Loose Identity and Becoming Something Else

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We are practiced at attributing numerical identity to things that, when we consider them another way, seem obviously distinct. These practices are well established and raise no question except among metaphysicians engaged in their requisite initial obtuseness. So, for example, we say the same tornado that went by here leveled Pittsfield later. We say this despite the fact that, plausibly, at neither time is there really even a single individual thing, much less the same individual thing. Identity is attributed to successively different pluralities of air, moisture, dust, and debris, as if they were a single continued thing—and rightly so. Metaphysicians rightly insist, however, that distinct things can't be identical, on pain of contradiction. Since cases like the above seem to present this contradiction, an explanation is needed why they really don't.

An historically important move is to say that such cases are cases of identity in name only. Identity doesn't really hold between the distinct things attributed identity. Whatever relevant relation does hold between them is called "imperfect identity" or "identity in the loose and popular sense" to capture both that the word 'identity' is used and yet it is to some extent abused. Let's assume that this move is the best one. I won't argue that it is; I think there is a better. But considering how an account of loose identity should go is a step in the direction of my preferred account.

Assuming a loose identity account requires supposing that the tornado is at best successive distinct single things (and at worst not a single thing at any time at all). Why grant this supposition? Why not say that in addition to the successive single things, there is a whole that they compose? They are its temporal parts. The whole is the tornado. Its identity through time is straightforward. Even at a time, besides the various bits, there is the whole that they compose. The tornado's singleness at a time is also straightforward. Why not say these things, and dispense with an account of loose identity?

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In my opinion, the theory of parts and wholes presupposed in this objection is ontologically profligate. There is no need for a whole as an additional thing when the various parts in relation will do. A better theory sees composition as much like loose identity.³ Pressing these claims, however, is outside my present purpose. The concern here is just how an account of loose identity should go, on the assumption that it is needed. I will be particularly concerned with why we use the words 'same' or 'identity' when attributing loose identity, and why such use is appropriate.

What is this relation of loose identity? It is not just similarity. The tornado in question is the same one we saw earlier, but not the same one as a closely resembling one a few miles away. What loose identity is depends on the things talked about and the purposes of the talkers. It often involves a proportionately small gain, loss, or replacement of parts or close resemblance or causal influence or spatio-temporal continuity, or a mixture of all of these as in the case of the tornado. For a detailed attempt to work out the relation between the successive things in one case, see Chisholm's discussion of the "successive table." A very attractive general characterization that encompasses Chisholm's example is given by Armstrong, inspired by Anstey and Geach. Armstrong says that loose identity is a species of "relative identity" which in general is co-membership in an equivalence class.⁵ The relevant class depends on context, of course. Part of what is so attractive about this proposal is that it captures that the relata really aren't identical, while providing an explanation for the use of the word 'identity': Loose identity is a lot like identity in virtue of being an equivalence relation, and we often use nearly appropriate words for resembling things. For instance we often call ships 'boats' when not being overly careful. Armstrong didn't in fact give this explanation, but he could well have.

Unfortunately, however, there is an obstacle to the proposal. Unlike any equivalence relation, loose identity is a matter of degree.⁶ So it is not transitive. Let me explain. Suppose loose identity is simply proportionately small replacement of parts. Then the original plurality may well not be loosely identical with the plurality resulting from successive small replacements. Too many original parts may have been lost. Yet the plurality resulting from each replacement may well be loosely identical with its predecessor. In general where loose identity depends on a small degree of difference it is not transitive, since small degrees of difference may sum to large ones. So for example, the cloud mass is loosely identical with the rotating cloud which is loosely identical with the funnel cloud which is loosely identical with the tornado. But the cloud mass is not even loosely identical with the tornado. They are too different in shape, behavior, and composition.

