



Why Constitution is Not Identity

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WHY CONSTITUTION IS NOT IDENTITY*

Many ordinary things are made up of, or are constituted by, material things. For example, Michaelangelo's *David* is constituted by a particular piece of white marble; Mother Teresa was constituted by a particular human body; the first Union Jack was constituted by a particular piece of cloth, and so on. Exactly what this relation of material constitution is, however, has been the subject of vigorous debate.¹ Prominent philosophers² have claimed that the relation between a material thing and the thing that constitutes it is identity. In contrast to such philosophers, I want to resuscitate an essentialist argument against the view that constitution is identity. The form of argument³ I shall defend is this:

* I am indebted to Fred Feldman and to Max Cresswell for comments on a draft, and to Katherine Sonderegger for advice on presentation.

¹ For a useful taxonomy of solutions to famous puzzles about constitution, see Michael C. Rea, "The Problem of Material Constitution," *Philosophical Review*, CIV, 4 (October 1995): 525-52. One of the assumptions that generates the puzzles is what Rea calls the *identity assumption*: $\forall x \forall y \forall ps [(the\ ps\ compose\ x\ at\ t \ \&\ the\ ps\ compose\ y\ at\ t) \rightarrow (x = y)]$. This thesis is also called *mereological extensionality*, and, as Rea notes, it is often expressed by the claim "constitution is identity" (p. 528). Assuming that persons and bodies, say, are wholly composed of exactly the same molecules, my article may be seen as an attack on mereological extensionality, understood as Rea's identity assumption. For further discussion, see Peter Simons, *Parts: A Study in Ontology* (New York: Oxford, 1987).

² See, for example, Allan Gibbard, "Contingent Identity," *Journal of Philosophical Logic*, IV (1975): 187-221; Anil Gupta, *The Logic of Common Nouns* (New Haven: Yale, 1980); David Lewis, "Counterparts of Persons and Their Bodies," this JOURNAL, LXVIII, 7 (April 8, 1971): 203-11; Denis Robinson, "Re-identifying Matter," *Philosophical Review*, XCI, 3 (July 1982): 317-42; Stephen Yablo, "Identity, Essence, and Indiscernibility," this JOURNAL, LXXXIV, 6 (June 1987): 293-314.

³ If instances of this argument form are sound, then two things can occupy the same place at the same time. Friends of that view (though not necessarily friends of my argument that entails it) include Simons; David Wiggins, *Sameness and Substance* (Cambridge: Blackwell, 1980); Frederick C. Doepke, "Spatially Coinciding Objects," *Ratio*, XXIV, 1 (1982): 45-60; Judith Jarvis Thomson, "Parthood and Identity

- (1) x is essentially an F
 (2) y is not essentially an F
 \therefore (3) $x \neq y$

Arguments of this form are widely thought to be question begging, by both essentialists and anti-essentialists.⁴ My plan is to set out a particular instance of an argument of the form (1)-(3) and to defend it from both anti-essentialist and essentialist challenges. If we use the term 'constitution' here to refer to the target relation that is under investigation—the relation between, for example, Michaelangelo's *David* and the particular piece of marble that makes it up—then the conclusion of the argument that I shall defend entails that constitution is not identity. The reason that constitution is not identity will emerge in my defense of the argument form (1)-(3). Although a constructive account of constitution will have to await another occasion,⁵ my aim here is to vindicate an essentialist argument that shows that constitution is not identity, and to defend the argument in a way that shows why constitution is not identity.

I. A SAMPLE ARGUMENT TO BE DEFENDED

The argument for the conclusion that constitution is not identity can be illustrated by a variation on a justly famous example about a statue from Allan Gibbard (*op. cit.*). Although Gibbard used his example to support contingent identity, I shall use the variation to support a contrary view: constitution without identity. But my overall aim—to defend the argument form (1)-(3)—could be as well served by other illustrative arguments as by the one that I have chosen. So anyone who thinks that concrete things have some of their properties essentially, but that the sample argument about a particular statue is unsound, should select a different illustrative argument. All my arguments in defense of the validity of the statue argument could be deployed, *mutatis mutandis*, in defense of many other arguments of the form of (1)-(3). I chose an argument concerning a statue as a sample argument largely because of the prominence of statue cases in the literature.

across Time," this JOURNAL, LXXX, 4 (April 1983): 201-20; E. J. Lowe, "Instantiation, Identity, and Constitution," *Philosophical Studies*, XLIV (1983): 45-59; Vere Chappell, "Locke on the Ontology of Matter, Living Things and Persons," *Philosophical Studies*, LX (1990): 19-32; David S. Oderberg, "Coincidence under a Sortal," *Philosophical Review*, CV, 2 (April 1996): 145-71.

⁴ For an essentialist argument, see Michael Della Rocca, "Essentialists and Essentialism," this JOURNAL, XCIII, 4 (April 1996): 186-202. For anti-essentialist arguments, see the philosophers cited in footnote 2.

⁵ This project is underway in my "Unity without Identity: A New Look at Constitution" (manuscript, 1996). As I see it, the relation of constitution is asymmetrical as well as irreflexive.

Here is the variation on Gibbard's example. As a matter of actual fact, the Greek sculptor, Myron, cast a statue of a bronze discus thrower in 450 BCE.⁶ Unfortunately, the statue, *Discobolus*, has not survived and is known to us only by Roman marble copies. Now, suppose that Myron created *Discobolus* by first casting two pieces of bronze and then welding them together. That is, suppose that *Discobolus* and the piece of bronze that constituted it came into existence at the same instant when the two smaller pieces were welded. Since *Discobolus* is not extant, suppose that *Discobolus* and the bronze piece that constituted it were destroyed together, at the same instant, a century later. Slightly more fancifully, suppose further that while Myron was deciding how much metal alloy to use to bond the two smaller pieces together, he was pondering the single piece that would result from the two smaller pieces after he bonded them. With his attention so riveted on his welding, he declared: "I hereby dub the piece of bronze that will result from my welding 'Bronze Piece', or 'BP' for short." 'BP'—whose reference is fixed by the definite description, 'the piece of bronze that results from Myron's welding at time t '—rigidly refers to that particular bronze piece.

So *Discobolus* is the statue; BP is the piece of bronze that constitutes the statue. *Discobolus* and BP were, we may assume, wholly coincident throughout their entire histories, and they had the same color, shape, location, and so on. So much Gibbard would accept. But I want to argue against Gibbard and his allies that, nevertheless, mere spatiotemporal coincidence is not enough for identity. Here is an instance of the simple and well-worn argument form to which I alluded earlier:

The statue argument.

