

Unity and Time in Metaphysics

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UNITY AND CONSTITUTION OF SOCIAL ENTITIES

LUDGER JANSEN

Abstract

Is a bank note identical with the piece of paper of which it consists? On the one hand, John Searle, in his reply to Barry Smith, suggests that they are "one and the same object" that is a social or non-social object only under certain descriptions. On the other hand, Lynne Rudder Baker puts forward the claim that bank note and paper are distinct entities that are bound together by the relation of material constitution. I suggest two possible analyses for Searle's description relativity claim, the Alternative Subject Analysis and the Predicate Modification Analysis. On both accounts his identity claim gets into serious trouble. While Baker's definition of material constitution deals well with the bank note example, it fails to account for the constitution of bearless social entities and groups. I point out five respects in which social constitution can differ from Baker's account of material constitution and discuss compositional, institutional and interactional constitution as additional varieties of social constitution.

1. Two Puzzles about Synchronic Unity

As it often happens, unity is not only an important term for philosophy but also an ambiguous one that comes in different varieties that better are to be distinguished by the philosopher in order to avoid misconceptions and fallacious reasoning.¹ For present purposes, it is important to distinguish between diachronic and synchronic unity, i.e. between unity in time and unity at a time. Diachronic unity or unity in time corresponds to the question how many things (of a certain kind) there are between two points

¹ Cf. already Aristotle, *Metaphysics* V 6 on the different meanings of "one".

of time, from t_1 to t_2 ? Synchronic unity, on the other hand, or unity at a time, corresponds to the question how many things there are at one certain point of time t – either of a certain kind or of different kinds? In this paper, I will primarily be concerned with synchronic unity, but questions of diachronic unity will be relevant for the discussion, too.

I will start my discussion with two puzzles concerning the synchronic unity of social entities. The first puzzle concerns the unity of groups, i.e. of such social entities that involve humans as their members. Consider a situation in which four people stand together in front of the philosophy department at noon. In this situation, how many groups are there? One? Or more? And can we tell *a priori* how many groups there are or do we need to know more about the people in question?

The second puzzle concerns the unity of ‘simple’ social entities that do not involve human members. Consider a philosopher – for example John Searle – holding a dollar bill in his hands: How many things are there in Searle’s hands? One, a piece of paper? Or two, a bank note? Or three, a piece of paper and a bank note?

John Searle’s own answer to this question is that there is only one thing in his hands: “In my hand I hold an object. This one and the same object is both a piece of paper and a dollar bill.”² Searle’s answer, however, is not uncontested. A less parsimonious answer has been put forward by Lynne Rudder Baker. According to Baker, there are at least two things in Searle’s hand, held together by the relation of constitution: “Constitution is a fundamental relation that is ubiquitous. It is the relation that obtains [...] between pieces of paper and dollar bills.”³ According to Baker, constitution ‘is an asymmetric relation: If x constitutes y , then y does not constitute x .’⁴ But any asymmetric relation is irreflexive, and thus the dollar bill and the piece of paper that constitutes it must be distinct entities. Thus there are (at least⁵) two things in Searle’s hand.

Now we have to choose between two alternatives: We can follow Searle and embrace his view of the identity of the piece of paper and the bank note, supported by a brand of description relativity with respect to social objects. Or we can follow Baker’s constitution view of dollar bills and say that there are two distinct objects. To be sure, there are more options. Baker herself, for one, has supplemented her constitution view with the claim that the dollar bill and the piece of paper, though distinct

2 Searle 2003, 302.

3 Baker 2000, 27.

4 Baker 2000, 44.

5 In fact, there are many more things in his hands, because the piece of paper is itself constituted by cellulose molecules, which are, in turn, constituted by certain atoms, and so on. Hence the ‘at least’. Cf. Baker 2007, 159: “there is constitution ‘all the way down’”.

things, are still numerically the same – and thus one thing only.⁶ For the time being, however, I will discuss Baker’s constitution view without taking into account her view about numerical oneness, and in section 3.3 I will say why. But first I will discuss Searle’s view and argue that it leads into serious difficulties. Then I will turn to Baker’s constitution view and show that it copes well with the puzzle about the bank note but still leaves open a lot of questions concerning our first puzzle about the number of groups in front of the philosophy department.

2. Searle’s Description Relativism

2.1 Two Intuitions and a Problem

Searle’s parsimonious position that there is only one thing in his hands is clearly in tune with some deeply rooted intuitions. Obviously, the dollar bill and the paper are spatially coincident. And we need only one pick to get both the dollar bill and the paper (“In my hand I hold an object.”). But Searle does more than just to appeal to these intuitions – the coincidence-intuition and the one-pick-intuition. He gives us an argument for the identity of dollar bill and paper. To be sure, the proposition that Searle wants to defend is much stronger: In fact, Searle argues that the notion of a social object is “at best misleading, because it suggests that there is a class of social objects as distinct from a class of non-social objects.”⁷ Searle claims that there are no social objects as distinct from non-social objects. But obviously, this implies that there is no bank note distinct from the paper, and thus, in our imagined situation, there cannot be two things in Searle’s hands. In Searle’s eyes, one and the same object can be both a natural and social object:

In my hand I hold an object. This one and the same object is both a paper and a dollar bill. As a piece of paper it is a non-social object, as a dollar bill it is a social object. So which is it? The answer, of course, is that it is both.⁸

Searle’s argument can be reconstructed as the following piece of aporetic reasoning, consisting of six premises and three intermediate conclusions:

(P1) x is a piece of paper.

(P2) If something is a piece of paper, it is a non-social object.

6 Cf. Baker 2007, 40–42 and 171.

7 Searle 2003, 302.

8 Searle 2003, 302. The passage in focus here is also discussed in Schmechtig 1995, who also defends the notion of a social object.

- (C1) x is a non-social object.
 (P3) y is a dollar bill.
 (P4) If something is a dollar bill, it is a social object.
 (C2) y is a social object.
 (P5) It is the very same object that is the dollar bill and the piece of paper, i.e.: $x = y$.
 (C3) The very same object is both a social and a non-social object.

Now comes the problematic bit: How exactly are the predicates “is a social object” and “is a non-social object” related to each other? It would be natural to assume (P6) – that social and non-social objects form disjoint classes:

- (P6) Any non-social object is not a social object.

But from (P6) and (C3) we can derive a flat contradiction. Of course, Searle wants to avoid this contradiction. As he accepts all of the premisses (P1) to (P5) and the three intermediary conclusions, it is exactly this inference step from (C3) and (P6) that Searle wants to block. Here is what Searle suggests as a solution to this problem:

But to say that [something is both a social and a non-social object] is to say that we do not have a separate class of objects that we can identify with the notion of social object. Rather, what we have to say is that something is a social object only under certain descriptions and not others, and then we are forced to ask the crucial question, what is it that these descriptions describe?⁹

Searle suggests description relativism with respect to the social or non-social character of things.¹⁰ According to this view, whether a thing is a social object or not crucially depends on our way to talk about it. This implies that the distinction between the social and the non-social is not a distinction between social or non-social things, but between social and non-social descriptions. To say that some predicate applies to an object only “under a certain description” is to say that this predicate does not apply to that object *per se*, but only in so far as we describe that object in a certain manner. The idea is, of course, that different descriptions allow for different predications. This implies, however, that the premisses (P1)-(P4) and thus the conclusions (C1) and (C2) are not properly stated. It is not x or y *per se* that have social or non-social character, but only x or y under a certain description, i.e. as being described as a piece of paper or as a dollar

bill. Thus Searle’s suggestion is to rephrase the realist conclusions (C1) and (C2) as the description relativistic statements (D1) and (D2):

- (D1) x as described as a piece of paper is a non-social object.
 (D2) y as described as a dollar bill is a social object.
 (P5) $x = y$
 (D3) y as described as a piece of paper is a non-social object.

