

Locke's Construction of the Idea of Power

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I. The Origin of the Idea of Power

In *An Essay Concerning Human Understanding*, Locke offers an elegant and attractive empiricist solution to the problem of how we are able to think of powers. Let me begin by quoting the account of the origin of our idea of power and intersperse some initial exegetical remarks. Locke explains his view in the first section of his chapter on power (2.21.1).¹ He begins by describing the attention the mind pays to various actions and changes, beginning with “the alteration of those Simple *Ideas*, it observes in things without.” The mind also notes, “how one [outward object] comes to an end . . . and another begins to exist.” In addition to these external observations, the mind contemplates itself. It registers the activities of external bodies and the results of internal volitions by “reflecting . . . on what passes within it self, and observing a constant change of its *Ideas*, sometimes by the impression of outward Objects on the Senses, and sometimes by the Determination of its own choice.”

These observations of changes and activities are data. The mind takes these data and infers “from what it has so constantly observed to have been, that the like Changes will for the future be made, in the same things, by like Agents, and by like ways.” After making this prediction, the mind “considers in one thing the possibility of having any of its simple *Ideas* changed, and in another the possibility of making that change.” This is Locke’s explanation of how we form “that *Idea* which we call *Power*.”

We build the idea of power out of ideas gathered by witnessing agents causing changes. If I see a brick break a window, I acquire the idea of what the brick is doing—namely, breaking a window. By extrapolating this idea to other bricks and other times, I get the idea that some other brick, sitting there calmly, can break windows. Likewise, someone who observes fire melting a piece

of gold may infer from what she has constantly observed that similar meltings will be made in similar pieces of gold by similar fires. She may then understand what it means to say that “Fire has a *power* to melt Gold . . . and Gold has a *power* to be melted” (2.21.1). Sensation and introspection give us only ideas of action and change; by inference, we create the idea of a power.

Locke’s account of the origin of our idea of power isn’t all that tangled, but its meaning has been obscured by Hume’s long and influential rival account. In the next section, I want to explain what idea of power Locke has in mind. In section three, I’ll evaluate Hume’s criticism of Locke’s account and show how Locke could have modified his account to avoid the criticism. I will argue that his neglect to do so reflects a studied neglect of taxonomy, an ambiguity in the notion of capacity, and complications in his conception of simple ideas. In section four, I will argue that not only do Locke and Hume disagree about the role of reason in the origin of our idea of power, but they are also talking about different ideas. Contrasting Locke and Hume’s accounts will make both accounts clearer.

In section five, I’ll trace Locke’s account of the origin of the idea of power back to the purported raw materials of the idea. Within the framework of his account of the origin of the idea of power, we can cast new light on why he believes that bodies only provide us with an obscure idea of active power. I will conclude in section 6 by defending his insight that there is a deep connection between the ability to predict and the idea of power.

II. Locke’s Idea of Power

We may distinguish, in modern English at least, between several senses of the word ‘power’: it may mean ability as in “Fire has the power to melt wax”; it may mean control as in “He had power over the crowd”; and it may be used to refer to a physical quantity, energy per unit time, that is measured in watts and horsepower. Though we can recognize the kinship among these notions and see that they are all forms of efficacy, we would not expect a univocal account of all of these senses

of power (Cf. Gregory (?), 244-49). A clear explanation of wattage will not give us a clear understanding of the metaphysics of abilities.

The sense of ‘power’ that Locke explicates in his chapter on the idea of power is that of a capacity or ability. All that it is to have a power to do something is to be able to do that thing. Locke tells us, “nothing can operate, that is not able to operate; and that is not able to operate, that has no *power* to operate” (2.21.20). In accordance with this analysis, he asserts that some scholastic theorizing about powers rests on a mistake:

For it being asked, what it was that digested the Meat in our Stomachs? It was a ready, and very satisfactory Answer, to say, That it was the *digestive Faculty* What moved? The *Motive Faculty*: And so in the Mind, the *intellectual Faculty*, or the Understanding, understood; and the *elective Faculty*, or the Will, willed or commanded: which is in short to say, That the ability to digest, digested; and the ability to move, moved; and the ability to understand, understood. For *Faculty*, *Ability*, and *Power*, I think, are but different names of the same things (Ibid.).

Some scholastic philosophers thought that psychology was the study of the faculties of the soul and treated these faculties as something more than mere potentialities (Park 88, 465-88). “This way of Speaking of *Faculties*,” Locke complains,

has misled many into a confused Notion of so many distinct Agents in us, which had their several Provinces and Authorities, and did command, obey, and perform several Actions, as so many distinct Beings; which has been no small occasion of wrangling, obscurity, and uncertainty in Questions relating to them. (2.21.6)

According to the alternative treatment that Locke here endorses, to say that something has a power to bring about an effect is not to put one’s finger on what aspect of that thing brings about that

effect.² All that one is saying is that the thing is able to bring about the effect.

Indeed, Locke not only denies that human capacities are agents, he also denies that they are ‘real Beings in the Soul’ (ibid., see also 2.31.2). We do not need to dwell on what Locke means by denying that powers are real beings; our topic is Locke’s philosophical psychology, not his metaphysics. We may, however, summarize his denial that powers are real beings and his analysis of having a power as being able to do a thing by saying that Locke has a deflationary account of powers.

Locke’s examples are not all of one sort. We should distinguish between voluntary and non-voluntary powers. Some powers require prior volitions for their activation, and some do not. If you put food in a person’s stomach, he will digest it, willy-nilly. On the other hand, putting a person in propitious circumstances is not enough to activate his motive faculty; he has to want to move. To cite some examples from a minor 18th century philosopher,

when we say that heat can melt lead, or that water can dissolve salt, we mean that if lead be heated to a certain degree, and for a sufficient length of time it will melt, and that salt mixed with a proper quantity of water will dissolve But when I say that I can eat, or that I can ride, I certainly do not mean that if food were set before me, I should instantly fall to and eat; nor do I mean that if a horse were brought to me I should instantly mount him and ride (Gregory (?) c. 1750/1963, 247).³

The first two examples are involuntary powers, the last two voluntary.

Some of the powers that Locke lists in 2.21.20 are voluntary by his lights, and some of them are not. Presumably, he would consider the digestive faculty non-voluntary and the motive faculty mostly voluntary. How he would class understanding and the will is a complicated, disputed matter.⁴ Locke gives four powers as examples in 2.21.1: the power of fire to melt gold, the power of gold to be melted, the power of the sun to blanch wax, and the power of wax to be blanched by the sun.

Obviously, none of these powers counts as voluntary. More important than this difference among Locke's examples is their commonality; they are all potentialities. The relevant powers are not pushes, causes, or strivings; they are capacities waiting for activation.