This is a case in which something becomes something else. Such cases are metaphysically puzzling. There is one thing at the beginning, there seems to be the same thing all along, yet there is a different thing at the end. An account of loose identity should help us resolve this puzzle which, after all, is a variation on the theme of distinct things identical with the same thing. And help is forthcoming. We can say that becoming something else is a succession of intransitive loose identities. That the predecessor *becomes* the successor, instead of just being replaced by it, is captured by the loose identities; identity is in some sense rightly attributed all along. That the successor is something *else* is captured by the fact that the relation of loose identity isn't transitive.

This case of becoming a tornado is not an isolated one. Intransitive loose identity can be found anytime something gradually becomes something else. So for example egg and sperm cell collectively become a human being which all too soon becomes a corpse. Some grass when eaten becomes cud and eventually cow flesh. A stack of bricks becomes a wall and then gradually the wall becomes a pile of rubble. Various materials become a work in progress which becomes a work of art. Various independent decisions and happenstances become a departmental policy which becomes another policy on gradual reinterpretation. Through successive drafts over the years, a paper becomes another, then another. In such cases there is loose identity over all relatively short periods of time, but not all relatively long ones. Loose identity is not transitive.

That many cases of loose identity are cases of becoming something else is no accident. Often loose identity is attributed to pluralities of things in succession that come together in one form, then disperse or are formed another way. For theoretical purposes, therefore, an account of loose identity ought to at least accommodate, and preferably explain, becoming something else. The account should certainly not be in tension with it, as Armstrong's is by holding that loose identity is an equivalence relation.

Of course Armstrong has to some extent anticipated such an objection. He says a "decent approximation to an equivalence class and an equivalence relation" will often do. What would such a decent approximation be, for a relation that isn't transitive? Presumably it would be a class in which for all members the relevant relation is reflexive and symmetric, and only for most members is it transitive. That is, in relatively few cases do two members bear the relation to some third member but not to each other.

This lessens the attractiveness of Armstrong's account a bit. Loose identity is now at two removes from identity. The resemblance between them is weakened and so the explanation for calling it loose "identity" is weakened. But perhaps it's near enough to be good enough.

Unfortunately not all cases are near enough. Suppose the cloud mass is long-lived, the transitional stages are short-lived, and the tornado is long-lived. In many cases, not few, a mass of matter in the cloud mass and a mass of matter in the tornado will be loosely identical with a mass of matter in a transitional stage. Yet they will not be loosely identical with each other. Thus there is no decent approximation of an equivalence relation here. Another approach is needed to help Armstrong shed unwanted transitivity.

Perhaps the objection can be overcome with a slight modification of Armstrong's account. He can say that a given relation of loose identity generates

not just a single equivalence class (or approximation thereto), but a class of them such that they have significant overlap in their memberships.⁸ Then he can go on to say that x is loosely identical with y if and only if x and y are both members of one of the equivalence classes in the relevant set. There is no guarantee that co-membership of x and y in some class, and co-membership of y and z in some class, will entail co-membership in some class of x and z. So loose identity won't be transitive.

This proposal follows out some of the presumed details of Armstrong's account of "partial relative identity." That would apparently be co-membership in some but not all members of a set of relevant equivalence classes. As Armstrong says such a relation would be symmetrical but not transitive.¹⁰

However if loose identity turns out not to be an equivalence relation, why try to preserve an account whose attractiveness consists in having it be an equivalence relation? This defense of Armstrong has surrendered too much.

One last try then: Stand firm that loose identity is an equivalence relation (or near enough). Grant that in the genesis of a tornado there are overlapping stretches of loose identity. But insist that they are all different loose identities different relations. The lack of transitivity of loose identity is mere appearance, the result of taking different transitive relations to be the same relation. That x has a relation of loose identity to y, y another such relation to z, and that x has no such relation to z, may look like lack of transitivity if the relations are confused, but really isn't. So it has come to this: The Armstrong account cannot both retain its initial attractiveness and accept as a fact that loose identity is a matter of degree. The apparent fact needs to be explained away.

Such an account may be right. But it seems to me such an account simply goes too far in defense of equivalence relations. It seems more natural to say we are attributing a non-transitive relation than to say we are attributing a number of slightly different transitive relations. The only motivation for hanging on to the latter, it seems to me, is that we have as yet no other explanation for using 'same' in attributions of loose identity than that we are attributing an equivalence relation. A replacement explanation would remove that motivation.