On the surface, the aporetic character has disappeared. As the distinction between the social and the non-social has been referred to the level of descriptions, it seems not to be an obstacle for the identity of x and y . In the following, I will argue that this is only a superficial solution and that description relativism does not in fact solve the problem.

2.2 The Alternative Subject Analysis

By way of criticism, the first thing to be said is that being a dollar bill in a situation S does not depend on being described as a dollar bill in S . In general, the existence of dollar bills does not depend on descriptions, but on the ascription of a certain status to certain things and the collective acceptance of this status by the relevant group of people.¹¹ But I will leave this aside in order to take under scrutiny the phrase “as described as”. Of course, everything in Searle’s analysis hinges on the question how this phrase is to be understood. As far as I can see, there are two competing possibilities to parse such phrases. The *Alternative Subject Analysis* considers the “as described as” phrase to be part of the grammatical subject of the sentence, while the *Predicate Modification Analysis* considers it to be part of the grammatical predicate. I will discuss these two accounts in turn. According to the Alternative Subject Analysis, the “as described as” phrase is part of the grammatical subject. From this point of view there are two different phrases modifying the “ y ” in (D2) and (D3). Thus these two propositions consist out of two long subject phrases in combination with the contrary predicates “is a social object” and “is a non-social object”

- (D2S) [y as described as a dollar bill] is a social object.
 (D3S) [y as described as a piece of paper] is a non-social object.

As these two propositions are propositions containing two different subject phrases, they ascribe the two contrary predicates to different subjects,

⁹ Searle 2003, 302 (direct continuation of the last quote).

¹⁰ For a possible source of inspiration cf. Anscombe 1957 and 1979. Anscombe’s use of the phrase in action theory has been criticised, *inter alia*, by Goldman 1971.

¹¹ This is in accordance with Searle 1995.

and thus no contradiction arises. Thus the aporetic result is actually avoided. But in order to avoid the contradiction we have made the subject phrases of (D2S) and (D3S) refer to two distinct objects! Following a suggestion of Kit Fine, such referring phrases containing words like “as described as” or “in virtue of” or “qua” are sometimes said to refer to qua-objects.¹² And the reason why Fine insists that referring phrases consisting of the same base term (“*y*”) but different gloss terms (“a dollar bill”, “a piece of paper”) refer to different things is exactly that we can ascribe to them contrary or even contradictory predicates (like “is a social object” and “is a non-social object”), in combination with the *Principle of the Indiscernability of Identicals*, e.g. in the following formulation:

If $x = y$, then x and y have the same properties and every predicate that can, in non-intensional contexts, be attributed to x can also be attributed to y .

By *modus tollens*, if x and y do not have the same properties, x and y are not the same thing (the *Principle of the Distinctness of Discernables*). Thus the Alternative Subject Analysis is unacceptable for Searle. For where Searle sees only one object, the Alternative Subject Analysis posits two things, i.e. two qua-objects: y as a piece of paper and y as a dollar bill.

2.3 The Predicate Modification Analysis

Thus it is likely that Searle takes refuge to the Predicate Modification Analysis.¹³ According to the Predicate Modification Analysis, a phrase starting with “as described as” belongs not to the grammatical subject but to the grammatical predicate of sentences like (D2). Such phrases are predicate modifiers that take predicate phrases and yield new predicate phrases. According to this approach, (D2) and (D3) consist both of the same subject phrase “*y*” but of two distinct complex predicate phrases:

(D2P) y is [as described as a dollar bill a social object].

(D3P) y is [as described as a piece of paper a non-social object].

Thus we clearly have one and the same subject in both propositions, and therefore this account is indeed more sympathetic to the identity component of Searle’s view. (D2P) and (D3P), however, contain quite strange complex predicates of the form “is a (non-)F as described as G”, where

¹² Cf. Fine 1982.

¹³ I myself think that the Predicate Modification Analysis is indeed the more appropriate approach to qua-phrases (cf. Jansen 2002, 41–43), as does Peter van Inwagen, who accuses the Alternative Subject Analysis of committing the fallacy of “adverb pasting” (van Inwagen 2000, 442 = 2001, 127–128).

“F” is a placeholder for “social object” and “G” is a placeholder for “a dollar bill” and “a piece of paper”, respectively. Now there may be considerable dispute about when exactly a phrase “ x , as described as a G, is an F” is true. But in those cases, where “F” does not require a scale reference (like “big” or “good” do), “ x , as described as a G, is an F” implies both “ x is an F” and “ x is a G”.¹⁴ The former wouldn’t be true without the two latter being true. Thus, as “social” is not a scaling term, if y is as-described-as-a-dollar-bill-a-social-object, then y is both a dollar bill and a social object. And if y is as-described-as-a-piece-of-paper-a-non-social-object, then y is both a piece of paper and a non-social object. Thus, according to the Predicate Modification Analysis and this implication, we end up with the very problem we started with, i.e. that y seems at the same time to be a social and a non-social object.

Thus Searle faces the following dilemma: Either he embraces the Alternative Subject Analysis of description relativism or the Predicate Modification Analysis. If he chooses the Alternative Subject Analysis, the diversity of discernables forces him to accept that there are two objects in the game after all, namely, according to Fine, two qua-objects. If he chooses the Predicate Modification Analysis, however, he ends up with the predicates “is a social object” and “is a non-social object” being ascribed to the object as such and thus with the very contradiction that Searle tried to avoid by introducing description relativism. Thus Searle’s appeal to description relativism seems to provide no way out.

2.4 Searle’s Second Argument

Searle has a second argument for rejecting the idea that there is a distinct class of social objects as opposed to non-social objects:

Again, when I am alone in my room, that room contains at least the following ‘social objects’: A citizen of the United States, an employee of the state of California, a licensed driver, and a tax payer. So how many objects are in the room? There is exactly one: me.¹⁵

Several things can be said regarding this argument. First, the general term “object” does not carry with it a principle of counting (nor do the general terms “thing” or “entity”).¹⁶ Thus to ask how many objects are in a room is not to ask a clear question. Thus, second, the problem Searle hints at in this passage is nothing that is peculiar to social objects: In the room to-

¹⁴ Cf. Jansen 2002, 43.

¹⁵ Searle 2003, 302.

