# CHISHOLM'S CHANGING CONCEPTION OF ORDINARY OBJECTS

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#### Summary

Roderick Chisholm changed his mind about ordinary objects. Circa 1973–1976, his analysis of them required the positing of two kinds of entities—part-changing ens successiva and non-part-changing, non-scatterable primary objects. This view has been well noted and frequently discussed (e.g., recently in Gallois 1998 and Sider 2001). Less often treated is his later view of ordinary objects (1986–1989), where the two kinds of posited entities change, from ens successiva to modes, and, while retaining primary objects, he now allows them to survive spatial scatter. Also (to my knowledge) not discussed is why he changed his mind. This paper is mostly intended to fill in these gaps, but I also give some additional reasons to prefer Chisholm's later view. Also, I discuss how mereological essentialism can be further defended by how it informs a theory of property-inherence which steers between the excesses of the bare particularists and bundle theorists.

## 1. Review of Chisholm's earlier position

#### 1.1 Introduction

Chisholm's views on the status of ordinary objects can be divided into two major stages. In the first stage, from around 1973 to 1976, he held a somewhat restricted mereology, and believed that most problems of material constitution and persistence are brought about by not realizing the following two things. First, in addition to the strict and philosophical sense of 'identity', there is a loose and popular sense of 'identity', and the two often get conflated. Second, real objects have all of their parts essentially. According to this view, ordinary part-changing objects are logical constructions or 'fictions', constructed out of (or reduced to) a succession

of objects which do not change their parts.1

In the second stage, from 1986–1989, Chisholm maintained mereological essentialism as well as the dichotomy of loose versus strict identity. However, he believed in a far less restricted mereology, and instead of constructions or fictions, he identified ordinary objects with reified *modes* of a succession of mereologically stable bare objects. These modes are not fictions constructed out of mereologically stable objects; they are rather genuine entities which 'pass through' a succession of mereologically stable masses of matter which are the substrates of the modes.<sup>2</sup> The second view is superior, but underdeveloped. But first I will examine the original view in detail.

The paper has three central sections. In section (1), I will show how Chisholm's *entia successiva* account of ordinary objects is a sensible first-pass at solving some problems of material constitution. In section (2), I will show how Mereological Essentialism ('ME') has some additional support making it even stronger than Chisholm initially supposed, namely, that ME offers a strong alternative to the bundle and bare particular views of property inherence. Yet, his earlier account as it is cannot solve the paradox of coincidence. Also, unmodified, it is too close to four-dimensionalism, a position he is against. Also, in section (2) I will show how Chisholm's earlier conception of objects is not as well-equipped as his later conception to solve as many problems. I will give some circumstantial support that Chisholm *might* have changed his mind about ordinary objects due to some of the concerns I raise (some of which were raised by Wiggins in 1979), but this is somewhat speculative. Lastly, in section (3), I show how his later account gets around some of the problems of the earlier view, and hence is an improvement upon it.

#### 1.1 Identity strict and loose

Chisholm's earlier view is encapsulated in "Parts as Essential to Their Wholes," "Mereological Essentialism: Some Further Considerations," and *Person and Object.* I will mostly focus on *Person and Object.* 

<sup>1.</sup> It is questionable whether a 'logical constructions' view is compatible with a 'fictionalist' view, as well as which kind of view Chisholm preferred. I believe he was not really interested in deciding this question at the time of writing *Person and Object*.

<sup>2.</sup> For a similar view, see Karmo 1977. For a discussion of Karmo's 1977 and Chisholm's 1986, see Zimmerman 1995.

<sup>3.</sup> Chisholm 1973, 1975, and 1976 (especially Chapter III and Appendix B), respectively.

Chisholm begins discussing identity over time in Chapter III of *Person* and Object by pointing out the puzzle of the Ship of Theseus. 4 Suppose that a man named Theseus had a ship made entirely out of wood, with planks labeled 1–1,000. Let us call this ship, before any part changes, S1. Theseus' ship comes into port twice a year, and each time has twenty planks replaced with aluminum ones. After twenty-five years, we have a ship S2, which we most likely would say is the *same* ship, made of completely different parts. But, the Hobbesian twist is that,<sup>5</sup> let us suppose, the shipwright who replaced the boards took the original planks and arranged them so that they are identically placed as they were with S1, so that after twenty five years the shipwright has made a ship S3 which is qualitatively identical to S1 and has all the same parts. Both S2 and S3 are good candidates for being identical with S1, but if they both are, then we have the absurd consequence that each of two ships is identical to one ship. This much is obvious: were it not for S3, we would say that S2 is identical with S1. Similarly, if S2 did not exist, we would find no fault with the claim that S3 is identical with S1. But why should what occurs with another ship determine whether *this* ship is identical with S1?

Chisholm attempts to solve this puzzle and others by pointing out the distinction between strict and loose identity, and defending mereological essentialism. For Chisholm, these notions go hand in hand towards constructing a theory of ordinary objects and their persistence conditions.

We can clarify the notion of loose versus strict identity by looking at several ways Chisholm says that we play 'fast and loose' with identity talk. Sometimes we play fast and loose with identity when we say things like "Route 6 is Point Street in Providence and is Fall River Avenue in Seekonk" (1976, 93). Since Fall River Avenue is not Point Street, they cannot both be identical to Route 6. In these kinds of cases we use an apparent 'is' of identity as short for more clear but unwieldy locutions. Similarly, we play fast and loose with identity talk when we employ *façon de parler* fusion and fission talk, such as when we say "This train will be two trains after Encinitas", or, "Those two trains will be one train after Leucadia." Sometimes we also fudge things a bit when we conflate a description, whose

There is considerable overlap in the three. The content of 1976 contains most of that in 1973 and 1975. When I refer to 1973 I will use the page numbers from Chisholm 1989, where 1973 is re-printed.

<sup>4.</sup> The original appearance of this puzzle is in Plato's *Phaedo*, 58a. My description of the puzzle is not exactly the same as either Plato's or Chisholm's.

<sup>5.</sup> Concerning Body Chap IX Sxn 7.

referent can change, with a rigid designator. For instance, one who hears "The President of the United States was Eisenhower in 1955, and Ford in 1975," who is not aware of certain conventions can be forgiven for thinking that there is this *entity*, the President, who was identical with Eisenhower in 1955 and Ford in 1975 (Ibid.). Lastly, a common error is confusing numerical with qualitative identity, or types with tokens, such as when I find someone with a mandolin and I say "you play the same instrument I play." If my hearer insists that, no, it is *his* instrument, and I have never played it, he's made an obvious error.

So much is easily agreed upon. The folk sometimes use 'as-if' identity talk that is not strictly speaking talk of *identity* (and the same goes for the 'is not' of *difference*). Chisholm courts controversy, however, when he compares these 'fast and loose' uses of identity with a very common usage, when we attribute identity to things across time that have changed their parts. Bishop Butler once "suggested that it is only in 'a loose and popular sense' that we may speak of the persistence of such familiar things as ships, plants and houses. And he contrasted this 'loose and popular sense' with 'the strict and philosophical sense' in which we may speak of the persistence of *persons*" (Ibid.).

# 1.2 Mereological essentialism: philosophical motivations and historical support

Thomas Reid, like Bishop Butler, also held that the persistence of persons is a paradigm instance of the persistence of a substance or *thing*, whereas that of tables or chairs, which change their parts, is not genuine persistence:

The identity of a person is a perfect identity; wherever it is real, it admits of no degrees ... for this cause, I have first considered personal identity, as that which is perfect in its kind, and the natural measure of that which is imperfect. (Reid 1854, 345. Quoted in Chisholm 1976, 89)

All bodies, as they consist of innumerable parts that may be disjoined from them by a great variety of causes, are subject to continual changes of their substance, increasing, diminishing, changing insensibly. When such alterations are gradual, because language could not afford a different name for every different state of such a changeable being, it retains the same name, and is considered as the same thing. Thus we say of an old regiment that it did such a thing a century ago, though there now is not a man alive who then belonged to it. We say a tree is the same in the seed-bed and in the forest.

A ship of war, which has successively changed her anchors, her tackle, her sails, her masts, her planks, and her timbers, while keeps the same name is the same. (Reid 1854, 346. Quoted in Chisholm 1976, 96)

Bodies are to be identified with *all* of their parts, and it is only in a loose and popular way that we say that a person has the *same* body when they have changed their parts. Many have agreed. David Hume, for instance, said "all objects, to which we ascribe identity, without observing their invariableness and uninterruptedness, are such as consist of a succession of related objects" (Hume's *Treatise*, I.iv.6, Selby-Bigge edition, 255. Quoted in Chisholm 1976, 211). Bodies have all of their parts *essentially*. When we talk about a thing that has changed its parts yet remained the same, we are actually talking about a succession of objects. As Hume says:

... suppose any mass of matter, of which the parts are contiguous and connected, to be plac'd before us; 'tis plain we must attribute a perfect identity to this mass, provided all the parts continue uninterruptedly and invariably the same, whatever motion or change of place we may observe either in the whole or in any of the parts. But supposing some very *small* or *inconsiderable* part be added to the mass, or substracted [sic] from it; tho' this absolutely destroys the identity of the whole, strictly speaking; yet as we seldom think so accurately, we scruple not to pronounce a mass of matter the same, where we find so trivial an alteration. The passage of the thought from the object before the change to the object after it, is so smooth and easy, that we scarce perceive the transition, and are apt to imagine, that 'tis nothing but a continu'd survey of the same object. (Hume's *Treatise*, I.iv.6, Norton and Norton edition, 167)

As Chisholm points out, "Abelard held that 'no thing has more or less parts at one time than at another' (Quoted from Henry 1972, 120). Leibniz said "we cannot say, speaking according to the great truth of things, that the same whole is preserved when a part is lost" (see Chisholm 1976, 145). A great many philosophers have embraced this doctrine, frequently called *mereological essentialism*.

Mereological essentialism has some intuitive appeal, but has an immediate counterintuitive consequence. Particular bodies, or masses of matter, cannot change parts; commonsense objects, such as tables and chairs, can change parts; so, commonsense objects are not particular bodies or masses of matter. But what *are* commonsense objects then? Chisholm answers, along with Hume, that commonsense objects are successions of distinct objects that it is convenient for us to 'feign identity' about. A chair at t<sub>1</sub>

which has lost a part by t<sub>2</sub>, is only identical to the later chair in a 'loose and popular sense', but is, strictly speaking, distinct.

Why would anyone accept mereological essentialism ('ME'), and why in particular does Chisholm? What exactly does the doctrine amount to, and what is the precise relation between the commonsense objects and the 'mereologically inflexible' ones? Unfortunately, Chisholm is much clearer about *how* we can hold ME and make it workable, rather than *why* we should regard it as true in the first place. Chisholm, in general, never spends much time defending why we should identify an object with its parts, except to point out the problems with mereological inessentialism (which we will get to), and what we can see in one short passage. I will try to get clear on why Chisholm thinks it is true, which we can only glean by perusing a wide variety of Chisholm's material. But first let us examine how Chisholm develops ME to clarify the relation between commonsense part-changing objects and the more philosophical, mereologically inflexible ones.

## 1.3 Entia successiva and entia per se

Chisholm says that the principle of mereological essentialism is the following:

... for any whole x, if x has y as one of its parts then y is part of x in every possible world in which x exists. The principle may also be put by saying that every whole has the parts that it has necessarily, or by saying that if y is part of x then the property of having y as one of its parts is essential to x. If the principle is true, then if y is ever a part of x, y will be part of x as long as x exists. (1976, 145)

The principle does not, of course, entail that a part y is necessarily a part of x, or needs to be a part of x in order to exist.

In order to explicate the difference between the parts of mereologically inflexible and commonsense or 'mereologically incontinent' objects, we need the distinction between a 'strict part' versus a 'loose part'. <sup>10</sup> Chisholm

<sup>6.</sup> Chisholm introduces this phrase in 1976 for objects which cannot change parts.

<sup>7.</sup> Although by answering the how he lessens the negative pull of the why question.

<sup>8.</sup> Here is the passage: "There is in its favour: a certain intuitive plausibility; the support of an impressive philosophical tradition; and the fact that it enables us to deal with what otherwise seems to be insoluble philosophical puzzles." 1976, 151.

<sup>9.</sup> Zimmerman coins this phrase in 1995.

<sup>10.</sup> Note that Chisholm does not say anything about what a loose-part is except that they are not strict parts, i.e., they are parts the folk think an object can lose or gain yet retain its identity.

uses the term 'S-part' for strict part. With the phrase 'S-part', we mean by 'part' what is often meant by 'proper part', or, a part of something that is distinct from that (entire) thing. Chisholm presents three initial axioms that give us transitivity and asymmetry for S-part, and ME.

- (A1) If x is an S-part of y and y is an S-part of z, then x is an S-part of z.
- (A2) If x is an S-part of y, then y is not an S-part of x.
- (A3) If *x* is an S-part of *y*, then *y* is such that in every possible world in which *y* exists *x* is an S-part of *y*.

The fourth axiom Chisholm presents is controversial even to many people who identify themselves as mereological essentialists:

(A4) For every x and y, if x is other than y, then it is possible that x exists and y exists and that there is no z such that x is an S-part of z and y is an S-part of z.

This principle, which we could call 'The Contingency of Wholes' is an explicit rejection of unrestricted mereology. <sup>12</sup> The principle of unrestricted mereology ('UM') or collectivism is that, for any distinct x and y, there exists a z such that x and y compose, or 'make up' z. UM is itself controversial, since it states that, for any two individuals, regardless of their temporal or spatial spread, they 'fuse' together to compose a 'third'<sup>13</sup> individual. If UM is correct, then there is an individual made up of the electron in my nose furthermost from my center of gravity and the last dinosaur.