(4) *Discobolus* is essentially a statue.

(5) BP is not essentially a statue.

∴ (6) BP ≠ *Discobolus*

Taken at face value, the statue argument is obviously valid. What (4) affirms is this: anything that existed and was not a statue (at all times of its existence) would not be *Discobolus*.⁷ If (4) is true, then being a statue is a property that a statue cannot lose without going out of existence—just as being a three-sided figure is a property that a trian-

⁶ H. W. Janson, *History of Art* (Englewood Cliffs, NJ: Prentice-Hall, 1962), pp. 105-06. There are interesting philosophical questions about the status of the marble copies; but it would take us too far afield to consider them here.

⁷ More formally: $\forall x \forall t [(x = \textit{Discobolus}) \rightarrow \Box (x \text{ exists at } t \rightarrow x \text{ is a statue at } t)]$.

gle cannot lose without going out of existence. Thus, (4) takes 'statue' as a substance sortal (like 'human being'), as opposed to a phase sortal (like 'child'). (4) entails that, if a statue ceases to be a statue, then it (the thing that was a statue) goes out of existence.

What (5) affirms is this: it is possible that BP exists and is not a statue.⁸ According to (5), BP—that very bronze piece—could have existed without being a statue.⁹ For example, for all that (5) claims, BP could have been part of an underground plumbing system in a society without representational art. In that case, BP would have existed and would not have been a statue. Let me explain the claim that BP could have existed in a society without representational art. This claim does not presuppose any particular individuation conditions for bronze pieces; it does not assume that BP would cease to exist on losing a molecule or two; nor does it assume the contrary. The claim is indifferent to whether or not the existence of BP depends on its having a particular maker, or its being formed by welding the two particular pieces together, or its maker's intention to make a piece of bronze. The claim only requires that, however bronze pieces are individuated, BP could have existed without being a statue. So, taking the statue argument at face value, *Discobolus* has a property (being essentially a statue) that BP lacks. In that case, by a familiar form of Leibniz's Law, *Discobolus* ≠ BP. Thus, the statue argument, taken at face value, is valid: (4) and (5) entail (6).

Arguments of the form of the statue argument, however, have been barraged by extremely sophisticated objections. My aim is to shore up the statue argument taken at face value by exposing flaws—in some cases surprisingly simple and fundamental—in the objections to arguments of its form. I shall start with two arguments that aim to show that *Discobolus* is identical to BP. Next, I shall turn to the anti-essentialist charge that the statue argument is question begging

⁸ More formally: $\exists x \exists t [(x = \text{BP}) \ \& \ \diamond (x \text{ exists at } t \text{ and } x \text{ is not a statue at } t)]$.

⁹ This way of putting it suggests that BP is in fact a statue. Although I do hold that BP is (predicatively) a statue derivatively, my argument here does not need that assumption. Anyone who thinks that BP is not a statue at all, but agrees with me that constitution is not identity, could modify the phrase to 'could have existed without being or *constituting* a statue'. Ultimately, in my constructive account in "Unity without Identity," I argue that BP borrows the property of being a statue from *Discobolus*. BP is a statue because, and only because, there is something that BP constitutes that is a statue. But this claim is more controversial than what I need for my arguments for the validity of (4)-(6). What is needed for those arguments is only the claim that the property of being a statue is not one that BP has essentially. Those arguments are indifferent to whether BP has the property contingently or BP lacks the property altogether.

in that it misconstrues modal predicates (like ‘...is essentially a statue’).¹⁰ Then, after discussing the idea of contingent identity—the relation that, according to anti-essentialists, holds between *Discobolus* and BP—I shall rebut an essentialist argument that also charges the statue argument with being question begging. At the end, I shall turn back to the question of the truth of the premises, and hence of the soundness, of the statue argument.

II. RESPONSES TO TWO ARGUMENTS FOR IDENTITY

One way to defeat the statue argument is to present a sound argument for the identity of *Discobolus* and BP. I shall consider two arguments that aim to discredit the statue argument.

Argument 1. “If y is a paradigm F and x is intrinsically exactly like y , then x is an F .”¹¹ *Discobolus* is a paradigm statue; and BP is intrinsically exactly like *Discobolus*; so BP is a statue. Since *Discobolus* and BP are spatially coincident, if *Discobolus* \neq BP, then where *Discobolus* is, there are two coincident statues. But it is intolerable to hold that where *Discobolus* is, there are two coincident statues. So, by modus tollens, *Discobolus* = BP.

Reply. In this argument, the premise that carries the ball is this principle:

(7) If y is a paradigm F and x is intrinsically exactly like y , then x is an F .

The argument is unsound, because (7) is false. No one who ever endorsed (7) could have been thinking about statues. For something is a statue in virtue of its relational properties. But it is obviously false that, if x is an F in virtue of its relational properties, and y is intrinsically exactly like x , then y is an F .¹² Anything defined in terms of relational properties—a planet, a U. S. dollar bill, a passport—provides a counterexample to (7). Specifically, artworks like statues

¹⁰ See Gibbard; Robinson; Lewis, “Survival and Identity,” in Amelie O. Rorty, ed., *The Identities of Persons* (Berkeley: California UP, 1976), pp. 17-40; and Lewis, “Counterparts of Persons and Their Bodies.”

¹¹ Mark Johnston, “Constitution Is Not Identity,” *Mind*, CI (January 1992): 89-105, here pp. 97-98. Johnston set out an argument of this form in order to refute it, and Harold W. Noonan—“Constitution Is Identity,” *Mind*, CII (January 1993): 133-46—criticized Johnston and defended the argument. Johnston prefaced his statement of this premise by saying: “Take any sort of thing F , then this principle will be plausible.” Although both Johnston and Noonan modify this principle, neither proposes any restrictions on the sort of property that ‘ F ’ indicates. The arguments on both sides—both Johnston’s and Noonan’s—are highly technical and complex and different from the one given here.

¹² Note that the argument in the text also shows that the following principle is also false: if y is a paradigm F and x is intrinsically exactly like y and x does not partly overlap any F , then x is an F . Noonan uses that principle in discussing “the problem of the many” in reply to Johnston (*ibid.*, p. 136).

are counterexamples to (7). If we look to the philosophy of art, we find that the competing answers to the question—‘In virtue of what is x an artwork?’—concern relational properties. Perhaps something is an artwork in virtue of “the artistic enfranchisement of real objects,”¹³ or perhaps in virtue of being an artifact “upon which some society or sub-group of a society has conferred the status of candidate for appreciation,”¹⁴ or perhaps in virtue of being a communication of feeling,¹⁵ or perhaps in virtue of being a certain kind of imitation,¹⁶ or perhaps in virtue of being “caused by a feeling or an emotion on the part of its maker,...which it then expresses,”¹⁷ or perhaps in virtue of something else. Whatever is the correct theory of art, the property or properties in virtue of which something is an artwork are relational.¹⁸ The counterexamples show that (7) is false, and hence cannot be used to show that, if *Discobolus* \neq BP, then where *Discobolus* is, there are two coincident statues. Hence, argument 1 is unsound.

