### Hobbes on Powers, Accidents, and Motions

#### Stewart Duncan

Draft for Bender and Perler (ed.), Powers and Abilities in Early Modern Philosophy

Thomas Hobbes often includes powers and abilities in his descriptions of the world. Meanwhile, Hobbes's philosophical picture of the world appears quite reductive, and he seems sometimes to say that nothing exists but bodies in motion. In more extreme versions of such a picture, there would be no room for powers. But Hobbes is not an eliminativist about powers. He talks of them throughout his work. Consider some examples from the early chapters of *Leviathan*. There we find Hobbes talking of the power of witches (L 2.8), the power of God (L 3.12), power as discussed by "geometricians" (L 5.1), and about what we can do when "causes come into our power" (L 5.17). Power also enters into definitions of passions (L 6.39–43, 6.59 and see L 8.15). As Hobbes turns towards political topics, chapter 10 is on power, in particular "power *of a man*," which is "his present means to obtain some future apparent good" (L 10.1). Beyond these examples, when Hobbes discusses powers theoretically, he never says that they do not exist.

Hobbes does not deny powers' existence, but his view does tend toward ontological minimalism. It would be good to have an account of what Hobbes thinks powers are, and how they fit into his understanding of the world. In this chapter, I investigate Hobbes's account of the metaphysics of powers and abilities. I focus on the account of powers in part 2 of *De Corpore*, which is the closest thing to a metaphysical treatise that Hobbes published in his lifetime.<sup>4</sup>
Section 1 considers three important aspects of Hobbes's account of powers: the connection between powers and causes; the modal aspects of powers; and the connection between powers

and motions. Sections 2 and 3 then consider interpretive arguments about whether Hobbes identifies powers with underlying corporeal features.

# 1. Three themes from chapter 10 of *De Corpore*

De Corpore is the structurally first part of Hobbes's Elements of Philosophy.<sup>5</sup> It was first published in Latin in 1655, well after the structurally third part, De Cive, which was published in 1639, but before the second part, De Homine, which appeared in 1658. An English translation of De Corpore appeared in 1656, though it is unclear how closely Hobbes supervised this. With this trilogy, Hobbes aimed to present his philosophy systematically. De Corpore, the first part of that system, is itself divided into four parts. The first of those considers logic (and with that the philosophy of language), the second "the first grounds of philosophy," the third "the proportions of motions and magnitudes," and the fourth physics. The second part is the Hobbesian text that most resembles a systematic account of metaphysics, though towards the end we start to slide from the metaphysical to the geometrical. Chapter 10 is "Of Power and Act." Its arguments are closely connected with those of the previous chapters, "Of Body and Accident" and "Of Cause and Effect." In this section I introduce three main themes from Hobbes's discussion of power in chapter 10.

#### 1.1 Power and cause

Chapter 10 of *De Corpore* is divided into seven numbered sections. The first paragraph of the first section gives us Hobbes's central view that cause and power are the same thing.

CORRESPONDENT to *Cause* and *Effect*, are POWER and ACT; Nay, those and these are the same things, though for divers considerations they have divers names. For

whensoever any Agent has all those Accidents which are necessarily requisite for the production of some Effect in the Patient, then we say that Agent has *Power* to produce that Effect, if it be applyed to a Patient. But (as I have shewn in the precedent Chapter,) those Accidents constitute the Efficient Cause; and therefore the same Accidents which constitute the Efficient Cause, constitute also the *Power* of the Agent. Wherefore the *Power of the Agent*, and the *Efficient Cause* are the same thing. But they are considered with this difference, that *Cause* is so called in respect of the Effect already produced, and *Power* in respect of the same Effect to be produced hereafter, so that *Cause* respects the Past, *Power* the Future time. Also, the *Power of the Agent* is that which is commonly called *Active Power* (*De Corpore* 10.1).

This draws on work in chapter 9. That chapter addresses a range of topics around actions, causes, and changes. Here I want to note just the basic account of what a cause is (the cause which is later identified with power).

The Cause therefore of all Effects consists in certain Accidents both in the Agents and in the Patient; which when they are all present, the Effect is produced; but if any one of them be wanting it is not produced; and that Accident either of the Agent or Patient, without which the Effect cannot be produced, is called *Causa sine qua non*, or *Cause Necessary by Supposition*, as also the *Cause Requisite for the Production of the Effect*. But a CAUSE simply, or *An Entire Cause, is the Aggregate of all the Accidents both of the Agents how many soever they be, and of the Patient, put together; which when they are all supposed to be present, it cannot be understood but that the Effect is produced at the same instant; and if any one of them be wanting, it cannot be understood but that the Effect is not produced (De Corpore 9.3).* 

An agent produces the effect it does because of accidents possessed by it and the patient. Thus, although Hobbes wants to stick to talk of agents, we are moving closer to an event or state conception of causation here. A cause centrally is said here to be an aggregate of accidents. The collection or aggregate itself is nothing but all the individual accidents: it is not some extra thing that depends on the accidents.

There is a good deal more detail about causes in *De Corpore* 9. But already we see the key connections. The cause of some effect is constituted by the collection of "all those Accidents which are necessarily requisite for the production of some Effect in the Patient" (*De Corpore* 10.1). But something with that same collection of accidents is something that has the power to produce the effect. A power is a cause, and a cause is a collection of accidents.

Suppose that is so, when and why do we use the different names 'power' and 'cause'? Hobbes's answer appears to be that we call the object with the relevant collection of accidents the cause if the effect has already been produced, but say it has the power to produce the effect if that has not yet happened.