1.4 Chisholm's restricted mereology and an answer to the Special Composition Question

First, let me introduce some rough-and-ready terminology. By 'bare objects' let us mean what have been variously referred to as 'masses,' 14 or 'fusions'

<sup>11.</sup> All four principles are in 1976, 151. By 'other' in 'x is other than y' Chisholm seems to mean either completely disjoint or partially overlapping.

<sup>12.</sup> See Wiggins 1979, 302.

<sup>13.</sup> I put the scare quotes because it is an open question whether composition is identity. If it is, the 'third' thing is not really anything in addition that we are ontically committed to beyond the two composing items. See Lewis 1991, 72–87 and Wallace ms for details on this debate.

<sup>14.</sup> The term 'masses' comes from Zimmerman 1995. These entities are also called 'aggregates-' (Burge 1977), 'parcels-' (Locke's *Essay*), 'collections-' (Wiggins \*), 'consignments-' (Karmo 1977), and 'quantities-' (Cartwright 1974 and 1979)—of matter.

of matter such that they persists just so long as all of their constituent parts do, regardless of whether they fall under a commonsense sortal (e.g., 'car', 'car'). By 'partially nude objects' let us mean fusions which persists just so long as all of their parts are stuck together to form objects of commonsense (where we include contiguous 'pieces' or 'bits' under the extension of 'commonsense object'). Both bare and partially nude objects are metaphorically naked in the sense that their persistence conditions are unencumbered by the clothing of natural- and artifactual-kind Aristotelian substance sortals, and hence are somewhat immodest in their persistence conditions. The main difference between the two kinds of objects is that bare, but not partially nude, objects can survive scatter.

UM is one answer to the question posed by Peter Van Inwagen called the 'Special Composition Question' ('SCQ'), namely, when is it true that there exists something such that some distinct things compose it? Some rivals of UM answer: 'never' (nihilism), 'when the things compose an organism' (organicism), 'whenever we intuitively think some things do' , 'it is a brute, unexplained fact when some things compose something' (brutalism). Chisholm, while not explicitly addressing this question (he wrote *Person and Object* eighteen years before Van Inwagen's *Material Beings*), has an answer as well. Two things compose a thing when they are *strictly joined*:

(D.B.3) x is strictly joined with  $y =_{Df}$  There is a w such that w is strictly made up of x and y.

But, when does the condition on the right obtain?

We might say that two things are *strictly joined* if no third individual falls between them; then we could say that two things are *joined* if part of the one is strictly joined with part of the other. This would allow us to say that scattered subatomic particles may be parts of an individual thing. But we would not need to say that a suite of furniture separated by various objects is itself an individual thing. Axiom (A4) and these criteria allow us to say that *some* things that are not in direct or indirect physical contact may be parts of the same individual thing, but they do not require us to say that *any* two separated things are parts of one individual thing. (Chisholm 1976, 153)

<sup>15.</sup> Van Inwagen 1990, 21-33

<sup>16.</sup> Dorr 2002.

<sup>17.</sup> Van Inwagen 1990.

<sup>18.</sup> Tacitly assumed by many such as Wiggins 1980.

<sup>19.</sup> Markosian 1998.

This would be extremely informative, if we knew what counts as an individual for Chisholm. Regions of space? If so, then everything would be joined to everything else (but, since strictly joined and not joined is what is ontologically important and clarified, it is not clear whether this would be bad). If not, then any two things, no matter how distant, would compose a further thing if no third thing comes between them, which is a kind of thesis that Chisholm seems against at this period. He never tells us directly, so, it is a bit difficult to tease out exactly what Chisholm had in mind, and it wasn't his intention to answer the then unasked SCQ. But, from this and other passages it seems that Chisholm held (at this period) that two or more things compose something just in case they are relatively compact and fall under some commonsense sortal, where we allow piece or piece of to count as commonsense sortals as well (where *piece* here implies contiguity and 'stuck-togetherness' of its constituent parts. This sense of 'piece' is commonsense, and not the same as the aforementioned 'parcel', 'aggregate', or 'fusion' of the philosophers). As we'll see, Chisholm held that if some bits of matter compose a hunk of matter that constitutes an object, that that hunk of matter goes out of existence when a tiny bit gets unattached and scattered from the (distinct) hunk of matter it used to be attached to. He does not believe that the former hunk of matter is still around, just with a piece no longer as contiguous with the rest as before (See Chisholm 1975, 481 and fn 4). To use our (not Chisholm's) terminology, Chisholm does not believe in *bare objects* at this point. That is, he does not believe that there are aggregates which persist just so long as their parts do. He does, however, believe in what I call partially nude objects, that is, aggregates that 'fuse' or aggregate (verb) just so long as all of their parts are either joined or contiguous with each other in such a way that they fall under an Aristotelian substance sortal, including piece or hunk of stuff. Partially nude objects won't survive the macroscopic discontiguity of their parts, unlike bare objects. As we'll see, partially nude objects are an inferior and somewhat arbitrary postulate as compared to bare objects, and Chisholm's acceptance of the partially nude, but not completely naked objects, gets him into trouble. Chisholm did, however, in the second stage that we will discuss, embrace bare objects.

### 1.5 Relation of primary to 'vulgar' objects

Switching to Chisholm's more tasteful usage, what we have called partially nude objects are what Chisholm calls *primary objects* (Chisholm 1989, 78).

Primary objects are either simple particles, gunk,<sup>20</sup> or fusions of either which fuse according to the criteria laid out above. Primary objects are also mereologically inflexible; they have all of their parts essentially. For Chisholm, primary objects are the genuine objects, and commonsense or 'vulgar' putatively part-changing objects are logical constructions out of the former. Given ME, is there no mereological change? There is:

If what I have said is correct, at least *four* types of mereological change are possible. The first two are coming into being and passing away; for wholes do come into being and pass away ... And the second two types of mereological change are joining and disjoining. Objects may be joined together to form a whole that hadn't previously existed. And objects may be disjoined from each other and, unlike the whole that they had formed, survive the change. (1976, 153)

When we except creation *ex nihilo* and annihilation into nothing of simples or any composite whole's part(s), there are actually only *two* kinds of mereological change, since joining is equivalent to coming into being, and passing away is equivalent to disjoining.

How do primary objects relate to vulgar ones? Let's use Chisholm's example of a very simple table, with only two (salient) parts—a stump and a board, one of which changes every day. Suppose on Monday that the table is made up of parts A and B, Tuesday, of B and C, and Wednesday, of C and D. Let us suppose that the changes the table goes through lead the folk to say that it is the same table throughout the time period, and let us further suppose that at no time through the part-changes would we suppose that there is not a table occupying the region occupied by at least two of the aforementioned parts. Is the table on Monday the same table as the table on Wednesday? 'Yes', say the folk (and most philosophers, let us presume). Is the table on Monday the same *primary object* as the table on Wednesday? 'No', says Chisholm (and other ME adherents). If, as Chisholm contends, there really are only primary objects, what is it that the folk are talking about? Chisholm calls the folk table an *ens succesivum*—"the 'successive table' that is made up of different things at different times" (1976, 98). The successive table and all other entia successiva, the chairs, cats, staplers and trees of common sense, are all logical 'fictions' or 'constructions' out of primary objects.

But what is the relation, between, say, the table made up out of AB on

<sup>20. &#</sup>x27;Gunk' refers to stuff which has proper parts, each of which also contain proper parts, ad infinitum.

Monday and BC on Tuesday? Table BC is a *direct table successor* of AB. y is a direct table successor of x just in case x is a table at  $t_1$ , y is a table at  $t_2$ , and, there is a z such that part of z is part of x at  $t_1$ , and part of x is part of y at  $t_2$ , and at every moment between  $t_1$  and  $t_2$  inclusive, z is itself a table.  $t_2$ 

What about the relation between AB and CD? CD is not a *direct* table successor of AB, but it is a table successor. Roughly, y is a (non-direct) table successor of x just in case x is a direct table successor of some z which is either a direct table successor of y, or is a direct table successor of a direct table successor of y or ... [repeated a finite number of times] ... of y (Chisholm 1976, 99). With some tinkering, we could generalize what it is to be a \_\_\_\_\_\_-successor for any count sortal, and define any part-changing object as a series or succession of mereologically inflexible ones.

*Entia successiva*, which are logical constructions, have their properties by proxy. For example, a successive table is blue (at *t*), iff some non-successive entity that stands in for it or 'does duty for it' is blue (at *t*). A successive table can prop up a plate and a glass only if a series of mereologically changeless, almost instantaneous tables, hold up a plate and a glass (or, rather, hold up a series of instantaneous plates and glasses).<sup>22</sup>

With our situation of the table from Monday to Wednesday, the question arises—how many tables total are there? Three? One? *Four*? Chisholm replies:

In saying that there are exactly *three* tables in the situation described one is speaking in the strict and philosophical sense and not in the loose and popular sense. In saying that there is exactly *one* table one is speaking in the loose and popular sense and not in the strict and philosophical sense. But the statement that there are *four* tables—AB, BC, CD and the successive

<sup>21.</sup> Chisholm's official definition is as follows:

D.III.1 x is at a t a direct table successor of y at  $t' =_{Df}(i)$  t does not begin before t': (ii) x is a table at t and y is a table at t'; and (iii) there is a z, such that z is a part of x at t and a part of y at t', and every moment between t' and t, inclusive, z is itself a table. (1976, p. 99)

I changed condition (iii), because it won't work as it stands. If A is a stump, and B is a board, if we turn the successive table into BC by placing stump C on top of B, turn it over and remove stump A, the 'table' z (ABC) that links x and y is not a part of x or y. Rather, part of z (AB) is part of x (AB) (an improper part), and part of z (BC) is an (improper) part of y (BC). Z itself is a table in this case, though a rather odd one.

<sup>22. &</sup>quot;(D.III.8) The successive table that is at place P at time t is F at  $t =_{Df}$  There is exactly one thing at place P at t that constitutes a successive table at t and that thing is F at t." (1976, 101)

table—is simply the result of confusion. One is trying to speak both ways at once (1976, 103).

## 1.6 Dealing with the puzzle cases

How does Chisholm's ME account deal with the puzzle cases? Some it deals with quite readily, while with others it does not fare so well. We'll also see that ME can deal reasonably well with the standard types of objections to it.

With the Ship of Theseus, the question 'which ship is identical to S1; S2 or S3?' loses its bite. S2 is loosely identical to S1, and related by ship-succession. S3 is strictly identical to S1, and neither loosely identical to S1 nor strictly or loosely identical with S2. The confusion comes about when we believe that our commonsense loose concept of sameness over time is in contention with our strict ME intuitions. They are not. We are using distinct standards, and assume that there is only one standard. As long as we keep the standards clear in our minds we can avoid confusion. Chisholm can allow for conflicting intuitions and accept that both S2 and S3 are loosely identical to S1, but deny that a contradiction is entailed since loose identity is not transitive.

Chisholm's account also deals well with problems of 'fusion'.<sup>23</sup> Here is how Theodore Sider presents the puzzle:

We begin with a cat, Tibbles, and a certain proper part of Tibbles, Tib, which consists of all of Tibbles except for the tail. Tibbles and Tib are obviously numerically distinct. But suppose now that Tibbles loses her tail; it seems that both Tibbles and Tib survive: Tib because nothing has happened to it beyond having something external to it detached, and Tibbles because cats, like trees, can survive the loss of certain parts ... Tibbles and Tib are distinct; but they coincide after detachment. (Sider 2001, 142)

Chisholm's account lets us resolve the difficulty and avoid saying either that two things became one, or that Tibbles (at least loosely speaking) went out of existence. Tibbles before the tail-severance is loosely identical to Tib after the severance, but is strictly speaking distinct. Tibbles' tail is only an L-part of a successive cat, but an S-part of the hunk of matter that composes Tibbles. So, when Tibbles loses its tail, the strict and philosophical object goes out of existence. But now, by 'Tibbles' we refer to Tib, who is still in existence. Since Chisholm's account can solve these and other

<sup>23.</sup> See Wiggins 1980, 209, and Rea 1997, xviii.

puzzles (e.g., the paradox of increase<sup>24</sup>), this gives us strong inductive support for Chisholm's ME account by inference to the best explanation.

### 2. Further motivations for, and objections to, the Entia Successiva Account

### 2.1 Entia Successiva do not solve the Paradox of Coincidence

What problems are there with Chisholm's earlier account? One main problem is that, unmodified, it cannot solve the paradox of coincidence. Just in case you have been hiding under a rock, the paradox of coincidence is often elucidated as follows. Suppose you have a piece of clay. Call it "Piece". Suppose you shape it into a statue, which you dub "Statue". Then you squash the statue down, and call the resultant thing "Clay". Now look at the following argument:

- (1) Piece = Statue
- (2) Piece = Clay
- (3) Statue ≠ Clay

So, given the transitivity of identity, Statue ≠ Piece and Piece ≠ Clay. Furthermore, Piece ≠ Piece! Something's gone wrong.

The reasoning goes as follows. The Piece is identical to the Statue, since fashioning a statue out of a piece does not make the piece go out of existence. The Piece is identical to the Clay, since they are both the same piece of clay, and yet, Statue is not identical to the Clay, since you make the Statue go out of existence when you squash it. But then, absurd results follow. Many have argued that the culprit is premise (1). Piece is actually distinct from Statue. Supposing this runs us into all kinds of problems, as we now have two distinct objects in the same place at the same time (these problems are well documented elsewhere, 25 so I won't cover them here).

Chisholm, while not explicitly discussing this problem in *Person and Object*, would likely have proposed a solution as follows. The foregoing argument only gets its force by not recognizing that 'identity' refers to (at least) two relations, 'strict identity' and 'loose identity'. One is trying to talk both ways at once, in the strict and philosophical sense, and the loose

<sup>24.</sup> Chisholm 1976, 157.