Both involuntary and voluntary powers can reasonably be called dispositions—involuntary powers need only be placed in appropriate circumstances to be activated, and voluntary powers need volitions in addition to those circumstances. I use the term 'disposition' for what Elizabeth Prior (1985, 1) calls "philosophers' dispositions". In accordance with this usage, both solubility and the power to melt wax count as dispositions. A narrower usage restricts the term to certain features of character; thus, we speak of cheerful and gloomy dispositions. Though the wider sense predates the Essay, Locke offers a definition of disposition in the narrow sense: "Which power or ability in Man, of doing any thing, . . . when it is forward, and ready upon every occasion, to break into Action, we call it Disposition: Thus Testiness is a disposition or aptness to be angry" (2.22.10). The OED cites the last phrase about testiness as an example of the narrow sense. I will use 'disposition' in the wide, philosophers' sense throughout.

In at least two places, Locke treats powers as more robust than mere dispositions. At 2.22.11, he describes power as "the Source from whence all Action proceeds". Leibniz accuses Locke of shifting his usage, since "if 'power' is taken to be the source of action, it means more than the aptitude or ability in terms of which power was explained in the preceding chapter [the chapter on power]" (1705/1981, 216). James Humber and Edward Madden assert that "at times [Locke] writes as if power had some sort of independent existence from objects" and they cite the following text in defense of their assertion "[When one billiard ball strikes another] it only communicates the motion it had received from another . . . which gives us but a very obscure idea of *an active power moving in body* . . ." (1973, 215). 'An active power moving in body' certainly sounds like a robust explanatory particular, but Humber and Madden omit a preposition in their quotation; Locke

actually writes “an *active Power* of moving in Body” (2.21.4).⁵ He means that we have a very obscure idea of a body’s capacity to move itself. Even so, earlier in the section, Locke writes, “whatever Change is observed, the Mind must collect a Power somewhere, able to make that Change, as well as a possibility in the thing it self to receive it.” The phrase, ‘a Power somewhere, able to make that Change’, while not emphatic, certainly suggests something more robust than a mere potentiality.⁶

Leibniz is right: the more robust, explanatory notion of power in 2.22.11 does not cohere with the account in the preceding chapter. In particular the first section of that chapter, the account of the origin of the idea of power, does not describe a robust explanatory notion. Locke’s most direct examination of the metaphysical status of powers comes in the deflationary account of §§6 and 16-20 where he denies that powers are real beings or agents, and we should give these passages due weight when we interpret the rest of the chapter. Moreover, Locke says that the product of the mind’s construction is that it comes to consider “in one thing the *possibility* of having any of its simple Ideas changed, and in another the *possibility* of making that change; and so comes by that Idea which we call Power” (2.21.1, italics mine). The idea of power that Locke describes is the idea of a sort of possibility. Possibilities are potentialities; they are not pushes, forces, or strivings.

Some commentators think that Locke is talking about causation when he is talking about power. For example, after Richard Aaron quotes this opening of the chapter on power, he remarks, “this is of course the regular-sequence theory of causation”(1965, 185). Though Locke does invoke a regular sequence of changes, we should resist the temptation to identify powers with causes. The idea that makes its entrance in this passage is the idea of a certain kind of “possibility”; in particular, it is the idea of an ability to act or to undergo changes.

By expending this effort to deny that Locke’s idea of power just is the idea of force, I do not mean to deny that his idea of power is, in some sense, a causal notion. Though we should not identify the idea of a capacity to do something with the idea of cause, the idea of power is rooted in

causation. To be more specific, we normally construct the idea of power out of observations of causal processes.

III. A Taxonomic Error

According to Hume, the active role the mind plays in Locke's construction of the idea of power violates the basic principle of psychology that simple ideas may not be produced by inference. He offers this objection in a footnote in the *Enquiry Concerning Human Understanding*:

Mr. Locke, in his chapter of power, says, that, finding from experience that there are several new productions in matter, and concluding that there must somewhere be a power capable of producing them, we arrive at last by this reasoning at the idea of power. But no reasoning can ever give a new, original, simple idea; as this philosopher himself confesses. This, therefore, can never be the origin of that idea (1748, 51/1975, 64n).

The thought that the idea of power is not quite simple on his account has not escaped Locke, who cheerfully admits, "*Power includes in it some kind of relation, (a relation to Action or Change,) as indeed which of our Ideas, of what kind soever, when attentively considered, does not?*" (2.21.3) He goes on to discern complexities in our ideas of extension, duration, number, figure, motion, color, and smell. It is as if Locke seeks to confuse his prosecutors by confessing to other crimes. Someone who takes the difficulty more seriously might offer him the following suggestion: why not classify the ideas of active and passive power as simple modes?

In order to explain this suggestion, let me quickly go over the place of simple modes in Locke's taxonomy of ideas. Locke, like Hume, believes that experience provides the mind with raw materials of thought (2.1.2). He calls these raw materials simple ideas and claims that the mind can create new complex ideas only out of those materials (2.2.2). Among these constructed complex

ideas, he distinguishes modes, ideas of substances, and relations (2.12.3). With one exception, he always uses the term ‘mode’ to refer to ideas (Chappell 1990, 27), ones that do not contain “the supposition of subsisting by themselves, but are considered as Dependencies on, or Affections of Substances” (2.12.4).⁷ Among modes, Locke distinguishes what he calls ‘simple modes’ from what he calls ‘mixed modes’. Simple modes “are only variations, or different combinations of the same simple *Idea*, without the mixture of any other” (2.12.5). In contrast, we create mixed modes out of the variation or combination of more than one simple idea.

If Locke said that the idea of active power is constructed through a variation of our idea of action and that the idea of passive power is constructed through a variation of our idea of change, then he would evade Hume’s criticism. Simple modes are created out of simple ideas, and Locke’s system allows reasoning to be used in their generation.

Indeed, once we start down this path, we may well wonder whether Locke does not himself classify the idea of power as a simple mode. As we have seen in our initial examination of the passage, he actually does describe the idea of power as arising out of observations of action and change. Moreover, he organizes book two by his taxonomy of ideas, the chapter on power follows eight other chapters on simple modes, and the first sentence of the next chapter begins, “Having treated of *Simple Modes* in the foregoing Chapters . . .” (2.22.1).

In the end, however, I do not think that Locke classes the idea of power as a simple mode. Remember the apology for the complexity of the idea in section 3. In addition, he classes power as a simple idea at 2.7.8. Finally, in the first edition version of 2.21.46, he admits that he may have misplaced the chapter given the framework of the book, writing,

under this simple *Idea* of Power, I have taken occasion to explain our *Ideas* of *Will*, *Volition*, *Liberty*, and *Necessity*; which having a greater mixture in them, than belongs barely to simple Modes, might perhaps, be better placed amongst the more complex

(1690/1975, 284n).

We have been talking about the idea of power. The idea of power is a constituent of ideas of particular powers, such as the idea of fragility, the idea of the power to melt wax, and the idea of liberty. Locke's official line is that ideas of particular powers ought to be classed as mixed modes (2.22.10). His discussion of power occurs among the chapters on simple modes not because he aptly classes the idea of power as a simple mode, but rather because he ineptly classes the ideas of will, volition, liberty, and necessity as such, instead of placing them with the mixed modes.