In *De Corpore* 10.2, Hobbes moves on from his basic definition of power to tell us that "every Act that may be produced, is produced at the same instant, in which the Power is Plenary." Hobbes had previously argued "that in whatsoever instant the Cause is Entire, in the same instant the Effect is produced. For if it be not produced, something is still wanting, which is requisite for the production of it; and therefore the Cause was not Entire, as was supposed" (*De Corpore* 9.5). In 10.2 he combines that view with his identification of power and cause, to argue that when a power becomes complete (or plenary) then the effect will be produced. There is still a sense in which a power (an active power) might exist without its effect following, if all the relevant accidents in the efficient cause are present, but not all the relevant accidents in the

whole system. That is, we need to contrast the entire relevant collection of accidents in the whole system (the entire cause and complete power) with the smaller sub-collection in the agent (the efficient cause and active power).

To get the full picture here, we will ultimately need to trace things back to chapter 8, where Hobbes discusses the project of defining 'accident.' I discuss that in section 2 below. For now, however, I want to look at two other themes that emerge from Hobbes's discussion in chapter 10.

#### 1.2 Modal aspects of Hobbes's account

In *De Corpore* 10.3, Hobbes argues that "active and passive power are parts only of plenary power." Again we have the conversion of a claim previously made about causes to a claim about powers, via the identification of the two. Both the power of the agent and the power of the patient are partial. Neither can produce the effect on its own, without the other. This leads Hobbes to describe active power as

conditionall, namely, the Agent has Power, if it be applied to a Patient; and the Patient has Power, if it be applied to an Agent; otherwise neither of them have Power, nor can the Accidents which are in them severally be properly called powers; nor any Action be said to be Possible, for the Power of the Agent alone, or of the Patient alone (De Corpore 10.3).

To have the power to produce something is, more precisely, to have the power to produce something, if applied to the appropriate patient in the appropriate state. Thus we do seem to get a dispositional or counterfactual element sneaking into Hobbes's account, despite its generally categorical nature.

Having just seen the apparent introduction of some modal elements into Hobbes' account, in 10.4 we get a reductive account of another modal aspect, namely the question of which acts are possible and which impossible. Hobbes tells us that "if the Power shall never be Plenary, there will always be wanting some of those things, without which the Act cannot be produced; wherefore that Act shall never be produced, that is, that act is IMPOSSIBLE: And every act which is not impossible, is POSSIBLE" (*De Corpore* 10.4). It appears that the possible acts are, for Hobbes, identical to the actual acts. Any act that never takes place is in fact said to be impossible; there are no possible acts which are not actual acts.

Having addressed the possible/impossible distinction in 10.4, Hobbes uses 10.5 to consider the necessary/contingent distinction. We start from Hobbes's account of the necessity of acts: an account which we might call minimal, reductive, or just confusing. Hobbes says that everything that actually happens is necessary: "every Act that shall be produced, shall necessarily be produced" (*De Corpore* 10.5). His main task in 10.5 is then to respond to a question: what should we say about future contingents? We could think of this as an objection: some (at least) of these future contingents will eventually happen, so by Hobbes's account they are necessary, but we call them contingent, so they can't be necessary. Hobbes's main thought here is to say that fundamentally, all claims about the future are either necessarily true or necessarily false, either about necessary things or impossible things. That is, he wants to insist on the view of the earlier section. He does explain why these events are called contingent, despite their necessity: he takes the language of future contingents to be fundamentally epistemic. We call future events contingent because we do not know whether they will happen, not because they are in themselves contingent.

Given the discussions of 10.4 and 10.5, one might think Hobbes is not far away from some of the necessitarian propositions in Spinoza, such as Ethics 1p33, "things could have been produced by God in no other way and in no other order than they have been produced," or indeed the start of 1p29, "in nature there is nothing contingent." For Hobbes here, whatever people may sometimes say, there are no non-actual acts which are genuinely possible. But what is Hobbes's argument for this apparent necessitarianism? It appears to be an argument from a definition of an impossible act: an act is impossible if there are always "wanting some of those things, without which the act cannot be produced," if "those things shall never concurre which are requisite for the production of it" (De Corpore 10.4). That is, an act is impossible if the circumstances required for its production never occur. Seeing that approach, it is tempting to say that Hobbes is not much of a necessitarian. Rather, he has defined 'impossible' to mean what others mean by 'never actual.' Given that definition, of course the acts that are never actual turn out to be impossible. But the definition appears to be confusing or tendentious, rather than insightful. Here we might compare the way that sometimes, when Hobbes talks about language being 'absurd,' he means it is contradictory, but at other times he simply means that it is false (Duncan 2016: 64).

### 1.3 Action and motion

In *De Corpore* 10.6 Hobbes tells us something new about active power, that it "consists in motion."

In [De Corpore 9.9] I have shewn that the Efficient Cause of all Motion and Mutation consists in the Motion of the Agent or Agents; And in the first Article of this chapter, that the Power of the Agent is the same thing with the Efficient Cause. From whence it may

be understood, that all Active Power consists in Motion also; and that Power is not a certain Accident which differs from all Acts, but is indeed an Act, namely Motion, which is therefore called Power, because another act shall be produced by it afterwards. For example, if of three Bodies the first put forwards the second, and this the third, the Motion of the second in respect of the first which produceth it, is the Act of the second Body, but in respect of the third it is the Active Power of the same second Body (*De Corpore* 10.6).

Here again Hobbes relies on the identification of power and cause, to translate earlier claims about causes into claims about powers. If efficient causes consist in motions, and powers are identical to efficient causes, then powers are themselves consist in motions. One wonders what exactly it is to consist in motion, and Hobbes's earlier discussion in *De Corpore* 9.9 is relevant. There he connects causes with changes and thus with motions. I return to those connections in section 3.