¹⁶ Cf. Lowe 1998.

gether with Searle there are his head, his legs, and his kidneys, among a lot of other bodily parts. There are two legs, ten fingers, and thousands of hairs. Still they all form only one human organism. Like many parts can form one whole, many properties can inhere in one substrate. Suppose that there is a ball, a round thing, a red thing, a leather thing, and a thing near to me. How many things are there? It may be that all the terms in this enumeration refer to one and the same ball, which is round, red, made of leather and situated near to me. Those terms do not necessarily describe distinct objects, but may apply to the same object because of distinct features of this object. In a similar manner, one and the same natural person, e.g. John Searle, can have the social status of being a US citizen, the social status of being employed by the state of California, the social status of being a licensed driver, and the social status of being a tax payer. In this case, all of these descriptions apply to the same natural person, John Searle, because this very person is the bearer of several social features. Searle's misconception is that he sees all descriptions of objects on a par, whereas in fact there are quite distinct ontological categories involved in his example and thus these descriptions do not have to make up distinct individuals (as it would have been the case were these terms, e.g., all terms for species of substances where none is a genus of the other, like "dog", "cat", or "human being"). Just as one thing can at the same time have different properties, one thing can at the same time have different social features, and it can have more than one social status.

2.5 Identity Rejected

Searle sums up the upshot of his arguments as follows:

There is a distinction between objects made of iron and objects not made of iron. But there is not in that way a distinction between the class of social objects and the class of non-social objects, because one and the same thing can be a social object relative to one description, and a non-social object relative to another description.¹⁷

I have shown that Searle's arguments are not conclusive. It is by no means clear that one and the same object can be a social object and a non-social object at the same time, depending on the descriptions one uses. In addition, description relativity is a highly artificial parrance, involving either unusual subject terms or unusual predicate terms. Moreover, because of the Indiscernability of Identicals, the kind of unity provided by synchronic identity should imply the same behaviour with regard to diachronic unity.

Searle's identity assumption, however, leads into trouble with different persistence conditions of the allegedly identical dollar bill and the paper. Let us call the dollar bill in Searle's hand Dolly and the piece of paper in Searle's hand Piecy. Now, according to Searle's identity assumption, Dolly is the very same thing as Piecy. But Dolly could cease to exist through an act of disvalidation, e.g. through a special disvalidation stamp. Through such an act the dollar bill Dolly would cease to exist. This would, however, change nothing about the existence of Piecy: the piece of paper would still be around.

Moreover, it could well have been that Piecy came into existence, but not Dolly. It could have happened that shortly after producing Piecy, the dollar were abolished. In this case, there would be a piece of paper, but no dollar note. Piecy would exist, but not Dolly. Thus, Piecy and Dolly are not identical. In fact, this difference with regard to their actual or constitutional persistence (which, in turn, implies a difference with regard to their modal properties) is one of the main motivating arguments behind the constitution view.

Before discussing constitution, I have to deal with an objection that could be brought forward against the rejection of identity. Let us assume for the moment that all bank notes are made of paper. Now consider the set of all pieces of paper in the world and the set of all bank notes. As I rejected identity between Dolly and Piecy in particular and between bank notes and pieces of paper in general, I am forced to judge these two sets as two totally distinct sets, as no element of the set of pieces of paper is identical with any bank note. But isn't it the case that if you have all pieces of paper in the world, you also have all bank notes? Does the rejection of identity not lead into trouble with this intuition? My answer is that the problem here roots not in the rejection of identity but in the confusion of sets with huge boxes. Sets "contain" their elements in a non-spatial way. Sets are unlike huge boxes, in that sets are not concrete but abstract things, existing outside of space and time. Were there a huge box into which we put all pieces of paper in the world, this box would in fact also contain all bank notes, because – according to our assumption – all bank notes are made of paper and thus co-located with some piece of paper. Thus the bank notes would end up in the box, not because of their identity with a piece of paper, but because of their being co-located with a piece of paper. And while identity implies co-location, this is not true the other way round: Co-location, or so the constitution view will claim, does not entail identity.

3. Baker's Constitution View

3.1 Material Constitution Defined

The retreat to description relativism is not the only response possible when faced with the above. However, the premises (P1)-(P4) are very much commonsensical and the inferences to (C1) and (C2) are based on the logically impeccable *modus ponens*. Remains the identity claim in (P5), which is indeed very much open for criticism. When confronted with (C1) and (C2), it would be natural to apply the Principle of the Indiscernability of Identicals, and reject (P5). This is exactly what the constitution view does. According to the constitution view that has been put forward by Lynne Rudder Baker, the synchronic unity between the bank note and the piece of paper is not the unity of identity but the unity of constitution. A paradigm example for the relation of constitution is the relation between a statue and the lump of stuff of which it consists. The lump of stuff is the material substratum without which the statue could not exist, but in order for the statue to exist, more is required than just a lump of stuff. Statues only exist, as Baker puts it, "in relation to an artworld,"¹⁸ i.e. in a context of social practices that consider some objects as pieces of art, as having aesthetic value, and so on. Moreover, the lump and the statue have different properties: The statue "may be defective, substandard, well or badly made, valuable, ugly, Romanesque, exchanged, insured, or admired even though the alloy which makes it up it is not."¹⁹ Most prominently, statue and lump have different persistence conditions:

Even if God created the statue (and, of course, the lump) *ex nihilo*, and the statue remained in existence and unchanged for a year, after which God annihilated the statue (and the lump), the lump had the property 'could survive radical deformation' and the statue did not have that property. And the statue had the property 'is necessarily continuous with a statue', and the lump did not have this property.²⁰

Any heavy deformation would destroy the statue, whereas the lump of stuff would still be a lump of stuff. Thus the persistence conditions of lump and statue also imply different modal properties: Our deliberations about the diachronic unity entail statements about the synchronic unity. Because of these arguments, constitution theorists do not conceive of the lump of stuff and the statue as being one and the same identical object.

The lump of stuff is the matter out of which the statue is made. Thus, the statue is materially constituted by the lump of stuff. Baker has suggested several formal definitions for this brand of constitution. Here is a slightly modified version of her most recent definition:²¹

- (MC) x materially constitutes y at t if and only if there are primary kinds F and G such that at t :
- (a) x has F as its primary kind and y has G as its primary kind.
 - (b) x and y are spatially coincident and there is no other thing that has G as its primary kind and is spatially coincident with x .
 - (c) x is in G -favorable circumstances.
 - (d) Necessarily, for everything that has F as its primary kind and is in G -favorable circumstances there is some spatially coincident entity that has G as its primary kind.
 - (e) Possibly, x exists but no spatially coincident entity that has G as its primary kind.
 - (f) If x is of one basic kind of stuff, then y is of the same basic kind of stuff.

Some comments are in place here. I will, in this order, elucidate (1) Baker's distinction between derivative and non-derivative properties and (2) her notion of primary kinds, then comment on (3) the definendum and, last but not least, discuss (4) her notion of G -favorable circumstances:

(1) Part and parcel of Baker's view of constitution is the distinction between *derivative* and *nonderivative properties*. The idea is that an object x can have some properties nonderivatively, i.e. independently of any constitution relations it may have to other entities, be it that these entities constitute x or that they are constituted by x . If x is F nonderivatively, then – given the appropriate background – x 's being F does neither imply that x is constituted by something that is F nor that x constitutes something that is F .²² Other objects can be F derivatively, i.e. by way of their constitution relations to other entities. An object x has a property F *upward derivatively*, if x has F because there is a constituent c of x that has F . And x has F *downward derivatively*, if x has F because x constitutes something that has F . Thus a person may have a certain weight because it is constituted by a body with this weight, and, the other way round, the body might have the right, say, to enter a cinema, because the person has a right to do so: Whi-

¹⁸ Baker 2000, 34.

¹⁹ Fine 2003, 206 (italics deleted).

