of the supervenient model. To the reducibility thesis they will substitute this one⁵¹:

RELEVANCE THESIS: if the relation changes, the terms change.

This thesis can be expressed in various ways: we may say that relations modify the nature of their terms, or that they "make a difference" for the terms, or that the terms do not exist independently of their relations. Analytically speaking, this is the view that, if *a* and *b* are related by *R*, whereas *c* and *d* are not thus related, then (*c*, *d*) cannot be identical with (*a*, *b*). Relations affect their terms so intimately that when they are modified, the terms themselves are modified in some essential way⁵².

This thesis was explicitly denied by Aristotle and substantialism, for which there was no movement according to relation since the relation could change without the terms changing⁵³. But it was also refuted by Russell, whose relations were *literally* external, so that they could not affect the identity of the terms:

no relation ever modifies either of its terms. For if it holds between A and B, then it is between A and B that it holds, and to say that it modifies A and B is to say that it really holds between different terms C and D. To say that two terms which are different if they were not related, is to say something perfectly barren; for if they were different, they would be other, and it would not be the terms in question, but a different pair, that would be

⁵¹ The expression «relevant relations» comes from B. Bosanquet (*op. cit.*), the first to understand that the "interiority axiom" was not as univocal as its critics thought.

⁵² For instance, one of the sources of the debate was T. H. Green's thesis that, against Hume's atomic view of ideas, «on the recognition of relations as constituting the nature of ideas rests the possibility of any tenable theory of their reality» (T. H. Green, *Introduction*, in D. Hume, *A Treatise of Human Nature*, Longmans, Harlow 1874, p. 153).

⁵³ Aristotle, *Phys.* 225b11-14.

unrelated. The notion that a term can be modified arises from neglect to observe the eternal self-identity of all terms and all logical concepts, which alone form the constituents of propositions. What is called modification consists merely in having at one time, but not at another, some specific relation to some specific term; but the term which sometimes has and sometimes has not the relation in question must be unchanged, otherwise it would not be *that* term which has ceased to have the relation⁵⁴.

The defenders of relevance talk about their thesis as that of the “interiority” of relations, not because relations are internal attributes of a substance (this was true for the reducibility thesis and the supervenient model); but because relations penetrate the terms, affecting their constitution and modifying their identity. From the relevance thesis comes the model that, in the continental debate, is what is usually meant talking about internal relations; we may name it the model of *constitutive* relations⁵⁵:

CONSTITUTIVE RELATIONS: just like the model of external relations, it refutes the reducibility thesis; but, contrary to external relations, the relevance thesis is here accepted. If relations are constitutive, terms depend on them in such a way that to modify the relation means to modify the nature of the terms. This dependence is bilateral: relations change when the terms change, and terms change when relations change.

The constitutive model shares with the external one the refusal of the reducibility thesis: for both, relations have an ontological consistence which is their own, irreducible to monadic properties. The difference between the two consists in the effect that relations have on terms. External relations deny the relevance thesis: terms are not essentially dependent on the relations they bear to other entities, they subsist independently one from another. Russell retains the traditional meaning of substance as independent of relations, while refuting its role of *hypokeimenon*, of substratum of accidents and subject of predications: the external model is thus well summarized by Spaulding saying that «*relationality and independence are compatible*»⁵⁶.

⁵⁴ B. Russell, *The Principles of Mathematics*, cit., pp. 454-5.

⁵⁵ The expression comes from G. Stout, *Things, Predicates and Relations*, «Australasian Journal of Psychology and Philosophy» 18/2 (1940), pp. 117-130.

⁵⁶ E. G. Spaulding, *The New Rationalism*, Holt, New York 1918, p. 177.

On the contrary, the terms of a constitutive relation bear with one another, if not an «existential dependence» for which they would not exist without the others, at least an «essential dependence»⁵⁷: they would not be what they are outside of the relations in which they are included. This is why an internal relation, when meant thus, is above all an *essential* relation, without which the nature of the terms themselves is lost.