Setting aside the derivative ideas of will and the like, we ought to ask why Locke classes the idea of power as a simple idea, given that there is an obvious alternative that avoids obvious difficulties. I have three suggestions, suggestions that I hope have philosophical interest beyond whatever exculpatory force they might have.

First, Locke doesn't care that much about taxonomy. As an alternative to the hypothesis of innate ideas, he asserts we derive all of our ideas from experience (2.1.2). In defense of this assertion, he promises to describe these derivations for "the *Ideas* we have of *Space, Time, and Infinity*, and some few others, that seem the most remote" from sensation or reflection (2.12.8). The rough principles of idea derivation provide him with a taxonomy of ideas, and, as I have noted, he uses this taxonomy to organize book 2.

The project of constructing various ideas from experience takes on a life of its own, and Locke finds himself engaged with various interesting problems in the philosophy of mind and metaphysics. He cares about these philosophical matters and about justifying his rejection of innate ideas. He does not care much about how he classifies ideas. Thus, after some sundry remarks about what the simple idea of extension might be, the editor of the fifth edition reports,

if this is not sufficient to clear the Difficulty, Mr. *Locke* hath nothing more to add, but that if the *Idea* of Extension is so peculiar, that it cannot exactly agree with the

Definition that he has given of those *Simple Ideas*, so that it differs in some manner from all others of that kind, he thinks 'tis better to leave it there expos'd to this Difficulty, than to make a new Division in his Favour. 'Tis enough for Mr. *Locke* that his Meaning can be understood. 'Tis very common to observe intelligible Discourses spoiled by too much Subtilty in nice Divisions (footnote to 2.15.9).

And, after admitting that he has misplaced his discussion of the will, Locke defends himself by writing, "I hoped this transgression, against the method I have proposed to my self, will be forgiven me, if I have quitted it a little, to explain some *Ideas* of great importance; such as those of the *Will*, *Liberty*, and *Necessity*" (2.21.46. 1st ed.). Locke really cares about having a good account of liberty; he doesn't care so much if he categorizes the idea of liberty under the proper heading.

A second possible explanation for the misclassification may rest on an ambiguity in the expression 'what a thing can do'. We may distinguish between two senses of the word 'can': in one sense it means, 'is not impossible', in another, it connotes a stable, reliably reproducible disposition.⁸ In the first sense of can, a single instance suffices to show that a thing can do something; that is, it suffices to show that something is merely possible. In the second sense, that of a stable propensity, more than one instance may be required. (Even when we use the word 'can' in the second sense, it is sometimes possible to make the inference with certain background assumptions. We know, somehow, if a person can roll her tongue without effort on her first attempt, she can do so reliably in the future.)

A person can extract the idea that an action or change is not impossible relatively directly from a single, simple experience. Though we would not normally call this sort of bare possibility a power, Locke possibly conflates the two notions of what a thing can do when classifying the idea of power as simple.

A third reason for Locke's puzzling classification of the idea of power may lie in the fact that

Locke is torn between two projects: the desire to trace all of our thought back to experience and the desire to explain how our thoughts are possible. Attempting to trace an idea back to experience is the attempt to find a chain of legitimate operations that reach back to an idea of whose content we might reasonably say, ‘I’ve experienced (seen, felt, heard, introspected . . .) that.’ In this project, the observation of possibilities often makes a perfectly good stopping place. To see this, think of what is necessary for a person to determine that she can roll her tongue. If Sally does it, then she learns by experience that she can do it. Nevertheless, we do not have to think that she tacitly and swiftly infers from the facts that: one, she is rolling her tongue and, two, anything that one does, one can do, to the conclusion: ergo, she can roll her tongue. It is more natural to say that she just finds out that she can roll her tongue. Observing that I can roll my tongue is something that does not require an inference from the more stable premise that I actually roll my tongue.

Understood in this way, such capacities are natural candidates for consideration as immediate objects of experience. Even though it may be an immediate object of experience, being able to form the relevant idea may still depend on having the capacity to make a certain prediction, namely, that the next time I try to roll my tongue, I will succeed. If a simple idea is an idea that doesn’t depend on the possession of any previous ideas, the idea of an ability to roll one’s tongue does not qualify. It depends on having the ideas of *rolling* and *tongue*. More to the point, the idea of *ability* depends on the idea of *action*.

We should read Locke’s description of power as a simple idea in this spirit. That brief section runs as follows:

Power also is another of those simple *Ideas* which we receive from *Sensation and Reflection*. For observing in our selves, that we do and can think, and that we can, at pleasure move several parts of our Bodies, which were at rest; the effects, also, that natural bodies are able to produce in one another, occurring every moment to our

Senses, we both these ways get the *Idea of Power* (2.7.8).⁹

When Locke says that we observe, “that we do, and can think, and that we can, at pleasure, move several parts of our Bodies, which were at rest” he is imagining that we run little experiments on ourselves. We convince ourselves that we can do these things by actually doing them. He cannot be thinking that we remain stock-still but determine that we can raise our hand by introspection.

Normally, Locke ends his accounts of how a thought is possible once he traces that thought back to experience. He finds that he had more to say about how thoughts of power are possible; he not only believes that we have experiences of various powers, but also thinks that he can say something about how we can have those experiences. He defers these comments until the chapter on power, and explains the tension away by saying, in effect, that he was not worried so much about getting to unanalyzable ideas as with describing “the principal Ingredient[s] in our complex *Ideas* of substances” (2.21.3)—that is, salient features of our experiences of objects. We may see oil burning and, at the same time, see that oil is flammable, and thus flammability might come to be an ingredient of our complex idea of oil. Nevertheless, it does not follow that the idea of flammability lacks structure.

The upshot of all this is that Locke is aware of the difficulty raised in Hume’s footnote, and he could easily avoid it, if he thought it important. Hume, of course, has all sorts of surprising and interesting things to say about causation and about our idea of it. I do not mean to pass judgment on his theory of causation by saying that Locke can easily avoid the criticism in Hume’s footnote. I just mean that Locke can avoid that particular criticism by classifying the idea of power as a simple mode.

While we are engaging taxonomic difficulties, we ought to consider Locke’s mysterious stipulation that that he will classify as simple the ideas of particular powers that largely constitute our ideas of sorts or substances. He tells us that we are only aware of powers to produce ideas

immediately in us, and powers to produce ideas in us indirectly, though affecting other things, “all those Powers, that we take Cognizance of, terminating only in the alteration of some sensible Qualities, in those Subjects, on which they operate, and so making them exhibit to us new sensible *Ideas*”. For that reason, he has

reckoned these Powers amongst the simple *ideas*, which make the complex ones of the sorts of *Substances*; though these Powers, considered in themselves, are truly complex *Ideas*. And in this looser sence, I crave leave to be understood, when I name any of these *Potentialities amongst the simple Ideas*, which we recollect in our Minds, when we think *of particular Substances* (2.23.7).