Before moving on, it might be useful to pause here and summarize the three themes I have picked out from Hobbes's discussions of power. First, Hobbes's fundamental move is to identify power and cause. There are various details here to do with efficient and material causes, active and passive powers. But at the end of the day, the power and the cause are the same collection of accidents. Second, Hobbes is quite reductive about modal aspects of talk of powers. Talk of the contingency of future contingents turns out to be merely epistemic, for instance. And despite some suggestions in the text that Hobbes is a necessitarian, even the language of necessity is given a reductive reading, where the necessary is the actual, and the impossible is the non-actual. Third, after having identified power with a collection of accidents, Hobbes seems also to identify power (at least active power) with motion.

## 2. Powers, causes, and accidents

## 2.1 Is Hobbes an identity theorist?

In the previous section we have seen some of Hobbes's comments about powers. They leave open a question about what Hobbes thinks power is, in general. There seem to be two basic interpretive options.

- a. We might think that Hobbes has an identity theory of powers. On such a view, there are powers in the world, but they are identical to corporeal structures or motions. There is no other sort of entity to call a power.
- b. Perhaps, instead, Hobbes has a non-reductive dependence theory of powers. According to such a view, there are again powers in the world, and the existence and nature of those powers depends on corporeal structure and motions, but the powers are not identical to those structures and motions, nor are they in any other way reducible to them.

These views agree that there are powers in the world, and that there are corporeal structures and motions on which they depend. They differ in their accounts of what the dependence relations are. The question is, are powers simply identical to corporeal structures and motions, or do they depend on them in some other, non-reductive way?<sup>8</sup>

Perhaps a note of caution is in order. One might worry that Hobbes was inattentive to the details of dependence relations, and did not write consistently about them. This issue about powers is not the only place in Hobbes's philosophy where that possibility comes to mind. One might have similar thoughts when considering the related question of what Hobbes thinks the dependence relation between mental states and underlying corporeal ones is. In both cases, there

is an open interpretive possibility of saying that we cannot answer our interpretive question, because Hobbes was inattentive to these matters, and did not write consistently about them.

We should not, however, be too tempted by such interpretive skepticism without some serious attempt to resolve the issue between the two main possible readings of Hobbes on powers. In this section I look at arguments for an a-type, identity reading of Hobbes on power, drawn from Robert Pasnau's discussion of Hobbes in his *Metaphysical Themes 1274–1671* (Pasnau 2011). Pasnau's main argument proceeds via Hobbes's definition of 'accident' and his identification of power and cause.

# 2.2 An argument from Pasnau

Pasnau presents Hobbes as a particularly clear example of someone holding what he calls a nominal conception of powers. To hold that is in effect to hold what I have called an a-type view, an identity theory of powers. There are, according to the nominal theorist about powers, things one can call powers in the world—that is, the nominal theorist is not an eliminativist. But the powers (or the things one can call powers) are just identical with corporeal structures: "nominal powers, as I use that phrase, are nothing more than a corpuscularian structure embedded in a certain sort of world ... they introduce no ontological commitment beyond bodies in motion" (Pasnau 2011: 520).<sup>10</sup>

Pasnau's basic argument is that Hobbes identifies a power with a collection of accidents; but an accident is nothing more, for Hobbes, than a mode of conceiving a body; and so a power is nothing more than a body conceived in a certain way—there is no additional entity in any category, over and above the body, that is the power. The main passage in which we find that argument is this:

Thomas Hobbes's even more reductive metaphysics takes the same approach, regarding talk of powers as shorthand of a description of a substance constituted in a certain way: "the power of agent and patient taken together, which may be called the complete or full power, is the same as the complete cause, for each consists in the aggregation together of all the accidents that are required to produce an effect in both the agent and the patient" (*De corpore* 10.1). This by itself is not obviously reductive, until one remembers ... that Hobbes's theory of accidents is itself reductive: accidents are nothing more than "the mode of conceiving a body" (*De corpore* 8.2). Hence his view of the corporeal world (which, for Hobbes, is the whole world) is rigorously corpuscular: there are bodies in motion and nothing more (Pasnau 2011: 520).

We can express much of this argument fairly straightforwardly. For Hobbes, according to Pasnau:

- 1. A power is an aggregate of accidents.
- 2. Accidents are no more than "the mode of conceiving a body."
- 3. Given 2, there is no metaphysical entity in the world which is an accident: there are merely bodies. So
- 4. A power, likewise, given 1 and 3, is no metaphysical entity over and above a body. Premise 1 is clearly correct—this just is how Hobbes defines 'power.' Premise 2 is one of the ways in which one might read Hobbes's discussion and apparent definition of 'accident.' I will return to this issue below. For now, I note that premise 2 does appear to justify the move to 3, though it leaves open the question of what modes of conceiving are. Given 1 and 3, we get straightforwardly enough to 4.

Despite that apparent clarity, there is still a question of what powers themselves are, given these premises. On the one hand, one might think that they must be identical to some feature of the corporeal beings that possess the powers—say, their structures or their motions. This is an a-type view, an identity theory of powers, and it first well with Pasnau's general characterization of a nominal theory of powers. On the other hand, if powers are aggregates of accidents, and accidents are modes of conceiving, then powers ought in fact to be modes of conceiving, or aggregates of them (if an aggregate of modes of conceiving is not itself a mode of conceiving). I consider this possibility briefly in the next sub-section.