The choice between external and constitutive relations has radical metaphysical consequences. Just consider the issue of modalities. In his reworking of the terms of the debate, J. Michael Dunn⁵⁸ has distinguished under the labels of «reductionist account» and «intimate account» what we are distinguishing as the models of supervenient and constitutive relations. He adds a third account, the «modal» one: internal relations are often said to be *necessary* relations, at least since Moore⁵⁹ posed the problem in these terms. A more moderate classification is proposed by Jonathan Schaffer⁶⁰, who distinguishes as «internal (intrinsic)» and «internal (essential)» our supervenient and constitutive relations, adding then «internal (constraining)» relations, relations which preclude the free recombination of their relata. We will not take the modal account as a distinct one. The modal question is a fundamental one in the debate, but it seems to supervene on the question of relevance: if relations are not relevant to their terms they can be freely changed, while if they compenetrates the nature of their terms there is a friction that forbids free recombination. Contingency is the modal mark of non-constitutive relations, while the constitutive model, even if it does not imply a strict necessity of relations, should embrace at least the concept of “constraint” used by Schaffer. Thus, we may list three theses that derive from the refusal of the relevance thesis:

SEPARABILITY THESIS: a compound is separable in its parts without these parts losing any essential feature.

DISLOCATION THESIS: relations between things have no intrinsic necessity; a thing may be moved from a set of relations to another without modifying its identity.

⁵⁷ S. French, *The Structure of the World*, Oxford University Press, Oxford 2014, p. 165.

⁵⁸ J. M. Dunn, *op. cit.*

⁵⁹ G. E. Moore, *op. cit.*

⁶⁰ J. Schaffer, *op. cit.*

RECOMBINATION THESIS: generalizing the dislocation thesis, the elements of the world may be taken apart and rearranged at will, without violating any fundamental law.

«*A disconnected pluralistic heap should be amenable to free recombination*»⁶¹: thus, the impossibility of free recombination – *pace* David Lewis⁶² on the analytical side or Quentin Meillassoux⁶³ on the continental one – should be enough to refute a world of merely irrelevant relations.

On the contrary, for a thinker of constitutive relations, «just as the relations modify the natures of the relata, so the relata modify the nature of the relation»⁶⁴. Differently from the supervenient model, here the dependence is reciprocal, not only of relations on terms. If a relation is relevant, it changes when its terms change, and the other way around. Then, modifying A, its relation R to B changes, and if R changes B itself changes. Therefore, constitutive relations hint towards a world as a whole in which parts are interconnected and cannot subsist independently:

INTERCONNECTION THESIS: given the relevance of relations, when an entity changes, the entities related to – virtually, the whole universe – change too: as Blanshard said⁶⁵, difference anywhere means difference everywhere.

The difference between external and constitutive relations is thus first of all that between pluralism and monism. It is on this opposition that much of the continental debate will revolve: born as a fight around the question of *reducibility*, the debate over internal and external relations becomes within a few years a debate around the *relevance* of relations. The affirmation of irreducibility, that had caused Russell's attack on tradition, becomes for continental philosophy almost trivial after his work, so that thinkers begin to tussle on how deep the effect of these irreducible relations is on the entities of the world. Russell was the major responsible for this shift, but he was the last to realize it happened, and he was never able to distinguish

⁶¹ Ivi, p. 351.

⁶² D. Lewis, *On the Plurality of Worlds*, Wiley-Blackwell, Hoboken 2001.

⁶³ Q. Meillassoux, *After Finitude. An Essay on the Necessity of Contingency* (Engl. transl. by R. Brassier), Continuum, London 2009.

⁶⁴ A. N. Whitehead, *Adventures of Ideas*, cit., p. 157.

⁶⁵ B. Blanshard, *The Nature of Thought*, cit., p. 292.

the two questions of reducibility and relevance, just like he was never able to discern the supervenient and the constitutive model.