Argument 2. The second argument for the identity of *Discobolus* and BP is this: *Discobolus* and BP “consist of the very same atoms.”¹⁹ If *Discobolus* and BP consist of the same atoms, then, if *Discobolus* and BP

¹³ Arthur C. Danto, “The Artworld,” this JOURNAL, LXI, 19 (October 15, 1964): 571-84.

¹⁴ George Dickie, “Defining Art,” *American Philosophical Quarterly*, vi (1969): 253-56.

¹⁵ Leo Tolstoy, “Art as the Communication of Feeling: From *What Is Art?*” in George Dickie and Richard J. Sclafani, eds., *Aesthetics: A Critical Anthology* (New York: St. Martin’s, 1977), pp. 53-82.

¹⁶ The broad tradition deriving from Plato.

¹⁷ Danto, *The Transfiguration of the Commonplace* (Cambridge: Harvard, 1981), p. 26.

¹⁸ I can think of two possible counterexamples: (1) Benedetto Croce’s conception of art as located in the artist’s head; what the artist produces is a kind of residue of the true artwork; and (2) Clive Bell’s and Roger Fry’s conception of art as significant form. I do not believe that either of these can be explicated entirely in nonrelational terms. In any case, neither of these is likely to be the correct theory of art.

I am not here denying that BP also has these relational properties; I am only providing counterexamples to (7). In “Unity without Identity,” I formulate a notion of borrowing properties, and argue that BP borrows the property of being a statue from *Discobolus*, and hence is not a distinct statue. The present point, however, concerns the truth value of (7).

¹⁹ The argument comes from Michael B. Burke, “Copper Statues and Pieces of Copper: A Challenge to the Standard Account,” *Analysis*, LII (1992): 12-17; the quotation is on p. 14. Burke asks in exasperation: “What, then, could make them different in sort?” He sees only two possible answers: (i) they have different histories, and (ii) they have different persistence conditions. Burke argues that neither of these can ground a difference in sort. His discussion does not consider the possibility that a difference in relational properties required for an F and a G may ground a difference in kind.

are not identical, they differ in kind.²⁰ If *Discobolus* and BP differ in kind, then “there must be something true of [*Discobolus*], but not of [BP] in virtue of which [they differ in kind].” But there is nothing that is true of one but not of the other in virtue of which they differ in kind. Therefore, *Discobolus* and BP are identical.

Reply. The statue argument outright specifies a property which *Discobolus* has but which BP lacks in virtue of which *Discobolus* and BP differ in kind: *Discobolus* is essentially a statue; BP is not essentially a statue.²¹ So simply to assert that there is not such a property would just beg the question against the statue argument. What grounds their difference in kind is this: the properties required for something to be *Discobolus*, as I have just argued, are relational properties; but no relational properties (or at least not the same relational properties) are required for something to be BP. If x has certain relational properties essentially, but y does not have the same relational properties essentially, then it is not surprising that x and y differ in kind. So there is no mystery that things consisting of the very same atoms can differ in kind.

In short, the difference in kind between *Discobolus* and BP is determined by the difference in the properties required for the existence of *Discobolus* and the existence of BP. Therefore, the premise that “there is nothing that is true of one but not of the other in virtue of which they differ in kind” is false, and argument 2 is unsound.

III. MODAL PROPERTIES

Since argument 1 and argument 2 each has a false premise, neither gives reason to think that there is anything wrong with the statue argument. But there is a different kind of challenge to the statue argument. This challenge tries to drive a wedge between modal predicates and the properties that they denote. I shall consider two versions of this strategy. The first (argument 3) is based on the claim that concrete things have no modal properties. The second (argument 4) is based on the claim that modal predicates are ambiguous.

Argument 3. Concrete things have no modal properties. If concrete things have no modal properties, then *Discobolus* does not have the property of being essentially a statue. In that case, (1) is false and the statue argument is unsound.

Reply. The weight of this argument is carried by the premise that concrete things have no modal properties. What reason is there to

²⁰ This argument assumes that two things of the same kind cannot be spatially coincident. For a defense of the assumption, see Oderberg.

²¹ On what Burke calls “the standard account,” *Discobolus* is not a piece of bronze, nor is BP a statue. That is not my view, as I explain in “Unity without Identity.” All that is needed for the present argument, however, is the denial that BP is essentially a statue.

accept such a premise? Gibbard has presented a succinct argument to show that there are no modal properties of concrete things:

- (8) "Modal expressions do not apply to concrete things independently of the way that they are designated."
- (9) "A property, if it is to be a property, must apply or not apply to a thing independently of the way that it is designated."
- ∴ (10) "Expressions constructed with modal operators...simply do not give properties of concrete things" (*op. cit.*, p. 201).

The argument is valid, but, I think, unsound. (8) is subject to counterexamples; for modal expressions include not only predicates like 'is essentially a statue', but also many other kinds of predicates. Suppose that a surgeon removes a bullet from a wounded soldier's shoulder, and later presents the bullet to the injured soldier and declares: "This thing could have killed you." Then it seems true of that particular bullet, independently of the way that it is designated, that it could have killed the soldier. In general, predicates ascribing abilities and powers to concrete things, independently of the way that they are designated, entail that modal expressions apply to concrete things. (For example, Alice can swim the English channel.) Many predicates which are not overtly modal expressions and which apply to concrete things presuppose that modal expressions apply to those concrete things. Predicates that attribute to concrete things dispositions ('is courageous', 'is even-tempered'), attitudes ('is afraid of flying', 'believes that winters are cold in Vermont'), probabilities ('has a probability of .5 of turning up heads'), or causal powers ('is lethal') all apply to concrete things only if modal expressions apply to those things independently of the ways that they are designated. So the truth of statements in which modal expressions apply to concrete things just does not, in general, depend on how those things are designated.