²⁰ Van Inwagen 1998, 208 = 2001, 95.

²¹ Baker 2007, 161–162. For an earlier version cf. Baker 2000, 43, 95 and 168.

²² Baker 2000, 49.

le bodies are the primary bearers of weight, persons are the primary bearers of rights, but persons can “inherit” the property of having a weight from their constituting body, and bodies can “inherit” rights from the persons which they constitute. Baker points out that the admission of both upward and downward derivation is a non-reductive feature of the constitution view.²³

(2) The *primary kind* of a thing x is what corresponds to the question: “What most fundamentally is x ?”²⁴ Everything has exactly one primary kind, which “goes hand in hand with its persistence conditions.”²⁵ A thing’s primary kind is something like its *infima species*, the most narrow kind it belongs to. Belonging to a primary kind is an essential property; a thing cannot exist without its primary kind: “Something that has K as its primary kind cannot lose the property of being a K without going out of existence altogether.”²⁶ In her own versions of the definition of material constitution, Baker demands explicitly that F and G are distinct kinds.²⁷ This is, however, redundant, since we can infer this from clause (e). When we say that everything has exactly one primary kind, we mean to say that everything has exactly one primary kind nonderivatively. It is possible that something has other primary kinds derivatively and non-essentially. For example, while a piece of paper belongs to exactly one primary kind essentially and nonderivatively (namely the kind piece of paper), it belongs to the kind dollar note downward derivatively and hence contingently, because it is a constituter of a dollar note.²⁸

(3) Baker considers her own definition as a definition of “constitution” full stop, whereas I have the more *restricted definitum* “material constitution”. This is, because I think that Baker’s definition is not yet a definition of constitution “in full generality.”²⁹ I will discuss the reasons for this in more detail in section 4, but here I can remark in passing, that according to (MC) only primary kinds – and because of clause (b) only spatial things – can have constituters or be constituters.

23 Cf. Baker 2000, 47. Though Baker mentions these two cases by name in this passage, she mostly deals with them in combination in the remainder of her book.

24 Baker 2000, 40; Baker 2007, 33.

25 Baker 2007, 33. Cf. Baker 2000, 39–40.

26 Baker 2007, 35. Cf. Baker 2000, 40.

27 Baker 2000, 42; Baker 2007, 161.

28 Cf. Baker 2000, 40, n. 33; Baker 2007, 34–39. Things seem to be different with upward derivation: The dollar bill belongs upward derivatively to the kind piece of paper. I take it that the laws are such that it would cease to be a dollar bill were it to consist of a different kind of matter. Thus, at least in some cases upward derivation seems to preserve essentially.

29 Thus she describes her intention in Baker 2000, 47.

(4) A crucial phrase in Baker’s definition is “ G -favorable circumstances”. This is a general term meant to cover anything that is necessary for the (material) constitution of an entity over and above the material substratum. According to Baker, there could not be statues without an art world, no persons without a first person perspective. Being embedded in an art world of artists, spectators and critiques is necessary for being a statue and thus belongs to the statue-favorable circumstances, just as, according to Baker, having a first person perspective belongs to the person-favorable circumstances a body has to be in, in order to constitute a person. And, or so we can continue, in order for there to be money, things have to be in money-favorable circumstances: They have to be embedded in social practices of selling, buying and paying; they have to be issued by the right authority, and so on.

3.2 Material Constitution Applied

But let us now put Baker’s definition to work and test whether it can deal with the case of the dollar bill. Again, let “Piecy” refer to that piece of paper that Searle holds in his hands and let “Dolly” refer to that dollar bill that Searle holds in his hands. Then Piecy’s primary kind is being a piece of paper, and Dolly’s primary kind is being a dollar bill. It is undisputed that Piecy and Dolly are spatially coincident. Moreover, Piecy is in dollar-bill-favourable circumstances – that is, Piecy has all the properties and the origins necessary for being a dollar bill (and has not, say, been printed by a forger). And necessarily, any piece of paper that is in dollar-favourable circumstances – any piece that has such properties and origins, that is – is co-located with a dollar bill. Last but not least, it is possible that Piecy exists but no spatially coincident dollar bill, e.g. if shortly after the printing on Piecy and before issuing Dolly the dollar were abolished. In that case, Piecy would still exist, but Dolly would not.

Thus Piecy and Dolly fulfil all the requirements laid down by Baker for constitution. Thus her definition is able to account for the dollar bill Dolly being constituted by – and not being identical with – the piece of paper Piecy. And as Dolly is not identical with Piecy, Dolly and Piecy are indeed distinct entities and not, as Searle assumed, “one and the same object”.

3.3 Saving Searle's Intuitions

The intuitive underpinning of the identity claim in (P5) was quite strong: Isn't it true that Searle imagines himself to hold one thing only, which is both a piece of paper and a dollar bill? Said in this way, I would totally agree. It is true to say:

- (A) This piece of paper is a dollar bill.

Still, it does not follow that the piece of paper and the dollar bill are the same object. The "is" in (A) need not be the "is" of identity. Indeed, because they have different properties, it should not be the "is" of identity. Still there is an intimate connection between the piece of paper and the dollar bill: They inhabit the same region in space. This is, why we are likely to agree that there is only one thing that Searle holds in his hand, according to the intuition that no two objects occupy the same space.³⁰ In this wording, however, the principle is not a valid one. A bronze statue and a certain lump of bronze of necessity occupy the same space, but they are not the same object: While a heavy deformation will destroy the statue, the lump of bronze will remain a lump of bronze whatever deformation will occur. Thus, the lump of bronze and the statue are not "one and the same object". Nor is a person identical with her body, though both occupy the same space. Rather, the body is something that constitutes the person, like the bronze constitutes the statue. The same applies to the case of the dollar bill: It is not identical with the piece of paper, but the piece of paper constitutes the dollar bill, and this is, why both occupy the same space. Now, if the dollar bill and the piece of paper are not identical with each other, if they are not, as Searle invites us to accept, "one and the same object", there is no contradiction in saying that the one is a social object and the other is not.

Nevertheless, Piecy and Dolly are not totally unrelated to each other. On the one hand, they are non-identical things. On the other hand, however, Piecy is a constituent of Dolly. Thus there is a sense of synchronic unity at stake here, but it is not the unity of identity, but the unity of constitution. And this sense of synchronic unity can account for the Searlean intuitions underlying his identity assumption, but it does not run into the ontological troubles into which the identity assumption itself has led us before. We can thus define:

- (UC) x and y form a unit of constitution, if and only if x and y are linked through constitution relations.