Here's a possibility: We use 'same' simply because we are attributing identity itself, though loosely. Consider some analogues. When we say that there are roughly 25 people in the room, we don't give an exact count of "rough 25." Rather we give a rough count of 25. Likewise when we say that our street is roughly a circle, we don't mean it is exactly a "rough circle." Rather we mean it is roughly a circle.¹¹ Likewise it seems to me we do not make strict attributions of loose identity; rather we make loose attributions of strict identity.

This explanation of why we use 'same' of the distinct requires that we distinguish two senses of attributing a relation. We have with Armstrong been assuming that the relation attributed is the one mentioned in the truth condition for the attribution. That assumption is right as far as it goes and we are indebted to Armstrong for emphasizing it. However there is no need to fit that relation onto the Procrustean bed of equivalence. There is an additional sense in which a relation can be attributed: It can be, as Hume says, "feign'd." ¹² We use the word 'same' because we are also feigning identity—representing things in fact distinct as being identical. So in a true attribution of loose identity there are really two attributions: that of the underlying truth-making relation—the relation which makes the attribution true—and that of the feigned relation, viz. identity, strict, absolute identity. My account differs from Armstrong's in adding the feigning of identity to the standard attribution of the underlying relation, to let the latter be intransitive.

The fact that the feigned relation is false of the relata, and different from the truth-making relation, is why such cases are called cases of loose identity. As I've suggested, they would more aptly be called cases of loose attribution of identity. Thus in part, correct attributions of loose identity are fictions. Nonetheless in part they are true, for they are also attributions of the underlying relation—the one mentioned in the truth conditions.

An analogy may help. On the supposition that the doll is a real baby and that the toy bottle really dispenses milk, what makes "The baby has been fed" true is that the toy bottle has been held for a few seconds in the vicinity of the doll's mouth. There are two attributions here, a fictional one and a true one. The fictional one is made by the sentence taken literally. The true one is made by the sentence in the context of making certain suppositions. We acknowledge that the suppositions are false, by putting the underlying true attribution in literally true terms. That is we speak of the doll, not the baby, etc. when we say what makes the sentence true.

The analogy of pretending is meant merely to illustrate how an attribution can be regarded as two attributions. A pretense is false. Yet in the course of pretending if your daughter says, "I fed the baby" and another child says "Did not," your daughter is right if she had previously put the toy bottle in the vicinity of the doll's lips; the other child is wrong. In the course of pretending it is perfectly appropriate to treat a statement as true, that is strictly false. That's the sort of phenomenon I'm interested in.

Another analogy is giving a rough count, as I've mentioned. I may use the number 25 as if it were the number of people in the room, even when it isn't. The underlying relation is the nearness of 25 to the number of people. But I may use 25 as if there were equality with the number of people. I would do so, for instance, in summing or comparing rough counts of people in various rooms. This isn't pretending. But still it is a case of appropriately treating the false as true.

The tornado case is more like pretending than estimating. It is as if we pretend that a tornado is a single thing identical through time. Only as if, though. Pretending tends to be local, temporary, and self-conscious. Humean feigning is widespread, relatively permanent, and not self-conscious. Still, as in the doll case, the results of false suppositions are appropriately treated as true. On the suppositions that a tornado at a time is a single thing and that a complex relation (involving close resemblance in certain respects, proportionately small replacements of parts in the short term, spatio-temporal continuity, and causal

influence) is identity, what makes it true that the tornado is the same through time is that this relation holds.

An additional advantage of this account is that it does not require that there be a single thing at one time and a distinct single thing at another to which the identity is attributed. As in the tornado example, there may at each time just be many bits of matter in some complex relation, not a single thing. We take these many collectively to be a single thing, 14 and their relation to many later bits collectively underlies the attribution of identity through time. In fact loose identity generally concerns multiplicities; the unity of each of its relata is as feigned as their identity.

