

CHAPTER 1

WHAT CAN BE

In a letter of May 1644 Descartes wrote:

I turn to the difficulty of conceiving how God would have been acting freely and indifferently if he had made it false that the three angles of a triangle were equal to two right angles, or in general that contradictories could not be true together. It is easy to dispel this difficulty by considering that the power of God cannot have any limits, and that our mind is finite and so created as to be able to conceive as possible the things which God has wished to be in fact possible, but not to be able to conceive as possible things which God could have made possible, but which he has nevertheless wished to make impossible. The first consideration shows us that God cannot have been determined to make it true that contradictories cannot be true together [les contradictoires ne peuvent être ensemble], and therefore that he could have done the opposite. The second consideration assures us that even if this be true, we should not try to comprehend it, since our nature is incapable of doing so.¹

A few years later, Pascal—who did not like Descartes at all—commented:

It is a sickness natural to man to believe that he possesses truth directly; and from that comes the fact that he is always ready to deny everything that is incomprehensible to him.²

For both Descartes and Pascal the context was theological. Pascal's view, one might think, was more deeply so. The human mind, as part of fallen

Copyrighted Material

nature, cannot be expected to have special access to truth. More, or worse, "Contradiction is a bad mark of truth: several things that are certain are contradicted; several false things pass without contradiction. Contradiction is not a mark of falsity, nor is noncontradiction a mark of truth": the human intellectual apparatus, wounded by original sin, cannot be trusted to detect either truth or falsity.³ In any case, the most important facts about the world—that God became man, for example—contain irremovable paradoxes. So what we can conceive or imagine will not get us far, for theological reasons.

In reality, though, Descartes's position was no less grounded in theological assumptions. "Our nature" is incapable of comprehending that contradictories might be true together, because our mind is so created by God as "not to be able to conceive as possible things which God could have made possible, but which he has nevertheless wished to make impossible." We can pass over the question of God's freedom to create impossibilities, later to be so trying for Leibniz, and focus on the divine legitimation for our power of comprehension. This was not dispensable for Descartes. Switching from French to Latin in midsentence, perhaps to underline the solidity of the principle he was citing, he wrote to Mersenne in 1640: "It seems very clear to me that possible existence is contained in everything which we clearly understand, because from the fact that we clearly understand something it follows that it can be created by God."⁴ To be conceivable (in Descartes's sense) was to be possible (in Descartes's sense). That contains two theological assumptions: God has made us so that our power of conception works successfully in that way, and possibility-in-principle has to be possibility-in-principle-for God. This was no esoteric byway in Descartes's thinking. The rule he was using appears at the crux of one of his most famous arguments, in the *Sixth Meditation*: "The fact that I can clearly and distinctly understand one thing apart from another is enough to make me certain that the two things are distinct, since they are capable of being separated, at least by God."⁵ This thinking relied in important ways on the capacity of our natural powers of conception. They may not model or match God's, but it is the fact that God has made us as we are which legitimizes them. Cognition may be naturalized, but the natural has to be understood in terms of divine creation.⁶ Without the underwriting, the logic would be unsupported. W. D. Hart misses this in his discussion of the related "principle that what can be imagined is possible." "As an epistemological principle," he writes,

it seems to be connected by analogy with traditional empiricism. At the core of empiricism lies the doctrine that perception is the basic faculty we exercise in justifying beliefs about what is actually true. The analogy is that as perception justifies (some) belief in actual truth, so imagination justifies (some) belief in possible truth; perception is to the actual as imagination is to the possible.⁷

That reverses history in a significant way. The principle being discussed was not a tool of "traditional empiricism" used presciently by Descartes, with a dispensable theological appendage. It was more an element of prerationalist religious thinking that was to stagger forward into empiricism.

Ripped even more thoroughly from any context, in an historical void, the notion of central interest is sketched here by Graeme Forbes:

As a rough elucidatory guide, "it is possible that P" in the broadly logical sense means that there are ways things might have gone, no matter how improbable they may be, as a result of which it would have come about that P. So in this sense it *is* true, for the typical reader, that it is possible that he is a millionaire today, just as Jones would have been if he had taken his broker's advice.⁸

How far that sort of possibility has any value, outside the contexts or environments which supported it, is the point to be discussed in this chapter. But what those environments were, and when they had their heydays, is a large part of the question. One might think that Hume captured one defining moment—

no inference from cause to effect amounts to a demonstration. Of which there is this evident proof. The mind can always *conceive* any effect to follow from any cause, and indeed any event to follow upon another: whatever we *conceive* is possible, at least in a metaphysical sense: but wherever a demonstration takes place, the contrary is impossible, and implies a contradiction. There is no demonstration, therefore, for any conjunction of cause and effect. And this is a principle, which is generally allowed by philosophers.⁹