Furthermore, statements containing ineliminable modal expressions that apply to concrete things independently of the ways that they are designated seem to play a role in the sciences. For example, Jupiter could have had one more moon than it does; Mars could have been a site where multicellular life developed. Or suppose that an electron gun in a double-slit experiment is slightly disturbed and fires an electron off-target, so to speak. It is true of that particular electron that it could have hit the target, or that it could have had a slightly different velocity. To say that the truth of such statements depends on how things are designated would be to say that truth in the physical sciences can depend on how things are designated. In that

case, anyone who assumes that realism requires truth independently of the way things are designated would face the specter of irrealism in the physical sciences. If this is not what philosophers like Gibbard want to say, then they should deny (8).

The difficulty with both (8) and (9) is that each is formulated as a general principle, without restriction to essential properties. (8)-(10) could be recast in a more restricted version that would avoid the counterexamples. For example, (8)-(10) could be replaced by:

- (8') Modal expressions that purport to attribute essential properties do not apply to concrete things independently of the way that they are designated.
- (9') An essential property, if it is to be an essential property, must apply or not apply to a thing independently of the way that it is designated.
- ∴ (10') Modal expressions that purport to attribute essential properties...simply do not give essential properties of concrete things.

The strength of the original (8)-(10) was its generality: it begged no questions against the statue argument. Of course, the downside of that generality were the counterexamples to (8). Now the problem with (8')-(10') is the opposite of the problem with (8)-(10). (8')-(10') would avoid the counterexamples, but at the cost of begging the question against the statue argument; for a proponent of the statue argument would denounce (8') right off the bat. So if (8')-(10') is to be used without begging the question against the statue argument, (8') requires independent argument. Whether such an argument will be forthcoming for (8') which does not beg the question against the statue argument remains to be seen.²² (Note that a proponent of the statue argument need not deny (9'); for an essentialist may well claim that *Discobolus* is essentially a statue independently of the way that it is designated.)

²² One might suppose that (8') could be motivated by examples like W.V. Quine's "mathematical cyclist"—see *Word and Object* (Cambridge: MIT, 1960), p. 199. As an argument against essentialism, this case has been thoroughly dissected in the literature and found wanting. For example, see Ruth Barcan Marcus, "Essential Attribution," in *Modalities: Philosophical Essays* (New York: Oxford, 1993), p. 54. Marcus also refers the reader to other writers as well (Terence Parsons, Alvin Plantinga, and Richard Cartwright). I have also heard Max Cresswell and Phillip Bricker discuss Quine's example. Moreover, Cresswell pointed out to me that Quine actually took rejection of essentialism as a premise rather than a conclusion, as evidenced by Quine's attempting to discredit quantified modal logic by claiming that it led to "the metaphysical jungle of Aristotelian essentialism"—"Three Grades of Modal Involvement," in *The Ways of Paradox and Other Essays* (New York: Random House, 1966), p. 174.

The upshot of the discussion of argument 3 is this: its controversial premise—that concrete things have no modal properties—is supported by an argument, (8)-(10), that is unsound. Replacement of the false premise by a true one, as in (8')-(10'), results in an argument that begs the question against the statue argument. In any case, Gibbard's argument does not establish the premise that there are no modal properties of concrete things. So argument 3 does not refute the statue argument.

Gibbard further takes his argument to show that persistence conditions are not genuine properties of concrete things. He takes the persistence criteria of a thing x to specify the conditions under which x would continue to exist as a particular kind. He says: "In rare cases, at least one thing will be of two different kinds, with different persistence criteria..." (*op. cit.*, p. 195). So, on Gibbard's view, persistence conditions do not attach to (what he takes to be) the concrete thing, *Discobolus*/BP. Rather, *Discobolus*/BP has one set of persistence conditions qua bronze piece and another set of persistence conditions qua statue. Gibbard's argument for this view is the one that I just refuted: persistence conditions are attributed by modal expressions (" x would not continue to exist if..."), and modal expressions do not attribute genuine properties of concrete objects; so, persistence conditions are not genuine properties of concrete objects. Since, as we have seen, arguments of this form are unsound, we may well hold that persistence conditions are properties of concrete things; and, indeed, we should.

Surely, there are conditions for the persistence of x per se—as opposed to persistence conditions for x -as-an- F . Persistence conditions of x per se specify the varieties of change that x can survive and the kinds of change that would destroy x . Here is an argument that *Discobolus* (and hence concrete things) per se have persistence conditions:

- (11) If x exists at t and is not eternal, then x can cease to exist (and not just cease to be an F).²³
- (12) If x can cease to exist (and not just cease to be an F), then there are conditions under which x would cease to exist (and not just cease to be an F), and conditions under which x would persist (and not just continue to be an F).
- (13) If there are conditions under which x would cease to exist (and not just cease to be an F), and conditions under which x would

²³ Of course, if being an F is an essential property of x , then x 's ceasing to be an F is sufficient for x 's ceasing to exist per se.

persist (and not just continue to be an F), then x per se has persistence conditions.

- (14) *Discobolus* exists at t and is not eternal (indeed, *Discobolus* existed and then ceased to exist).

∴ (15) *Discobolus* per se has persistence conditions.

We have seen that Gibbard argued (unsuccessfully, in my opinion) against claims like (15). But it is worth pointing out why (15) is significant. (15) cannot be accommodated by the contingent-identity view. On the one hand, it follows from Gibbard's contingent-identity view that:

- (16) There are persistence conditions C and C' such that *Discobolus*/BP (qua statue) has C , and *Discobolus*/BP (qua bronze piece) has C' , and $C \neq C'$.²⁴

On the other hand, if (15) is true, and *Discobolus* = BP, then *Discobolus*/BP cannot have more than one set of persistence conditions. (Otherwise, there would be a circumstance in which, on one of the persistence conditions, x would survive, and on the other of the persistence conditions, x would not survive. But it is impossible for there to be a circumstance in which both x would survive and x would not survive.) So it follows from (15), together with the thesis that *Discobolus* = BP, that:

- (17) If there are persistence conditions C and C' such that *Discobolus*/BP has C and *Discobolus*/BP has C' , then $C = C'$.

(16) and (17) cannot both be true. So the contingent-identity theory and (15) cannot both be true. Since (15) is entailed by (11)-(14), a contingent-identity theorist would have to show that one of the premises (11)-(14) is false in order to secure the coherence of the contingent-identity view. Since (11)-(14) seem unassailable to me, the coherence of Gibbard's contingent-identity view looks to be in jeopardy.