How then is the original apparent contradiction resolved? The contradiction is this: If identity can rightly be attributed to distinct things, then the sentence 'They are the same thing' is true and false. The resolution is as follows: The sentence is used at the same time to attribute identity, falsely, and the underlying relation, truly. The underlying relation can truly hold of the relata that really exist, even when that relation is falsely supposed to be an identity holding between things falsely supposed to be single things.

What then does it mean to say that loose identity is a matter of degree, and why isn't it transitive? Answer: Whether the fiction of identity is appropriate depends on how closely related two things are. Thus the fiction may be appropriate of x and y, and of y and z, though not of x and z.

My account explains the role the word 'same' plays in the attribution: It, or a comparable expression, is needed for identity to be feigned. But then, of course, the question arises, why the feigning? Why is identity conventionally attributed in cases in which pluralities are closely connected by various relations, especially when they are not equivalence relations? What makes the fiction appropriate?¹⁵ It may be as Hume proposed, that the mind naturally fails to distinguish things in certain kinds of relation. 16 But why?

The traditional explanation has it that distinct things in succession which are virtually indistinguishable in the short term are referred to by one name as if they were numerically the same thing. This is done for "the conveniency of speech" as Reid puts it and for "conveniency and dispatch in the common actions of life" as Berkeley does. 17 The assumption seems to be that distinguishing is more trouble than identifying. To avoid the trouble the successive things are "united under a common idea that does not make the difference between them clear and indicates only what they have in common," as Arnauld and Nicole say.¹⁸

This traditional account is carried over into Quine's discussion of cases in which we use ostension and an attribution of identity to make "a convenient addition to our ontology." 19 Quine doesn't seem to regard this as feigning, but the motivations are apparently the same. In so making an addition we "simplify our discourse" by ignoring "distinctions immaterial to the discourse at hand." Thus we identify things "indiscernible" relative to a discourse. 20 This move is picked up by Geach, whose discussion of relative identity provides an inspiration for Armstrong on loose identity.

I think it is clear that short term similarity smoothes the way to attributing identity. Since the distinct tend to differ, lack of differing makes distinctness less obvious. Further there is an analogy between successive similarity and identity through time in that they both entail similarity. The close fit facilitates substituting the latter for the former.

Nonetheless the emphasis on resemblance, especially in Quine's heirs, neglects the change—the lack of resemblance—that the early accounts recognize in things loosely identical over the longer term. The Granted, after a while changes mount up to the extent that we say something has become something else. But short of this, change is allowed. However, even the early accounts fail to recognize that differences over time, changes, are important in explaining why we feign identity. Supporting change is another way of being analogous to identity. In fact recognizing this also helps address a related problem which appeal to similarity doesn't work for—why individuality is attributed to what is really a plurality of related things at a time. 22

The early tradition tries to explain why many are taken to be one through time. However these cases generally involve taking many to be one also at a time. Each of the successors loosely identified is itself really just many things related in some way. A tornado at a time is just air molecules, pieces of dust and dirt, bits of water vapor, wisps of straw, various shingles, etc., whirling around. Why do we take it to be unitary—an individual? The various things don't resemble each other so the traditional explanation of feigning identity doesn't apply.

The first step in an answer is to see that the underlying complex relation linking the distinct things, supports a relatively predictable process of change during the gradual replacement of those things. In various cases knowing what is coming cannot easily be based on knowledge of the many individually at a time, but can be much more easily gained based on knowledge of the many collectively at that time. Thus there would be predictive benefit to regarding the many collectively.

Consider some examples. Waves at the shore go through predictable changes. First there is the swell, then the wave crests, dashes on the beach, and recedes. Likewise with a tornado the funnel cloud forms, the funnel touches down, gathers debris, later grows thin, then lifts or dissipates. The advantages of being able to make such predictions range from the recreational, as in body surfing, to survival, as in knowing what to expect of a tornado in the vicinity.