In correspondence, Sam Rickless observes that this stipulation allows us to resolve the taxonomic difficulties that I have been wrestling with; at 2.7.8 and 2.21.3, Locke is classifying the idea of power as simple because it is a constituent of our ideas of substances. Although this reading makes the texts consistent, adopting it obscures any motivation that Locke might have had behind his odd stipulation.

Locke grounds his stipulation in the fact that we are only aware of powers that ultimately affect us. Presumably, he is thinking that the idea that is ultimately caused in us will be simple, so Locke permits us to think of the idea of the corresponding power as simple. He says that he makes the stipulation “for brevity’s sake” (2.23.7), but there is, I think, more to it than that. Locke is also tackling the different problem of giving an account of our ideas of substances that applies both to the ideas of the naive and the sophisticated. A good portion of everyone’s ideas of substances consists of ideas of secondary qualities, and this portion is greater among the untutored. (According to Locke, the child’s idea of gold is just “a Body of a certain yellow shining Colour” (3.9.17).) However, the sophisticated conception of secondary qualities differs from the unsophisticated one. The sophisticated recognize that secondary qualities are powers, but most people just have simple

ideas and assume that these resemble something in bodies (2.8.24, 25). Locke classifies ideas of particular, definite powers such as the power to produce the sensation of yellow as mixed modes at 2.22.10. In order to bridge the gap between the ordinary and corpuscularian conceptions of secondary qualities, he stipulates that he will class ideas of powers in substances as simple ideas. This stipulation allows him to avoid subtleties about the differences between naïve and sophisticated ideas of substances.

If this account of Locke's stipulation is correct, then it does not directly help with our problem. Locke makes it with an eye on ideas of particular powers and not on the idea of power simpliciter. In particular, his stipulation does not explain why he classifies the idea of power as simple at 2.7.8.

IV. Reason and The Dispute between Locke and Hume

The footnote in the first *Enquiry* and a similar argument in the *Treatise* (1739-40/1978, 157) show that Hume believes that he is offering a rival to Locke's account of the origin of our idea of power. Since there is a tendency to misread Locke's account of power through Humean eyes, let me contrast their opinions on the subject.¹⁰ I will argue that the two empiricists disagree not only about the role of reason in the production of our idea of power, but also in more radical ways that suggest that despite Hume's confrontational intentions, he is considering a different idea than the one that Locke has in mind.

Hume initially claims that our ideas of the relation of cause and effect are composed of our ideas of contiguity, succession, and necessary connection (1739-40/1978, 157).¹¹ In order to trace the origin of our ideas of cause and effect, he attempts to trace the origin of our idea of necessary connection. During this investigation, he claims that the idea of necessary connection that he is chasing is the same idea that Locke calls the idea of power (1739-40/1978, 156).¹² Hume concludes that this idea of power is copied from a simple impression of reflection produced by the imagination

when, after observing the constant conjunction of two sorts of objects, we come to expect the presence of an object of one sort when we are confronted with an object of the other sort (1739-40/1978, 164ff.).¹³

In both Hume's and Locke's accounts, the idea of power is a product of a prediction, and for both this prediction is based on what the mind, in Locke's phrase, "has constantly observed to have been." For Hume this process does not involve reasoning: when properly conditioned, the imagination produces the prediction in us in accordance with the psychological laws of association (1739-40/1978, 91ff.). Locke, on the other hand, would have rejected such an account of prediction. He thinks of association as a mild form of madness precisely because it does not come from reason (2.33.4-5), and he does not criticize the mind's construction of the idea of power. Locke believes that reason is capable of making probabilistic inferences based on ideas it "hath observed to be frequent and usual" (4.17.17 see also 4.17.2 and 4.17.16); whereas Hume's discussions in 1.3.3 of the *Treatise* and (more subtly) in part 2 of section 4 of the *Enquiry* imply that he believes that reason is only capable of making deductively valid inferences.¹⁴ So for Locke, reason uses experience as a justification for a certain prediction, while for Hume, experience causes the imagination to make that same prediction.

Hume and Locke cannot be talking about the same idea of power. As I have said, Locke believes that 'power', 'ability', and 'faculty' are all synonyms, and he usually uses the word power in its dispositional sense. There are exceptions (e.g. 2.22.11), but they do not matter much for our purposes. As we have seen, when his topic is the metaphysical status of powers, he describes a dispositional notion of power, and he describes the origin of that notion in the first section of the chapter on power.

In contrast to Locke, Hume offers 'efficacy,' 'agency,' 'force,' 'necessity,' 'connexion,' and 'productive quality' as terms that are "nearly synonymous" with 'power' (1739-40/1978, 157).¹⁵

None of these words has dispositional overtones. Almost all of these terms suggest that Hume is appealing to the notion of a source of action.

If this list of synonyms does not suffice, here are three more reasons for thinking that Hume is not writing of dispositions when he writes of powers. First, he thinks that the idea of power is an indispensable constituent of the mind. In contrast, he takes a dim view of talk of potentialities. In the chapter of the *Treatise* in which Hume dismisses ancient philosophy, he claims that the word 'faculty' is "wholly insignificant and unintelligible" (244).

Second, Hume thinks his account of the origin of our idea of power is relevant to the 18th century "dispute whether the force of a body in motion be as its velocity, or the square of its velocity" (1748, 51/1975, 52n). According to him, the existence of this debate supports his relational account of power, since if the disputants "had any idea of power, as it is in itself, why could not they measure it in itself?" This is not an overwhelming argument; the fact that a debate over the nature of a quality cannot be settled by measurement is poor evidence for the conclusion that the quality is relational. For our purposes, the important thing is that Hume thinks that he is talking about the same thing that early 18th century physicists were talking about, and the physicists were clearly not talking about dispositions such as the power to melt wax.

Third, Hume goes so far as to claim that his account of the origin of our idea of power shows that "the distinction, which we often make betwixt *power* and the *exercise* of it, is . . . without foundation" (1739-40/1978, 171). Now, no account of ability could be thought to show that there is no distinction between ability and the exercise of that ability; the distinction is too important to the concept of ability. Therefore, Hume is not giving us an account of the idea of ability.¹⁶

Again, I do not mean to imply that Hume's account of the origin of our idea of power is irrelevant to Locke's. If Hume's account were correct, then various assertions that Locke makes would be mistaken. Still, we should distinguish power as potentiality from power as force. Locke

almost always has the first in mind, and Hume almost always has the second in mind.

We need to keep these different notions of power straight, when we consider Locke and Hume's dispute over the psychological priority between action and power. They both believe that our idea of power is founded on experience but Locke believes that it is based on our experiences of action or change while Hume believes that it is based on our experience of the constant conjunction of objects. Since, according to Hume, the idea of power is a component of our idea of the relation of cause and effect, he concludes that only after we form the idea of power can we think of things as being causally connected (1748, 51/1975, 75).¹⁷

However, if Hume meant an ability or disposition by 'necessary connexion or power' then he would not say this. The idea of an ability to ϕ is posterior to the idea of ϕ ing. Someone cannot understand what a disposition or capacity is without being able to parse it at least mentally as something like *easily ϕ d*, or *capable of ϕ ing*. No one could know what fragility is without knowing that fragile things are apt to break. Thus, no one can know what fragility is without knowing what breaking is. On the other hand, it is quite possible for someone to have the concept of an activity without having the concept of the corresponding power. We can imagine a child who understands breaking but not fragility; we cannot imagine a child who understands fragility but not breaking.