To sum up my reply to Gibbard's view that concrete things do not have modal properties, I tried to show that Gibbard's argument, (8)-(10), is unsound and hence cannot be used against the statue argument, which attributes modal properties to concrete things. Moreover, I argued that concrete things per se have persistence conditions, where persistence conditions are attributed by modal expressions. Finally, I argued for the significance of the claim that concrete things

²⁴ Gibbard is explicit on this point. He provides different persistence conditions for statues and pieces of clay, and says: "The persistence criteria that I have given make it clear that often the two [a statue and a piece of clay that constitutes it] are distinct" (*op. cit.*, pp. 190, 188). When a statue and a piece of clay are identical, on this view, the fact that the statue and the piece of clay have different persistence conditions makes their identity contingent.

per se have persistence conditions by showing that that claim is incompatible with the contingent-identity view as developed by Gibbard.

As we have just seen, argument 3 attacks the statue argument by exploiting the difference between modal predicates and modal properties. Other arguments exploit the same difference, by claiming that modal predicates are ambiguous.²⁵ For example, some claim that de re modal predicates are “predicates whose reference is affected by the subject term to which they are attached.”²⁶ Harold Noonan, who calls such predicates *Abelardian predicates*, says that the view of modal predicates to which “the defender of contingent identity is committed is that modal predicates are Abelardian predicates whose reference is determined by a component of the sense of the subject expression to which they are attached” (*ibid.*, pp. 189-90).²⁷ On this view, modal predicates of the form ‘is essentially a statue’ do not attribute a single property in all linguistic contexts. Now let me give a Noonan-style argument against the statue argument.

Argument 4. The property denoted by ‘is essentially a statue’ in (1) is not the same property as the property denoted by ‘is essentially a statue’ in (2). So there is not a single property that is attributed to *Discobolus* and not attributed to BP. If there is not a single property that *Discobolus* has but BP lacks, then (1) and (2) do not entail (3)—and the statue argument is invalid.

Reply. The first premise depends on the claim that the property denoted by ‘...is essentially a statue’ depends on the meaning of the subject term to which it is attached. I believe that this key claim is false. My argument here is extremely simple: expressions denoting persistence conditions have the same status as expressions denoting essential properties, with respect to dependence on the meanings of subject terms to which they are attached. In that case:

- (18) (The meaning of a predicate of the form ‘is essentially *F*’ depends on the meaning of the subject term to which it is attached) if and only if (the meaning of a predicate expressing persistence conditions depends on the meaning of the subject term to which it is attached).

²⁵ Lewis is perhaps the most prominent proponent of the view that de re modal predicates are ambiguous. See his “Survival and Identity” and his “Counterparts of Persons and Their Bodies.”

²⁶ Noonan, “Indeterminate Identity, Contingent Identity and Abelardian Predicates,” *The Philosophical Quarterly*, xli, 163 (1991): 183-93, here p. 188

²⁷ Noonan points out that Lewis’s counterpart theory (as revised to admit a variety of counterpart relations) provides one way of putting flesh on the bones of the idea that modal predicates are Abelardian predicates, but “stress[es] that it is only to the skeletal idea that modal predicates are Abelardian and not to its counterpart-theoretic interpretation that the defender of contingent identity is committed” (*ibid.*, p. 190).

I have just argued, however, that concrete things per se have persistence conditions. (For example, it is not just that *Discobolus* has one set of persistence conditions relative to being a statue named '*Discobolus*', and another set of persistence conditions relative to being a piece of bronze named 'BP'.) In that case:

- (19) It is false that the meaning of a predicate expressing persistence conditions depends on the meaning of the subject term to which it is attached.

From (18) and (19), it follows that:

- (20) It is false that the meaning of a predicate of the form 'is essentially *F*' depends on the meaning of the subject term to which it is attached.

Thus, I believe that the statue argument stands against all four of the counterarguments I have canvassed. Now I shall turn to a central motivation for counterarguments.

IV. CONTINGENT IDENTITY

One motivation for holding that BP is identical with *Discobolus* is a strong intuition shared by many philosophers. It is the intuition that some things that are in fact identical might not have been identical. Granted, the intuition goes, BP and *Discobolus* might have been distinct; but in fact they are not.²⁸ They are contingently identical.²⁹

- (21) x is contingently identical to $y = df - (x = y) \ \& \ \Diamond(x \text{ exists} \ \& \ y \text{ exists} \ \& \ x \neq y)$

Now, traditionally, identity has been understood as a necessary relation for which the following *thesis of the necessity of identity* holds with full generality:

- (22) $x = y \rightarrow \Box(x = y)$

Those who endorse the thesis of the necessity of identity would deny that anything satisfies the above definition of 'contingent identity'. Michael Jubien³⁰ put it well:

Undoubtedly there are some relations that behave in some respects like identity but which do not hold of necessity. I believe it is a fundamental

²⁸ Such a contingent-identity theorist may bolster his intuition with a theory of modal predication of the kind already considered.

²⁹ Gibbard, p. 187.

³⁰ *Ontology, Modality and the Fallacy of Reference* (New York: Cambridge, 1993). Agreement with Jubien on the nature of identity, of course, does not entail agreement about what in fact exists.

error to think that one of these relations actually is the identity relation, that is, to think that identity actually doesn't hold of necessity. I also believe it is seriously misleading to agree that none of these relations is the identity relation, but nevertheless to dub one of them 'contingent identity' (*ibid.*, p. 39).

My own position is that identity is necessary, and that no objects satisfy the definition of 'contingent identity' given in (21); and, further, that constitution, our target relation, is not identity of any sort. Constitution is rather one of those relations "that behave in some respects like identity, but do not hold of necessity."³¹

Here we have a clash of the deepest of intuitions—intuitions that may seem to be (but are not quite) beyond the reach of argument. Does it even make sense to say that *a* is identical to *b*, but that *a* might not have been identical to *b*? Although reasons are difficult to come by at this level of intuition, I believe that—even if the contingent-identity theory exposed some flaw in the argument for (15)—there would remain good reason to prefer constitution-without-identity; for the contingent-identity view of constitution has theoretically unsatisfying consequences that a nonidentity view of constitution lacks. One of these infelicitous consequences is metaphysical; the other is epistemological.

First, consider a metaphysically untoward consequence of the contingent-identity view: the contingent-identity view affords no unified account of the relation between persons and bodies, nor of the relation between statues and pieces of bronze, and so on. The contingent-identity theorist holds, roughly, that *a* and *b* are contingently identical only if *a* and *b* share all their categorical properties, where categorical properties are those which do not depend on how things are in other worlds.³² For example, if *a* and *b* are contingently identical, then *a* and *b* start to exist at the same time and cease to exist at the same time. Gibbard suggests that a person may cease to exist when she dies. If Smith's body continues to exist (as a corpse), then—everyone would agree—Smith, the person, is not contingently identical to her body. But if the body is destroyed at death, then "there is no purely logical reason against saying the following: the

³¹ Partly "for shock value," Yablo uses the term 'contingent identity' for the relation that I am calling 'constitution' (*op. cit.*, p. 303). But he disavows the assumption that "contingently identical things were (at least) properly identical, only—and this was their distinction—not necessarily so." That is, Yablo is not using 'contingent identity' in the sense of (21). I think that it is less misleading to avoid the term 'contingent identity' altogether.