As I already remarked in section 1, Baker herself tries even more to meet the intuitions underlying the identity statement. While continuing to insist that Piecy and Dolly are distinct, she now argues for the position that Piecy and Dolly (and their ilk) while being distinct are numerically one. To advertise her position, Baker refers to "Aristotle's notion of numerical oneness without identity".³¹ One may say that a seated man is a unity of a man and someone seated. If seated Socrates rises from his chair, however, that seated someone ceases to be, while the man Socrates continues to exist. The seated and the man are conceptually distinct but may indeed be numerically one man. Charlotte Witt has rightly pointed out that Aristotle's seated man – like the red round ball discussed above – is a unity composed out of a substance and accidents. Aristotle might have been counting substances – and he could say that there is numerical oneness because being seated is an accident inhering in man, and thus there is only one substance involved. Baker, however, claims numerical oneness for combinations of distinct entities belonging to different primary kinds with different persistence conditions.³²

Questions of counting without reference to any sortal indicating a principle of counting are extremely difficult. Baker herself avows that "the 'How many' question has no application apart from some sortals".³³ And Baker goes on: "If x and y are constitutionally related, then I would deny that where x and y are, there are two things." So far, Baker's move is justified by the sortal relativity of counting: No sortal, no counting; and thus no two things. But Baker does not rest content with this. She does indeed claim: " x and y are numerically one".³⁴ If we take Baker at her word and strictly adhere to the need of a counting principle, she is not at all allowed to say "one" at this point: For relative to which sortal are Piecy and Dolly numerically one? Sure, they are exactly one piece of paper, because only Piecy is a piece of paper in the first place, at least nondeterminatively. And they are exactly one bank note, because only Dolly is (nondeterminatively) such a thing. But this is supposedly not what Baker has in mind: Also Piecy and Poundy (that English Pound note that I have in my pocket) are exactly one piece of paper – again because Poundy is not (nondeterminatively) a piece of paper. What Baker has in mind seems to be something like this: Piecy and Dolly are numerically one because they make up exactly one

³⁰ This principle is being defended by, e.g., Burke 1994 and critically discussed in Lowe 1995a.

³¹ Baker 2007, 40.

³² Witt 2008.

³³ Baker 2007, 171.

³⁴ Baker 2007, 171.

unit of constitution. The sortal involved here thus seems to be “unit of constitution”. But this is not true: “Unit of constitution” is not a sortal for Piecy and Dolly at all. For neither Piecy nor Dolly *are* a unit of constitution. They rather *belong* to the same unit of constitution. This is quite like saying that father and son are one and the same family. This does not make father and son numerically one. Nor does it make either of them a family. They just belong to the same family. Notwithstanding this, father and son still are numerically two, i.e. two human beings.

There is another reason not to follow Baker at this point: For any non-identical entities there is always a sortal with regard to which they are two, namely the set-theoretical sortal “element”. Consider the set consisting of Dolly and Piecy. Were they numerically one, this set should have one element only. In this case, the names “Dolly” and “Piecy” would refer to the very same entity. But then the set {Dolly, Piecy} would be the same set as {Dolly}, which, in turn, would be the same set as {Piecy}. But sets are identical only if they contain the same elements. Baker, however, sustains the non-identity of Dolly and Piecy. Hence, the set {Dolly, Piecy} is to have two elements and not only one. This argument shows that, as far as absolute identity is at stake, non-identity implies numerical two-ness relative to the dummy sortal “set-theoretical element”.

What, then, about our everyday parlance? If I put Dolly and Piecy into a previously empty box, it would be quite extravagant to say that there are two things inside. But then remember again the difference between sets and boxes: Not every set that contains Dolly does also contain Piecy, because they are not identical. But any box that contains Dolly will also include Piecy, because they are constitutionally related. And because Dolly and Piecy belong to the same unit of constitution, they are co-located and I need only one throw in order to put both Piecy and Dolly into the box. But that does not imply that this involves, strictly speaking, only one thing. It rather means that it involves only one *throw*. And this again does justice to the one-pick intuition.

3.4 The “Is” of Constitution

The discussion so far shows that we have to add another shade to the spectre of meanings of the word “to be”: the “is” of constitution.³⁵ The “is” of constitution has different logical properties than, say, the “is” of identity: the constitution relation as defined by Baker is irreflexive, asymmetrical, and transitive. This can easily be shown. Clause (e) provides for irreflexivity: Nothing can constitute itself, because the primary kind of a thing cannot be both present and not present at some spatio-temporal region. And together with clause (d) it provides for asymmetry: If x constitutes y , y cannot constitute x , because if the necessitation expressed in (d) would work in both directions, (e) cannot possibly be true for any direction. And, finally, as all clauses of the definiens feature transitive characteristics, the definiendum is transitive, too.³⁶

Its irreflexivity and asymmetry sharply distinguish constitution from identity. We may thus be licensed to say truly both “Dolly is Piecy” and “Piecy is Dolly”, but then the “is” in these two sentences cannot possibly have the same meaning. For, as we have seen, Dolly is not identical with Piecy, thus the symmetrical relation of identity cannot be meant here. Rather, the relation between Dolly and Piecy is the asymmetrical relation of constitution. Thus, when Dolly is constituted by Piecy, Piecy is not constituted by Dolly, but rather does Piecy constitute Dolly. Thus the “is” of constitution is itself ambiguous: While “Dolly is Piecy” means that Dolly is constituted by Piecy, “Piecy is Dolly” means that Piecy constitutes Dolly.

This disambiguation of the “is” of constitution allows us to distinguish whether some property can be ascribed to a subject derivatively or nondervatively, and if derivatively, whether it is ascribed due to upward-derivation or due to downward-derivation.³⁷ Again, we are licensed to say

35 Cf. Wiggins 1980, 30; Baker 2000, 54. Baker points out, that her aim is “metaphysical, not linguistic”, and that she is “not postulating an ambiguity in the predicative use of ‘is a person’” (2000, 54). Nevertheless, she speaks about the “is” of constitution and makes it pretty clear that she distinguishes “two ways to have a property – nondervatively and derivatively” (2000, 55).

36 While Baker 2000, 45 argued that her constitution relation is intransitive, Zimmerman 2002 demonstrated that, to the contrary, it is transitive, and Baker 2007, 165 n. 14 now accepts this result. The point is the following: Let x (of primary kind P) constitute y (of primary kind G), and let y constitute z (of primary kind H). Then while it is not necessary that all circumstances that are H -favourable for y are also H -favourable for x , it is still the case that there always are *some* circumstances that are H -favourable for x . Such are, e.g., the circumstances consisting out of the conjunction of the circumstances that are H -favourable for y and the circumstances that are G -favourable for x . This is enough to guarantee the transitivity of the constitution relation.

37 Cf. Baker 2000.

both “Dolly is a dollar bill” and “Dolly is a piece of paper”. But we must be aware of the ambiguity of “is” here, too: Dolly is a dollar bill nonderivatively, but Dolly is a piece of paper derivatively. Dolly is a piece of paper because Dolly is constituted by something (namely Piecy) that is nonderivatively a piece of paper. Likewise with “Piecy is a piece of paper” and “Piecy is a dollar bill”. Piecy is nonderivatively a piece of paper, but Piecy is not nonderivatively a dollar bill. Rather, Piecy is derivatively a dollar bill, because Piecy constitutes something that is nonderivatively a dollar bill.

We can summarize these different ways of being brought about through the relation of constitution in the following table:

Dolly's ways of being

Dolly is Piecy.

Dolly is a dollar bill.

Dolly is a piece of paper.

Dolly is constituted by Piecy.

Dolly is nonderivatively a dollar bill.

Dolly is constituted by something that is nonderivatively a piece of paper.

Piecy's ways of being

Piecy is Dolly.

Piecy is a piece of paper.

Piecy is a dollar bill.

Piecy constitutes Dolly.

Piecy is nonderivatively a piece of paper.

Piecy constitutes something that is nonderivatively a dollar bill.

