

The final chapter of the book is devoted to the question of the epistemological status of holistic pragmatism itself. White thinks of it as a thesis, a statement that may have been originally a very generalized description of the methods of science but has become normative. Yet, in its own spirit, that does not make it immune to correction. Still, as already noted, one is disinclined to modify or reject this sort of statement. White points out, correctly, that our resistance to reject or modify it is analogous to the reluctance of 19th century physicists to reject or modify the law of the conservation of energy. That law was “pinned down” but became later “unpinned”; the same may happen to holistic pragmatism. Here again, as so many times in this little book, one wants to thank its author for raising questions. Indeed the book as a whole is a challenge, a challenge to do philosophy (of culture), to fulfill its ambition.

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Resemblance Nominalism: A Solution to the Problem of Universals. GONZALO RODRIGUEZ-PEREYRA. Oxford: Clarendon Press, 2002. Pp. xii, 238.

As Rodriguez-Pereyra understands the Problem of Universals, solving it requires specifying the truthmakers of attributions of sparse properties to particulars, so as to resolve the “Many over One”—the puzzle of how the *same* particular can be *different* ways. According to Rodriguez-Pereyra, these truthmakers need not involve irreducible properties (universals or tropes); resemblances between particulars will do. Here I’ll set out Rodriguez-Pereyra’s version of resemblance nominalism and note certain of its problems, some of which can be answered with revisions that he could, *qua* nominalist, accept, and others for which the solution is not so clear.

Rodriguez-Pereyra understands resemblance to be an objective, primitive, 2-place “relation”, that is reflexive, symmetric, and non-transitive (§4.3).¹ His answer to the Many over One is motivated by a supposed conceptually necessary connection between resemblance and the sharing of a sparse (natural, fundamental) property (such that particulars share a sparse property iff they resemble), and is that “a particular can have many different properties by resembling many different groups of particulars [...]. The multiplicity involved in the Many over One is thus a multiplicity of groups of particulars that a certain particular resembles” (p. 53). Since talk of *a*’s resembling a group is shorthand for talk of *a*’s resembling each member of the group, what makes ‘*a* is *F*’ true is—putting it loosely—the fact that *a* resembles each member of the group of things which are *F*; or—to remove the apparent circularity—the conjunctive fact that *a* resembles *b* and that *a* resembles *c* ... and that *a* resembles *z* (where *a*, *b*, *c*, ... are, as it happens, exactly the things which are *F*). To resolve various difficulties² Rodriguez-Pereyra helps

¹ The scare quotes indicate that resemblance has a “special status” (p. 63), such that talk of resemblance neither involves commitment to irreducible properties, nor requires analysis in terms of further resemblances.

² E.g., the coextension problem for actualist nominalism, according to which distinct properties might be shared by all and only the same particulars at a world. Given an appropriately broad space of concrete possible worlds, supported by a combinatorial theory of possibility on which—with some few exceptions—any sparse (contingent) properties

himself to David Lewis's ontology of particulars as consisting of time-slices of concrete possibilia (§4.7), as well as a combinatorial theory of possibility (§5.3).³

As above, Rodriguez-Pereyra's truthmaker for '*a* is *F*' is the conjunctive fact that *a* resembles *b* and ... that *a* resembles *z*. But what makes true the resemblance claims (e.g., '*a* resembles *b*') corresponding to the conjuncts? Certain of Rodriguez-Pereyra's remarks (§4.8) suggest a *Tractatus*-like view of relational structure as not being due to additional ontology, which would suggest taking the truthmakers of resemblance claims to be primitive resemblance facts. But this is not Rodriguez-Pereyra's approach, as is indicated by his seeing Russell's regress, which assumes that relational structure requires a structuring entity, as threatening (Ch. 6). In response to this threat (§6.5), he rather suggests that *a* and *b* together are the truthmakers of '*a* resembles *b*': "Resemblance Nominalism can and must maintain that particulars resemble each other just in virtue of being the particulars they are, so that what makes '*a* and *b* resemble each other' true is just *a* and *b*" (pp. 120–1).