<sup>25.</sup> E.g., in Zimmerman 1995.

and popular sense. Once we clear up the equivocation we can see that we can only treat (1)–(3) above as either of the following (where we use 'S=' to mean 'strict identity', which is just the plain old logician's 'identity' and 'L=' to refer to 'loose identity', which is the commonsense 'same as' or 'same F as' which does not entail strict identity):

- (I) Piece S= Statue
- (II) Piece S= Clay
- (III) Statue S= Clay<sup>26</sup>
- (1') Piece L= Statue
- (2') Piece L= Clay
- (3') Statue L≠ Clay

From (I)–(III) we obviously cannot conclude that the Statue is strictly distinct from Piece. Given Chisholm's methods, since the Piece/Clay/Statue never changed parts, he would most likely regard them as all strictly speaking identical. From (1')–(3') we can only conclude that Piece is loosely distinct from Clay just in case 'loose identity' is transitive. And, not only should we not think, from all that Chisholm has said, that loose identity is transitive, but, since this is consistent with the Statue being strictly identical to Clay and Piece, it is not clear what the problem would be *even if* they were loosely distinct. Chisholm would most likely say that we have one primary object which constitutes different *entia successiva* at different times.

Still, I don't think Chisholm has solved the paradox of coincidence here, and this is somewhat indicated by the change in his metaphysics of ordinary objects by 1986 which is custom-tailored to deal with coincidence. At this point, I think we can see what the problem with his solution is at this point in time via the following argument.<sup>27</sup>

By the term 'lump\*' let us mean a piece of clay which can survive part changes. The folk would certainly support the existence of such objects, and not object that we have the same lump\* around after I tear off a tiny piece and annihilate it. Are lumps\* reducible? Yes. Chisholm would say that part-changing lumps\* reduce to, or can be explained in terms of, successions of primary objects which themselves do not change parts.

<sup>26.</sup> Of course, (III) is not a translation of (3) above. But, if we decide to disambiguate, this is the closest statement to number three that Chisholm would assent to in regards to how Statue and Clay stand to each other vis-à-vis strict identity.

<sup>27.</sup> Thanks go to a referee for Grazer for some very helpful comments on this section.

A key question here is what Chisholm thinks about reduction and the ontological status of the relata in the reduction relation. Let us say that the F's reduce to the G's. That is, we can say everything we want to about the F's in terms of the G's, without quantifying over F's. Now, the key question is—do F's exist? It seems we can go either way in how we answer this question. We can agree, for instance, that biological entities reduce to chemical entities, and chemical entities to elementary particles and their properties. But, it does not seem forced upon us to deny that there *really* are cells, mitochondria, or H<sub>2</sub>O molecules. Rather, fundamental particles in the right arrangements are just what cells, mitochondria, and H<sub>2</sub>O molecules are. But, we could be pushed to say that, since mitochondria are nothing 'over and above' their fundamental particles (or simples) in the right arrangements, that mitochondria do not, strictly speaking exist. There are just simples arranged 'mitochondriacally'. Call the reductivist who thinks that, strictly speaking, the reducible relata or supervenient phenomena do not exist 'pessimistic reductionists.' Call the reductivist who believes that the reducible relata or supervenient phenomena do exist (and are to be identified with the subvenient base) 'optimistic reductionists'. Now, here is the question. Is Chisholm an optimistic or pessimistic reductionist?

I think the answer is that it is actually underdetermined by Chisholm's writings whether he is an optimistic or pessimistic reductionist, although the evidence slightly favors holding him to be an optimist.

Certainly Chisholm seems to often connote that part-changing objects do not really exist, which is what the 'fiction' label is supposed to indicate. But, Chisholm seems to contradict this when he says quite clearly that primary objects are (predicatively) ordinary objects which actually exist when they constitute them. "To say that there are four tables, in the strict and philosophical sense, is to say that there are four different things, each of them a table." And:

D.III.1 x is at t a direct table successor of y at t' =Df (i) t does not begin before t': (ii) x is a table at t and y is a table at t'; and (iii) there is a z, such that z is a part of x at t and a part of y at t', and at every moment between t' and t, inclusive, t' is itself a table.

<sup>28.</sup> Chisholm 1976, 102.

<sup>29.</sup> Chisholm 1976, 99.

So, since primary objects 'are' tables etc. when they constitute them, it seems somewhat doubtful that Chisholm is a pessimistic reductionist. Hence it seems that he favors a more optimistic 'logical construction' view of ordinary objects, where ordinary objects must exist in some sense.

I think it is difficult to make a strong case either way, but I think I can show that, whether or not Chisholm is an optimistic or pessimistic reductionist, in neither case does he satisfactorily solve the paradox of coincidence in the earlier period.

Take our aforementioned lumps\*. They reduce to non-part-changing partially nude objects. Do lumps\* exist, at least in 'some sense'? If so, then lumps\* are definitely *entia successiva*, which, according to this interpretation, have some kind of being. If not, then either there are no referents for "lump\*" or "lumps\*," and so all talk about them is strictly false (i.e., we embrace an error theory), or, while talk about them is strictly speaking false, talk of lumps\*, like tables, is regulated by useful normative rules, so that some talk about ordinary objects is 'true' (or, at least true in the fiction of ordinary part-changing object discourse), other talk of ordinary objects—false (or, false in the fiction). So, if we accept this, we embrace some kind of 'fictionalist' theory.<sup>30</sup>

Let's see first what the problems are for Chisholm if he is an optimist, and, secondly, a pessimist. If he is an optimist, then 'Piece' in the above argument for coincidence, either names an ens successivum (possibly-part-changing) lump\* or a mereologically inflexible primary object. If Piece (and, by extension, Clay) is an ens successivum, then there can be two entia successiva in the same place at the same time, since the lump\* (by hypothesis) is an ens successivum and is constituted by, throughout, the same primary object. Since the Statue is loosely distinct from the Clay (and possibly the Piece), since they have different persistence conditions and histories, then there are two entia successiva in the same place at the same time.

The other option available for him is to treat instead Piece and Clay as primary objects. But, if Piece is a primary object, or a mereologically inflexible one, then either there can be no lumps\*, or, there is *also* a lump, in which case we still have the same problem as mentioned above. And, there's reason to think that Chisholm does believe in things like lumps\*, so we do have the above problem. So, coincidence has not been satisfactorily avoided.

<sup>30.</sup> For an explanation of fictionalism in philosophy, see Eklund 2007.

Of course one obvious response is that coincidence of *entia successiva* is no problem. But, if *entia successiva* are logical constructions, and these constructions exist, then tables and lumps\* exist. Merely *calling them* 'logical constructions' in no way eliminates the problems of coincidence (e.g., how could two objects be in the same place at the same time, while made up of the same matter in exactly the same internal relations?). So, the option of treating Piece and Clay as lumps\*, and lumps\* as real does not solve the problem of coincidence. He could try to further ameliorate the problem by treating these distinct *entia successiva* as sharing temporal parts, but then his position would seemingly collapse into four-dimensionalism, a position he decries (more on this later).

But, Chisholm could take the pessimistic line. Tables and lumps\* do not exist. But, does he seem more sympathetic to an error theory or a fictionalist theory? An error theory has the advantage in that all part-changing ordinary-object discourse gets the same universal treatment. There just are no part-changing objects, or *entia successiva*, and since non-existent things cannot coincide, there is no problem. The disadvantage of an error theory is that one must suppose that the folk are radically wrong about their object discourse, and that, strictly speaking, all of our talk about part-changing objects is false. And, Chisholm himself does not seem to favor a version of eliminativism combined with an error theory. In Person and Object, in too many places he seems to imply that there are norms and rules governing part-changing ordinary-object talk, and even talk of loose identity. It's not anything goes, even though entia successiva do not exist in the same way that primary objects do. If I change my tire, I can't say that my old car is (loosely) identical to my new house. It is neither loosely nor strictly identical, and is definitely both strictly and loosely distinct. So, it does seem that Chisholm holds that there are rules governing our fictional discourse (if he does indeed believe that part-changing ordinary object talk is part of a realm of fictional discourse), and, if so, then the problems of coincidence have not been solved, but merely pushed around like a bump in a carpet.

This is because, if talk of lumps\* and tables and so on is part of a fictional rule-governed area of discourse, that now, answering the problems of coincidence would amount to giving a story about how we can render coherent folk talk about lumps\*, masses of matter, tables and so on. (If it can't be rendered coherent, it would be best to go back to the error-theoretic option). But, Chisholm has given us no idea about how to make the folk talk which governs the use of 'loose identity' and its interactions with strict identity coherent. As I said above, one apparent way to dissolve the

coincidence argument is to disambiguate between the equivocal uses of 'identity', and show how when we do not equivocate in no case can the absurd conclusions follow. But, if we look back at the disambiguation above, where (1)–(3) get treated as follows:

- (1') Piece L= Statue
- (2') Piece L= Clay
- (3') Statue L≠ Clay

I argued that from these premises the absurd conclusions of (1)–(3) do not follow. But, what does follow? Is Statue loosely identical to Clay? Is Statue loosely distinct from Piece? I have no idea. We are given no way of understanding what loose identity and distinctness amounts to. But, if Chisholm embraces a fictionalist treatment of part-changing ordinary objects, then a solution to the problem of coincidence should be satisfied within this framework, or, shown how it does not arise in the fictionalist framework. But, Chisholm does not do this, and so the problem of coincidence is still outstanding in Chisholm's treatment of ordinary objects around the time of *Person and Object*.

The above problems of Chisholm's in answering the paradox of coincidence are rooted in two features of his ontology: (1) He allows partially nude but not bare objects, and (2) he allows commonsense object sortals to give us criteria for identity of objects of any ontological kind, whether they be 'loose objects', 'pieces,' 'fictions' or 'constructions'. We will see that something along the lines of his account fares better when we reject both (1) and (2) by asserting that there are bare objects. Chisholm's assertion that there are masses of matter is good, but when he combines this notion with the persistence conditions of standard sortal essentialism, he 'takes back' the problem-solving features that (bare) masses of matter are particularly placed to bestow. In addition, as it stands, we will see how Chisholm's account is too much like a stage-theoretic four-dimensionalism, and falls prey to the same kind of triviality objections he brings against the four-dimensionalist.

### 2.2 Problems Chisholm's Mereological Essentialism can avoid

But, before this, let us see what is *not* wrong with Chisholm's account. As Chisholm notes, most objections to ME come in one of the following forms:

- (A) My car had parts last week that it does not have this week. But this can't be true if ME is, so ME is false.
- (B) My car could have had different tires than it in fact has. But, this cannot be true if ME is, so ME is false. $^{31}$

Chisholm notes how we can dissolve these objections by careful disambiguation. With regards to (A), the ME'er can admit that a person can own a strict object which can get disjoined from one strict object, and joined to another. But, the ME'er will deny that when the car changes parts that we have one and the same (strict) object before us. Rather, the car now is a mereologically inflexible object, as was the previous car, and the later car is a car successor of the earlier car. The parts that changed were L-parts of the ens successivum car, but S-parts of each mereological whole which they constitute. Similarly, with (B), the ME'er can admit that the mereological whole car one now possesses can have a part, namely, all of the car except the tire, which could have been joined to a different tire. (In other words, ME does not apply to entia successiva). But that is not to admit that the very same (strict) object, a mereological whole, could have had different parts than it in fact does. These objections all arise by an equivocation over 'part'. So, these objections ought not to move the mereological essentialist.

But, on to a further main objection. What is the problem with objects which persist just so long as their parts are contiguous (namely, 'partially nude objects'), as opposed to bare objects which persist just so long as all their parts do, regardless of (spatial) contiguity? For starters, supposing so entails either the contradictions noted above, or that we should give up on thinking that 'loose' identity has any coherent logical relations at all. Mainly, however, denying that there are bare objects undermines one main, implicit motivation for ME to begin with.

# 2.3 Motivating Mereological Essentialism as an aid in delineating a meaty substrata view of property inherence

It is curious that Chisholm spends quite a bit of time laying out a mereological essentialist system, defending it from objections, but little time motivating ME intuitions in the first place. His main, explicit motiva-

<sup>31.</sup> Chisholm 1976, 154–155. These are responses to objections brought up by Plantinga 1975.

tions for ME are that it has "a certain intuitive plausibility; the support of an impressive philosophical tradition; and the fact that it enables us to deal with what otherwise seems to be insoluble philosophical puzzles" (Chisholm 1976, 151). This is kind of odd since most people think that ME is wildly counterintuitive, and the fact that many philosophers have thought something is not usually given as grounds for believing something, and, ME, at least in Chisholm's form, seems to bring up as many problems as it solves.

In this section I will try to show that Mereological Essentialism can be further defended by how it naturally guides us to a certain well-supported view of substrata and property-inherence that steers between the excesses of the 'bare particular' and bundle theorists.<sup>32</sup> Furthermore, I will also show that there is some evidence in Chisholm's writings that supports that these kinds of concerns were implicitly motivating him. But, whether or not the view of property-inherence I raise is one Chisholm would endorse, I think we can see how at least this gives *us* some (non-conclusive) reasons for favoring ME.

Property realists owe us an account of how properties stand to the particulars which have them. Providing such an account would help explain the metaphysical underpinnings of predication. Such an account would help shed light on the all-important difference between objects and the properties they have. Lastly, providing such an account would also solve the problem of 'individuation,' or, how to explain (or, explain away) numerical difference in the face of exact qualitative similarity.<sup>33</sup> Let us refer to theories that give an account of these various issues under the umbrella phrase 'theories of property-inherence.'

Classically, in exegeses on the now tired dialectic, there seem to be two main kinds of theories of property-inherence—bundle theories, and substrata views.<sup>34</sup> The substrata views are themselves divided into two main kinds, the 'bare particular' theories, and more meaty substratum accounts. Bundle theorists include in the fundamental level of reality only one kind of entity—properties. An apparent object, such as a red, round bowling-ball, is actually just the features red, round, being-three-holed, and so on, that are 'compresent' with one another. There is no non-quali-

<sup>32.</sup> I am especially grateful to a referee for *Grazer* who provided much helpful and needed prodding on this section, which lead to its being much improved.