## 2.3 Powers as aggregates of modes of conceiving?

Given what we have seen in the previous sub-section, it appears we can construct this argument:

- 1. A power is an aggregate of accidents.
- 2. An accident is a "mode of conceiving a body." So
- 3. A power is an aggregate of modes of conceiving a body.

A mode of conceiving a body appears to be a mode of a mind that conceives of a body. So here we seem to arrive at a view on which powers are mental states formed in reaction to bodies (or aggregates of such mental states). We might understand this view on the model of some accounts of colors. Consider a Galilean view of colors on which red, for instance, is nothing in a body, but is a sensation in the mind of a perceiver. This view licenses talk of red, but moves red itself from the body where one might have thought it belonged, into the mind of the perceiver. The view of powers just argued for is like a generalized version of that account of colors—it locates powers in perceivers rather than in the objects one might have expected them to be in.

This view does not remove powers from the corporeal world. After all, the being doing the conceiving can perfectly well be a corporeal conceiver, on this story. But it does locate the powers in surprising places: in the conceivers of bodies, rather than in those bodies themselves.

More bluntly, this account appears to locate powers in the wrong place. However plausible it may be to be a Galilean about secondary qualities, or indeed to think that Hobbes was sometimes tempted by that view, this seems not to be a plausible general account of powers, or of Hobbes's views about powers. Moreover, we seem nowhere to find Hobbes saying directly that powers are aggregates of modes of conceiving, or aggregates of phantasms. So we should surely be suspicious of this reading of Hobbes. And that itself should perhaps raise our suspicions about Pasnau's initial argument, which appears to point in this direction, even if he does not want it to. 12

# 2.4 Accidents as powers

Suppose we put that issue aside for now, however. Pasnau's basic strategy remains: argue for a reductive or identity-type reading of Hobbesian powers, by drawing on Hobbes's account of accidents. If Hobbes reduces powers to accidents and accidents to corporeal structures or motions, then it appears that he, at least implicitly, reduces powers to corporeal structures or motions.<sup>13</sup> But how should understand Hobbes's view about accidents?

Interpreting Hobbes's discussion of what accidents are is not a simple task. In the key passage, *De Corpore* 8.2, Hobbes seems to say three different, relevant things: that accidents are modes of conceiving; that accidents are faculties of bodies; and that we should not be trying to answer the general question of what accidents are.

To consider these issues, and try to untangle some of this, let me spend a little time working through the text of 8.2. Here, Hobbes has just defined 'body,' and begins by noting, in contrast, the difficulty of defining 'accident.' <sup>14</sup>

What an accident is, however, is more easily explained by examples than by definition. Suppose that a body occupies some space, or is coextended with it: that coextension is not the coextended body. Similarly, suppose the same body is moved: that movement is not the moved body. Or suppose the body is not moved: that non-movement (or rest) is not the resting body. So what are they [i.e., the coextension, movement, and rest]? They are accidents of body. But we are asking what an accident is. In doing so we are asking about something we understand, rather than what we ought to be asking about. For who, told that something is extended or moves or doesn't move, does not understand this (always and in the same way)? Most want to say, however, that an accident is something, evidently some part of natural things [rerum naturalium], when actually it is not a part of them. These people will be best satisfied, as far as that is possible, by those who answer [the question of what an accident is] by defining an accident to be a mode of body, in consequence of which it is conceived [juxta quem concipitur], which is as same as if they said an accident is a faculty of a body, by which it impresses on us a conception of itself. 15 This definition may not answer the question that was asked [namely, what is an accident] but it does answer one we ought to ask, namely, how does it happen, that one part of a body appears here, another there? This is correctly answered, because of extension. Or, how does it happen, that a whole body is seen successively first here, then there? And the answer will be, because of motion. Or finally, how does it happen, that the same space may appear to be occupied for some time? To which one ought to answer, because there is no motion. For if asked what is it? about the name of a body (that is, about a concrete name), one ought to reply by definition, as the question is just about the signification of speech. But if asked what is it? about an abstract name, one is asked about the cause by which a thing appears in this or that way. So if you are asked, what is hard, you ought to reply, [something is] hard, if a part does not yield unless the whole does; but if you are asked, what is hardness, you ought to point to the cause of the part not yielding unless the whole does. Therefore I define accident to be mode of conceiving of body (De Corpore 8.2).

Hobbes begins by assuring his readers that people understand the contrast between accidents and bodies perfectly well for normal purposes, even if they lack a definition of 'accident.' Indeed, he suggests we ought to be asking for something else, other than a definition of 'accident,' though he does not initially say what that thing is.

Still, suppose we persist in looking for that definition. Many people want to say that an accident is a part of natural things (perhaps a sort of part of the substance of which it is an accident). But this, Hobbes says, is not the case. Whatever the relationship of accident to body (or bodies) is, it is not the relationship of part to whole. The closest we will come to satisfying those people, is by saying that an accident is "a mode of body, in consequence of which it is conceived" or "a faculty of a body, by which it impresses on us a conception of itself." Each of these formulations places an accident in a body (rather than in a perceiver of it). An accident is described as a mode or faculty—it is a mode or faculty that gives rise to conceptions of the body. On this sort of view an accident itself is a power, namely a power to cause conceptions. Thus we might (anachronistically) describe Hobbes as having a Lockean theory, thinking of Locke's view that all qualities are powers (Essay 2.8.8).

It would be nice for the interpreter if we could simply stop there, and declare that to be Hobbes's view of accidents. But there are several complications—here I consider five.