³² Yablo brings to light difficulties in formulating a clear, noncircular statement of a thesis of contingent identity (*op. cit.*).

person in this case is identical with his body, but had he died a normal death, he would have been distinct from his body" (*op. cit.*, p. 213).³³ On Gibbard's construal of contingent identity, then, whether or not a person is contingently identical to her body may depend on a fluke at her death: if she leaves a corpse, she is not contingently identical to her body; if she does not leave a corpse, then there is no logical reason to deny that she is identical to her body. Therefore, this contingent-identity view does not assert a uniform relation between all persons and their bodies—nor between statues and pieces of bronze that make them up, nor between any of the other things that, on my view, are related by constitution. Instead, the contingent-identity view of constitution interjects needless bifurcations into our conception of the world.

Surely, contrary to the contingent-identity view of constitution, all human persons have the same relation to their bodies, whatever it is. If I am identical to my body, so are you to yours; and if I am not identical to my body, you are not identical to yours either. Similarly, there should be unified accounts of the relation between statues and pieces of marble (or gold or whatever), and of the relation between flags and pieces of cloth, and so on, as well. Constitution-without-identity is superior to constitution-as-identity in that it provides a unified view of the relation between persons and bodies, statues and pieces of bronze, and so on.

We can see this point from another angle. If we pretheoretically understand constitution to be the relation between, say, statues and pieces of bronze that make them up, then, on the contingent-identity view, in most cases, constitution is not identity. Gibbard is explicit on this point:

In a typical case, a piece of clay is brought into existence by breaking it off from a bigger piece of clay. It then gets shaped into the form of an elephant. With the finishing touches, a statue of an elephant comes into being. The statue and the piece of clay therefore have different properties: the times they start to exist are different, and whereas the statue has the property of being elephant-shaped as long as it exists, the piece of clay does not. Since one has properties the other lacks, the two are not identical (*op. cit.*, p. 190).

Now, in the case just described by Gibbard, a piece of clay (call it 'Clay') constitutes a statue (call it 'Elephant'), without being identi-

³³ Gibbard continues: "If there are any reasons against such a view, they must be non-logical reasons." So, he is not actually committed to the view that whether or not one is identical to one's body depends on a fluke at death. Still, the possibility that he envisages is, I believe, theoretically unacceptable.

cal to it. So, to describe the relation between Clay and Elephant, even proponents of contingent identity would need recourse to some notion in addition to contingent identity anyway.

So the contingent-identity theorist is in the odd position of saying that the relation between Elephant and Clay is not the same as the relation between *Discobolus* and BP (as I have imagined it). But, surely, it is at least a desideratum to have a single account of the Elephant/Clay relation and the *Discobolus*/BP relation. The notion of constitution-without-identity, in contrast to the notion of contingent identity, allows that desideratum to be satisfied. Therefore, the notion of contingent identity cannot do all the work that the notion of constitution does.

The second theoretically untoward consequence of the contingent-identity view of constitution is epistemological: if the contingent-identity view were correct, we would typically not be justified to assert of *a* and *b* that they are contingently identical while they/it exist(s). This is so, because in order for the identity of *a* and *b* to be contingent, it must be possible that they have different properties; but in order for *a* and *b* to be identical at all, *a* and *b* must actually have all their properties in common—including ceasing to exist at the same time. But before the demise of *a* or *b*, we do not know whether they will differ in the future (and hence not be identical). For example, I have no idea how I shall die; I do not know whether I shall leave a corpse or not. Hence, on the contingent-identity view, I lack justification for supposing that I am or that I am not contingently identical to my body. Only after I die is a contingent-identity theorist in a position to declare whether I am contingently identical to my body; presumably, I shall never know. On a nonidentity view of constitution, if *x* constitutes *y* (now), we can be justified in asserting now that *x* constitutes *y*; but on the contingent-identity view, if *x* is contingently identical to *y* (now), we are typically not justified in asserting now that *x* is contingently identical to *y*.

Thus, there are both metaphysical and epistemological reasons to prefer a nonidentity view of constitution to a contingent-identity view. Moreover, the purposes to be served by the idea of contingent identity are as well served without recourse to contingent identity: for example, statements like 'The inventor of bifocals was the first U.S. Postmaster General' are true and contingent, but they do not express any contingent identity in the sense defined by (21).³⁴ In

³⁴ Using Bertrand Russell's theory of descriptions, the terms that seem to refer to individuals (for example, 'the inventor of bifocals') disappear in favor of variables and predicates.

short, not only are the arguments against the statue argument resistible, but also the motivation for those counterarguments can be undercut as well.

V. AN ESSENTIALIST OBJECTION TO THE STATUE ARGUMENT

Even if we reject the contingent-identity view of constitution, there remains another threat to the statue argument: constitution as necessary identity. An essentialist who endorses the thesis of the necessity of identity may yet reject the statue argument in favor of this argument:

(23) *Discobolus* is essentially a statue.

(24) *Discobolus* = BP

∴ (25) BP is essentially a statue.

Is there any reason to prefer the statue argument over (23)-(25)? Does each just beg the question against the other? I think not. I think that the argument that BP is not essentially a statue is stronger than the argument that *Discobolus* = BP. But the argument that BP is not essentially a statue depends on modal intuitions: BP could have existed without being a statue. For example, BP could have existed as a piece in an underground plumbing system in a world without art. Hence, BP is not essentially a statue.

Recently, arguments of the form of the statue argument—supported by modal intuitions like those just expressed—have come under fire. Michael Della Rocca has argued that, under certain natural assumptions, all arguments of the form of (1)-(3) are question begging (*op. cit.*).³⁵ This is a strong conclusion, indeed, and, I shall argue, a mistaken one. If certain arguments of the form (1)-(3) are sound—and I shall try to show that they are—then it is clear that constitution is not identity.

Della Rocca's argument is designed to show that arguments of the form of the statue argument fail even from an essentialist point of view. The essentialist point of view here is Kripkean essentialism. Say that a Kripkean essentialist is one who (i) thinks that there are certain properties and certain things such that those things cannot exist without exemplifying those properties, and (ii) accepts Saul Kripke's distinction between the meaning of a term and the fixing of its reference. Consider an argument that has the same face-value form as the statue argument:

³⁵ I modify Della Rocca's argument to make it applicable to the statue argument.