—or that Wittgenstein defined a certain end point or *reductio ad absurdum* in the *Tractatus*: "A picture contains the possibility of the situation that it represents. . . . What can be described can also happen. . . . The only impossibility that exists is *logical impossibility*."¹⁰—and the main force of this chapter should be applicable to these two examples. Uncontroversially, some notion of logical possibility was essential to the type of philosophical thought-experiment used by Hume. "Whatever we *conceive* is possible, at least in a metaphysical sense" is a cardinal assumption in his argument

(though his appeal to a metaphysical sense might set off some alarms, given his professed attitude to many metaphysical matters). The *Tractatus* took that position to its extreme. To be picturable was to be possible. "What can be described can also happen . . ." sounds like the apotheosis of the philosophical thought-experiment.¹¹

But the real interest must be in the connection with logic itself. The initial passage quoted from Descartes circles uneasily around the real issue. That *les contradictoires ne peuvent être ensemble*, Descartes well understood, was fundamental. The kind of impossibility that excluded inconsistency must have been prior to logic. Later writers probed the weakness in the use of God's will: the notion that God could have "done the opposite" in some opaque or unintelligible sense. Yet the important point, as Descartes saw, was not what God could do but what we can do. The negative force of inconsistency, and hence the positive force of consistency, related to our nature, which was created by God. If, as David Sanford puts it, logic is "the science of inconsistency,"¹² then that science, for Descartes, was grounded in the capabilities of our nature, and the validity of the science had to be underwritten by God.



The outline of the case is simple: what we now see as logical possibility is a technical notion. This is undeniable in the harmless sense that some explanation for its use is advisable to avoid confusion. It is also true in a stronger sense, in that we should not assume any uncontroversial interpretation of logical possibility outside some context of explanation. The argument will be that the justification for such a context (or contexts) is questionable. And the argument is an historical one. The initial context for logical possibility was theological. When that became less plausible, the context became psychological: mental representability. When that became implausible, the context came to be logic: purified, absolute representability. But logical possibility provided at least some support for logic. So what support could logic provide for logical possibility? The suggestion is not a vicious circle because, in short, it might make good sense for logic to be fortified by logic. The problem is that logical possibility owed its force to a succession of contexts from a repudiated past. It outlived its history.

THE NEED FOR CONTEXT

It should be seen that *logical possibility* has to be taken as a term of art, mainly in philosophy. That should not be too difficult, as might be recog-

nized by any teacher who has tried to persuade students that it is logically possible to fly unaided to the moon or (using the example just cited) that it is true, for the typical reader, that it is possible that he or she is a millionaire today. Further, logical possibility derives its point from the very fact that it is not like what might be called (without question begging) ordinary possibility. The first step in any explanation of logical possibility should be that it is not like any normal conception of what can happen. Logical possibility has to be less limiting than nonlogical possibility because logical impossibility has to be ultimately restrictive. If something is logically impossible then it is absolutely ruled out, so if it is logically possible, plainly, it may be not absolutely ruled out.

G. E. Moore wrote in his *Commonplace Book* that it was logically possible that he should have been seeing exactly what he was seeing, and yet should have had no eyes.¹³ As Moore knew and intended, this was a long way from any normal use of *possible*. People without eyes cannot see. The suggestion that it is logically possible that they might see may need some explanation. For those who may have reservations about this example, a further obstacle lies in wait. One might try to understand possibility in terms of scientific availability. Some story can be told: remarkable scientific developments . . . subsequent evolution in the sense of "seeing" . . . and so on. . . . It might follow that a dogmatic denial of the possibility of seeing without eyes would be unwise. It would not follow that logical possibility was not a wider, more technical notion than practical possibility. One thought in the background could be that a naive sense of *what can happen* could be superseded by a more sophisticated sense of what is possible within the framework of any possible theory. Maybe it could, though that thought is not itself without extreme difficulties in relation to the characterization of a possible theory, but no one could imagine that this was not a radical revision of any everyday understanding. An alternative revisionary view can be given by those who adopt an extremely confident understanding of the intelligibility of what can happen, where *what can happen* is to be understood solely through a network of ("natural") causes, and where logical possibility dissolves either into "natural" possibility or into an uninteresting fact that our imaginations can operate without constraint. "For many more ideas can be constructed from words and images than from merely the principles and axioms on which our entire natural knowledge is based," as Spinoza noted.¹⁴

Logical possibility stands in need of explanation not because it is a philosophical technicality—a tricky notion to pin down—but because it

relies on a notion of 'not-being-ruled-out', which in turn must provoke questions about being ruled out by what? So some context of explanation is essential, even if there is some aspiration to an absolute context: not ruled out by contradiction or by the absolute force of logic.

It must be an anachronism to think of a continuing concept of logical possibility held or used by Hume, by Leibniz, by Descartes, and so on, back to its alleged origins in Duns Scotus.¹⁵ We can consider some views of what is possible which were explicable in terms of something other than everyday possibility (as understood at any particular time) and which may be intelligible in terms of not-being-ruled-out. What rules out impossibility, or does not rule out possibility, may vary. We can look at the variants of possibility that result from differing explanations. Whether or not this amounts to a consideration of some continuing concept of possibility or of a succession of changing concepts is not important in itself, as long as we do not think that simple comparisons between, for example, "Descartes on possibility" and "Wittgenstein on possibility" can get far without further reservations.