No matter how one looks at these ideas, the idea of an activity will be closer to raw experience than the idea of a disposition. There is less of a puzzle about how we could witness a sugar cube dissolving than there is about how we could witness the merely potential solubility of that sugar cube. It is hard to think that Hume means to deny this in denying the priority of our idea of cause to our idea of power.¹⁸ Whatever he has in mind, we may conclude that on the Lockean interpretation of what powers are, Locke is quite right in believing that the idea of an activity or change is psychologically more fundamental and closer to experience than the idea of the corresponding power.

V. The Origins of our Ideas of Action

On Locke's account of the origin of the idea of power, "*power . . . is twofold, viz: as able to make, or able to receive any change: The one may be called *Active*, and the other *Passive Power*" (2.21.2). If we begin by concentrating on the activity of the fire, we might come to form an idea of the disposition of the fire to melt wax. By concentrating on the changes wrought in the wax, we might come to form an idea of the wax's disposition to be melted by fire. As I understand him, Locke believes that the ideas of active and passive power are constructed out of the ideas of action and change. In this section, I offer some considerations in favor of this reading and build upon it by deciphering Locke's discussion of the obscurity of the idea of active power that we get from bodies.*

James Gibson infers from the first section of 2.21 that Locke believes "that the idea of causation is logically prior to that of power" since we only get the idea of a possibility for making or receiving changes after concluding that similar agents will make similar changes in similar things (1917, 107). Though I think that Gibson's reading is almost exactly right and that he basically captures the priority that Locke gives to our thoughts of actions, we should pause and distinguish between actions and causes. Broadly speaking, there are two ways to consider causes. One may either think of them as substances or as actions of substances. Suppose, for example, that Sam throws a brick that breaks a window. If we think of causes as substances, then we may call either Sam or the brick the cause of the broken window. If we think of causes as actions, then Sam's throwing the brick or the brick's colliding rapidly with the window is the cause of the breakage.

For the sake of comparison, let me treat causes as a subclass of actions. I will assume that every time an object causes an effect, it acts, as, for example, when Sam breaks a window or when the sun melts snow.¹⁹ On the other hand, some non-relational actions are not necessarily causes, for example, dancing, swimming, and growing. These activities are not always causes since they do not

intrinsically involve another object in the way that kicking a ball or making a paper hat does.

One might try to make every activity relational, saying, perhaps, that dancing is a relation between a person and a particular dance, the watusi, say. This seems misguided to me, but even if it were so, there would be a difference between the concept of action and the concept of cause. Suppose I pace around the room. This is obviously an action, but it doesn't obviously have effects. The effects that it has, such as jostling the air in the room, it has contingently, or at any rate synthetically. There's an analytic connection between the concept of cause and the concept of effect, but there's no such connection between the concept of an action and the concept of an effect.

If a strict version of Gibson's interpretation is right, then Locke would deny that the mind could construct the idea of power out of experiences of actions that are not causes. In favor of Gibson's reading, in the passage he quotes Locke speaks of the possibility of making a change being "in another", something seemingly distinct from the thing which has the possibility making the change. Moreover, in the course of arguing that the will is not an agent, Locke writes, "*Powers* are Relations, not agents" (2.21.19), which suggests that their actualizations are relations. My reading, on the other hand, makes sense of the parenthetical explication at 2.21.3 in which Locke says that the idea of power includes "a relation to Action or Change". In addition, one of the observations he lists as a preliminary to forming the idea of power is of the mind changing its own ideas, and in this example we do not have two distinct things interacting. Finally, he lists 'the singing *Faculty*' and 'the dancing *Faculty*' as powers (2.21.17), and those are capacities to act without necessarily causing.

The exegetical question is murky, but, philosophically speaking, I think that it is clear that powers correspond to non-relational actions just as well as they correspond to causes. It is as natural to speak of the ability to whistle as it is to speak of the ability to play the ukulele and just as normal to speak of the capacity to grow as it is to speak of the capacity to melt wax. There is no

good reason, as far as I can see, to say that we may build the idea of power only out of our ideas of causal actions.

If my reading is right, then Locke believes that the idea of active power rests upon our idea of action and that the idea of passive power rests upon our idea of change. What, one might ask, do these more fundamental ideas rest upon in turn? Experience, Locke would presumably respond.

Locke says little about the idea of change. He argues that the idea of motion is a simple idea (3.4.8-9), and, surely, if that is, then so is the idea of change. He also says that our idea of time is constructed out of our idea of succession. These relate to the idea of change but are not quite the same thing.

Locke says more about the circumstances in which we acquire the idea of action. In some respects, he thinks that we acquire ideas of action lightly. We get ideas of reflection by noticing the operations of our minds (2.1.4). We have “daily experience” that thought produces motion (2.23.28, compare 4.10.19). Locke tells us, that “whosoever desires to understand what [volition] is, will better find it by reflecting on his own mind, and observing what it does, when it *mills*, than by any variety of articulate sounds whatsoever” (2.21.30). This is a formula that Locke recites repeatedly when one might expect a definition of what he takes to be a simple idea. For Locke, simple ideas cannot be defined; they can only be gotten from experience (3.4.4).

We also have “daily experience” of the production of motion by impulse (2.23.28) and we “observe” the transfer of motion from one body to another (2.21.4).²⁰ Locke’s description of the origin of our ideas of cause and effect follows the simplest empiricist model: we “observe, that several particular, both Qualities, and Substances begin to exist . . . from the due Application and Operation of some other Being. From this Observation, we get our *Ideas of Cause and Effect*” (2.26.1). That is, we observe something cause an effect, and from that observation, we get our ideas of cause and effect. Locke never read Hume, so we cannot expect him to have been mesmerized by

the counter-intuitive doctrine that we cannot observe children making paper hats, drawing their names in the sand, or shooting basketballs.²¹

Although Locke believes that we may observe the operations of the mind, the transfer of motion, and objects causing effects, he worries that it may not be appropriate to apply the idea of action to bodies. Once we recognize that Locke believes that we construct the idea of active power out of the idea of action, we get a better understanding of his obscure discussion of the obscurity of our idea of active power.²² His worries about that obscurity of the idea of active power that we get from bodies stem from his opinion that bodies provide us with an obscure idea of action. Since we construct the idea of active power out of the idea of action, the obscurity of the latter idea infects the former one.

Consider two cases involving the motion of birds. In the first case, a bird flies out the window, under its own power. In the second case, a dead bird is thrown out the window. The flight of the first bird is something that bird does, an action. The flight of the second bird is something that befalls the bird, a 'passion', to use an antiquated expression.