The *first complication* is that saying 'the closest we can come to satisfying people who think A is to say B' is quite far from simply saying 'B.' It is thus not entirely clear, from this passage alone, that Hobbes endorses the view of accidents as powers. But there is a supporting text elsewhere. This is the end of *De Corpore* 3.3, which is the theoretical discussion of abstract and concrete names to which Hobbes refers back in 8.2. There Hobbes says that "the causes of names are the same as the causes of our conceptions, namely, some power or action, or disposition of the thing conceived or, as some say, its *mode*, what many call accidents" (*De Corpore* 3.3). That is not completely decisive, because it talks about "what many call accidents," not simply about accidents. Still, the passage does support the thought that Hobbes endorses the view that accidents are powers. 17

As an aside, that passage in 3.3 also suggests that Hobbes would rather speak the language of causes, or even that of modes, rather than the language of accidents. Hobbes does not completely abandon the terminology of scholastic Aristotelianism, and he maintains something like the distinction between substance and accident. But substances become—at least within the realm of philosophy proper—bodies, and Hobbes is not enthusiastic about the terminology of 'accident.'

Returning to 8.2, a *second complication* involves the way Hobbes tries to redirect us from the inquiry into what accidents are, towards other questions. When Hobbes turns his attention to the question we ought to ask instead, he gives us examples, rather than a general answer. That leads to what Leijenhorst (2002: 156) describes as a "mind-boggling passage on concrete and abstract names." However we read the details though, this all seems in keeping with Hobbes's

general preference for giving causal explanations. Moreover, even if Hobbes does think there are better questions with which to occupy one's time than 'what is an accident?', nothing Hobbes says here actually involves denying that accidents are powers. Indeed, look at Hobbes's last example. Hobbes tells us that hardness is whatever it is that causes a body to appear hard. That is, hardness—the accident, we might say—is a thing that causes a conception (of a body as hard).

Reflecting on Hobbes's preference for causal explanation might also help us answer the puzzle of why Hobbes says that the view that accidents are powers does not answer the question of what accidents are. That view tells us what accidents do, without perhaps telling us what they are—it is a statement of accidents' causal role rather than a definition proper. Hobbes thinks, at least sometimes, that that definitions state causes (Duncan and LoLordo 2018: 40). But then the definition of 'accident' ought to state the cause of accidents (if there is any such thing, in general) rather than telling us what accidents cause.

The *third complication* relates to Hobbes's comments about accidents not being parts. In discussing Hobbes, Pasnau (2011: 116) quotes Hobbes saying to Bramhall that objects are not "compounded of" substance and accidents. But this does not show there are no accidents, that accidents are in some sense merely nominal, or that accidents are merely conceiver's modes of conceiving. One might well say that accidents are not assembled or compounded into an object as parts are, without denying that accidents exist. Hobbes asks Bramhall: "A man is rational: does it follow that reason is a part of the man?" (Hobbes 1839–40: 4.303). This is just Hobbes's familiar insistence that accidents are not parts. It is important here that Hobbes thinks all parts are spatial parts: there are no metaphysical, non-spatial parts.

Pasnau also (2011: 117) quotes a passage from *De Corpore* 8.3 about accidents not being in bodies as parts in wholes. This is obviously Hobbes's view. But Pasnau's next move is

puzzling. For he writes as if Hobbes basically sees two possibilities. Either accidents are parts of bodies, or they are merely modes of conceiving of bodies. They are not the former, and so they are the latter. This is not presented as an argument Hobbes gives, but they are the two options considered in the presentation. There seem however to be at least two other possibilities. After all, to deny that accidents are parts from which bodies are assembled (because the only parts are spatial parts) is not to deny there are any accidents. As we have seen, there could be accidents which are powers. And there could be accidents which we recognize, but of which we give no general metaphysical account. Thus, any implied argument that depends on there being only two possibilities seems not to work in any straightforward way.<sup>19</sup>

A *fourth complication* involves the last sentence of *De Corpore* 8.2. Everything we have seen so far in that passage fits with Hobbes thinking that accidents are powers. But Hobbes ends by saying "Therefore I define *accident* to be *mode of conceiving of body*."<sup>20</sup> This line appears to be an endorsement of the view that accidents are modes of conceiving, which are states of conceivers, rather than modes of the bodies conceived. But that leaves *De Corpore* 8.2 looking even more puzzling than before.

One might say that this last sentence is Hobbes's final word on the subject, so he must have abandoned his view that accidents are powers. But that would be a very puzzling interpretation—Hobbes nowhere seems to have argued against the view that accidents are powers, which he stated both earlier in 8.2 and back in 3.3. And the thought that this apparent new view follows ("Therefore") from something that has just been said is odd as well.

There are several approaches one might take here. Cees Leijenhorst argues that Hobbes in fact has a "two-fold definition of accident" (Leijenhorst 2002:157), on which there are both phenomenalist and realist accidents. That might seem "ambiguous" (157) if not downright

contradictory. But Leijenhorst argues that Hobbes thinks there are at least two realist accidents, magnitude and motion, which are the "objective causes" (163) of the phenomenalist accidents ("phantasmata," subjective accidents). Leijenhorst locates this approach against the Aristotelian background to Hobbes's work. We can also (as he does too) see this in terms of a distinction between primary and secondary qualities: primary qualities are realist accidents which are powers of bodies, while secondary qualities, in Galilean fashion, exist only in the minds of perceivers or conceivers. That would make sense of why Hobbes talks in the two ways. And the thought that Hobbes gives magnitude and motion some special status seems entirely correct. But this still would not make much sense of the details of *De Corpore* 8.2—even if Hobbes uses two definitions, why put one in the middle of the section and the other at the end?