The motion argument.

- (26) Molecular motion is essentially molecular motion.
 (27) Heat is not essentially molecular motion.
 ∴ (28) Heat is not identical with molecular motion.

Kripke has a well-known argument to show that (28) is not established by the premises of the motion argument, and Della Rocca argues that there is no good reason to refrain from using similar considerations to show that (6) is not established by the premises of the statue argument. Della Rocca focuses on Kripke's reconstrual of the second premise of the motion argument. (27) does not properly express our intuition about heat; rather, if we think harder (and distinguish between reference fixing and meaning), we shall see that the intuition should not be expressed as (27). Instead, assuming that we actually fix the reference of 'heat' by 'the cause of sensation *S*', where sensation *S* is a heat sensation, our intuition about heat should be expressed as (29):

- (29) There is a possible situation in which something which is not heat but which produces in us sensation *S* fails to be molecular motion (*op. cit.*, p. 192).

But the argument resulting from substituting (29) for (27) in the motion argument is invalid.

Now, Della Rocca notes, there is an analogous reconstrual of (5) available for the statue argument. Assuming that the reference of 'BP' is fixed by the definite description, 'the one and only piece of bronze that results from Myron's welding at time *t*', the parallel reconstrual of (5) is (30):

- (30) There is a possible situation in which an object that is not BP, but has the property of being the one and only piece of bronze that results from Myron's welding at time *t*, is not a statue.

Now "for an essentialist," says Della Rocca, "our intuition in the matter of heat can be expressed in two ways—one way [(29)] compatible with the identity of heat and molecular motion and one way [(27)] not compatible with this identity. From this it follows that an essentialist would not allow one to argue simply from our modal intuition in this matter to a conclusion of nonidentity" (*op. cit.*, p. 196).³⁶ Simi-

³⁶ Della Rocca supposes that there is a single intuition that may be expressed in either of two ways—(27) or (29); he says that "the intuition of contingency originally expressed by [(27)] could also be captured by [(29)]" (*op. cit.*, p. 198). But surely, since (27) and (29) manifestly "say" different things, they are not just two ways of expressing a single intuition. However intuitions are individuated, since (27) is false and (29) is true, it would be more plausible to say that there are two

larly, on Della Rocca reasoning, our intuition about bronze pieces can be expressed in two ways—as (5) or as (30). So, given the availability of (30), we need a principled reason, says Della Rocca, to consider (5) as the correct interpretation of the intuition underlying the second premise. Therefore, says Della Rocca, the statue argument is question begging—unless there is a reason to reject (30) as a reconstrual of (5). The only available reason, he thinks, would involve prior assumption of the nonidentity of BP and *Discobolus*. Obviously, we cannot assume the nonidentity of BP and *Discobolus* in an argument for their nonidentity (*op. cit.*, p. 196). If this is so, then the statue argument is question begging, period. Here is a more compressed version of Della Rocca's argument:

Argument 5. When (27)—which, on Kripkean essentialism, is false—is replaced by its reconstrual (29) (which is true), the revised motion argument is invalid. There is no good reason to refrain from replacing (5) by its reconstrual (30) in the statue argument in the same way. If there is no good reason to refrain from replacing (5) in the statue argument in the same way that (27) was replaced in the motion argument, it is question begging to take the statue argument at face value as a valid argument. Thus, it is question begging to take the statue argument at face value as a valid argument.

Reply. Argument 5, too, is unsound; for Della Rocca's second premise—that there is no good reason to refrain from replacing (5) by its reconstrual (30) in the statue argument—is not in the slightest justified by consideration of the flaw in the motion argument. What is wrong with the motion argument is that, given Kripkean essentialism, one of its premises—(27)—is false, independently of any considerations about reconstrual; but, as I shall argue momentarily, Kripkean essentialism provides good reason to hold that the parallel premise in the statue argument—(5)—is *true*. Therefore, there is very good reason to refrain from replacing (5) in the statue argument.

What motivates reconstrual and replacement of (27) is that (27) is false; yet we have an intuition that (27) seems to express. The point of the reconstrual of (27) is to show that one's mistake in holding (27) is understandable.³⁷ Reconstrual of (27) answered a question that we had about the motion argument: "Why does (27), which is

intuitions, one correct and one incorrect, and one (correctly) expressed by (29) and one (correctly) expressed by (27). But my argument does not depend on contesting Della Rocca's way of counting intuitions.

³⁷ I am simply saying that a Kripkean essentialist has a way to avoid Della Rocca's charge; I am not claiming that Kripke himself would approve.

false, *seem* to be true?" But without an independent argument to show that (5) is false, the parallel question regarding the statue argument just does not arise. In this case, the second premise of argument 5—there is no good reason to refrain from replacing (5) by its reconstrual (30) in the statue argument in the same way that (27) was replaced by (29)—is unjustified. For in the absence of an independent argument against (5)—an argument similar to the Kripkean argument against (27)—there is no motivation to reconstrue (5). Thus, without the (unargued for) assumption that (5) is false, then argument 5 is unsound, and the statue argument, taken at face value, still stands.

Not only is the motivation for replacing (5) missing, but also the same essentialist tack that showed that (27) is false can be deployed to show that (5) is true. That is, the essentialist who argued that, given her essentialism, (27) is false and hence subject to replacement by a reconstrual, also has resources to show that, given her essentialism, (5) is true and hence not subject to replacement by a reconstrual. Consider this form of essentialism: for every concrete thing, there is a kind of which the thing fundamentally is a member. No concrete thing is fundamentally a member of more than one kind. As Aristotle might say, the kind that provides the answer to the question—"What is x ?"³⁸—is the kind of which x is fundamentally a member. The essential kind-properties of a thing are the essential properties that all members of its fundamental kind share; if a thing has any other essential properties, then either they are entailed by its essential kind-properties, or they are not properties essential to all members of any kind.³⁹

Such an essentialist then may say: BP's fundamental kind is the kind bronze. So BP's essential kind-properties are the essential properties of pieces of bronze and properties that are entailed by essential properties of pieces of bronze. BP has no other kind-properties essentially. Being a statue is a kind-property that is not entailed by the essential properties shared by all pieces of bronze. Otherwise,

³⁸ See also Wiggins's thesis of sortal dependency (*op. cit.*, ch. 2). According to Wiggins, the answer to this question has "both a sortal component (*What is x ? It is an F thing*) and a deictic or particularizing component (*Which F thing is x ? It is this F ; or It is the F which is ϕ*)" (*op. cit.*, p. 115).