According to Locke, if we were to have a clear idea of a body acting, it would be from its motion, since we cannot conceive of bodies acting in any other way (2.21.3, 2.22.11). When a body is put in motion, that motion is something that befalls it, rather than something that it does; when a body "is set in motion it self, that Motion is rather a Passion, than an Action in it. For when the Ball obeys the stroke of a Billiard-stick, it is not any action of the Ball, but bare passion" (2.21.4). The cue ball does not act in moving any more than the dead bird acts in being thrown through the window.

The cue ball does not act in being struck by the billiard stick; neither, according to Locke, does the cue ball act later when it strikes another ball. We need to understand Locke's account of collision in order to understand why he believes that striking bodies do not act upon struck bodies.

In 2.21.4, he advocates the Cartesian collision law that the striking body “only communicates the motion it had received from another, and loses in it self so much, as the other received.” The quantity of motion is conserved; he thinks of this conservation as the transfer of a state from one body to another. On his view, the continuation of a state does not count as an action even if the state moves to a different subject. Genuine action requires the creation of a new state, since “the continuation of the Alteration made in it from rest to motion being little more an Action, than the continuation of the Alteration of its Figure by the same blow is an Action” (ibid.). Let me illustrate Locke’s comparison with an example. Suppose that a bronze sphere is both dented and set into motion by a collision. The fact that the sphere continues to be dented after the collision is not an action; it is merely the continuation of a state. Likewise, according to Locke, the motion of the bronze sphere is not an action, but the mere continuation of a state, albeit in a different body.²³ Nor was that motion—that very motion—an action when it was in the striking object.

Locke concludes from all this that a collision “gives us but a very obscure *idea* of an *active Power* of moving in Body, whilst we observe it only to transfer, but not produce any motion” (ibid.). What is ‘an active power of moving’? It is an ability to move as an action, the ability to move as a living animal moves. For good examples of actions, Locke cites, “when I turn my Eyes another way, or remove my body out of the Sun-Beams, I am properly active; because of my own choice, by a power within my self, I put my self into that Motion. Such an *Action* is the product of *Active Power*” (2.21.72). The active power of moving may be contrasted with the passive power of moving, the ability to be moved, to move as a thrown object moves. Locke calls the first ability “*Motivity*, or the Power of moving” and he calls the second capacity “*Mobility*, or the Power of being moved” (2.21.73). Bodies have the passive power of being moved (2.21.73), but “the *Active Power* of motion is in no substance which cannot begin motion in it self, or in another substance when at rest” (2.21.72). By that criterion, living birds have the ability to act, while dead birds do not.

As Ruth Mattern has shown, we should not interpret his worry that bodies give us an obscure idea of active power psychologically. Locke's point is metaphysical: the capacities of bodies are not good examples of active power (Mattern 1980, 65-67). At 2.21.1, he seems content to attribute the powers to melt gold to fire and the power to blanch wax to the sun. In the next section, he justifies his examples with psychology: "*active Powers* make so great a part of our complex *ideas* of natural Substances" and "I mention them as such, according to common apprehension" (2.21.2). As a matter of metaphysics, he warns that these putative active powers are "not, perhaps, so truly *active Powers*, as our hasty Thoughts are apt to represent them" (ibid.). Locke stipulates that his initial concern in the chapter on power is with philosophical psychology and not with philosophical chemistry, "my present Business being not to search into the original of Power, but how we come by the *Idea* of it." Thus, Locke separates his skepticism that bodies have active powers from his account of the origin of our idea of power.

If bodies do not provide us with good examples of active power, it is because they do not provide us with good examples of action. Locke does not attempt to show that bodies have no powers at all; even if moving bodies do not have active powers, they still provide us with good examples of mobility, the passive power of being moved. Locke's discussion of the obscure idea of action is essentially about action and only incidentally about power.

VI. Prediction and Powers

How should empiricists treat dispositions? Think of a sugar cube, destroyed in a fire. Presumably, that sugar cube was soluble, although it never dissolved. Setting aside the questions of whether this presumption is true or justified, how could anyone even think such a thing? That is, how could anyone ever form an idea of an unactualized disposition? To believe that a sugar cube is soluble is to believe at least that if it had been put in water, then (*ceteris paribus*) it would have

dissolved. However, we have experience only of the way the world actually is, not of the way it would have been if things had gone differently. No one has ever visited a merely possible world and looked around. For an empiricist who believes that our thoughts are constrained by our experience, these facts present a puzzle. Locke offers, roughly within the constraints of his theory, an account of how we can think of things that would have happened but did not.

The crucial step between the simple idea of action (or the simple idea of change) and the idea of power occurs when the mind concludes “from what it has so constantly observed to have been, that the like Changes will for the future be made, in the same things, by like agents, and by the like ways.” On its own, this prediction moves us from the actual to the possible.

Locke’s implication that there is a close tie between prediction and our ability to conceive of s strikes me as insightful and right. Suppose that a person can predict that a thing will act in a certain way or be changed in a certain way when placed in some circumstance. For example, suppose that she has the mental acuity to be able to predict that a certain sugar cube will dissolve if placed in water. In virtue of being able to make that prediction, she is also able to think that the sugar cube is soluble. She can have that thought regardless of whether the sugar cube ever touches water. What it takes to believe that an object has a certain capacity is to predict that if that object is put in specific circumstances, it will behave in a certain way.²⁴ Since such predictions are essentially conditional upon the object’s being in those circumstances, it does not matter if we know that the object will never be in such a situation. In this way, we can make sense of counterfactuals. The ability that allows us to predict future actions and changes beyond present experience is also the ability that allows us to think of unrealized actions and changes beyond actual experience. That is, the same ability underlies these predictions and thoughts about dispositions.

Michael Ayers quotes Locke’s account of the origin of our idea of power and concludes, it seems to me that Locke sees [the idea of power] as operating in everyday thought

as a sort of dummy concept, *faute de mieux*. In other words, the function of the idea springs from the rationality of explaining observed interactions by underlying, unobserved properties of the things interacting (1975, 4).

On this reading (if I understand it right), Locke believes that having an idea of power depends upon the postulation of unobserved, explanatory qualities. Locke does believe that we ought to make such a postulation, but I think it is a mistake to import this belief into his account of the origin of our idea of power. Here we must carefully distinguish between Locke's metaphysics and epistemology and his psychology.

As a substantive thesis of metaphysics, he believes that powers flow from underlying internal constitutions. However, this doctrine is no part of his psychological account of the origin of our idea of power. He never says that we have to postulate such qualities in order to think of powers, and there is no reason why he should. Imagine a man who rejects the postulation of unobserved, explanatory qualities as a piece of logocentric, hegemonic thought. Suppose that he predicts a pyramid will invariably sharpen razor blades placed beneath it. I say that he has sufficient cognitive resources to form the idea of a power to sharpen razor blades. Nothing else is required.