I suggest we might understand the final sentence of 8.2 as an awkward rewriting of one earlier in the section. Earlier Hobbes had said that an accident was "a mode of body, in consequence of which it is conceived [juxta quem concipitur]." That itself is not entirely clear, but it is immediately glossed as "an accident is a faculty of a body, by which it impresses on us a conception of itself." The second version makes it clear we are thinking of accidents as faculties or powers of bodies. We might read this final account of an accident as a "mode of conceiving of body" ["concipiendi corporis modum"] as another expression of the same view. A mode of conceiving of body is not, in this reading, a mode of the conceiver, but a mode of the conceived body, a mode that has to do with conceiving. This is an awkward reading of the final sentence, but makes, I suggest, good sense of De Corpore 8.2 as a whole. Insofar as Hobbes there endorses any view of what accidents are, he endorses a view of them as faculties or modes or powers that cause conceptions.

That brings us to the *fifth complication*. Let me begin again with Pasnau, who raises a puzzle for reading Hobbes as thinking accidents are powers:

if Hobbes did mean to analyze the accidents of bodies in terms of the powers of bodies, then his discussion of powers (*potentiae*) in *De corpore* 10 would be obviously incoherent, because that discussion ... seeks to understand powers in terms of accidents (Pasnau 2011: 521 n1).

Pasnau is surely right that there is an internal puzzle, if Hobbes says that powers are collections of accidents and that accidents are powers. The discussion of accidents and the discussion of powers do not fit together, at least if both are supposed to be fully general. If Hobbes had said only that some of the things we call powers are aggregates of accidents, which are themselves powers, there would be no contradiction—he would merely be telling us that some apparent powers are in fact aggregates of other powers. But Hobbes seems to be doing more than that. He seems to be analyzing the notion of accident in terms of that of power, then analyzing the notion of power in terms of that of accident. That is, at the very least, unhelpful.

Combining that problem with the difficulty in reading the last sentence of 8.2 as expressing the view that accidents are powers, one can certainly make a case for the view that Hobbes thinks accidents are modes of conceiving. The problem with this is a simple textual one: both 3.3 and 8.2 do appear to state the view that accidents are powers. Moreover, if we read accidents as modes of conceiving (which are modes of conceivers) we end up with a different but equally striking puzzle, of how to understand powers of bodies as aggregates of modes of conceiving of them. Neither of these two appealing readings of Hobbes on accidents fits well with Hobbes's account of powers as aggregates of accidents. And none of this confusion helps makes a particularly good case for a reading of Hobbes as endorsing an a-type view of powers.

Mind you, none of this gives us a case for a b-type reading either—rather it starts to look like a case for Hobbes's neglect of the details of non-causal dependence relations. While there is surely some truth in that, I want here to look in the next and final section at another place in which we might see evidence of Hobbes having an a-type view of powers. This is his discussion of the connection between powers and motions.

#### 3. Powers and motions

As we saw back in section 1.3, in *De Corpore* 10.6 Hobbes tells us that active power "consists in motion."

In [De Corpore 9.9] I have shewn that the Efficient Cause of all Motion and Mutation consists in the Motion of the Agent or Agents; And in the first Article of this chapter, that the Power of the Agent is the same thing with the Efficient Cause. From whence it may be understood, that all Active Power consists in Motion also; and that Power is not a certain Accident which differs from all Acts, but is indeed an Act, namely Motion, which is therefore called Power, because another act shall be produced by it afterwards. For example, if of three Bodies the first put forwards the second, and this the third, the Motion of the second in respect of the first which produceth it, is the Act of the second Body, but in respect of the third it is the Active Power of the same second Body (De Corpore 10.6).

Here again Hobbes is relying on the identification of power and cause, to translate earlier claims about causes into claims about powers. If efficient causes consist in motions, and powers are identical to efficient causes, then powers are themselves consist in motions. But what does Hobbes mean by saying that efficient causes consist in motions?

That connection is made back in chapter 9. In *De Corpore* 9.9, Hobbes argues that "it is necessary that mutation can be nothing else but motion of the parts of that body which is changed." The argument for that depends on the questionable initial premise that "we do not say any thing is Changed, but that which appears to our Senses otherwise then it appeared formerly." Hobbes moves on from there by cataloguing the different circumstances in which we might find something appearing differently to our senses, and finding that in each of these cases, motion is the underlying change.<sup>21</sup>

For First, we do not say any thing is Changed, but that which appears to our Senses otherwise then it appeared formerly. Secondly, both those Appearances are Effects produced in the Sentient; & therefore if they be different, it is necessary (by the preceding article) that either some part of the Agent which was formerly at Rest, is now Moved, and so the Mutation consists in this new Motion; or some part which was formerly Moved, is now otherwise Moved, and so also the Mutation consists in this new Motion; or which being formerly Moved, is now at Rest, which (as I have shewn above) cannot come to pass without Motion (*De Corpore* 9.9).

There are three different claims Hobbes might have in mind about the relationship between change and motion. He might think (i) that all changes are identical to motions; (ii) that all changes are caused by motions; or (iii) that all judgments of change are caused by motions. Indeed, he appears to think all three, and apparently proposes to argue for (i) by arguing for (iii).<sup>22</sup>

That looks unlikely to be a successful argument, but if we suppose that Hobbes does think (i) and (ii)—he says after all that "*Mutation* can be nothing, else but Motion of the Parts of that Body which is Changed"—we can draw out some consequences for our understanding of his

theory of powers. If changes are just motions, and the causes of those changes are likewise (and unsurprisingly) motions, then the powers to cause the changes must be motions too, because powers are identical to causes. Thus we find, at least in this part of Hobbes's text, evidence for an a-type reading of Hobbes's account of active powers.