<sup>33.</sup> There is not really one or *the* problem of individuation, but rather, several. This is one of them.

<sup>34.</sup> See Loux 1970, 1998, and 2002.

tative thing in addition to the properties, there are just the compresent properties. Substrata theorists, both bare particular theorists and the more meaty substratum theoreticians (let us refer to the latter as 'substratum theorists' in distinction to the bare particularists, from now on, even though bare particular theorists are, strictly-speaking, substratum theorists as well), hold that, in addition to properties, there must be a particular in which the properties inhere. A bowling ball has the properties of being red, round, and three-holed, but is not itself a mere exhaustive collection of its compresent properties. What bare particular theorists believe, but both meaty substratum and bundle theorists deny, is that, when one 'subtracts away' all the properties of a thing, that something is left over—a bare particular. Substratum theorists and bundle theorists both believe that bare particulars, i.e., things without properties that are the havers of properties, are incoherent. I agree. Furthermore, if bare particulars 'in themselves' or, essentially, have no properties of their own, then they do indeed seem extravagant.<sup>35</sup> But, what the substratum theorists still insist on, but the bundle theorists deny—is that we need more than just properties to account for the nature of concrete particulars and to understand property-inherence.

The bundle theorist has an advantage over the bare particularist in that they postulate no mysterious bare particulars, and respect empiricist principles, and have a more sparse ontology. The problem with the bundle theory, however, is that, to my knowledge, it has never been shown how the bundle theory can respond to this classic objection: the bundle theory entails that the Identity of Indiscernibles is true, but it is false. The Identity of Indiscernibles states that if some x and a y have all the same properties, then x is identical with y.

This principle comes to grief when we employ a thought experiment thought up by Max Black.<sup>37</sup> Imagine that there are two qualitatively identical but numerically distinct spheres in a radially symmetrical universe. For each property one sphere has, the other one has it as well. If objects are nothing more than collections of properties tied together by compresence, then this world is impossible, since these 'two' spheres have all the same

<sup>35.</sup> In Sider 2006 Sider gives a decent defense of bare particulars, but, what he says about them there seems to indicate that he actually believes more of a view like the 'meaty substrata views' I speak of below.

<sup>36.</sup> Another way of stating this objection is that the bundle theory conflates qualitative sameness and difference with numerical sameness and difference.

<sup>37.</sup> Black 1952.

properties. What is possible is for there to be one multi-located sphere, but, strictly-speaking, there cannot be two qualitatively identical objects. But, we know that there *can* be two qualitatively identical objects, so, the bundle theory is false. Some have tried to ameliorate this worry, but, none, as far as I can see, have done so satisfactorily.<sup>38</sup>

So, if the bare particular and bundle views of property-inherence are no good, then that leaves us with the more meaty substratum views. How does the selection of substratum views on offer fare? Not well. Either the views on offer are too flat-footed, or, while more rich, fail to satisfactorily explain what the non-qualitative component of particulars is.

Peter van Inwagen, often in passing, denigrates the bare particular view. For instance,

A chair cannot, for example, be a collection or aggregate of the properties ordinary folk say are the properties of a thing that is not a property, for a chair is not a collection or aggregate of all those things one could truly say of it ... (I hope no one is going to say that if I take this position I must believe in 'bare particulars'. A bare particular would be a thing of which nothing could be said truly, an obviously incoherent notion).<sup>39</sup>

Another perfectly meaningless term ... would be 'bare particular.' A bare particular would either be what you get when you subtract the tropes from an ordinary concrete object (and thus the term would be meaningless), or else a thing of which nothing is true; and of course, the idea of a thing of which nothing is true makes no sense at all.<sup>40</sup>

This is fine, as far as it goes, since I don't think one ought to embrace a bare particular view even if one rejects the bundle view, but, since van Inwagen does not lay out anywhere (to my knowledge) a more meaty substratum view, then we are left in the dark as to the non-qualitative component of concrete particulars. We are left embracing the need for a non-qualitative component of objects for them to inhere in, but are left in the dark as to what it could be. Call this the 'flat-footed' response. It doesn't say, with

<sup>38.</sup> One can, of course, try to individuate the spheres because they occupy different regions. But this has just pushed the problem back. What individuates the regions? Each region has exactly the same properties as the other. If the regions are held to be brutely individuated, then regions are in fact playing the mysterious substratum role that the bundle theorists decry. (Cf. Martin, 1980, 8). For some relatively recent discussion of the problem, see Hawthorne 1995 and Zimmerman 1997,

<sup>39.</sup> van Inwagen, 2004, 135.

<sup>40.</sup> van Inwagen, 2006, 202.

Locke, that a substratum is a "I-know-not-what", but rather, that it is a "I-know-what-but-I'm-not-going-to-tell-you."<sup>41</sup> One is left with the suspicion, however, that the latter is really the same as the former. In any case, rejecters of both the bundle and bare particular views cannot be satisfied with the flat-footed response except as a temporary stop-gap to be filled in by a theory at a later time.

There have been more meaty, fleshed-out substratum accounts. While this is not the place to give a thorough examination of all of the accounts of substrata on offer, I will say at least a little. The most promising accounts I have seen can be found in the more recent work of Michael Loux, D.C. Long, and the somewhat Lockean-inspired account of C.B. Martin (who in turn influenced E.J. Lowe). We will see later how Chisholm also fits into this picture). They have all, in turn, influenced me. What I present below is a composite of these various views.

What is common to these substrata views is (i) a rejection of the bundle theory, (ii) a rejection of the terms of the old dialectic between bundle theorists and bare particularists, (iii) endorsing some kind of (sortal) essentialism, and, (iv) accepting that, in some sense, objects are self-individuating, or, are their own substrata. (How the 'in some sense' is filled in makes for the differentia amongst the theories). I think these views are broadly on the right track, but incomplete. As I hope to show later, holding that the stuff of an object is its substrata is a fruitful addition to, and I hope completion of—this approach. I will also show an important precedent for this in the work of Michael Jubien.<sup>45</sup>

These 'meaty' substrata theorists all reject the bundle theory. That is, they reject the notion that an object is nothing more than the sum of its properties. But, none of them accept that the non-qualitative component which somehow completes the object and in which all the properties inhere is somehow 'bare' as the bare particularists argue. Rather, the particular is a characterized particular of some kind. <sup>46</sup> D.C. Long calls

<sup>41.</sup> See Locke's Essay, II xxiii 1-4, and, for a secondary source, Jolley 1999.

<sup>42.</sup> See Loux 1998 and 2002, Long 1970, Martin 1980, and Lowe 2000 and 2003.

<sup>43.</sup> Along with, as you will see, Michael Jubien.

<sup>44.</sup> In a way this will be somewhat unfair to each of the writers, but, I hope, convenient for the reader. It is not my intention to present an exegesis of the works of the aforementioned philosophers, but, rather, to present a general strategy they all, in broad terms, represent, while of course disagreeing about much of the particulars.

<sup>45.</sup> See Jubien 1993 and 2001.

<sup>46.</sup> See Loux 1970, 193-6.

his theory 'Qualified Particular Theory', or QPT.<sup>47</sup> Michael Loux in a somewhat Aristotelian vein notes that particulars are chiefly characterized by being of a certain kind, and, the having or instantiating of this kind guarantees that a distinct individual of the kind exists, and is the thing which has the properties.<sup>48</sup> He argues (along with E. J. Lowe in 2000) that concrete particulars are not the kind of entities to be reduced to more basic ones (such as properties and bare particulars), but rather we can help ourselves to concrete particulars of certain kinds from the outset.

In many ways these substrata theorists are rejecting the old terms of the debate. The debate, at least in modern times, started with the 'Humean mistake' (see Chisholm 1969). The Humean mistake, committed by both bundle theorists and bare particularists, was (in part) to suppose that, when we observe a particular, we do nothing more than observe its qualities.<sup>49</sup>

As our idea of any body, a peach, for instance, is only that of a particular taste, color, figure, size, consistency, etc., so our idea of any mind is only that of particular perceptions without the notion of anything we call substance, either simple or compound.<sup>50</sup>

The Humean mistake can be summarized as follows. One assumes, as a good empiricist *seems* she should, that what one observes when they observe a thing is actually just a property or collection of properties. Then, once we accept this, we wonder why we need in addition to the properties postulate a weird, non-qualitative *thing* which has them. And so one often becomes a bundle theorists. But then, folk often believe that something like the 'compresence' relation of the bundle theory is too loose to tie these qualities together. And so, the bare particularist accepts the terms of the debate, but rejects the bundle theory, and in turn grudgingly accepts the goofy bare particular.<sup>51</sup>

The meaty substrata theorist thinks that the right thing to do is to reject one of the major premises that led to bundle theory or bare particular theory in the first place, namely, the idea that when we experience a thing what we directly experience is only its properties, the implicit commitment

<sup>47.</sup> See Long 1970.

<sup>48.</sup> Loux 1998 and 2002.

<sup>49.</sup> See also Long 1970, 278.

<sup>50.</sup> Hume's Enquiry, 194 Hendel version.

<sup>51.</sup> For some bare particularists, see Allaire 1963 and 1965, and Bergmann 1953.

of this view being that objects are something which we infer rather than directly experience.<sup>52</sup> Chisholm:

One is tempted to say instead that our idea of a peach is an idea of *something that has* a particular taste, color, figure, size, and consistency; and analogously for the other familiar physical things. But even this is not quite right. Our idea of a peach is not an idea of something that *has* the particular qualities, say, of sweetness, roundness, and fuzziness. It is an idea of something that *is* sweet and round and fuzzy. More pedantically, our idea of a peach is an idea of an individual x such that x is sweet and x is round and x is fuzzy.<sup>53</sup>

Long chimes in that supposing we observe properties but not necessarily the things that have them is absurd:

Again, suppose that one is asked to locate in instance of a colour, say, the red colour of the ball in our example. We are to locate not the ball, however, but simply its colour ... There is no way to give a location of the color *per se*. If we try to pin it down we merely find ourselves attempting to locate the pigmented surface of the ball ... To give still another illustration of my point, the claim that redness and being four inches in length are moving through space can only be understood as meaning that some object which is red and four inches long is moving through space.<sup>54</sup>

Finally, Martin also shows his rejection of the Humean mistake implicitly by showing how committing that mistake led to asking the wrong questions:

To ask, 'What are the properties of that which has all the properties it has?' or to ask, "What are the properties of the bearer of properties other than the properties it bears?', is to ask the wrong questions, and very wrong ones at that.<sup>55</sup>

To one degree or another, views like this veer towards some kind of essentialism. Michael Loux, for instance, believes that an appeal to kinds can cut the Gordian knot of the bundle/bare particular dilemma. One universal, the kind a thing belongs to, has a *sui generis* individuating role:

Every substance exhibits a universal whose exemplification is by itself constitutive of an individual substance and whose multiple exemplification is by itself constitutive of a plurality of different individual substances.<sup>56</sup>

<sup>52.</sup> Cf. Long 1970, 278.

<sup>53. 1969, 8,</sup> ital. his.

<sup>54. 1970, 272.</sup> 

<sup>55. 1980, 6.</sup> 

<sup>56. 1998, 243.</sup> 

Key to this view is rejecting the 'constructivist' view of both bundle and bare particular theorists, who both take it that concrete individuals are constructed out of, or reduced to, more basic ontological entities:

... [T]o allow substance kinds to play the proposed role in our ontological characterization of substances is to reject the reductivist/constructivist framework that structures the debate between bundle theorist and substratum theorist. It is to hold that the concept of a familiar concrete particular is given us at the beginning of the ontological enterprise in the substance kinds under which ordinary objects fall ... Substances are not wholes made up of constituents [i.e., universals alone or universals plus bare particulars]; in virtue of instantiating their proper kinds, substances are irreducibly basic entities ... A framework of first-order properties like colours and shapes is simply too impoverished to provide the materials for reconstructing the framework of substance kinds ... The idea of a particular substance is not something we need to construct.<sup>57</sup>

Loux is, if I may be allowed to stretch things a bit, saying that the thing which has the properties is the very thing itself, as characterized by the essential properties. So, the thing with the essential properties *has* the accidental properties, and the thing with the essential properties is one and the same as the thing which has the accidental properties. The object has the essential properties in the very same way that it has the accidental properties, but the essential properties help us characterize the substrata 'core' that we are attributing the properties to.<sup>58</sup> This, it seems to me, broadly correct. E.J. Lowe continues with a proposal which is somewhat similar to this, and characterizes it in part at as follows:

It may, I concede, strike some philosophers as being entirely at odds with any doctrine of *substratum* to say that the *substratum* of a property-possessing object is that very object itself, but I disagree. *Substrata* are invoked, primarily, to play the role of something which is not itself a property, and upon which the properties of an object can depend for their existence (and perhaps also their identity), on the assumption that properties themselves are not independent beings. But the object which possess the given properties is at least formally equipped to play this role, because it is not itself a property, nor, I should say, is it a collection or bundle of properties.<sup>59</sup>

<sup>57.</sup> Loux 1998, 243-4. For similar remarks, see Martin 1980, 6-7.

<sup>58.</sup> Cf. Long 1970, 277-84.