Of course, Locke would not recommend such an attitude as an epistemic policy. Indeed, he calls the best kind of probabilistic judgment "an Argument from the nature of Things themselves" (4.16.6). In such an inference, from "what our own and other Men's constant Observation has found always to be after the same manner . . . that we with reason conclude to be the Effects of steady and regular Causes, though they come not within the reach of our Knowledge" (*ibid.*).²⁵ So Locke certainly thinks that when we are judging well, we postulate an undetected cause underlying regularity.

Locke believes that probabilistic inference can be rational, and the prediction that "the like Changes will for the future be made, in the same things, by like Agents, and by like ways" certainly

seems rational enough. However, he does not explicitly require rationality when he describes the origin of our idea of power in the first section of the chapter on power. Since the that section contains the essentials of his account of the origin of our idea of power, I conclude that Locke does not require that the prediction be rational, let alone that it rest on the postulation of an internal constitution.

Given what Locke says about the argument from the nature of things themselves, I must concede that there is a chance that he would be so scandalized by someone who made predictions without postulating an underlying causal structure, that he would not only deny the cogency of the prediction, but he would also deny that the predictor could form a genuine idea of a power. At a certain point, however, one needs to settle on an interpretation. I will assume that there is no hidden proviso in Locke's account of the origin of the idea of power. That is, I will proceed as if Locke does not require a postulation of an underlying internal constitution in order to form an idea of power. The resulting view is interesting in any case.

The stubborn might refuse to be consoled by a reduction of thoughts about dispositions to conditional predictions. After all, one might complain, we have no more contact with the future than we have with alternative possible worlds. Ideas about the future might seem as inaccessible as ideas about what might have been. Locke does not say that something hard is equivalent to something easy. It is no more or less hard to think of a mere disposition than it is to make a conditional prediction. His step forward consists in showing that something that looks difficult from one angle looks manageable from another. If we conceive of thinking of dispositions as a matter of establishing contact with possible worlds, it will seem next to impossible. If we conceive of thinking of dispositions as a form of projection and extrapolation of a piece with prediction, these thoughts will cease to mystify (cf. Goodman 1979, 57-58). Many philosophers have been puzzled by how we can make justified assertions about the future, but few since Parmenides have wondered

how we can think about the future at all.

If we recognize that the ability that allows us to make a certain kind of prediction is the same ability that allows us to think of dispositions and we do not consider the ability to predict to be problematic, then we should not consider the ability to think of dispositions as problematic. Of course, one may at least verbally distinguish between the ability to think conditionally about the future and the ability to think conditionally about non-actual situations. If there were a real distinction between two abilities here, it would be reasonable to say that the first is less mysterious than the second. But because of the close connection between predictions and thoughts of dispositions, drawing such a distinction is similar to distinguishing between the ability to ride a red bicycle and the ability to ride a blue bicycle; in reality, there is only the ability to ride a bicycle and this ability allows one to ride both red and blue bicycles.

How far does this account get us? It gives us an account of the origin of our idea of the dispositions of individual things. It does not, I take it, give us an account of the origin of our ideas of mere possibilities of things, people, or of the world as a whole. To give some examples, it doesn't give an account of how we can think that your yacht could have been it is, how we can think that I could have brought my umbrella, or we can think that there could have been more stars. Nor does Locke's account of the origin of the idea of power give us a general account of how we can think of necessity.

Locke does give an account of necessity in 2.21.8: an action is necessary for an agent if he lacks the power to act or not act in accordance with volitions. The constituent ideas are the ideas of power, action, and volition, and we have seen where he thinks that those ideas come from. This gives a notion of necessity that is relative to agents, and not what modern analytic philosophers normally worry about when they worry about necessity. We might try to construct an account of an absolute idea of necessity out his account of certain and universal knowledge, since he believes that

we are only capable of such knowledge when “there are certain Relations, Habitudes, and Connexions, so visibly included in the Nature of the *Ideas* themselves, that we cannot conceive them separable from them by any Power whatsoever” (4.3.29). Perhaps Locke would say that a proposition is absolutely necessary if it is beyond the power of any agent—including God—to make it otherwise. Something would be merely possible if it is not absolutely necessary. We have mere hints about what Locke might say about the origin of our ideas of mere possibility and necessity rather than a genuine account.

In one respect, Locke’s account at 2.21.1 is of merely antiquarian interest. Twenty-first century philosophers do not, for the most part worry about the psychological genesis of our ideas. In another respect, the account has become a commonplace. Prior (1985, 5) remarks, “what is commonly accepted by *all* those who discuss dispositions is that there exists a conceptual connection between a statement attributing a disposition to an item and a particular conditional”. So current discussions, I suppose, repeat Locke’s doctrine that in order to form the idea of a disposition, we must be able to make a certain conditional prediction. It is worthwhile to track down the philosophical antecedents of this consensus.

My reading will flummox those who take Locke’s comparison between the mind and white paper too seriously.²⁶ Locke believes that we possess innate faculties, such as the abilities to perceive, remember, discern, compare, and abstract. Among these abilities is the ability to make a conditional judgment, a judgment that allows us to enlarge observed ideas of action and change to include other times and other possibilities.

Locke’s theory of the origin of our idea of power is a theory about the origin of our thoughts of dispositions. We begin with experiences of action or change. We then make an extrapolation from observed cases to future and merely possible cases using the same mental operation for both sorts of extrapolation. The application of this procedure to our observations of action or change

produces the idea of power.

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BIBLIOGRAPHY

- Aaron, R. (1965). John Locke (3rd ed.). Oxford: Oxford University Press.
- Anscombe, G. E. M. (1981). Causality and Determinism. In Metaphysics and the Philosophy of Mind: Collected Philosophical Papers (vol. 2, pp. 133-47). Minneapolis: University of Minnesota Press.
- Aristotle (1968). De Anima, D. W. Hamlyn (trans.). Oxford, Clarendon Press.
- Ayers, M. (1975). The Ideas of Power and Substance in Locke's Philosophy. The Philosophical Quarterly, 25, 1-27.
- Chappell, V. (1990). Locke on the Ontology of Matter, Living Things and Persons. Philosophical Studies, 60, 19-32.
- Chappell, V. (1994). Locke on the Freedom of the Will. In G. A. J. Rogers (ed.), Locke's Philosophy: Content and Context (pp. 101-21). Oxford, Clarendon Press.
- Darwall, S. (1995). The British Moralists and the Internal 'Ought': 1640-1740. Cambridge, Cambridge University Press.
- Dunn, J. (1964). Authorship of Gregory's Critique of Hume. Journal of the History of Ideas, 25,

128-29.

Gibson, J. (1917). Locke's Theory of Knowledge. Cambridge, Cambridge University Press.

Goodman, N. (1979). Fact, Fiction, and Forecast (4th ed.). Cambridge, Mass., Harvard University Press.

Gregory, J. (?) (c. 1750/1963). On Power. P. P. Wiener (ed.), Journal of the History of Ideas, 24, 241-268.