This is an unwise move. Rodriguez-Pereyra's primary objection to an "ostrich nominalist" view on which the truthmaker for '*a* is *F*' is *a* itself is that this view fails to appropriately distinguish truthmakers: "how can the same thing make true '*a* is white', '*a* is spherical', and '*a* is hot'?" In general, what makes *a* *F* must be something different from what makes it *G*, if *F* and *G* are different [sparse] properties" (p. 45). Parity of reasoning requires different truthmakers for '*a* is *F*' and '*b* is *F*', when *a* and *b* are different (non-overlapping) particulars. Moreover, it is plausible that the truthmakers of some claims are jointly the truthmakers for the conjunction of these claims. Hence if property attributions are conjunctions of resemblance claims, and the truthmakers of resemblance claims are just the resembling particulars, then the truthmakers for both '*a* is *F*' and '*b* is *F*' will be just *a*, *b*, ... , and *z*. Rodriguez-Pereyra's account thus faces the same difficulty as the (simpler) ostrich view he rejects.⁴ He would do better to take the truthmakers of

might not be co-instantiated, distinct such properties will be associated with distinct sets of resembling (actual and possible) particulars.

³ The Many over One for relations is resolved similarly: for a possible time-slice to stand in multiple relations is for it to be a member of multiple ordered sequences, where each sequence is part of a group of resembling ordered sequences (where resemblance between ordered sequences is defined in terms of a nominalistically acceptable function of resemblances between the particulars in the sequences) (p. 55).

⁴ In personal correspondence, Rodriguez-Pereyra denies this, on grounds that the truthmaking relation (that is, the "in virtue of" relation), is such that the truthmakers of some claims needn't jointly be the truthmakers for the conjunction of these claims. He presents the following case in support: suppose that the fact that *P* and the fact that *Q* jointly make true '*P* and *Q*'. Suppose also that there is a conjunctive fact that *P* and *Q*. Then the fact that *P* and *Q* makes true 'There is a conjunctive fact'. But the fact that *P* and the fact that *Q* do not jointly make true 'There is a conjunctive fact'. 'There is a conjunctive fact' is true in virtue of the fact that *P* and *Q*, not in virtue of the fact that *P* and the joint fact that *Q*.

For the case to work, it needs to be plausible that the joint holding of (the facts that) *P* and *Q* makes true '*P* and *Q*', but doesn't make true 'There is a conjunctive fact'. But this is implausible, and appealing to the "in virtue of" relation doesn't make it any less so. Whatever makes '*P* and *Q*' true also makes true 'There is a conjunctive fact', just as whatever makes true a specific existential claim also makes true 'Something exists'.

resemblance claims to be Tractarian facts, which account isn't obviously threatened by Russell's regress.

A long-recognized problem with resemblance nominalism is Goodman's (1966, pp. 162–4) "imperfect community difficulty", initially raised against Carnap's (1927/1967) version. Roughly, Carnap's suggestion was that membership in a maximal class α of resembling particulars (such that every pair of members of α resemble, and nothing outside the class resembles every member of α) is necessary and sufficient for the members of α to share a property. The imperfect community difficulty cuts against the sufficiency of the analysis. As a simple example: let a be F , G , and H ; b be F , P , and Q ; and c be R , P , and H . Then every pair of members of a , b , c resembles, but there is no property they all share.

In response (Ch. 9), Rodriguez-Pereyra introduces an iterative relation R^* , as follows:

two particulars are related by R^* iff they share a property; two ordered pairs of particulars $\langle x, y \rangle$ and $\langle u, v \rangle$ are related by R^* iff x and y share a property that u and v also share; $\langle \langle x, y \rangle, \langle u, v \rangle \rangle$ and $\langle \langle a, b \rangle, \langle c, d \rangle \rangle$ are related by R^* iff $\langle \langle x, y \rangle, \langle u, v \rangle \rangle$ share a property that $\langle \langle a, b \rangle, \langle c, d \rangle \rangle$ share; and so on. Then: what makes α a perfect community (a class whose members are all and only the particulars sharing a property) is that the members of α R^* each other, and the pairs of the members of α R^* each other, and the pairs of the pairs of the members of α R^* each other, and so on (p. 171).