<sup>59. 2000, 508.</sup> 

Lastly, we even have a diagnosis for why the flawed debate arose and continued unabated for so long. Martin, in appealing to Locke, gives a gloss that runs like this: our powers of abstraction can seemingly impute ontological divisions where none actually exist, and our ability to think of one feature in abstraction from its others, when taken to extremes, can lead us to abstract every feature away from an object except for its property-bearing feature. And it is indeed correct that objects having a property-bearing character—that is almost definitional. The problems arise when we believe either that we can drop the notion that there are objects, distinct from properties, which bear properties, or, when we think that the thing which bears properties is something distinct from the object itself:

The substratum view can be put least misleadingly and most clearly by employing Locke's device of 'partial consideration.' When we are thinking in the most general possible way of the attribution of properties (each and every one) to an object, we are thinking of, or partially considering, the object, perhaps a passionfruit, simply qua or simply in its role as, the bearer, not itself borne, of its properties without at the same time considering it in terms of the actual properties it undoubtedly bears. Partially considering a passionfruit, as what bears whatever properties it bears, is thinking of it under a partial, incomplete description—as a bearer of properties. This is not to think of the passionfruit as a passionfruit kind of object, nor, of course, is it to deny its being of this kind. It is, rather, to consider the passionfruit as a bearer of properties (without attending to what those properties are) which itself is not borne as a property, or set of properties, by anything else. The passionfruit under this partial consideration, and incomplete description, is indeed the substance or substratum. Where, then, is the harm?<sup>60</sup>

I believe the foregoing proposals allow us to say most of what we want to say, and represents a reasonable, non-mere-table-pounding solution to the problems of property inherence. It avoids the problems of the bundle theory. It avoids the problems of the bare particular theory. It countenances a thing distinct from its properties, yet denies that this thing lacks any properties. This is what we should want. That's the good news.

The bad news is that nothing about these accounts actually solves the metaphysical problem of individuation, i.e., accounting for numerical diversity in cases of exact qualitative similarity. Rather, these accounts presuppose an answer to the problem. Appealing to kinds does not help. Loux says that "multiple exemplification is by itself constitutive of a plurality of

<sup>60.</sup> Martin, 1980, 9-10.

different individual substances." Of course, *multiple* exemplification is *always* sufficient to establish a plurality of objects, whether you appeal to kinds or not, if one means by 'multiple exemplification' the instantiation of more than one thing. If, however, by 'multiple exemplification' means the apparent multi-instantiation of kinds, where we leave open the possibility that the 'two' things might be one—then certainly nothing about multiple exemplification by itself ensures the exemplification of two distinct things. How does Loux's account differentiate between the following two worlds—world 1, wherein there is only one multi-located sphere, and world 2—where there are two distinct but qualitatively identical spheres? It does not differentiate between them.

I think at this point it would be helpful to step back and look at the desiderata of a substratum view. Then, I will show how it is fruitful to hold that the material stuff of an object is its substratum, by showing how it fulfills the desiderata. After this, I will show how Chisholm seems to have been somewhat similarly motivated.

Why are we postulating substrata in the first place? What's their job? What are they for? I think the following is a helpful first pass at a good list of the desiderata to be fulfilled by a substratum theory. Note that the items on this list overlap significantly. Also, I do not claim that this list is exhaustive:

#### Desiderata for a Substratum View of Property-Inherence:

- A substratum theory should account for metaphysical individuation, such as in Max Black's case, but should not do so by *ad hoc* appeals or mysterious means.
- 2. A substratum theory should show how various properties are tied together as the properties of one thing. That is, it should show how the nature of substrata, or inherence base, can tie together its various qualities.
- 3. It should also explain how properties are dependent on the objects that have them, but, also, explain how objects are not dependent on their (non-essential) properties.
- 4. Explain both the sense in which the substrata has properties, and the sense in which a substrata is a thing apart from its properties, or, less misleadingly, is not merely a sum of its properties. (Another way of stating this is that a substratum account should characterize the non-qualitative component of concrete particulars).

<sup>61. 1998, 243.</sup> 

5. A substratum theory should shed light on the distinction between objects (i.e., property-bearers) and properties.

Now, I would like to show how a mereological essentialist view of property-inherence along Chisholmian lines, which holds that the stuff or matter of an object is its substratum, satisfactorily fulfills (1)–(5). But, first, we must take an illustrative detour through an important precedent for this view in the work of Michael Jubien. This will in part be clarified by examining an exchange between him and Ted Sider. We will also see how this ME view of property-inherence, when combined with a Chisholmian combinatorial theory of possibility (I will explain what this is), makes this whole picture more strong than the views of property-inherence and possibility considered separately.

The notion of ME as motivated as an alternative to the bundle and bare particular views has also been at work in the work of Michael Jubien, but seemingly goes unnoticed by one interlocutor, Theodore Sider. Jubien argues in the following way for ME in *Ontology, Modality, and the Fallacy of Reference:* 

... think about things in the abstract, in isolation from everyday descriptions and associations. So first recall that an arbitrary thing is just the occupier of some arbitrary, full region of space-time. Let x be any such arbitrary thing, and let y be an arbitrary proper part of x ... there also exists a third thing—the thing that is all of x except for the part y. Let's call it z. If we agree to use '+' and '-' in the natural way for mereological sum and difference, we have z = x - y. Now imagine another situation, as much like this situation as possible, but in which the entire thing y simply does not exist. This certainly *seems* like a situation in which x doesn't exist either, but z does. I think it very difficult to deny this intuition without somehow relying on prior convictions involving everyday descriptions and associations, like the belief that a certain *house* could have had (somewhat) different parts. (1993, 18–19)

#### Sider replies:

The crucial claim in this argument is that in a possible situation in which y does not exist but z does, x does not exist either. What is the support for this claim? Jubien asks us to forget about nearly all features of the objects in question, but he does draw our attention to the fact that x fills a certain region of spacetime. In particular, Jubien draws our attention to the composition of x: it is the sum of y and z. But why is this particular feature of x the only feature one may consider in thinking about x's modal properties? Let us sup-

pose that x is, in fact, a house. Being a house is then just as much a feature of x as is being composed of y and z; in thinking about x's modal properties, why should we abstract away from the former, but not the latter? ... think about x in abstraction from its material composition; just think about the fact that x is a house. Couldn't that object have existed even though one of its small parts failed to exist? The answer now seems to be yes ... the problem for Jubien here is that he is committed to an unjustified asymmetry between predicates like 'is a house' on one hand, and 'is composed of y and z' on the other ... the latter expresses a property that is essential to its bearers, whereas the former does not. Why this difference? Here is an object with many properties. It is a house. It is made up of certain parts. The former is just as good a candidate to give the essential nature of the object as the latter ... Jubien's choice of the latter candidate appears arbitrary. (Sider 1999, 288. Two longer emphases mine)

But Jubien's choice of the latter is anything but arbitrary. Sider seems to ignore crucial passages of Jubien (1993, 41–45) where the latter argues that "the property *being made of this stuff*... is a perfect candidate for being the haecceity of the thing in question" (Jubien 1993, 43).

Haecceities, or primitive 'thisnesses,' are often introduced to deal with problems like Max Black's example wherein there are only two qualitatively indiscernible globes in a radially symmetrical space (Black 1952). It seems obvious that a world just like this world could have existed where the two globes have reversed positions. But, this does not describe a world that is qualitatively distinct, and so, either this is not a distinct world, or, there exist brute and primitive individuating (non-qualitative) components such as bare particulars, or, there are merely formal individuating properties, such as being this globe. Some have settled for the latter, the classical name for these brute individuators being 'haecceities' or thisnesses. By accepting haecceities the problem is 'solved' in differentiating our worlds. In these worlds, the spheres have merely switched their haecceities. But, this often comes across as a desperate, ad hoc, and mysterious move. Also, strictly speaking, it does not solve Max Black's case, since, haecceities, being properties, make it such that, if one globe has one haecceity, the other globe a different one, then they are not in fact qualitatively identical. (If haecceities are not in fact qualitative then they're really quite like bare particulars, with the exception that properties cannot inhere in them. It is hard to see what the advantage of this over classic bare particulars could be.)

Jubien asks, what counts as a qualitative difference? In particular, does being made of such and such stuff count as a quality? (Jubien 1993, 42). Since the globes are made of different stuff, and if the foregoing type of

properties are qualities, then the positing of qualitatively indistinguishable globes does not make sense. But, *being made of this stuff* does not seem like a *general* quality, since, if Jubien's right that things are nothing more than precise parcels of stuff, the property is not repeatable or multi-instantiable (Ibid., 42–3).

This, however, would play into his hands:

We already saw that the property being made of such and such stuff, considered as a property of official things, could not be general. If this is enough to show it isn't a quality, and if haecceities must be nonqualitative, then it is a very plausible candidate for being the haecceity of the thing that has it. (Ibid., 43)

But, whether or not we want to count properties like *being made of such and such stuff* as qualities that a thing has, Jubien notes that

What is important is that the property is a perfect candidate to serve as a thing's haecceity whether we say it is nonqualitative or not ... This candidate does everything we could reasonably ask of a haecceity: It is an essential property of the thing that has it. It is necessary that if anything has the property, then that thing is the thing that actually has the property. To the extent that it makes sense to speak of other possible worlds, and to the extent that there is any need to 'ground' talk of 'identity across possible worlds,' this candidate fills the bill. So I nominate it for the office. (Ibid., 45)

I second the nomination, but with a qualification. Jubien is quite right that the property of being made of some stuff is a perfect candidate to play the role of the haecceity or individuator for an object. We get all the benefits of brute individuation, with none of the cost of weird particularizing but non-qualitative properties:

Appeal to haecceities has often been regarded as a desperate measure, one primarily designed to save an uncertain intuition. Desperate, it is said, because it is an *ad hoc* appeal to what are fundamentally mysterious entities ... I think some conceptions of haecceities have invited this criticism, but the present one does not. There is nothing mysterious about the idea that things are made up of stuff. And there is nothing mysterious about the idea that the stuff over here is different from the stuff over there. So there is nothing mysterious about the property *being made of this stuff.* (Ibid.)

While this solution does merely switch the problem of individuating from the individual to the stuff, it does, it seems rightly to me, as well as Jubien, put the primitiveness where it belongs (Ibid., 46). My only quibble here is that the notion of 'haecceities' such as *being made of this precise stuff* are not doing any additional work than just supposing that there are parcels of stuff that are distinct from one another, where the stuff plays the substratum role. But, if properties such as *being made of this precise stuff* are to do the work required, then the stuff must be postulated to be distinct and play the substratum role anyway. So, I prefer an account like Jubien's except that substrata are used rather than haecceities. (I'll develop this further below).

While Jubien does not explicitly lay out the idea of the stuff of a thing playing the haecceity-role as a species of 'meaty substrata' technique to maneuver between the horns of the bundle and bare particular dilemma, we can see how it would help. The stuff of a thing plays the role of the bare particular, but there is nothing bare or odd about it. The stuff is a bare object, and bare objects are like clothed bare particulars, in that they provide both the substratum for the thing and give us its sort (namely, 'mass', 'fusion', 'parcel of matter', 'primary object', etc.).

Looking at things in this way has several advantages. Not only do we get a metaphysical interpretation of predication or property inherence for commonsense objects that steers between the goofy (bare particulars) and the goofier (bundle theory), and solves the problem of Black's globes, but it also helps provide answers to many troubling questions about persistence and possibility, as well as giving us the tools to break a putative impasse.

We can note here, and in other defenses of (e.g., in Jubien 2001) and attacks upon ME, a certain pattern and impasse. The ME'ist says, think of certain hunk of stuff—don't think of anything else about 'it'. How can it survive a loss of parts? Those non-sympathetic to ME reply—well, tell me more about it. What is the hunk of stuff? Is it a house? Then of course it can. Those who are against ME think that the features that we think of as giving an essence depend on the description of the item: "When viewed as a house, that object might have lacked y; when viewed as a sum, having y as a part is essential to it" (Sider 1999, 289, emphases mine). Whereas those in favor of ME believe that there is nothing to giving an essence of an item other than listing its ultimate parts (or, referring to some gunk).

We can break this impasse in favor of ME when it is seen as motivated by being a third option that avoids the difficulties of the bare particular and bundle theorists' views. If the primary bearers of properties are hunks of stuff and primary objects are their stuff (commonsense objects being 'constructions' or 'fictions') then Sider's demand that we 'think about x

in abstraction from its material composition' is absurd (since we're being asked to think of a thing in abstraction from itself), as is his claim that properties like 'being a house' are just as much a candidate for being essential to an object as being composed of y and z. The ME'ist can defensibly claim that 'bare hunks of stuff' are all that we pick out when we pick out objects. For instance, look again at the Sider quote: "When viewed as a *house*, that **object** might have lacked y; when viewed as a sum, having y as a part is essential to it" (Ibid., emphases mine). What is 'it', or the object such that it can be viewed as a house, or as a mere hunk of stuff, and can be thought of multiple ways so that different features are apparently essential to it under different descriptions? Sider's view (in this article) of physical objects is pretty mysterious, whereas Jubien's is utterly clear. For Sider, there is some odd thing such that it can have different persistence conditions when thought of differently. For Jubien, there's just some stuff, and all of it is essential to it. While it is true that we can 'turn the argument around' on Jubien and be asked to think of the house in abstraction from its material composition, this is question-begging at worst, and moot at best. In the context in question of Jubien's book, he is explaining that by regarding the property of 'being made of such-and-such stuff' as the haecceity of the object in question we can solve certain problems. It should be no surprise that if we ignore the reason that a thesis was introduced (namely, that by identifying genuine objects with their stuff we can solve the problem of Max Black's spheres) and instead focus on other problematic elements of it, that it will be easy to apparently defeat the proposal.

Anyways, if the mysterious 'it' is nothing but the hunk of stuff, and such hunks are the primary bearers of properties, then, not only are Sider's claims about 'it' (e.g., that it could have lacked a part when thought of one way) false, but, Jubien's choice of 'being composed of x and y' versus 'being a house' as giving the essential features of an object is not 'arbitrary', pace Sider.

Now I'll try to develop this Mereological Essentialist version of property-inherence, and show how it fits the desiderata (1)–(5) listed above. But, first, let me give a general idea of this theory. Note also that this is more of a proto-theory than a fully developed one. I just want to make clear the general structure of this position and its advantages.