It should be noted that the supervenient model remains quite neutral about many questions that oppose exteriority and relevance. For instance, Aristotle and Leibniz share the supervenient model; but while Aristotelian essentialism makes some properties intrinsic to a substance and anticipates externalism in the refusal of the relevance thesis⁶⁶, Leibniz combines the most radical supervenience with the most radical relevance of relations, accepting the interconnection thesis. The various models may be summarized with respect to the two main theses in a table that shows how Russell's «interiority axiom» has no real unity, grouping thinkers (monists, monadists, essentialists) that disagree on both reducibility and relevance:

	REDUCIBILITY	IRREDUCIBILITY
RELEVANCE	Monadology (Leibniz)	Monism
IRRELEVANCE	Essentialism (Aristotle)	Logical atomism (Russell)

3. *Objects and Structures*

In the contemporary continental debate, internal relation still means constitutive relation. The conceptual drift has favored the meaning that for Russell was derivative. But this has the curious consequence of overturning the terms of the polarity. Interiority meant for Russell the denial of any form of relationality; on the contrary, his exteriority axiom was meant to affirm the reality of relations. But refuting the relevance thesis, exteriority gives to relations a less important status than internal (constitutive) relations do: once the supervenient option is overcome, the external model becomes, compared to the constitutive one, a way of weakening the ontological consistence of relations. We get to the point that, in the contemporary phase of the debate, *external relationality means non-relationality*. This is especially the case of Graham Harman's Object-Oriented Ontology, for which the exteriority of relations means that, concretely, *relations do not exist*. What we usually call a relation is just the effect of the *inclusion* of

⁶⁶ Cf. R. Gupta, *The Doctrine of Internal Relations with Reference to Some of the Main Historical Treatments*, 1966, <https://core.ac.uk/download/pdf/78865378.pdf> [07.04.2021].

smaller objects in larger objects. We may call this model of exteriority – recalling Harman’s theory of «vicarious causation» – the model of vicarious relations:

VICARIOUS RELATIONS: relations do not exist. What we usually call a relation between two objects is just the *inclusion* of both objects in a third, larger object that does not exhaust their being, leaving them substantially free and autonomous. The supposed movement of relations is just the internal movement of this larger object.

Even if we lack the space to inquire more thoroughly into Harman’s object-oriented philosophy⁶⁷, these hints should be enough to show how a centenarian conceptual twist brings this heir to Aristotelian substantialism⁶⁸ to embrace the «axiom» of «external relations» that was initially designed to fight substantialism.

This explains the contradictory interpretations of relationality in Deleuze: the breakup between analytic and continental philosophy produces two incommensurable meanings of the internal-external opposition. The continental tradition still talks about internal relations meaning constitutive relations: Kleinherenbrink’s book, adopting Harman’s object-oriented perspective, is the extreme fruit of the assumption of exteriority as the negation of the relevance of relations.

The analytic tradition has instead held to the meaning of interiority as *supervenience* with which the debate had started: in the analytic field, to oppose internal and external relations still means to ask if the truthmakers of relational statements are themselves relational. Candiotta and Pezzano take up the debate where it had been left by Ladyman and Ross, which had in turn defined structural realism in opposition to David Lewis. In the analytical vocabulary of *On the Plurality of Worlds*, internal relation means supervenient relation; the definition of external relations is instead original: relations are external when «they do not supervene on the intrinsic natures of the rela

⁶⁷ For a self-presentation, see G. Harman, *Object-Oriented Ontology: A New Theory of Everything*, Pelican Books, New York 2018. For a critique of his radical externalism, cf. P. Wolfendale, *Object-Oriented Philosophy: The Noumenon’s New Clothes*, Urbanomic, London 2014.