Rodriguez-Pereyra takes R^* to be primitive, with references to "sharing a property" in R^* 's characterization being present just so R^* may be understood (the idea being that xR^*y is extensionally equivalent to the pre-theoretically understood ' x and y share some sparse property', when x and y are particulars). He also takes R^* to be a *resemblance* relation, reflecting the aforementioned conceptual connection between the sharing of properties and resemblance. There are two concerns with R^* , so understood.

First, it is unclear why Rodriguez-Pereyra's R^* -based account should count as resemblance nominalism. Before, what made a have a property was its resembling some other particulars. Now, what makes a have a property is its standing in R^* to some other particulars, and pairs involving a and these other particulars standing in R^* to each other, and pairs of these pairs standing in R^* to each other, and so on. But R^* is a "resemblance" relation only in the weak sense that there is a (symmetric) conceptual connection between the sharing of properties (in terms of which the primitive R^* was extensionally characterized) and resemblance. The claim that resemblance is doing ontological work in solving the problem of universals thus seems metaphysically empty.

Second, since Rodriguez-Pereyra's solution to the imperfect community difficulty doesn't crucially appeal to resemblance, why shouldn't nominalists prefer a solution that cuts out the complex middleman R^* and takes the perfection of communities to be primitive—or better yet, takes properties to be primitively natural

Note that taking the joint holding of P and Q to make true multiple truths does not undermine Rodriguez-Pereyra's (good) objection to ostrich nominalism, since different truthmakers are plausibly required for truths involving different sparse properties or different non-overlapping particulars. But different truthmakers do not seem necessary when one truth expresses the existential generalization of another, or when one truth (' a is F ') expresses the conjunction of some others (' a resembles b ', ' a resembles c ', ... , ' a resembles z '). Like all entities, truthmakers should not be multiplied beyond necessity.

classes (with the truthmaker of ‘ a is F ’ being a ’s membership in a natural class)? The latter approach is also motivated by a supposed conceptually necessary connection (between belonging to a natural class and sharing a property), but is simpler than Rodriguez-Pereyra’s, and moreover has the advantage of also solving the forthcoming companionship difficulty.⁵

These concerns would be met if R^* were a non-primitive relation, explicitly constructed from resemblance relations. Assuming the resemblance nominalist has in hand resemblance-based necessary and sufficient conditions on property individuation (as needed to cash out the references to “shared properties” in R^* ’s definition), R^* would provide a basis for defining perfect communities. But the imperfect community difficulty is aimed precisely at showing that such necessary and sufficient conditions are not in hand. Such a resemblance-based definition of imperfect communities is thus circular (and question-begging).

Hence Rodriguez-Pereyra faces a dilemma: either R^* is a primitive relation having nothing deep to do with resemblance, in which case his account introduces much complexity for no apparent advantage over other nominalist accounts, or else R^* is a non-primitive relation defined in terms of resemblance that is, unfortunately, circular. I don’t see any clear way out of this dilemma.

A similar problem threatens Rodriguez-Pereyra’s response to Goodman’s companionship difficulty (Goodman 1966, pp. 160–2; cf. Carnap 1927/1967, p. 112). This difficulty aims at showing that Carnap’s maximality condition is not necessary for some resembling particulars to share a property. The condition is imposed in order to rule out subclasses of classes of resembling particulars from being distinct property classes. So, for example, if a , b , c , and d are the only F particulars, and share no other property, then the maximality condition rules out a , b and c from sharing a property distinct from F . Unfortunately, the condition also rules out cases where a subclass of particulars does share a property distinct from that shared by members of the superclass, as when every F is a G , but some G s are not F . What is needed is a maximality condition making room for properties like F , that entail distinct properties.