The stuff or matter of a commonsense object is distinct from it. This is because the matter will both pre-exist the object and last past its destruction. Even if an object and its matter are both simultaneously created and then later destroyed (where we suppose that none of the matter which constitutes the object is lost during the interim) the matter could have existed past the destruction of the object.<sup>62</sup> The stuff of commonsense objects is identical with fusions of either simple, non-composite particles or non-atomic 'gunk'. This stuff of an object—the mass of matter—all of its parts are essential to it. Different parts—different thing. In fact, in a certain sense, these masses of matter are the only objects there really are they are the 'primary objects.' Commonsense objects, such as tables and chairs, are somehow derivative entities. When we say that a commonsense object, such as a particular table, has a property, such as being brown and square—how are we to understand this? Is there a bare particular, which has the property of being brown and square, which 'in itself' has no properties? Do we assert that there is a compresence of browness and squareness? No, and no again. A table is not a mere compresence of properties, and no bare particular is needed. A table is what results when a mass of matter exemplifies the phase sortal 'being a table,' or, as I prefer, when a mass of matter undergoes the process or activity of 'tabling'. 63 What makes it the case that two qualitatively identical but numerically distinct things are distinct? The stuff. Distinct stuff—distinct things. If Max Black's spheres are described as being made up of the same stuff—then there is actually only one multi-located mass of matter. If they are stipulated to be made up of different stuff, then they are distinct things. No problem arises.

What's the substratum of a commonsense object? Its matter. That's why an *ens successivum* is, strictly speaking, a succession of distinct tables (when its parts change). The only genuine objects are masses of matter. Tables are masses of matter in which qualities such as *being a table* inhere (or, the property of *being a table* is a Platonic entity that the mass participates in), or, are masses of matter in which the property of *being a table* is immanent, or the mass of stuff possesses the trope *being a table*, and so on.

But, you may ask, what makes one parcel of stuff distinct from another? A parcel of stuff x and a parcel of stuff y are identical just in case they have all of the same ultimate or fundamental parts. But, suppose we get down

<sup>62.</sup> All of this, actually, has to be highly qualified. I am against coincidence, so, strictly speaking, I would deny that there are two distinct *objects* in the same place at the same time, made up of out of all the same material parts—such as a mass of matter and a distinct statue. On my view, and the later Chisholm's view, as we'll see, the matter and the statue are of two different kinds. The matter is some stuff, and it is *statueing*. The statue is an activity, only the mass is an object. The standard problems of coincidence do not arise on this view. Others do, to be sure, but they are more tractable.

<sup>63.</sup> Cf. Jubien 1993, and section 3 below.

to ultimate parts, such as electrons.<sup>64</sup> What makes two electrons distinct? Well, perhaps they are composed of two different 'super-strings' vibrating in different parts of space. What makes two strings distinct? I do not know. At some point we stipulate or suppose that there are different parts, and use this supposition to do further work. Regardless of one's theory of property inherence, we will ultimately get down to some point where the individuation is just stipulated and presupposed. I just choose to locate this bruteness in the matter itself, rather than in some bare particular, or, in what seems to me derivative entities, commonsense things such as cabbages or airplanes.

Sounds like *materia prima*, you think? It is not. Different particles of matter have different essential properties—let the scientists tell us what they are. There are fundamental substances (or, Aristotelian 'primary substances'), but we need only suppose they are things like electrons, gluons, and fusions of them, not horses and galaxies.

The basics of this view is that the ultimate havers of properties are just simple particles or collections of them (or collections of gunk)—full stop. Analysis stops there. To ask for a bare particular is to impute a more complex ontic structure to objects than they really have, or need. To *not* require something like masses of matter for the properties of objects to inhere in is to embrace the bundle theorists odd, possibly free-floating compresent properties. Also, unlike meaty substrata theorists like Loux, where objects are their own substrata, we need not suppose that concrete particulars like frogs and stereos are fundamental and basic entities—this seems wrong. We get to suppose that frogs, stereos, and so on are composed out of more basic entities, i.e., masses of matter in which the property of being a frog or stereo inheres.

What is it exactly about mereological essentialism that is doing the work here? Its being true is a necessary precondition for presupposing that the stuff of an object is its substratum. If we suppose that an object can change parts, then we cannot identify the substratum of an object as the stuff which composes it. If an object can change parts, then the parts cannot be construed as what *has* the properties—rather, there is a substrata which *has* the property of having some parts at one time, and having another set of parts as parts at another. If this is allowed, then surely it is not the case that a precise collection of stuff is the haver of properties, rather, a distinct thing has the properties of having certain stuff as parts.

<sup>64.</sup> I could have stated this in a different way about gunk as well, but prefer not to.

This position recommends itself only if we believe that properties are parts of objects in the same way that material parts are parts of objects—which is surely a mistake. I will say more on this further below.

Now, how does this view of property inherence satisfy the desiderata laid out above? Let's go through them.

(1) A substratum theory should account for metaphysical individuation, such as in Max Black's case, but should not do so by ay *ad hoc* appeals or mysterious means.

This has already been adequately explained above.

(2) A substratum theory should show how various properties are tied together as the properties of one thing. That is, it should show how the nature of substrata, or the inherence base, can tie together its various qualities.

We can see how the ME property-inherence view ties together various properties as properties of one thing. Distinct properties are properties of the same thing provided they inhere in either all of the same stuff, or inhere in different parts of the same collection of stuff.

(3) It should also explain how properties are dependent on the objects that have them, but, also, explain how objects are not dependent on their (non-essential) properties.

The ME property-inherence account can satisfy this desideratum as well. Properties are dependent on the objects which have them (whether bare or partially nude), since no property can float free and detach itself from the matter that has it. Bare objects are not dependent on their non-essential properties, since being a cup, being the Empire State Building, and, being red are quite obviously properties that a mass of matter can lose while continuing to exist. As far as the essential properties of masses of matter—this would be a function of all of the essential properties of the fundamental particles that make up that particular mass. What are the essential properties of fundamental particles? Once again, ask a scientist.

Commonsense objects are not dependent on their non-essential properties, since, although they are strictly speaking fictions or constructions, the assertability conditions for the identity or not of *entia successiva* are given

by folk usage, and folk usage, for instance in the case of an automobile, assures us that we identify a car as the same one when it changes tires, even though, strictly speaking, we have a different object before us after the tire-change.

(4) Explain both the sense in which the substrata has properties, and the sense in which a substrata is a thing apart from its properties, or, less misleadingly, is not merely a sum of its properties. (Another way of stating this is that a substratum account should characterize the nonqualitative component of concrete particulars).

The satisfaction of this desideratum would depend in large part on one's theory of the nature of properties—an issue I don't want to try to settle here. But, I see no reason why the desideratum cannot be satisfied regardless of one's theory of properties. Substrata have properties, because the properties are instantiated by a collection of stuff. We cannot say, in general, anything very informative about what it is for a mass of matter to have a property. We can say a bit more about more particular cases. A mass of matter has the property of being spherical, for instance, if it occupies a spherical-shaped portion of space. A mass of matter is solid if it generates a certain amount of impenetrability to another mass of matter. And so on. But, this ME account of property inherence does not identify an object with all of its properties. Subtract away all the non-essential properties of the mass of matter. What do you have? The mass of matter. This thing is distinct from all of its contingent or accidental properties, even though it always has some accidental properties or other. Also, we can employ 'partial consideration' and consider the mass of matter only in its property-bearing aspect. But, we would be fooling ourselves if we thought we were thinking about a non-propertied haver of properties. More roughly put, we can imagine a certain mass of matter distinct from its particular arrangement, and then we are thinking of the mass qua mass, even though the mass always has some arrangement or other.

Another way ME satisfies this desideratum of avoiding identifying an object with all of its properties is that the ME'ist realizes that *objects do not have properties as parts in the same way that objects have material parts as parts.* When you subtract away all the properties of an object, what do you have? The object and all of its material parts. An object's ultimate parts are not parts of it in the same way that its properties belong to it. While the *predicate* 'having such and such a part' is certainly true of a mass of

matter, it does not refer to a *property* in the same way that the predicates 'being red' or 'being a frog' do. Why is this? It is because of the following disanalogies of partial consideration. We can 'abstract away' from an object's color, shape, and so on. If ME is true, we *cannot* 'abstract away' from an object its material composition, because, if ME is right, that's what objects ultimately are—their material parts. (This is not to say that we cannot think of a color in the abstract). We can imagine the shape as apart from the color, and the color as apart from the shape, but we *cannot* imagine the shape or color as apart from the object's material composition. Things with no material composition have no shape and color, and can have no shape and color (regions of space excepted as regards shape).

The whole idea of construing properties as parts of objects is just wrongheaded. I can cut the top half off a cube and destroy it, and have left an independently existing entity.<sup>65</sup> I cannot take off only the shape, leaving the color behind. Treating properties "as if they were objects in their own right to be bundled as so many sticks in a pile" would be a big mistake.<sup>66</sup> This is because "an object is not just a group of properties, because properties are not themselves objects to be grouped."<sup>67</sup> Thinking of objects as bundles of properties, where properties are construed like objects is what gave rise to the problems for both the bundle and bare particularist theorists in the first place. We don't need bundles, and don't need bare particulars. We need masses of matter.

(5) A substratum theory should shed light on the distinction between objects (i.e., property-bearers) and properties.

Objects are masses of matter, properties are the ways that these masses are, or are the truth-makers for what can truly said about them. More could be said, but only if I present a theory of properties, which I will not do. But, suffice it to say, that I see no reason the major theories of properties can't be made consistent with my proposals.

Now, you may remember that this is an exegetical paper about Chisholm. My point in this section is not just to show how ME can find further support in this way, but to show that Chisholm was at least implicitly motivated by the notion that the stuff of an object is its substratum.

<sup>65.</sup> See Martin 1980, 7.

<sup>66.</sup> Martin 1980, 6.

<sup>67.</sup> Martin 1980, 7.

We can find some evidence for this interpretation in Chisholm's "On the Observability of the Self." Chisholm insists that we avoid the Humean mistake, and supports the notion that we do not perceive a thing's properties when we perceive it, we perceive the thing which has the properties. Our notion of *concreta* is much more solid than our notion of a thing's properties. While we can doubt that there are properties, like the nominalist does, we can not (reasonably) doubt that there are concreta. Chisholm discusses with approval Leibniz's criticism of Locke's empiricist epistemology and theory of perception:

When we consider any person or thing, he said, what comes before the mind is always a *concretum* and not a set of abstract things or qualities; we may consider something as knowing, or something warm...but we do not thereby consider knowledge or warmth ... The abstract things, he noted, are far more difficult to grasp than are the corresponding *concreta*. I cannot help but think that the point is a simple-minded one. 'Our idea of a peach is not an idea of sweetness, roundness, and fuzziness ...; it is an idea of something that is sweet and also round and also fuzzy ...' One would not have even thought of mentioning it, had not philosophers denied it and constructed fantastic systems on the basis of its negation. (1969, 9)

Chisholm is attempting to turn a certain kind of property-realists argument upside down. It is not the case that all we observe are an objects properties—objects themselves being something we infer. Rather, we observe objects, their properties (when we are realists) being something we infer. When we see the above in the context of the rest of Chisholm's writings, we see a consistent picture emerge where the basic items of our acquaintance are primary objects, and primary objects (i.e., hunks of matter) are the primary bearers of properties but are not identical with sums of properties. This is another way of saying that hunks of matter are substrata.

Further indirect evidence for my interpretation can be found by examining Chisholm's only direct argument for ME. It is an argument by elimination that I call 'the argument from modal vertigo' (Chisholm 1976, 147–49). In its bare outlines it goes like this:<sup>68</sup>

(A) One alternative to ME is what we could call 'Extreme Mereological Inessentialism.' ['EMI'] On this view, *any* whole could have been made up of any two or more things whatsoever.

<sup>68.</sup> I have not mentioned some of the other alternatives to EMI and ME he discusses.

- (B) EMI is obviously false. [Chisholm's comments on this is that EMI implies haecceitism, which is false.]
- (C) All the other (viable) alternatives between EMI and ME, or modest mereological inessentialisms, would allow that, if a table x in  $W_1$  is made up of simple parts 1–10.000, and a table y in  $W_1$  is made up of simple parts 10.001–20.000, then there is a  $W_2$  where x is made up of parts 2–10.001 and y is made up of 1 & 10.002–20.000.
- (D) But, if this is allowed, then it would be allowed that there is a world  $W_3$  where x is made up of parts 3–10.002, and y is made up of 1–2 & 10.003–20.000.
- (E) But, if this is allowed ... then we have a world  $W_{10,000}$ , where x is made up of parts 10.001–20.000, and y is made up of parts 1–10.000.
- (F) But then modest mereological inessentialisms imply EMI.<sup>69</sup>
- (G) So, ME is true.

One of the lessons here seems to be that we track composite macroscopic individuals across worlds, *not*, *pace* Lewis (see Lewis 1986), by tracking qualitative similarity (which gets us only loose and popular transworld identity, which is probably what Chisholm would regard counterpart relations of commonsense macroscopic objects as), but by tracking the possible arrangements of the non-composite simples or base-level primary objects. Chisholm says as much in his earlier "Parts as Essential to Their Wholes":

The theory of possibility does not require us to say, of any of these commonsense objects—the automobile, the table, the station ... and the fish—that they exist in any other possible worlds. But it does require us to say, of the strict and philosophical wholes that constitute these common sense objects, that *they* exist in other possible worlds.

The theory of possibility does not require us to say of any *nonprimary* object that it exists in any possible world other than this one. But it does require us to say that *primary* objects exist in possible worlds other than this one. What we can truly say about the unrealized possibilities of nonprimary things may be reformulated more precisely in terms of the unrealized possibilities of primary things. We do not need to suppose, therefore, that there are possible worlds which are indiscernible except for the fact that some nonprimary things are

<sup>69.</sup> Note that the move to (F) is invalid. [The argument does not, for instance, show that my foot could have been composed of the Empire State Building and Julius Caesar, which EMI, unqualified, seems to suggest]. I present Chisholm's argument to point out certain features of it, not, however, to condone it.

constituted by one set of primary things in one of them and by another set in another. (1989, 79).