³⁹ For example, G is entailed by F if and only if necessarily all F s are G . (If Tiny is of the fundamental kind elephant, and Tiny has the property of being an animal essentially, then the property of being an animal is entailed by the property of being an elephant.) I remain neutral here on Kripke's doctrine of the essentiality of origin.

every piece of bronze would be a statue. Therefore, BP does not have the property of being a statue essentially. That is, (5) is true.

Note that the argument that (5) is true depends only on general considerations about properties: for example, the property of being a statue is a kind-property that is not an essential property of pieces of bronze; nor is it entailed by the essential properties shared by all pieces of bronze. No particular (non)identity claims of the form $x \neq y$ are assumed. Now, according to Della Rocca, “we can know that x and y differ with regard to [a modal] property only if we already know that x and y are not identical” (*op. cit.*, p. 202). On the version of essentialism I just sketched, however, it is on the basis of *general knowledge* of statues and bronze pieces that we know that a particular statue and a particular bronze piece differ in regard to a modal property. Antecedent knowledge of the identity or nonidentity of x and y does not come into it. So the argument for the truth of (5)—the second premise in the statue argument—begs no questions.

I think that Della Rocca made a subtle two-fold mistake: first, by focusing on the invalidity of the argument in which (27) is replaced by (29), he underestimated the real problem with the motion argument—namely, that it is unsound because (27) is false; second, he took the mere availability of a reconstrual of (5) to motivate replacement of (5) in the statue argument. But the reason to replace (27) in the motion argument was not the mere availability of a reconstrual, but rather the fact that (27) was false. For Della Rocca’s analogy to succeed, he must show that (5) is likewise false and the statue argument thus is unsound. Not only does Della Rocca offer no argument for the falsity of (5), but, on the contrary, I have shown that an essentialist has an argument for the truth of (5).

In short, given essentialism, (27) is false, and the motion argument is straightforwardly unsound, independently of any reconstrual of (27); but also given essentialism, (5) is true, and there is no parallel basis for claiming the statue argument to be unsound and no motivation to replace (5) with the admittedly available reconstrual of (5). Hence no question is begged by accepting the statue argument at face value. Therefore, I do not believe that Della Rocca has made good on his claim that arguments of the form of the statue argument are question begging or otherwise unsound.

VI. CONCLUSION

We have surveyed challenges to the statue argument from both the anti-essentialist “left” and the essentialist “right.” Both the anti-essentialist and essentialist charge, in different ways, that arguments like the statue argument containing modal predicates, are question beg-

ging. I hope to have shown that the statue argument survives the challenges. If I have, then I think that the statue argument should be taken at face value as valid. If its premises are true—or if the premises of any other argument of the form (1)-(3), where y constitutes x , are true—then constitution is not identity, whether identity is construed as a contingent or a necessary relation.

But is the statue argument sound? Since I doubt that there are conclusive non-question-begging arguments for or against its premises, I would settle for a stalemate. Nevertheless, let me press the case for soundness. I have just argued for (5) on essentialist grounds. Indeed, I believe that the only reason to doubt (5) would depend on prior rejection of the conclusion (6). But one can hardly impugn an argument by using the denial of its conclusion to discredit a premise. Here is another angle. Suppose that in anticipation of welding the two pieces of bronze together to form BP, Myron had said: "I don't yet know whether BP will constitute a statue or not. If my welding is unsuccessful, then BP will be just another piece of bronze to be cast aside." If Myron's utterance, taken at face value, is true, then BP could exist without being a statue. In that case, again, (5) is true.

Although (4) is more controversial, I do have a thought experiment in support of (4). If (4) is false, then not only could *Discobolus* exist without being a statue, but also, presumably, all the other artworks that do exist could exist without being artworks. That is, if (4) is false, there is another possible world that contains every individual that actually exists, but not a single artwork. This consequence of denying (4) seems to me unacceptable. Although I realize that I am wielding only an intuition pump (in Daniel Dennett's memorable phrase), it is clear to me that any world without artworks is missing some of the individuals that populate the actual world. Taking ontology to concern what individuals exist, a world without art would be ontologically impoverished compared to our world. Anyone who agrees will accept (4).

Now suppose, as I have urged, that some argument—the statue argument or some other argument—of the form of (1)-(3), where x bears constitution relations to y , is sound. In that case, constitution is not identity. If the relation between a thing and what constitutes it is not identity, would the relation between *Discobolus* and BP be just an unexplained fact? No. For, as we have seen, *Discobolus* has relational properties essentially that BP does not have essentially. If there is some relational property in virtue of which y is the thing that it is,

but not in virtue of which x is the thing that it is, then x and y are not identical. So the nonidentity of *Discobolus* and BP is understandable.

There is a longstanding tradition of assuming that all essential properties of a thing are nonrelational. (The prejudice against relational properties is abetted by equivocal use of the term 'intrinsic' to mean both 'nonrelational' and 'part of the nature of its bearer'.) Even if it turns out that fundamental physical particles have only nonrelational properties essentially, it would not follow that "higher-level" objects have only nonrelational properties essentially.⁴⁰ Not only would refusal to countenance relational properties as essential be arbitrary, but also it would rule out a priori the very cases of interest—namely, objects defined by their relational and/or intentional properties. In any case, simply to assume that things do not have intentional or relational properties essentially would be no refutation of the statue argument.

In conclusion, I hope to have shown that the idea of constitution-without-identity is preferable to constitution-as-identity. It remains now to say just what constitution is. Although I must save that inquiry for another occasion, let me say in advance why constitution is so important. If I am right about constitution-without-identity, then not only do subatomic particles exist, but also so do all manner of things of other kinds—things whose properties are not determined by the properties of the subatomic particles that constitute them. In the natural world there are planets, kidneys, persons, landscape paintings, carburetors, cathedrals. None of these things is what it is (the thing that it is) in virtue of its intrinsic properties. Each of them is constituted by another thing (ultimately by an aggregation of subatomic particles) with which it is not identical. So it is well worthwhile to try to discover how constitution actually works.

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⁴⁰ This is the lesson of "externalism" in the philosophy of psychology. See Tyler Burge, "Individualism and Psychology," *Philosophical Review*, xcv, 1 (January 1986): 3-46; Jerry Fodor, *The Elm and the Expert* (Cambridge: MIT, 1994); and my *Explaining Attitudes: A Practical Approach to the Mind* (New York: Cambridge, 1995), ch. 2.