⁶⁸ Cf. E. Salem, *Object and Οὐσία: Harman and Aristotle on the Being of Things*, in A. Greenstone-R. Johnson (eds.), *Contemporary Encounters with Ancient Metaphysics*, Edinburgh University Press, Edinburgh 2017, pp. 224-242.

taken separately, but only on the intrinsic character of the composite of the relata»⁶⁹. For instance, the distance between a proton and an electron is an external relation because it does not analytically supervene on the natures of the terms in isolation, but it will once they are joint in an atom, in which the distance between proton and electron is necessary. In Lewis's terminology, an external relation is just a higher order supervenient relation.

Adopting Lewis's vocabulary, but accepting the evidence of quantum mechanics, Ladyman and Ross define their ontic structural realism as the discovery of a relationality *even more external* than the one Lewis called external. Thus, they arrive at the real emancipation of relations from substances, in the shape of *structure*:

unlike external relations, the non-supervenient relations into which several quantum particles may enter are not even supervenient on the relational properties which their relata possess independently of each other. They are much more independent of the properties of the individual particles than spatio-temporal relations between classical objects⁷⁰.

The relevance thesis tends to make relation a metaphysically primitive element with a *physis* and a *dynamis* that are its own and that free it from the subordination to substance. However, there are many possible versions of the relevance thesis. There are cases in which objects and relations have the same ontological dignity: objects do not exist outside of relations, but relations are always relations between objects⁷¹. But it is also possible to defend the idea that rela-

⁶⁹ D. Lewis, *op. cit.*, p. 76.

⁷⁰ J. Ladyman-D. Ross, *op. cit.*, p. 150.

⁷¹ Instances are Whitehead's dialectical relation between entities and prehensions, or *moderate structural realism*: «neither objects nor relations (structure) have an ontological priority with respect to the physical world: they are both on the same footing, belonging both to the ontological ground floor. It makes no sense to assign an ontological priority to objects, because instead of having fundamental intrinsic properties, there are only the relations in which they stand. In other words, an object as such is nothing but that what bears the relations. As regards the relations, it makes no sense to attribute an ontological priority to them, for at least insofar as they exist in the physical world, they exist as relations between objects. In sum, as far as the physical world is concerned, there is a mutual ontological as well as conceptual dependence between objects and structure (relations)» (M. Esfeld-V. Lam, *Moderate Structural Realism about Space-Time*, «Synthese» 160/1 (2006), pp. 27-46, pp. 31-32).

tions are *even more fundamental* than objects, that objects are not just affected by relations but *generated* by them. We may formalize this idea as a thesis:

GENERATIVITY THESIS: relations are not just fundamental in defining the essence of their terms: concretely speaking, relations *generate* their terms.

The possibility of *relations without relata* is strongly counterintuitive for the heirs of a tradition which has given absolute preeminence to independent substances on which relations supervene. In the classical phase of the debate this idea is still evoked only to ridicule it⁷². But the idea of relation as the first ontological category is not contradictory. Structural realism is one way of incarnating the generativity thesis. Modern science suggests that «the world is structure and relations. Individual things are locally focused abstractions from modal structure»⁷³. This is how Candiotta and Pezzano assume the exteriority of relations. We will define it as a model:

STRUCTURAL RELATIONS: relations are not only real, but the structure they interweave is ultimately the only reality. Terms are *knots* of relations that subsist momentarily, pragmatic devices that we find useful for our aims. The subject-predicate statements should be rewritten in an entirely relational form.

Structural realism tends to be deflationist towards objects: the identity of fixed entities *supervenies* on the relational structure, and objects are reduced to *pragmatic devices* that allow us to handle the structure spotting some regularities. The accusation of absurdity to the generativity thesis may derive from an incapacity to get out of the substantialist point of view and to think relations in themselves – that is to say, from the flattening of relations on *relational properties* attributed to substance: «relational properties *presuppose* the existence of the

⁷² It is considered absurd from both defenders of relevance and exteriority, even if, for instance, Russell (quoted in F. H. Bradley, *Selected Correspondence: January 1905-June 1924*, Thoemmes, Bristol 1999, pp. 67-68) and G. Stout (*op. cit.*, p. 124) attribute it to T. H. Green. Bradley, while denying its intelligibility, once contemplates (against Russell) the hypothetical possibility of a reality made entirely of relations, of «pure relations without terms», capable of generating their terms (F. H. Bradley, *Essays on Truth and Reality*, Clarendon, Oxford 1914, p. 305).