What parts a thing has is not *merely* one more property we can use to track a thing—it is the very basis of (material) thinghood itself, the minimal necessary conditions for a thing to have any properties whatsoever, be called a thing, or be reidentified. A (primary) thing just *is* its stuff. It is not some thing other than its parts, which can have the property of having some-parts-or-other, nor is a thing a cluster of properties, one of which happens to be 'having some stuff x as a part'. This is not to say that things cannot be predicated of as having certain material parts, since of course they do. But, the ME'ist contends, having some material parts is not just one feature among many that a thing contingently has. The property of 'having such-and-such precise parts' has a halo of some kind.

Chisholm himself renders modes and attributes as explicitly distinct from bodies or substances in the later *Self-Profile*. Modes, or the ways things are, are dependent upon their substrates. Substrates, or things themselves which have modes, are not modes of anything (e.g., regions). And a substrate for Chisholm is a substance, but this substance's defining feature is having the material parts it does. His definition there of a thing or *substance* is, "x is a substance iff: for all y, if y is a part of x, then x is necessarily such that y is a part of it" (1986, 67). Things are not modes of anything else. And, things are identical with all of their parts. So, the property of having-as-parts the parts that they do are not modes or attributes of anything else, such as a bare particular.

This view also naturally combines with explaining our modal intuitions about genuine substances as a kind of mereological combinatorialism from certain bits of stuff, and *not* as built up out of a Humean mosaic of property distributions. If the ME'ist views things this way, then it seems she has a leg up. The ME'ist can claim that most of our modal intuitions about putative commonsense substances are actually about properties and property entailment, whereas our modal intuitions about primary objects are about bare hunks of stuff in their own right. For instance, Jubien, in "Thinking About Things," (2001) claims that certain intuitions, such as that a certain dog, *Fido*, is necessarily canine, is not at all about a substance—Fido. Rather, our intuition is that if some-stuff-or-other has the property of *being Fido*, then that same stuff would have the property of *being canine*. Our intuitions about the hunk of stuff, however, that composes Fido now, such that it can not lose any parts, *is* an intuition about a genuine substance. I won't decide on the issue of whether this ME-

informed proto-theory of modality is correct. I merely want to point out what *seems* to be motivating the mereological essentialist. Genuine objects are nothing more than precise collections of stuff. *Having x as a part* is not merely one of many properties an item has (although of course it can be expressed by a predicate), rather, this predicate picks out part of x such that it could not have any properties (without that part) whatsoever. As we will see, however, although Chisholm seems to favor the view that the substrata of objects are their stuff, the position that there are bare objects gels better with this position than the earlier Chisholm's view that masses of matter are partially nude.

## 2.4 Problems for partially nude objects

Why, though, does Chisholm believe in partially nude objects, but not bare ones? What are the advantages of his position? One advantage is that he gets to severely delimit the number of objects. There is no object composed of me and the Eiffel Tower, although there is the primary object (right now) that constitutes me and the distinct one that constitutes it. I would also agree that we would want to rule out objects such as the fusion of me and the last dinosaur. But, why, if I have a hunk of clay in my hands, will the primary object that constitutes the hunk go out of existence merely by my tearing off a piece? Why isn't the same primary object still around, just scattered? If I continually tear off pieces, combine them with bits and pieces from other bits of clay, I can casually be creating and destroying objects all afternoon while I play with my nephew.<sup>70</sup> Also, since macroscopic objects, in the actual world, are actually (within their interior regions) mostly empty space, why does apparent macroscopic contiguity and 'stuck-togetherness' matter so much for a hunk of stuff to be an object? Another way of asking the question is, why is Chisholm's mereology so restricted?

Chisholm never quite explains why *joining* is so important to a hunk of matter's existence, and staying joined so essential to its persistence. Rather than believing that separating an object's parts and then sticking them back together again first destroys an object, and then brings it back into existence (or brings a distinct object into existence), why not just believe that the object existed throughout, and had its parts scattered, and its parts were then made more contiguous again? Certainly nothing about accepting

<sup>70.</sup> I believe van Inwagen 1990 has an example like this, but I cannot remember the exact location.

ME *per se* requires us to accept *joining* as a condition for composition. Also, we can ask the following Euthyphro-like question—'Are partially nude objects countenanced by the folk as objects because they *are*, or, are partially nude objects objects because the folk countenance them?' The former seems more true than the latter. If so, what is to prevent *bare objects* from being objects as well? I will argue though, that Chisholm should accept bare objects over partially nude objects in part because of Theodore Sider's argument from vagueness, but also because only by accepting this can Chisholm get around certain objections given by André Gallois.

We can object to partially nude objects by looking at a paraphrased version of a thought experiment of Sider's (2001, 122). Imagine that a precise bunch of stuff, either 'simples' or 'gunk' composes a fusion; in this case an iron cube. (In the rest of this paper, for simplicity, I will write as if there are simples only, and not gunk. I believe nothing here hinges on this). Now, imagine something like the following operation taking place. At  $t_1$  we turn on a strong magnetic field which permeates the sealed room the cube is in, and gradually moves all the constituent parts of the cube away from its center of gravity at the rate of one ¼ Planck length [10<sup>-33</sup>/4 cm] per one millionth of a nano-second. Suppose that at some time t<sub>3</sub>, when the simples are, say, spread around the room evenly in an invisible cloud, they no longer compose an object. The problem with this is that if composition is definite, then there must be some exact time t<sub>2</sub> where the simples compose a fusion, where the 'next' instant they do not, and this change is something like the 1/4 Planck length distancing of its bits apart from the initial center of gravity, over the course of one millionth of a nano-second from t<sub>2</sub>.<sup>71</sup> This is absurd. Any of (these) kind of changes which could supposedly destroy the fusing of the simples and hence the fusion, and hence the object, are arbitrary. And arbitrariness won't do. Furthermore, since composition is non-arbitrary and definite, if you hold that the simples do not compose a fusion when they are spread around the room in a cloud, then see what occurs when you reverse the magnetic field and watch them coalesce. By the same kind of reasoning, if we reject arbitrariness, then the simples cannot ever come to compose a fusion—that is, the cube can never come into existence as an object! There will rather be simples 'arranged cube-wise,'72 but not a cube. So, Chisholm should not accept that *joining* is a precondition of being a fusion. But, if he wants a

<sup>71.</sup> Please allow me the convenience of distinct, yet contiguous 'instants'.

<sup>72.</sup> This the view Peter Van Inwagen espouses, at least for non-organic material objects, in 1990.

system of mereological essentialism similar to his own, he ought to accept that bare objects (fusions which persist just so long as all their parts do), not partially nude ones, are the primary objects.

Furthermore, Gallois in *Occasions of Identity* gives the following objection to Chisholm's program (1998, Part III, Chapter 8). Most properties that objects can gain and lose are what he calls 'mereologically destabilizing properties' ('MDP'). That is, most salient properties or changes that an object goes through, in the actual world, result in a change of parts. For instance, painting Theseus' ship, or his ship being such that Theseus walked across it. Having the latter obtain would obviously scuff off a few molecules. Gallois defines MDP as follows:

Let us say that property  $\phi$  is mereologically destabilizing just in case it is physically necessary that if x has  $\phi$  then x changes at least one of its component parts.

If Chisholm's account was correct, then there could be no genuine or primary object which has been made to, say, glow; heating an iron cube to the point of glowing brings about the release of photons. Theseus could not walk across his (mereologically stable) ship. Supposing for simplicity that Theseus does not lose any parts, Chisholm can however reply that Theseus can indeed walk across an *ens successivum* that changed parts—a ship series. This, however, is not quite a successful reply. Chisholm must admit that not only can objects not change their parts, but, strictly speaking, objects can hardly change at all.

This problem just disappears if Chisholm accepts bare objects and loosens up his restricted mereology. If he does, all the changes we would like to predicate of objects *can* occur to mereologically stable objects. All such mereologically destabilizing properties Gallois discusses can be cashed out in terms of internal changes in larger fusions which have the before- and after-change fusions as proper parts. A cube can come to glow, since that is a change in re-arrangement in all the particles or mass-energy that compose the cube before it is heated and the photons which are emitted afterward. Theseus *can* walk across his ship, since what he walks across contains the fusion of all the particles that constitute the ship when he starts walking, and the same fusion after he finishes walking.

However, if Chisholm did pursue this line, he would be giving up considerably on the spirit of his program. There would be no need to posit *entia successiva* in the way he proposed. Talk about the whole life

of Theseus' ship can be cashed out in terms of a very large fusion which always exists, which has different proper parts that have something like the property of *being Theseus' ship* at different times. If, as Chisholm is wont to do, we would like to ignore this large fusion and instead focus on just those bits that have the ship property, it seems we would have to identify Theseus' ship with a succession of *time-slices* of the succession of proper parts of the large fusion which successively constitute the ship. But Chisholm is rabidly anti-four-dimensionalistic. A way out of this would be instead to accept bare objects, but deny four-dimensionalism, and rather identify the 'ship' with a property, mode, or process of a succession of distinct bare-objects. And this is exactly what he does later. Although I cannot find explicit mention of this anywhere in Chisholm's material, it seems that he changed his position in part to avoid having a four-dimensionalistic kind of position.

## 2.5 Entia successiva: just like four dimensional objects?

We can see that Chisholm's proposal, which countenances partially nude objects, actually is too close to four-dimensionalism for (his) comfort. Indeed, the very objections Chisholm gives to four-dimensionalism apply to his own account. In many ways, Chisholm's earlier account of ordinary objects is no different than a stage-thereoretic four-dimensionalism.<sup>73</sup>

Chisholm's main objection to four-dimensionalism, as contained in Appendix A to *Person and Object*, is as follows. The main arguments for four-dimensionalism are that it can help us solve a variety of puzzles about identity through time. For instance, Heraclitus famously asks, how can we bathe in the same river twice, since rivers are water, and the waters keep flowing on and on? Quine answers that things have temporal as well as spatial parts, and "that the temporal parts of individual things are like the temporal parts of the careers, histories, or biographies of those things" (Chisholm's gloss on Quine. Chisholm 1976, 143). Quine writes:

a physical thing ... is at any moment a sum of simultaneous momentary states of spatially scattered atoms ... Now just as the thing at a moment is a sum of these spatially small parts, so we may think of the thing over a period as a sum of the temporally small parts which are its successive states. (Quine 1959, 210. Cited in Chisholm 1976, 143)

<sup>73.</sup> I just became aware that David Wiggins made the same point in his 1979, esp. 302.

So, the 'solution' is that "you *can* bathe in the same *river* twice, but not in the same river stage" (Quine, 1963, 65. See Chisholm 1976, 143).

But, as Chisholm notes, if this solution is to genuinely solve Heraclitus' puzzle, it must "presuppose the concept of the persistence of an individual thing through time—the concept of one and the same individual existing at different times. Even if all rivers are sums of river stages, not all sums of river stages are rivers" (Chisholm 1976, 143). How do we know that the different stages that Heraclitus bathed in are stages of the same river? Quine's putative solution to this is in part to define a relationship called 'river-kinship' (Quine 1963, 66), what Chisholm calls 'cofluvial'. We can say that "a, b and c are stages of the same river iff they are cofluvial with each other" (Chisholm 1976, 144).

Chisholm's complaint then is that there is bootstrapping circularity going on here (the following parrots an imagined exchange in Chisholm 1976, 144):

Q1: How do I step into the same river twice?

A1: By stepping at different times into things that are cofluvial.

Q2: What is it for things to be cofluvial?

A2: Things are cofluvial provided they are temporal parts of the same river.

Indeed, we can make the same charge against Sider's stage-theoretic fourdimensionalism, which holds that objects that we think persist are actually just successions of instantaneous stages related by a temporal counterpart relation:

Q3: How do I meet Ted twice?

A3: By meeting two stages that are Ted-temporal-counterpart-related.

Q4: What is it for things to be Ted-temporal-counterpart-related?

A4: Things are Ted-temporal-counterpart-related provided they are person-stages and each stage is Ted. (Sider 2001, 193–208)

The four-dimensionalist can respond that they can give a more informative answer than A2 (or A4), by appealing to causation. Something like: Things x and y are cofluvial (short for, 'river-temporal-counterpart related') just in case x is a river, y is a river, and x's being the way it is causes y to be the way it is, or x causes some  $z_1$ ,... which causes some  $z_n$ , where  $z_n$  causes y to be the way it is, and each of  $z_1...z_n$  is a river. Indeed this is

just what Sider does.<sup>74</sup> Note, however, that this is *very* similar to the way that Chisholm himself defines a 'direct table-successor' and the non-direct 'table-successor':

D.III.1 x is at t a direct table successor of y at  $t' =_{Df}(i) t$  does not begin before t'; (ii) x is a table at t and y is a table at t'; and (iii) there is a z, such that z is a part of x at t and a part of y at t', and at every moment between t' and t, inclusive, t is itself a table.

D.III.2 x is at t a table successor of y at  $t' =_{Df}(i) t$  does not begin before t'' (ii) x is a table at t and y is a table at t'; and (iii) x has at t every property P such that (a) y has P at t' and (b) all direct table successors of anything having P have P. (Chisholm 1976, 99)

There is even a Chisholmian analogue for a spacetime 'worm', namely, an object-series:

(D12) C is an object series  $=_{Df}$  C is a class having as its members an object-pair x, all the object successors of x, everything of which x is an object successor, and nothing which is unrelated to x by object succession (Chisholm 1989, p77).

And, of course Chisholm would have to say something like this, since, as we can see, the template he used above can be used against him<sup>75</sup>:

Q5: How can I touch the same table twice?

A5: By touching at different times distinct items that are related by table-succession.