When we apply these means of disambiguation to the reductio argument from section 2, we get the following:

(P1*) Piecy is nonderivatively a piece of paper.

(P2*) If something is nonderivatively a piece of paper, it is nonderivatively a non-social object.

(C1*) Piecy is nonderivatively a non-social object.

(P3*) Dolly is nonderivatively a dollar bill.

(P4*) If something is nonderivatively a dollar bill, it is nonderivatively a social object.

(C2*) Dolly is nonderivatively a social object.

(P6*) Whatever is nonderivatively a non-social object is not nonderivatively a social object.

With these two conclusions (C1) and (C2), together with (P6*) and the Principle of the Diversity of Discernables, the constitution theorist can infer the non-identity of Dolly and Piecy. And as Dolly and Piecy are not identical, no contradiction follows. What is true, instead, is that something (i.e. Dolly) that is a social object nonderivatively is a non-social object

derivatively, and that something (i.e. Piecy) that is nonderivatively a non-social object is a social object derivatively. But this is perfectly in tune with classical logic.

4. How Many Groups Are There?

4.1 Four Options

Having thus dealt with the bank note puzzle, I will now return to the group puzzle: If four people stand together in front of the philosophy department at noon, how many groups are there? To answer this question we need – implicitly or explicitly – an idea about the synchronic unity of a group. I will now discuss four possible answers to this “How many?” question, each relying on a specific account of what it is to form a group and thus on a specific account of group unity. I do not take this list of four to be exhaustive.

Firstly and most sparsely, the answer could be: There is only one group that consists of all the people present. This one group is the “maximal group”, consisting out of all people present at a certain time at a certain place (and only of those). As there are four people hanging around in front of the philosophy department at noon, this maximal group consists of four members. Secondly and more affluently, the answer could be that there are many more groups: There is, of course, a group with four members, but there are also four groups with three members and six groups with two members. Thus there are, all in all, eleven groups in front of the philosophy department. In these two cases, “group” obviously means something like “(maximal) aggregate of the human beings present” or “(maximal) mereological sum of the human beings in question”.³⁸

Thirdly, we could respond that we cannot tell *a priori* how many groups there really are. For if we conceive of a group less formally as a relevant unit of social interaction, then we need to know more about the social interactions between these people before we can tell which of them form a group and how many groups there are: Are two of the four a loving couple? Do they all together form a group of close friends?

38 Sometimes groups are construed as sets. Cf. e.g. Rami 2005, 74 or the definition of „society“ in Hawthorne 1995, 835: „A set of individuals and/or institutions in relations governed by practical interdependence, convention, and perhaps law [...]“ Although there is a set of the people that are in front of the department, this set itself is not in front of the department. As sets are abstract entities, they do not occupy any place in space or time at all. Groups as sets are discussed (but not endorsed) in Uzquiano 2004.

Fourthly, we could consider the possibility that there can even be more than one group consisting of the very same people.³⁹ The four people can - at the same time - be the faculty of a department, the advisory board of a journal, and a neighbourhood bridge club. Here, "group" means "institutional group", something that has been established by an act of institution and has some institutional structure. Again, the actual number of such groups is no matter of armchair-philosophy but requires a lot of empirical data.

4.2 Beyond Material Constitution

As different as these four options are, they share the feature that groups are somehow constituted by other entities. According to the first two options it is the people that constitute groups, even if the two options disagree about which people have to be taken into account. According to the third option, it is people plus social relations or social interactions that constitute groups. And according to the fourth option, it is people plus institutional rules or an act of institution that constitute groups.

We have seen that Baker's approach can deal with some social entities like banknotes. It can provide for the fact that some constituters (in Baker's terms, the "favourable circumstances") are extrinsic to the constituted entity. In this, it fares much better than mereological accounts of constitution, which can provide only for such constituters that are parts of the constituted entities.⁴⁰ But while Baker's brand of material constitution was sufficient to solve the bank note puzzle, it cannot at all cope with the group puzzle. There are several reasons why an account of social constitution must go beyond material constitution:

(1) Baker's definition of constitution defines a one-one relation between a single constituting entity and a single constituted entity. Social constitution, however, may be a many-one and even a many-many affair.⁴¹ Thus, firstly, it may involve a plurality of constituters: It is a plurality of people that constitute a group, or people plus interactions, or people plus rules plus institutional acts. An obvious strategy at this point is to go for mereological sums of these as one 'single' constituter. And, indeed, Baker

accepts aggregates or sums as "the ultimate constituters".⁴² In this way, many things can jointly constitute another thing insofar their mereological sum constitutes this thing.

It might be objected that this strategy is question-begging with regard to the mereological sums themselves, which also are groups of a kind. In the next section I will argue that sums are special in so far that they are, as I will say, 'trivially' constituted and can be dealt with easier than other groups.

(2) Secondly, social constitution may involve many constituted things, even many constituted things of the same kind: E.g., the very same people can constitute lots of groups at the same time. Baker does admit the possibility that there are several constituents of the same constituter, if only they are of different kinds.⁴³ In the clause (b) of her definition she explicitly demands that there is no second thing of primary kind *G* present when an *F*-thing constitutes a *G*-thing. She added this uniqueness postulate to block off certain counterexamples involving two or more persons within the same body. But why shouldn't it be possible that one organism constitutes two persons?⁴⁴ Or why shouldn't it be possible that a piece of paper constitutes two letters, each written on one of its two sides? Or even that the very same scratches of ink constitute two different letters at once - though in two different languages?⁴⁵ In case some external things are relevant for the constitution, such things seem to be totally acceptable: The ink scratches need codes like an alphabet and a language in order to constitute a letter, and there seems to be no contradiction in the assumption that one and the same pattern of ink scratches constitute different letters with respect to different codes. Thus this addition to Baker's clause (b) is not necessarily helpful if it comes to social ontology, and I will later discuss the possibility that the same people can constitute more than one group. Thus with an eye on social constitution I am not sure whether the addition of the uniqueness postulate to her definition is indeed an improvement.

(3) For Baker, constitution is a material affair. It involves material constituters. Earlier versions of Baker's definition contained a reference to immaterial entities: "If *y* is immaterial, then *x* is also immaterial." Baker later decided to replace this with her new clause (f) documented in the

39 Such cases are also discussed by Gilbert 2004 and Uzquiano 2004.

40 Mereology is discussed in Baker 2000, 179-185 and Baker 2007, 181-198. Uzquiano 2004 suggests that a group is constituted at *t* by the set of their members at *t*. But then a concrete entity (the group) would be constituted by an abstract entity (the set), which, or so it seems to me, puts things upside down.

41 The possibility of a plurality of constituters (as well as the possibility of a plurality of constituted things) is extensively discussed by Wilson 2005 and Wilson 2008.

42 Baker 2007, 181. In a note aside she considers to use plural quantification to solve this problem; cf. Baker 2007, 32 n. 17.

43 Cf. Baker 2007, 164: "There could be branching: The lump constitutes a plant pot, and the lump constitutes a statue. But the plant pot does not constitute a statue." Baker wants to block a counterexample put forward by Sider 2002, 46. Cf. also Wilson 2005.