⁷³ J. Ladyman-D. Ross, *op. cit.*, p. 153.

individuals that are their owners, whilst relations may be conceived as *first of all* owned by the *whole* composed by the correlated entities⁷⁴. Individuals are ultimately knots of relationality; they result from a process of *refraction* of relations, they are singular points in an open infinity of relations.

4. Conclusion

In the analytical debate, the model of structural relations is synonym of the strongest exteriority not because it is opposed to the relevance thesis, but on the contrary because it is the perfect inversion of the reducibility thesis and of the supervenient model: non-relational statements are now thought to have relational truthmakers. It is this meaning of exteriority, characterized by an assumption of relevance so strong that relations are given a *genetic* role, the one vindicated by Candiotta and Pezzano. On the contrary, the one vindicated by Kleinherenbrink is the continental meaning of exteriority as irrelevance, if not inexistence, of relations.

We may represent in a table this explosion of meanings, distinguishing the classical or contemporary phase of the debate and the continental or analytic context. The models usually said to be of “external relations” are colored in green, whilst the “internal” ones are colored in orange:

	CONTINENTAL		ANALYTIC		
CLASSICAL	EXTERNAL non-reducibility non-relevance	CONSTITUTIVE non-reducibility relevance	EXTERNAL non-reducibility		SUPERVENIENT reducibility non-relevance
CONTEMP.	VICARIOUS reducibility non-relevance	CONSTITUTIVE non-reducibility relevance	STRUCTURAL generativity	EXTERNAL non-reducibility non-generativity	SUPERVENIENT reducibility non-relevance

This table must not be taken as absolute: for instance, Gilles Deleuze

⁷⁴ M. Morganti, *Che cos'è un oggetto*, Carocci, Rome 2010, pp. 59-60.

belongs to the continental tradition, but his defense of external relations reminds more of structural realism than of vicarious relations (Candiotta and Pezzano's reading appears more grounded than Kleinherenbrink's); Bertrand Russell, being the point of diffraction between the two traditions, displays both the analytic and continental ways of understanding the internal-external divide in the classical phase. The table however shows how the same battle cry is used by divergent and even contradictory positions: it is in order to avoid this risk that we should overcome the vocabulary of the opposition of internal and external relations, trying to distinguish more specific models of relations. A serious treatment of the relations debate should study how the questions of reducibility and relevance have been considered by the various thinkers, and how they generated the proliferation of models we have sketched.

This paper has laid some concepts that should help any further reconstruction of the debate. It has focused on the continental branch both because its genealogy is more clear-cut, and because its use of the distinction between internal and external relations is more divergent from Russell's original distinction than the analytic use; however, the five models we have distinguished can be used to treat the analytic branch as well. The conceptual framework offered by this paper should help to build a common ground of commensurability between the two traditions, in order to renew the possibility of a dialogue between them. This could bring to interesting speculations, for instance regarding the reasons why today it is difficult to find a defender of the supervenient model in continental philosophy, whereas Harman's model of vicarious relations does not seem to have a specular option in the analytic field: is this just a historical accident? Or are there specific differences in mentality between the two traditions that encourage certain views of relations? Either way, there are friends and foes of relations on both sides: the relevance thesis is radically refuted by both Lewis and Meillassoux; the constitutive model is shared by continental monists and analytic philosophers such as J. Schaffer, just like the structural one is shared by Deleuze and structural realism. This shows that the distance is not insuperable, that a common ground for discussion may still be built.