Humber, J. & Madden, E. (1973). Natural Necessity. New Scholasticism, 47, 214-27.

Hume, D. (1739-40/1978). L. A. Selby-Bigge & P. H. Nidditch (eds.), A Treatise of Human Nature (2nd ed.). Oxford, Oxford University Press.

Hume D. (1748, 51/1975). L. A. Selby-Bigge & P.H. Nidditch (eds.), Enquiries Concerning Human Understanding and Concerning the Principles of Morals (3rd ed.). Oxford, Oxford University Press.

Leibniz, G. W. (1705/1981). P. Remnant & J. Bennett (trans. and eds.), New Essays on Human Understanding. Cambridge, Cambridge University Press.

Locke, J. (1690/1975). Peter Nidditch (ed.), An Essay Concerning Human Understanding. Oxford, Oxford University Press.

Mattern, R. M. (1980). Locke on Active Power and the Obscure Idea of Active Power from Bodies. Studies in the History and Philosophy of Science, 11, 39-77.

Park, K. (1988). The Organic Soul. In C. B. Schmitt, Q. Skinner, E. Kessler, & J. Kraye (Eds.), The Cambridge History of Renaissance Philosophy (pp. 464-84). Cambridge: Cambridge University Press

Passmore, J. (1942). The Moral Philosophy of Cudworth. The Australasian Journal of Psychology and Philosophy, 20, 161-83.

Passmore, J. (1980). Locke and the Ethics of Belief. Proceedings of the British Academy, 64, 185-208.

Prior, E. (1985). Dispositions. Aberdeen, Aberdeen University Press.

Stroud, B. (1977). Hume. London, Routledge & Kegan Paul.

¹All quotes from Locke are from the P. H. Nidditch edition of the *Essay* (Oxford, 1975). All of the lines quoted in the next two paragraphs are from 2.21.1.

²This criticism was over a century old by the time Locke made it (Park, 476-80). In fact, John Passmore (1942, 162n) argues that Locke lifted part of his discussion from Ralph Cudworth's 'Treatise of Freewill'. See also Darwall (1995, 172-75).

³John Dunn, (1964) casts doubt on Philip Wiener's attribution of authorship to James Gregory.

⁴For excellent treatments, see Passmore, (1980) and Vere Chappell (1994, 107-12).

⁵Humber and Madden themselves believe that powers ought to be understood as "forceful particulars that make things happen" (1973, 214). In spite of their own inclinations and their accidental misreading of the text, they concede that "in other places [Locke] speaks as if it makes little sense to talk of power *per se*" and that "a close reading of Locke's work makes it appear that [that] view is his final position" (215). They cite 2.21.6 in defense of their final interpretation (215n2).

⁶I suppose that by 'power' in this context, Locke means the thing with the ability, as we speak of 'the powers that be' or 'the allied and axis powers'.

⁷Locke's claim that modes are considered dependent on substances fits in with tradition but his claim that modes are ideas is an innovation. In traditional usage, the word 'mode' is applied to aspects of objects in the world and not to ideas or anything else mental. Locke apologizes for the inconvenience that his innovative terminology might cause at 2.12.4.

⁸In this paragraph, I am heavily indebted to some comments by Rob Reilly.

⁹In the posthumous fifth edition the words "that we do, and can think; and" are deleted.

¹⁰For a salutary protest against some of these misreadings, see R. M. Mattern (1980, 39-55).

¹¹Hume eventually concludes that contiguity is not an element of the idea of causation. Though he repeats it as a necessary condition when he defines causation (170) and in giving rules for judging causes and effects (173), he argues against the contiguity restriction at pp. 248-50. Hume flags his final view of the matter in a footnote (75n). It does not occur in the *Enquiry*.

¹² In the *Enquiry*, Hume ties the notions together by saying that he is asking after the origin of ‘the idea of power or necessary connexion’ (63, 73, 74, 78).

¹³ Hume divides what Locke would call ideas into two species: ‘impressions’, which are lively and forceful, and ‘ideas’, which are all fainter copies of impressions.

¹⁴Barry Stroud (1977, ch. 3) tentatively argues that the thesis that reason only can make deductively valid inferences is not a premise of Hume’s argument. Nevertheless, even on Stroud’s interpretation, the thesis follows from Hume’s conclusions.

¹⁵*Treatise*, p. 157

¹⁶In the chapter of the *Treatise* on the pride that people take in their possessions, Hume concedes that there is a vulgar and unphilosophical conception of power according to which it does make sense to distinguish between a power and its exercise (311-13). Nevertheless, the distinction that he allows is not quite the distinction between dispositions and their activation; it is more like the distinction between the subjective probability of an event and its actual occurrence. In any case, Hume emphasizes that the relevant notion only belongs to “the philosophy of our passions” and we ought not take it seriously in other branches of philosophy (311).

¹⁷ It has been asserted that Hume believed that we could have an experience of causation without a prior experience of constant conjunction on the basis of a passage in 1.3.8 of the *Treatise* in which he writes that in certain laboratory situations “we may attain the knowledge of a particular cause merely by one experiment” (104). He goes on to write, however, that in order to form a causal connection

the natural philosopher must reflectively appeal to the general principle “*that like objects, plac’d in like circumstances, will always produce like effects*” (105). According to Hume, our belief in this principle depends on custom and thus the original belief in the law indirectly depends on custom.

¹⁸At *De Anima* 415a16 Aristotle asserts, “activities and actions are in respect of definition (logos) prior to their potentialities”. Though I think that Locke’s concern with the nature of power and our idea of it reflects the prominence of the notion of potentiality in scholastic philosophy, I would not say that he acquired the doctrine that the idea of action is prior to the idea of power from Aristotle. It seems to me that anyone who reflects upon the notion of potentiality would realize that the idea of a potentiality is posterior to the idea of an action or activity. Hume’s dissent merely shows that he had something different in mind. John Carriero brought the passage in *De Anima* to my attention.

¹⁹ Actually, Locke doubts whether any inanimate object may be said to act, strictly speaking, but his doubts are not really a part of his account of the origin of our idea of power. I will defer a discussion of those worries until section 4 and assume for now that all causes are actions.

²⁰ For further discussion, see my “The Epistemology under Locke’s Corpuscularianism,” *Archiv für Geschichte der Philosophie*, forthcoming.

²¹ Against Hume’s doctrine, see G. E. M. Anscombe (1981, 137f.). It might be fair to find the seeds of Hume’s doctrine in Locke’s claim that what we really see when we look at a globe is “a Plain variously colour’d” (2.9.8).

²²Mattern (1980) is very helpful on this topic.

²³Locke expresses doubts about the intelligibility of this conception of collisions at 2.23.28, but he thinks that we are stuck with it, since “we can have no other conception”. See my “Epistemology under Corpuscularianism”.

²⁴This is a bit of a simplification. We might have the idea of a power that merely makes its effect more likely under the relevant circumstances.

²⁵ An anonymous reader pointed out this text to me.

²⁶ In this paragraph, I am indebted to Lisa Shapiro.