44 This possibility is rejected in Baker 2007, 162, while it is defended by, e.g., Rovane 1998.

45 The latter examples are from Fine 2000.

definition given above, which she considers to be “a slightly generalized version”⁴⁶ of the older clause.⁴⁷ Both the original and the new clause (f) are intended to block off counterexamples involving, e.g., Cartesian egos⁴⁸ or ‘ectoplasmatic’ ghosts.⁴⁹ It is, however, not clear to me, whether immaterial things are made of any kind of stuff at all. In any case, social constitution often involves non-material constituents or at least such constituents that are not overtly material, like interaction events, individual or collective intentions, individual or collective commitments, or obligations. And many of the things constituted are non-material, too, like companies or electronic money. Thus, social constitution goes beyond the scope of Baker’s definition.

(4) Closely related to this is the fact, that Baker ties constitution to spatial coincidence.⁵⁰ Co-location is at the very heart of Baker’s account: It features not only in clause (b) of her definition, but also in the ‘modal’ clauses (d) and (e). Social constitution, however, can be a non-spatial issue, not least because some social entities are non-spatial. As Robert Wilson remarks:

Collective social agents “are not physically bounded entities. As such, they seem unlikely candidates for satisfying the first condition of constitution: spatial coincidence. Boards of directors, trade unions, philosophy classes, families, and the welders in a factory are or can be agents of some kind, but they are not continuous, spatially bounded, physical agents, and so cannot be spatially coincident with entities that have these features.”⁵¹

With social constitution, both constituents and things constituted may be non-spatial entities. While some groups clearly have a spatial location, some social entities haven’t got one. The bridge club may be sitting in my living room, the faculty can be assembled in the seminar room, and the dollar bill is in my hand. They all have a spatial location. But companies and bank accounts do not have locations, nor do contracts or obligations. In a way, they are “quasi-abstract” entities, as Barry Smith calls them.⁵² They do not extend in space, but they extend in time: They have as history, involving a moment at which they come into existence and also a moment at which they cease to exist. Troublesome cases of this kind are

46 Baker 2007, 164.

47 Baker 2007, 161.

48 Baker 2000, 43 attributes this counter-example to Anil Gupta.

49 Cf. Zimmermann 2002, 604.

50 Note that Baker now wants to construe spatial coincidence no longer as “absolute spatial coincidence” but loosely as “near spatial coincidence” in order to account for objects with vague boundaries (Baker 2007, 161; italics deleted).

51 Cf. Wilson 2005, 67.

52 Smith 2008, 37.

all those entities that have a kind of social status without having a bearer for that status, like electronic money or companies.⁵³

(5) Baker restricts her account of constitution to essential properties of constituents and things constituted. According to Baker’s definition, only membership to primary kinds can ground a constitution relation. Social constitution may involve external components as diverse as social relations, the look of outside observers, appropriate institutional rules or collective acceptance of these, or collective intentions.⁵⁴ These may (co-) constitute a group without being a part or a member of the group they constitute.⁵⁵ As far as the constituent is concerned, accidental and relational aspects can be accommodated within the G-favourable circumstances. But this means that all external constituents, which are so crucial for Baker’s view, are equally hidden within the G-favourable circumstances.

Baker’s general account is underinformative at this point. But as far as the constituting entities are concerned, that can be dealt with by spelling out what the G-favourable circumstances for the G in question are on a case-by-case basis. This is not possible as far as the constituted thing is concerned. ‘Fiancé’, ‘husband’ and ‘widow’ (or, ‘divorce’) are social roles that, as all social entities, are in need of constitution. But according to Baker, ‘husband’ does not denote a primary kind.⁵⁶ It is rather, one might say, a social phase sortal. A theory of social constitution must also account for social accidents, that is those social properties (like having the age of majority), social roles (like being a husband) and social relations (like being a superior to someone) that do not make up primary kinds.⁵⁷

(6) Finally, while identity is reflexive, symmetric and transitive (or, for short, an equivalence relation), constitution as defined by Baker is, as we have seen, irreflexive, asymmetric, and transitive. Social constitution, however, seems to have non-transitive cases: Smith, Miller and Jones constitute the neighbourhood bridge club, and each of them is in turn constituted by their bodies. But, or so it seems, Smith’s body is no constituent of the bridge club, and neither does the bridge club inherit all the properties of Smith’s body as derivative properties: If a bridge club has a weight at all

53 Cf. Smith 2003a, 2003b.

54 Cf. e.g. Sartre 1943 (on outside observers), Seale 1995 (on constitutive rules and collective acceptance), Baker 2000, 24 and Wilson 2005, 51 (on external relations), Hindriks 2006 (on acceptance dependence) and Baker 2007, 11–13 (on intention dependence).

55 For the differences between parthood and membership cf. Ruben-Hillel 1985, ch. 2.

56 Cf. Baker 2000, 40: “[...] being a husband [...] is not a primary-kind property. A world like ours except that it lacked the institution of marriage (and hence had no husbands) would not thereby have fewer individuals in it than our world.” However, such a world would contain fewer or at least different accidental entities. Cf. also Baker 2007, 34–35.

57 On the categorical variety of social entities cf. Jansen 2005.

(which can be doubted), then it is not the weight of the body of a single member, i.e. not the weight of Smith's body. The bridge club, the three members and their bodies just belong to different levels of beings. On the other hand it might be to strong to posit social constitution as a non-transitive relation, for there may be some transitive cases, especially in the case of groups considered as mereological sums. It is to these cases that I turn now.

4.3 Mere Composition

Notwithstanding the merits of Baker's approach, these six points give us good reasons for second thoughts. I will proceed in two steps. First, I will deal with those cases of groups that are only superficially of a social nature, i.e. those groups that are mere aggregates, or mereological sums, of people. In these cases we are confronted with composition, which we may either oppose to constitution proper⁵⁸ or else consider as a very weak variety of constitution that we may dub "trivial constitution". Having discussed this, I will go on and consider non-trivial cases of social constitution.

How many groups are in front of the philosophy department? Consider again the first and second answer to this question: There is one maximal group of four persons in front of the department, or there are eleven groups of two or more members, respectively. Here, I said, "group" means something like "mereological sum of human beings". There is nothing deeply social about such mereological sums, with the exception that they comprise a plurality of human beings. But the ontology of sums makes no difference as to the nature of the elements or parts: The only thing about a part of a mereological sum that matters for the ontology of sums is (beside its having parts) its very being a part. Thus sums of humans behave no different than sums of plants, cars, or stones; they are all governed by the same logical axioms.

If there are the parts, there is also the mereological sum of these parts. There is no explanatory gap between the existence of the parts and the existence of the sum: The existence of the parts by itself gives rise to the existence of the corresponding sum, without the need to specify any external constituents or any sum-favourable circumstances. This is the triviality involved in the "constitution" of mereological sums. It is, indeed, so trivial that the question may be asked whether it is worth to call this rela-

tion by the name of "constitution" at all. However, no whole is identical with any of its proper parts taken singly. And there is an important similarity between the parthood-relation and the relation of material constitution: Both feature in accounts how or why a more complex thing exists in virtue of the existence of other things – either the parts or the material constituent. And this seems to be a good reason to consider both as legitimate varieties of constitution.