One apparent limitation of these remarks as evidence for a general a-type reading of Hobbes on power is easily visible, namely that Hobbes's comments just apply to active powers, not passive or total powers. We might be inclined to think that the point generalizes to all powers, but Hobbes has a reason for not doing that. Hobbes thinks that rest is not a state of motion, and "Rest cannot be the Cause of any thing; nor can any Action proceed from it" (*De Corpore* 9.9). Rest may be part of a passive power or a total power, but not an active one. Still, we might think that a more general view is suggested, namely that all causes and powers are identical to states of motion or rest.

Suppose we follow that line. We then face a general question of how this story fits together with what Hobbes says about accidents. A power is a collection of accidents. A power is also some motion (or rest). Thus, a collection of accidents is some motion. But a collection of accidents is also, as we have seen, itself a collection of faculties or powers of bodies to cause conceptions. Those faculties or powers must themselves be motions, if this account is correct.<sup>23</sup> The general tendency of Hobbes's account is fairly clear—in some sense, motion does all the ultimate causal and explanatory work. But the precise relations between all the things talked about here (motions, accidents, powers, faculties, causes, and explanations) are not nearly as precisely made out as one might hope. Notice again, as an example, Hobbes's shift between saying change is motion and saying it "cannot come to pass without Motion", which is really not the same thing. Recall also the puzzles about what exactly accidents are supposed to be, and the

puzzles about how the analyses of powers and of accidents fit together. Moreover, although it is tempting, given the above, to think that Hobbes must simply identify all accidents with motions, in fact he himself says towards the end of *De Corpore* 8.3 that the question of whether accidents such as colors are motions is one to be settled by natural philosophy, not basic metaphysics. So, while it is tempting at times to think that all these relationships between important notions are identities (that powers are causes are accidents are motions) and some passages even suggest those identities, it is rather less clear that Hobbes was consistently committed to that view.

This sort of puzzle, here arising from thinking about the connection between power and motion, arises throughout Hobbes's metaphysics. In some sense or other, the world is to be explained in terms of bodies in motion. Sometimes, it seems that any other thing we talk about is simply to be identified with a body or a motion. But that is far from the only way in which Hobbes talks. So while there is certainly a case to be made that Hobbes is committed to an atype, identity account of powers, the case is not overwhelming, and a sense of metaphysical vagueness remains.

### References

- Bliss, Ricki and Kelly Trogdon. 2022. "Metaphysical Grounding." In *The Stanford Encyclopedia* of *Philosophy* (Winter 2021 Edition). Edited by Edward N. Zalta. https://plato.stanford.edu/archives/win2021/entries/grounding/.
- Duncan, Stewart. 2016. "Hobbes on Language: Propositions, Truth, and Absurdity." In *The Oxford Handbook of Hobbes*. Edited by A. P. Martinich and Kinch Hoekstra, 57–72.

  Oxford: Oxford University Press.
- Duncan, Stewart. 2022. Materialism from Hobbes to Locke. New York: Oxford University Press.
- Duncan, Stewart, and Antonia LoLordo. 2018. "Gassendi and Hobbes." In *Knowledge in Modern Philosoph*y. Edited by Stephen Gaukroger, 27–43. London: Bloomsbury.
- Hobbes, Thomas. 1656. Elements of Philosophy, The First Section, Concerning Body. London.
- Hobbes, Thomas. 1839–40. *The English Works of Thomas Hobbes*. Edited by. William Molesworth. London: John Bohn,
- Hobbes, Thomas. 1973. *Critique du De Mundo de Thomas White*. Ed. Jean Jacquot and Harold Whitmore Jones. Paris: Vrin.
- Hobbes, Thomas. 1976. *Thomas White's De Mundo Examined*. Trans. Harold Whitmore Jones. London: Bradford University Press.
- Hobbes, Thomas. 1981. *Part I of De Corpore*. Translated by A. P. Martinich. New York: Abaris Books.
- Hobbes, Thomas. 1994a. Leviathan. Edited by Edwin Curley. Indianapolis: Hackett.
- Hobbes, Thomas. 1994b. *Human Nature and De Corpore Politico*. Edited by J. C. A. Gaskin. Oxford: Oxford University Press.
- Hobbes, Thomas. 1999. De Corpore. Edited by Karl Schuhmann. Paris: Vrin.

Joakim, Sahar and C.P Ragland. 2018. "Is Hobbes Really an Antirealist About Accidents?" European Journal of Analytic Philosophy 14 (2): 11–25.

Laird, John. 1968. Hobbes. New York: Russell & Russell. First published 1934.

Locke, John. 1975. *An Essay Concerning Human Understanding*. Edited by P.H. Nidditch. Oxford: Clarendon.

Pasnau, Robert. 2011. Metaphysical Themes 1274–1671. Oxford: Oxford University Press.

Peterman, Alison. Forthcoming. "Cavendish on Matter and Materialism." Oxford Studies in Early Modern Philosophy. Preprint available at <a href="https://www.rochester.edu/college/faculty/alisonpeterman/CavendishMatter.pdf">https://www.rochester.edu/college/faculty/alisonpeterman/CavendishMatter.pdf</a>.

Schmitter, Amy. 2018. "Where Is My Mind?' Locating the Mind Metaphysically in Hobbes." In Philosophy of Mind in the Early Modern and Modern Ages: The History of the Philosophy of Mind, Volume 4. Edited by Rebecca Copenhaver, 16–42. PUBLISHER: PLACE

Spinoza, Benedictus de. 1985. *The Collected Works of Spinoza*. Volume 1. Edited and translated by Edwin Curley. Princeton: Princeton University Press.