Rodriguez-Pereyra’s response (Ch. 10) is intricate, but to see its main problem it suffices to note that it crucially appeals to his account of resemblance to degree n , according to which x and y resemble to degree n iff they share n properties (§4.4). Here again Rodriguez-Pereyra has a choice. Either he takes resemblance to degree n to be primitive, in which case it’s unclear what advantages his “resemblance” nominalism has over simpler nominalist accounts; or else he defines

⁵ Rodriguez-Pereyra might respond that class nominalism faces the “fatal” objection that it confuses explanans with explananda (since when particulars are members of a natural class, this is intuitively because they share a property, not *vice versa*): “Resemblance Nominalism ... does not make a ’s belonging to the class of F s a primitive and unexplainable fact, but accounts for it in terms of a ’s resemblances to the other members of the class” (p. 223). But first, resemblance nominalism faces an analogous objection, for when particulars resemble, this is intuitively because they share a property, not *vice versa*. Rodriguez-Pereyra replies (p. 201) first by denying the intuition and second, by maintaining that in any case satisfying intuitions is not the main goal of metaphysical theories. But the denial of the intuition is implausible (or so it seems to me); and if satisfying intuitions is not the main goal of metaphysical theories, then why is it fatal to class nominalism that it violates the above intuition? Second, as per the first point above, it’s unclear that Rodriguez-Pereyra is within his rights to cite advantages depending on resemblance, as opposed to R^* .

resemblance to degree n in terms of resemblance, in which case his solution requires, in circular and question-begging fashion, that he have in hand nominally acceptable necessary and sufficient conditions on property individuation. In the present case he may have a way out, however. As mentioned, Rodriguez-Pereyra endorses concrete possibilities and a combinatorial theory of possibility. Therefore, the properties at issue in the companionship difficulty must be such that F entails G only iff $\Box \forall x(Fx \supset Gx)$. There are two clear cases when this occurs: when G is a determinable of F , and when G is realized by F (e.g., is a functional property implemented by F); but Rodriguez-Pereyra denies that determinables are sparse, and realized properties are not sparse on any account of realization. If the entailed properties in the companionship difficulty are generally non-sparse, the difficulty would not arise for Rodriguez-Pereyra's explananda of sparse properties.

A final, epistemological, worry remains. An account of the truthmaker of ' a is F ' should presumably be compatible with one's knowing that a is F . But it is unclear that Rodriguez-Pereyra's account (returning to the pre- R^* account) is compatible with this: the truthmaker for ' a is F ' concerns resemblances between a and F -particulars spread throughout time and logical space, and how on earth is one to know that all these resemblances obtain? Going by his reply to a related objection (§4.12), Rodriguez-Pereyra would say that the objection presupposes that in order to know that p , one must know some proposition about the truthmaker for p under a "canonical" or "nature-revealing" mode of presentation, and this is false: one can know that this ring is gold without knowing that this ring is composed of element 79.

True enough; but the objection nonetheless raises a challenge for Rodriguez-Pereyra to provide a positive epistemic theory. On a familiar positive view of our epistemic access to natural kinds, one knows that this ring is gold by knowing that it has certain manifest properties which are reference-fixers for 'gold' (e.g., by knowing that the ring is yellow, malleable, etc.). But Rodriguez-Pereyra's epistemology can't be exactly parallel: if one knows that a is F by knowing that a has certain manifest properties which are reference fixers for ' F ', the initial concern reappears to target one's knowledge that a has these manifest properties. The worry thus remains that Rodriguez-Pereyra's solution to the Problem of Universals is incompatible with our knowledge of property attributions.

Because the additional complexity of his account does not purchase any advantages over simpler nominalist rivals, and because his account appears not to accommodate our knowledge of property attributions, Rodriguez-Pereyra fails to show that resemblance nominalism is a viable (much less the best, as he claims) solution to the Problem of Universals. Nonetheless, the clarity and ingenuity that Rodriguez-Pereyra brings to his Sisyphean project make his book well worth reading for any philosopher interested in the metaphysics of properties.⁶

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References

- Carnap, Rudolf. 1927/1967. *The Logical Structure of the World*. London: Routledge & Kegan Paul. Translated by Rolf George.
- Goodman, Nelson. 1966. *The Structure of Appearance*. Indianapolis: The Bobbs-Merrill Company, Inc., 2nd edition.
- Rodriguez-Pereyra, Gonzalo. 2002. *Resemblance Nominalism: A Solution to the Problem of Universals*. Oxford: Oxford University Press.