Baker herself, however, is very keen to distinguish mereological composition from constitution, in order to delineate her own theory of constitution from mereological accounts of constitution.⁵⁹ For my part, I do not want to advocate a mereological account of constitution as composition *tout court*. I only want to consider the possibility that composition is a trivial variety of constitution; I do not want to claim that all cases of constitution are cases of composition. To the contrary, I agree with Baker that all those cases that she calls "constitution" are in fact not cases of mere composition.⁶⁰

4.4 Institution and Interaction

Let us now turn to the third and fourth answers suggested above. According to these options we were not able to tell a priori how many groups there are standing in front of the department. This is a reliable indicator that these options are much less formal answers that promise actually to transfer information about the social world. As I already pointed out, according to the third option "group" refers to a relevant unity of social interaction, and "group" refers to institutional groups according to the fourth option. I will call the varieties of constitution involved in these cases "interactional constitution" and "institutional constitution".

Institutional groups are, of course, themselves relevant units of social interactions. Associations are units of co-operation and joint commitments, companies are units of employment and commerce. Thus, in fact, institutional groups are a special case of groups as relevant units of social

59 Cf. Baker 2007, 186, where she says that her preferred terminology is to say "that constitution is not composition; composition is a mereological relation, and constitution is not".

60 Another opponent of the idea of composition as constitution is David Lewis, who claims (in Lewis 1991) that composition is a many-one variety of identity: The parts just are the whole. But this does not only require a revisionary logic of identity as a multigrade relation "The x 's = the y ", but causes also serious conflict with the indiscernibility of identicals in the case of, say, the statue, if one identifies the statue with all the particles of which it is composed (van Inwagen 1998). If composition is thought of as a kind of constitution, neither of these two problems arises.

58 This would be Baker's choice; cf. Baker 2007, 187 ("constitution cannot be understood as mereological composition") and 181 ("Constituted objects are not identical to any sums.")

interactions. For sake of simplicity, I will first turn to the special case of institutional constitution and then consider the general case.

If we want to establish an institutional group like an association or a company, the laws of our countries tell us what we have to do: How many founding members are needed to set up a charity? With what authority do you have to register? In Germany, you need at least seven people to establish a *Verein*, and you register a charity or company with the *Amtsgericht*, the local court. These are, of course, contingent facts and they differ from one legal system to another, both historically and geographically. Nevertheless, these legal facts tell us exactly what to do in order to establish an association or a company. For many institutional groups they are highly relevant for their existence.

Now many philosophers followed Aristotle in distinguishing the principles and causes of becoming from the principles and causes of being,⁶¹ and they took great pain to point out that a thing's constituters do not belong to its causes of becoming but to its causes of being.⁶² Now, if the legal process of registering an association is this association's way of coming into existence, i.e. its cause of becoming, what are its causes of being – its constituters? The legal process cannot be a constituter of an institutional group, because the process is not coexistent with the group: The group comes into being only once the process is completed and has come to its end. And the group can exist while the legal process of its establishment withers more and more into the distant past. As we can thus exclude the legal process itself from our search for the constituters, two groups of candidates remain: first the documents and records produced in the legal process, and second the rights and obligations that are established through this legal process. The legal documents, or so I will argue, are mostly only of instrumental value: They are mnemonics for and testimonials of the rights and obligations in question. Thus the only remaining candidate for the external constituter of an institutional group is the deontic structure that comes into existence through the legal process of establishing such a group. While the legal process is what brings the institutional group into existence, it is the deontic structure of rights and duties that constitutes an institutional group. It is this deontic structure that perdures once the process is over.

With this result, let us now turn to groups as relevant units of social interactions – like a loving couple or a group of close friends. Can we broaden our previous approach in such a way as to cover these cases, too? For sure, we do not legally register our friends nor do we need a legal

authority to fall in love and to start courting. And, normally, such relations do not come along with well-defined rights and obligations. Max Horkheimer and Friedrich Pollock are said to have established a contractual agreement for their friendship.⁶³ But normally, we do not sign contracts with our friends, and there are good reasons to believe that personal relations like friendship cannot live on the basis of a contract alone. But maybe there is something else to be found in such groups, in the storey just below the deontic network of rights and obligations: joint commitments. One way in which a group may be a relevant unit of social interactions is exactly by its members sharing a joint commitment which gives them reasons for actions according to a group intention.⁶⁴ A commitment may come about through an explicit mutual promise, i.e. a social contract *en miniature*, thus becoming a full-fledged obligation. But a commitment can also gradually build up through a series of successful co-operative actions, thus forming an implicit understanding of a joint intention to continue this series without leading to an explicit and formal act of obligation. In any case, the joint commitment comes about through social interactions of some kind.

Another way a group may be a relevant unit of social interaction is to have members that are disposed to act in an appropriate, co-operative manner, for example because they individually have the capability or tendency to react in a fitting way.⁶⁵ Again, such a capability is likely to be acquired through a process of learning or training, triggered by a series of similar situations in which each group member has the opportunity to learn the fitting co-operative reaction. Here, too, social interaction is the way to acquire these capabilities.

While in all of these cases the past interaction is the cause of the group's coming into being, past interactions no longer exist and can thus not constitute the group.⁶⁶ The entities that perdure are the commitments and the capabilities brought about through the past interactions, and these can be said to be among the group's external constituters in these cases. In a way, they are external to the group, as they are neither members nor parts of the group itself. As these groups come about through social interactions, it is not surprising that their external constituters are entities that

63 Cf. Gammeter/Ringkuh 1973, 13/16. I am indebted to Michael Grobstein for pointing out to me this telling anecdote.

64 Joint commitment is, of course, the central concept of Margret Gilbert's theory of plural subjects. Cf. e.g. Gilbert 1989.

65 Such cases are extensively discussed in Baltzer 1999 and Schmid 2005. I reflect on Schmid's approach in Jansen 2007.

66 If they are no constituters at all, they are, *a fortiori*, also not *intrinsic* constituters of the group.

61 Cf. Aristotle, *Metaphysics* V 1, 1013a 18.

62 Cf., e.g., Thomas Aquinas, *Quaestiones disputatae de veritate* 2, 3 obj. 20: Constituters are *causae esse rei* or *causae essendi*, not *causae fieri*.

come about through social interactions. As there is a huge variety of such groups, there is also a huge variety of possible external constituters. They range from rights and obligations via commitments to capabilities and tendencies to act in a certain way that are being shared by the individual members.

5. Towards Social Constitution

In order to account for the bank note puzzle, I rejected Searle's identity assumption and his description relativity approach to social objects and embraced a constitution view instead. I demonstrated that material constitution as defined by Baker can cope well with the bank note puzzle, but is not apt as a general account of constitution as it is found in the social realm, because social constitution goes beyond material constitution, as is shown by bearerless social entities and groups. There are at least three ways in which groups at large can be constituted: by trivial constitution (like sets and mereological sums of humans), by institutional constitution (like associations and companies), and, more generally, by interactional constitution (like a loving couple and a group of friends). Due to this richness and flexibility of social constitution, I refrain from stating a rigorous definition of social constitution, let alone of constitution in general. Even to state a number of necessary conditions is not easy beyond the usual irrelexivity and asymmetry of constitution, if they are to embrace all of material, compositional (or trivial), institutional and interactional constitution.⁶⁷

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⁶⁷ Many thanks to Lynne Baker, Andris Breiting, Ingvar Johansson, Bertram Kienzle, Arto Laitinen, Pedro Schmechig and Barry Smith, who commented on earlier versions of this paper, and also to audiences in Berlin, Krakow and Madrid for their inspiring questions.

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