<sup>&</sup>lt;sup>1</sup> The argument would be straightforward: only bodies and motions exist; but powers are neither bodies nor motions; so powers do not exist.

<sup>&</sup>lt;sup>2</sup> I cite passages from *Leviathan* using the abbreviation 'L,' followed by chapter and paragraph numbers, using Curley's edition (Hobbes 1994a).

<sup>3</sup> That discussion suggests a question, of how 'power' in its most general metaphysical sense relates to 'power' in discussions of politics. However we answer that question, it is clear that the political discussion repeatedly mentions powers (in the general metaphysical sense) and abilities.

<sup>4</sup> We also possess Hobbes's critique of Thomas White's *De Mundo* (Hobbes 1973; 1976). A complete study of Hobbes's metaphysics would ultimately need to account for that text, but for now I concentrate on the central, published account.

- <sup>5</sup> I refer to *De Corpore* by name throughout, and give references by chapter and section number. I use Schuhmann's edition of the Latin text (Hobbes 1999) and quote the seventeenth-century translation (Hobbes 1656) unless otherwise indicated.
- <sup>6</sup> Hobbes also uses the language of necessity back in *De Corpore* 9.5, where he argues that every effect has a "Necessary Cause," saying that "seeing a Necessary Cause is defined to be that, which being supposed, the Effect cannot but follow; this also may be collected, that whatsoever Effect is produced at any time, the same is produced by a Necessary Cause." Here a necessary cause is what Hobbes elsewhere (*De Corpore* 9.2) calls a cause *sine qua non*, and the talk about necessity is about the relation between individual cause and effect.
- <sup>7</sup> Meanwhile, Hobbes concludes chapter 10 by giving an account of formal and final causes in section 10.7. On this account they are, to the extent that such language makes any sense at all, actually efficient causes.
- <sup>8</sup> One might hope for more detail here about what the non-reductive dependence relation might be, but we do not tend to find fine distinctions between dependence relations in Hobbes's work.
- <sup>9</sup> On some related complications in Hobbes's account of the mind, see Schmitter (2018).
- <sup>10</sup> It is not obvious that a corpuscularian *structure* could be the correct reduction base in Hobbes, given his tendency to appeal to motions (which are not structures).

<sup>11</sup> That said, if we think about accidents rather than powers, Hobbes does say in the *Elements of Law* that "that whatsoever accidents or qualities our senses make us think there be in the world, they are not there, but are seemings and apparitions only" (EL 2.10). Though motion may be exempted from this, it does seem to be a fairly general thesis about accidents for Hobbes, at least in that text.

- <sup>12</sup> There are some complex questions in the background here, about what modes of conceiving are and about ontological commitment. I will come to some of this below, but for now I note that Pasnau's argument appears to rely on the existence of modes of conceiving, which are distinct from the bodies conceived of, their structures, and their motions.
- <sup>13</sup> This probably doesn't strictly speaking follow—compare some recent discussions of whether grounding is transitive (Bliss and Trogdon 2021: 2.2)—but does seem likely.
- <sup>14</sup> Here I use my own translation rather than that of Hobbes (1656).
- <sup>15</sup> The Latin text of this key sentence reads "His ut satisfiat, optime, quantum fieri potest, respondent illi, qui accidens definiunt esse *modum corporis, juxta quem concipitur*; quod est idem ac so dicerent *Accidens esse facultatem corporis, qua sui conceptum nobis imprimit.*"
- <sup>16</sup> Here I quote Martinich's translation from Hobbes (1981).
- <sup>17</sup> Note also a passage from 10.3 that I have already quoted: "nor can the Accidents...properly be called Powers." But in context that is not to say that they are not powers, but they are not strictly speaking powers unless in the correct situation and thus efficacious. Which is the sort of thing you say if you basically do want to treat accidents as powers.
- <sup>18</sup> Here I deny Pasnau's suggestion (Pasnau 2011: 116–7) that Hobbes abandons the substance-accident distinction. Pasnau observes that the view that there is a "veiled subject" that lies behind or beneath the qualities we perceive can be seen in early modern corpuscularians such as

Gassendi, and says "One might have thought that the substance-accident distinction would have been one of the first pieces of scholastic baggage to be jettisoned by corpuscularian philosophers, and with it the doctrine that beneath the sensible qualities of a thing lies some sort of veiled subject" (Pasnau 2011: 116). Whatever Pasnau might have though, this is not what generally happened, though see Peterman (forthcoming) for an argument that Margaret Cavendish rejected "substance-property ontology."

- <sup>19</sup> I have objected in several ways to Pasnau's reading of Hobbes on accidents. See also the different line of objection to Pasnau's account of Hobbes on accidents proposed by Joakim and Ragland (2018).
- <sup>20</sup> "Definiemus igitur Accidens esse concipiendi corporis modum."
- <sup>21</sup> There are at least broadly mechanical assumptions about sense perception here, along no doubt with some others.
- <sup>22</sup> Hobbes's slide between talk of a change itself and talk of the appearance of a change (between ii and iii) is noted by Leijenhorst (2002: 54–5).
- <sup>23</sup> On the possible reduction of accidents to motions, see Laird (1968) who, amid criticizing the details of Hobbes's account of accidents, remarks that "Defective or not, these explanations had a purpose. In the first place Hobbes contended that all accidents belonged to a single class, since they all described *motions* in bodies" (Laird 1968, 96).