<sup>74.</sup> Well, not exactly. But, Sider connotes things along this lines, and it seems likely that something along these lines would be his reply to the triviality objection of Chisholm. Cf. Sider 2001 103 "... I accept that causation is a prerequisite of personal identity," and ibid. 94 "The temporal counterpart relation is the same relation used by the worm theorist to unite the stages of spacetime worms ... it may be analyzed in some way (in the case of persons perhaps in terms of memory or bodily continuity) ...". Also, see ibid., 227–236

<sup>75.</sup> Wiggins in 1979, 311 also shows how Chisholm's *entia successiva* account suffers a similar objection to one frequently leveled against four-dimensionalists, namely that if ordinary objects are *entia successiva*, then they are event-like and could not have had a different history than the one they in fact have. Whether the objection is any good I leave open, but I think it's important to note that Chisholm's suffering of the same objections as four-dimensionalistic kind of positions strengthens the thesis that his position is very similar to them.

Q6: What is it for things to be related by table-succession?

A6: Things are related by table-succession provided they are both tables and are parts of the same table-series.

His definition of table-succession and table-series gets him out of the charge of complete circularity, just like my Sider-imputed definition which employs causation. So, the four-dimensionalist is really no worse off than Chisholm here, since he can avail himself of some criteria for *cofluviality* or 'river-kinship' which is just as informative as Chisholm's definition of 'river-succession'. But, if the four-dimensionalist is no worse off than Chisholm is, it is only because Chisholm's *entia successiva* are too much like time-slices. David Wiggins seemed to be getting at this when he wrote:

Only events or processes can have temporal parts. For someone in my position indeed Chisholm's "things that do duty on different days for the successive table"... have too great a *likeness* to temporal parts of the table, and it is a real question whether Chisholm's *ens successivum* treatment of tables will quite escape from all the good objections which are urged in Chisholm's Appendix A section 4 against such notions as that *a*, *b*, *c* are stages of the same river if and only if they are *cofluvial* with one another.<sup>76</sup>

One thing that is interesting to note here is that Chisholm's notion of 'loose identity' and Sider's notion of 'temporal-counterpart-related' play the exact same role, namely, what I call a *fudge factor for the folk*. In both Chisholm and Sider's case, *there is no genuine persistence* (for ordinary objects). There is, rather, a succession of instantaneous objects, each distinct from the next, and they are sometimes tied together by relations like 'river-kin-ship' or 'river-succession'. Sider says that the stages are instantaneous objects which are part of a four-dimensional worm F when the stages are temporal-counterpart-related and each are F. Chisholm says that an *ens successivum* which is F is a succession of short-lived objects (given the fact of rapid microscopic change) each of which are F and each of which are F-direct-successors of one of the others in the series.

These both give us a "fudge factor for the folk" in that each system allows us to have an "as-if" talk of persistence of commonsense items, while not really holding there to be any that persist across time. Granted, Chisholm's system is far different, in that objects (can) endure, and if objects never changed parts, they would not be like stages at all. But, given how the world in fact is, and given that Chisholm accepts partially nude

<sup>76.</sup> Wiggins 1979, 302.

objects which exist only when joined, (composite macroscopic) objects would exist only for an instant, and Chisholm's system would amount to the same thing as Sider's.

The problem with both systems is that neither really gives us a theory of *persistence* (of ordinary objects, not primary objects) at all—only a way to save appearances after admitting that there really is no persistence over any significant time-frame. Or, more charitably, *if* the world is as they say it is, given that there is no genuine persistence, their accounts make the best of a bad situation, and tell us what the best candidate for 'persistence' is; either temporal counterpart relations or object-succession. But both these accounts have too much of a 'fictionalist' flavor—indeed, Chisholm admits as much himself,<sup>77</sup> as does Sider,<sup>78</sup> and if we can account for commonsense objects as persisting in a way that does not treat them as strictly speaking *not* persisting, then we ought to do so. Chisholm's account ought to be accepted only if we cannot find some other entities to play the persisting object role—entities that genuinely exist and persist over time.

## 3. The later account: objects as modes, and modes as activities

And Chisholm *did* find some other entities to play the commonsense object role: pairs of bare objects and *modes*. Chisholm changed his mind. I am not sure if he accepted bare objects for the reasons or concerns I raised above, but later, in his *Self-Profile* volume (1986), and "Scattered Objects" (1987), he allows both bare objects and modes, and the latter are somewhat like processes.<sup>79</sup>

<sup>77.</sup> Chisholm 1976, 96 "The point could also be put by saying that such things as the Ship of Theseus and indeed most familiar physical things are really 'fictions' ..." Chisholm excepts *persons* from this treatment, however (see 1976 chapter III, section 5).

<sup>78.</sup> Sider 2001, 96: "I must concede, however, that tenseless statements of 'cross-time' identity are false ...," and, ibid.: "But, assuming four-dimensionalism is true, counterpart-theoretic persistence is as good as it gets, and is thereby the best candidate, and is thereby true persistence." The last phrase does not follow. The 'best candidate theory' of content does not really entail that the *best* candidate for the use of a term F is always the true candidate for the term F. If this was so, then 'the ether' would mean 'the vacuum,' which was obviously the best candidate. The best candidate theory states that the candidate which best meets certain minimal conditions is the true candidate for reference, and I can't see how stage-theoretic persistence meets the minimum standards. But, this is another paper. For a description of the 'best candidate' theory of reference/content, see Lewis 1983 and 1984.

<sup>79.</sup> Chisholm does, however, officially naysay process ontology (see Chisholm 1989, 94–95). But, what he was arguing against was both four-dimensionalisms and radical process ontologies

Chisholm quite clearly accepts bare objects at this period. No longer is being joined a necessary condition for the persistence of a fusion:

If Harry is that object that has parts *A*, *B*, and *C* and that occupies the place that Charlie occupies on Monday, doesn't Harry exist with precisely the *same* parts on the next three days? He becomes somewhat scattered on Tuesday, more widely scattered on Wednesday, and still more widely scattered on Thursday when he becomes a mass of jetsam. (Chisholm 1989, 93)

However, he never gives up ME, but merely expands its scope to cover scattered objects. In "Scattered Objects" he defines a substance in this way:

(D4) x is an individual substance  $=_{Df}$  If x has parts, then for every y, if y is part of x, x is necessarily such that y is part of it (Ibid.).

He also calls the objects that ME is true of *aggregates* or *heaps* (Chisholm 1986, 68) and, in allowing them to persist just so long as all of their parts do, has squarely entered the bare objects tradition, and given up on the partially nude.

Part of the explanation for this could be that Chisholm realized that his entia successiva account did not solve the paradox of coincidence. There is some circumstantial evidence to think this. In the Self-Profile volume, to deal specifically with coincidence, he develops what I call his "mode account". Chisholm notes that one way to solve the paradox of the statue and the clay is to hold that, while 'the statue' and 'the clay' both refer, that 'the statue' picks out, not a substance, but rather a mode of a substance. And the substance of which the statue is a mode is, of course, the piece of clay. In this instance, the piece is a substrate of the statue.

But what is a *mode*, as Chisholm understands it? We know that modes are *not* (i) essential properties of the substrates that have them, or (ii) universal properties of things (i.e., properties that everything has) (Ibid., 66). Roughly, modes are reified 'ways' that objects can be, and can change their substrate. Chisholm lays out the following desiderata for a definition of mode:

Our definition ... should allow us to say that the statue is a mode of the piece of metal—and that the piece of metal is not a mode of the statue ... [and] should also allow us to say that a house is a mode of a heap or aggregate of

such as Whitehead's. As we'll see, Chisholm's 'modes' are quite akin to processes or homogenous activities in many respects.

building materials—and that the heap or aggregate of building materials is not a mode of the house (Ibid.).

Chisholm wants to divide the (physical) world clearly into modes and substrates/substances. Substances or substrates are bare objects, and modes are commonsense objects which are modes of the substances. His definition of mode is:

(BD1) x is a mode of  $y =_{df} (1)$  neither x nor y is an abstract object; (2) there is a z which is such that y, but not x, is necessarily such that it has z as a part; and (3) there is a P which is such that (a) x exemplifies P and (b) x is the only thing other than y which is necessarily such that it has P iff y has P. (Ibid.)

It is best to turn to examples to clarify. *Shipping* is a mode of an aggregate just so long as neither *shipping* nor the aggregate are abstract, the aggregate has a part such that the aggregate, but not the *shipping* mode, necessarily has that part as a part, and, there is a property SHIPPING such that *shipping* exemplifies it, and *shipping* is the only thing other than the aggregate which is necessarily such that it has the property of SHIPPING iff the aggregate has the property of SHIPPING.

It is very difficult to understand this clearly. It is especially hard to know if, in describing this view, that one may be imputing to Chisholm views or motives he did not have, since Chisholm is very brief here. It seems that *shipping* is not a universal or a property, but rather a reified *activity*. *Shipping* is not a property, SHIPPING is, and both the aggregate and the *shipping* have that property. The *shipping* activity, however, has the property indirectly and derivatively, while the aggregate has the property directly. The activity somehow 'borrows' the property from the aggregate. But, the aggregate is not necessarily SHIPPING, whereas the *shipping* is.

Modes can move from substrate to substrate:

If a substrate is a ship, then, it has a mode which is also a ship. If the substrate ceases to be a ship, and if the mode does not transfer to another substrate, then *that* mode ceases to be. And if, in such a case, the substrate continues to be, then it would have other modes (Ibid., 66–67).

Chisholm says more about what it means for *shipping*, for instance, to cease to be. Chisholm offers an answer as follows:

(BD2) P is a modal essence of  $x =_{df}$  There is a y such that: (i) x is a mode of y; (ii) x has P and y has P; (iii) y is possibly such that it does not have P; and (iv) x is necessarily such that, if y ceases to have P, and if x does not become a mode of anything else, then x ceases to be (Ibid., 67).

Using our previous example, SHIPPING would be a modal essence of *shipping* if there is an aggregate *y* such that *shipping* is a mode of *y*, *shipping* has the property of SHIPPING and *y* has the property of SHIPPING, but, *y* might not be SHIPPING, but, *shipping* is necessarily such that, if *y* ceases to be SHIPPING, and if *shipping* does not become a mode of another aggregate *z*, then *shipping* would cease to be.

It still is quite mysterious what these modes are. Perhaps Chisholm can clarify things by saying some more about substrates or substances that modes are modes *of*. He gives the following definition:

(BD3) x is a *substance* =  $_{df} x$  is a contingent thing; and there is no y such that x is a mode of y. <sup>80</sup>

He also asserts that ME is true of substances (Ibid., 67, principle (BA1)). So, in contrast to modes, substances are not modes of anything, but modes are modes of substances. Furthermore, *if* substances have parts, they have them necessarily. Modes, by contrast, can change their parts:

If the ship W is a mode and not a substance, we need not hesitate to say that it changes it parts from one day to the next. But the various aggregates that the situation involves *never* change their parts. For they are substances (Ibid., 68).

We have the outlines of a research program. I call, perhaps controversially, Chisholm's modes *activities* partly because of a process of elimination. Modes are not essential properties of anything. <sup>81</sup> Modes are not substances, or things. But, particulars like a ship or a table *are* modes. Modes have properties and modal essences, <sup>82</sup> and are reified particulars. Aggregates *have* ships and tables as modes, but aggregates which have a table or a ship as a mode do not *count* as a ship or a table, <sup>83</sup> only the modes do. I

<sup>80.</sup> Ibid. 67. Chisholm notes that this definition of *substance* won't square well with those who think that God is a substance and a necessary being.

<sup>81.</sup> Ibid., 66.

<sup>82.</sup> Ibid., 66-67.

<sup>83.</sup> Ibid., 70.

cannot interpret what these modes could be except concrete activities, e.g. 'a shipping', such that different substances *undergo* it.

If this is the proposal, then it has interesting implications. It certainly seems to dissolve some of the puzzle cases. In the case of Ship of Theseus, the set of aluminum planks which constitute the replacement ship (S2) is the substrate of the same *mode*, or ship, as the aggregate that originally made up Theseus' ship (S1). The shipwright's ship (S3), has a mode qualitatively similar to but distinct from the original ship.<sup>84</sup>

There is no puzzle of coincidence with the statue and the clay. There is just an aggregate of stuff which is *statueing*. The substance—the aggregate of stuff, persists throughout being shaped into a statue and being flattened, and happens for a while to be statueing—in which case we often say that there is a *statue* there. We are right that there is a mode or an activity of statueing there, but we are wrong that there is a substance or thing in addition to the hunk of matter to coincide with it. I will not criticize Chisholm's modes view here, partly because I think it is roughly correct. Elsewhere I have offered an account very similar to Chisholm's modes view, although actually more inspired by Karmo (1977) and Zimmerman (1995). Chisholm's later account seems to me to be a reasonable alternative to solve the metaphysical puzzles of ordinary objects—one that deserves more attention.

\* \* \*

My main point in the foregoing was to elucidate Chisholm's changing view of ordinary objects, and to point out certain strengths that the latter account has over the former. Also, I hoped to have shown how Chisholm's consistent mereological essentialism has some additional motivating factors

<sup>84.</sup> Ibid., 67. (S2) is not (S3) by transitivity, since Chisholm contends that (S2) is the substrate of the same mode as (S1) after plank replacement, whereas (S3) is not. "Consider a ship that transfers from a substrate *y* to a substrate *z*. If *z* became a ship as a direct result of altering *y*, and if nothing else *also* then became a ship as a direct result of altering *y*, then we may say that there was a mode *x* which transferred from *y* to *z*. What if more than one ship was thus a direct result of altering *y*? Then we may say that the substrate having the most parts in common with *y* is the one that received the mode of *y*." Ibid.

<sup>85.</sup> I should note that there are elements of the account that I did not cover, but with which I disagree. But these are quibbles. Overall, though, I agree with the spirit of Chisholm's enterprise.

<sup>86. &</sup>quot;Bare Objects, Ordinary Objects, and Mereological Essentialism." Manuscript.

that need stressing. While somewhat speculative, I also, I hope, have shed some light on what might have been some reasons that Chisholm changed his mind about the status of ordinary objects.<sup>87</sup>

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