Once we think in terms of prediction we see that predicting continued similarity in many collectively during replacement of individuals, may also be advantageous. Additionally there are advantages in using inductions from observed similar collectives to unobserved similar ones, both to infer changes and similarities.²³ Note that our general concern with similarity and change involves a particular concern for the causal powers of the many collectively.

Thus an important reason for regarding many things as a collective at a time is that we are interested in the collective behavior through time of them and their successors. In this respect, in the relevant cases, there is an analogy between individual identity and the complex underlying relation unifying the many collectively at times and between times. The complicated relations between the bits of matter that make up waves or tornadoes, and between the multiplicities of matter at one time and at a later time, support continued similarity and also relatively predictable change in the collective. So too does an individual's identity link its similarities and differences through time.²⁴

The close fit between the underlying relation and individual identity facilitates the feigning.²⁵ However more is needed to explain it. Why not regard the entire collective as such? Why regard the many collectively as an individual at a time, identical through time?

The answer of the tradition—that it saves on names and ideas—is not satisfactory. We have plural expressions that are as easy to use as singular ones. I assume it is the same with ideas. In terms of expressions required, speaking of the Founding Fathers is as easy as speaking of George Washington. What is harder, is speaking of Washington, Adams, Franklin, Jefferson, et al. individually. Likewise talk of change through time can be done in the plural. We say successive presidents gradually gained more power. Economy of expression only requires few expressions, not singular ones. Why then use the inaccurate singular of many collectively, when an accurate plural is just as easy?

Actually the question is not just about using the singular. We use singular expressions like 'collective' when explicitly talking of many collectively in order to aid in constructing plural plurals, e.g. "many collectives." Let me say that an expression like 'collective', while grammatically singular, is conceptually plural. The question then is why we would use an expression that is both grammatically and conceptually singular of many collectively. Why regard them as an individual?

I conjecture that regarding something as an individual is a sign of its importance in the context. A collective of things of individual importance is denoted by a conceptually plural expression. They "count," which is a handy way of conveying that we regard them as distinct things because they are important as distinct things. A collective of things of no individual importance is denoted by a conceptually singular expression. They don't count. In such a context the important thing is the collective; it is treated as an individual; it counts. The same goes for successions. If the members are of no individual importance, they are treated as the same thing.

In philosophical contexts this treatment is suspect. There, mere numerical difference from other things is sufficient for importance. In loose and popular contexts such meticulousness can mislead about importance. And so, in certain cases, we treat the many collectively in succession as a single enduring thing. We feign identity.

If my conjecture about importance is correct then one would expect a parallel phenomenon of "loose diversity"—a single thing taken to be two or more distinct things. In such a case a thing's aspects would, in context, be considered individually important regardless of their real identity. In my opinion such cases are found at least anywhere philosophers of language find substitution failures. We say that Lois Lane loves Superman though not Clark Kent, though we know they are the same person. Why? Because in love and ignorance aspects of a thing often loom larger than the thing itself.

Loose diversity requires a separate discussion.²⁶ But note that an advantage of admitting loose identity and loose diversity would be the provision of a very natural explanation for the perplexing locution, 'They are the same thing.' ²⁷ With such sentences we either attribute loose identity to the strictly diverse, or strict identity to the loosely diverse.²⁸

Notes

¹See Hume (1978), Book 1, Part 4, Section 6, p. 256; Butler and Reid, in Perry (1975), p. 101, 112; Arnauld and Nicole (1996), pp. 111–113; Chisholm (1976), pp. 92, 96–104.

²On my view, identity depends on standards for counting with competing virtues, where more than one standard can be correct. On a loose identity view, one standard is correct and any other, however useful, is incorrect. See my (1988a) and (1988b).

³See my (1988a) and (1988b). Cf. Yi (1999).

⁴Chisholm (1976), pp. 97–103. Note that on Chisholm's proposal, 'Table A is loosely identical with table B' could be defined as 'Table A constitutes at some time the same successive table that table B constitutes at some time.' This is an equivalence relation given his definitions.

⁵Armstrong (1993), pp. 40–41, and (1997), p. 16. Intuitively, relative identity is exact resemblance in some relevant respect (or in all of some relevant respects).

⁶Hume (1978), p. 262. Hume is explicitly concerned with the vagueness of loose applications of 'same' resulting from the fact that the underlying relations "may diminish by insensible degrees." My simpler point does not depend on the vagueness, but just on the fact that small degrees of difference where 'same' is clearly loosely applicable may sum to large degrees where it clearly is not applicable, even loosely.

⁷Armstrong (1997), p. 16.

⁸One might be tempted to specify each relevant equivalence class by referring to the mereological whole of its members. The equivalence relation would be the relation of co-parthood in that whole. However this approach appeals to mereological wholes, which have already been ruled out.

⁹Intuitively, partial relative identity is exact resemblance in some of various relevant respects.

¹⁰Armstrong (1993), p. 42.

¹¹Cf. Unger (1975), p. 68-69.

¹²Actually Hume tends to say what we "feign" is a metaphysical fact to justify the mistaken attribution of identity. See Hume (1978), pp. 254, 263. Armstrong notes Hume's use of 'feigned' in (1997), p. 88. See also Chisholm (1976), p. 96.

¹³Hume (1978), p. 259.

¹⁴In my opinion to take many things to be a single thing is to take them to be aspects of a single thing, in my sense of 'aspect'. (See my 1999) However nothing I say in this paper precludes a more standard interpretation in which taking many things to be a single thing is taking them to compose a single thing in a sense of composition that is not a form of identity. I'm indebted to Cian Dorr and Gideon Rosen for raising this point.

¹⁵For careful exploration of the depths of a related problem see Hirsch (1993), esp. Ch. 5. The question for me is like Hirsch's problem of "individuative strangeness" from the point of view of a "Disbeliever:" What are the relative advantages of individuating the world into things we think exist and can be denoted—like bits of matter—as opposed to "virtual objects" which we think don't exist and can only be "ostensibly denoted"—like tornadoes (given the initial assumption of this paper)? (See Hirsch, 1993, p. 12) The question for me is unlike Hirsch's, however, in two ways: First, neither alternative qualifies as "strange," i.e., intuitively "absurd." (Hirsch, 1993, p. 27) Second, the more common and familiar way of individuating is the one that posits the "virtual object."

¹⁶Hume (1978), p. 255.

¹⁷Reid in Perry (1975), p. 112; Berkeley (1948–57), p. 246; Cf. Butler in Perry (1975), p. 100. Chisholm endorses the explanation of Butler and Reid. (Chisholm, 1976, pp. 96–97)

¹⁸Arnauld and Nicole (1996), p. 111.

¹⁹Quine (1961), p. 70.

²⁰Ouine (1961), pp. 70–71.

²¹Arnauld and Nicole (1996), p. 112–113; Hume (1978), p. 257.

²²Hume tries to give parallel explanations. However he appeals to psychological tendencies to identify the closely related which, again, I'm trying to give reasons for. See Hume (1978), pp. 220–221.

²³Millikan emphasizes the role of induction in our formation of substance concepts and extends this to our concepts of individual substances. (Millikan, 2000, Chapter 2) She mainly emphasizes predicting similarities—that an individual will be similar to itself in the future or will be similar to other individuals of the same kind—or as she puts it, "projecting of invariants." (Millikan, 2000, p. 26) Nonetheless she touches on what I am emphasizing—knowing what's next, knowing how the process will unfold. (Millikan, 2000, p. 27; cf. p. 73)

²⁴Gracia suggest that the ability to undergo change is a mark of individuality, and so, I infer, of feigned individuality. (Gracia, 1988, p. 17)

²⁵Cf. Hume (1978), p. 253.

²⁶For background see Baxter (1999).

²⁷Cf. Russell (1985), p. 115.

²⁸I'm grateful for comments from Austin Clark, John Trover, David Armstrong, W.R. Carter, Jaegwon Kim, Paul Bloomfield, and some anonymous referees.

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