DESCARTES

Looking once again at the initial quotation from Descartes, the brunt of his point was that we need not care what God can do (whether or not it had some broader theological interest). What mattered was what we can do, with our natural capacities: *la finitude de l'esprit humain*, in the words of Jean-Luc Marion. Yet the theology which was pushed to one side remained fundamental beneath the surface; divine legitimation was needed to give any content to what was possible-in-principle.¹⁶ Without it, no distinction could be sustained between (legitimated) clear conception and fallible imagination. The crux of the argument for the Real Distinction, self-evidently an important step, makes this clear: "The fact that I can clearly and distinctly understand one thing apart from another is enough to make me certain that the two things are distinct, since they are capable of being separated, at least by God."¹⁷ ". . . at least by God" cannot be bracketed or crossed out to modernize the argument. Just from my capacity to clearly and distinctly conceive myself apart from my body it cannot follow that "the two things are distinct," for two reasons. First, the validity of my clear and distinct conception is itself underwritten only by the existence of a God with the requisite character. (This is one route into the Cartesian Circle: a deeply contentious area of exegesis. No specific resolution of the Cir-

cle need be assumed, as long as we recognise that God is not a dispensable element in it.) Second, God's support in an understanding of modality was not accidental; or rather, a nonsubjective, absolute perspective was not accidental, and no such perspective seemed persuasive without God. It was not merely Descartes's personal conviction that he could conceive his mind apart from his body. This was to be conceivable by anyone with the appropriate cognitive apparatus who judged the question in an appropriate way. One of the characteristics of secure conception in contrast with fallible imagination must have been that it was nonsubjectively reproducible; so "it is not-impossible for Descartes" must have meant just "it is not-impossible." This was the relevant difference between ordinary possibility (as in what Descartes could imagine) and the extraordinary possibility needed for the Real Distinction (what could be conceived). A nonsubjective perspective had to be assumed to maintain the difference.¹⁸ The problem is not alleviated by pragmatic appeal, for example, to something such as "the opinion of an ideal person in similar circumstances."¹⁹

A parallel thought comes from the use of the evil demon at the end of the *First Meditation*. Descartes envisaged ways in which his perceptual judgments or his understanding might be mistaken. At that stage of his case it did not matter whether he had in mind his imagination or his intellection (clear and distinct conception). But then he came to consider the possibility of the suspension of his best judgment. Was it possible when using the best intellectual capacities at his command that he might be in error? He could not represent to himself how that might be so, using either his imagination or his conception. What he could suggest was how, in outline, his best capacities might err. He could not conceive this but he could portray it in a story which would offer some explanatory context. The argument depended upon a step from the natural power of his mind—the mind—to something nonnatural in the sense that it was disconnected from forms of narrative representable by him. The disconnection was essential.²⁰

This two-step argument is characteristic of what came to be logical possibility. It was intrinsic to Descartes's case that his best natural endeavors could not portray to him the possible failure of his understanding. (This is another point of departure for debates over the interpretation of the Cartesian Circle.) Descartes wanted both to believe (in a sense) and to deny (in a sense) that his present conception might be in error. The equivocation was not accidental. The function of the demon (or the ad hoc hypothesis of a nonbeneficent God in the *Principles*²¹) was to offer a context for a story which was allegedly intelligible in one way but necessarily unintelligible in

another. It had to make *some* sense that the demon might be at work. Richard Popkin has explained the historical context from the witch trials of the 1630s.²² But equally, the machinery of the demon's workings had to be obscure. If they could be understood transparently ("clearly and distinctly") then their use as a source of possible error would be neutralized, which is to say that the possibility would lose its force or content.

There are many controversial points here, but the only one relevant to this argument should be the need for the step from the ordinary possibility of what Descartes could imagine or conceive to the extraordinary possibility where he could represent only its possible existence (God or the demon might be deceiving him now), not its coherent detail. The use of possibility in this, one of his foundational arguments, depended once again on some nonsubjective perspective or form of representation. Again, given his assumptions, some form of theology was not optional. A step beyond the natural was required to maintain his case. And at that point, the step was one he should not have been licensed to take, by his own standards.

HUME

A psychological slant in Hume's approach has been seen by almost every commentator. Apparently, no connection was explained or justified between a capacity to imagine the movements of billiard balls and what is actually possible on a billiard table. I can assert, for example, that *my* imagination only allows me to envisage situations that accord with causal laws. I can even assert, narrow-mindedly, that I cannot imagine anyone else imagining things differently. Such feeble personal considerations would prove as much or as little as Hume's appeals to his own mental capacities. Arthur Pap, in one much-cited discussion, wrote of Hume's "absurd identification of the logically possible with the imaginable," diagnosing fallacy, error, and confusion all on a single page.²³ In fact, it seems quite likely that what mattered to Hume was the explanation for his degree of belief in possibilities, rather than their objective ontological status, in which case it might be useful to redirect our attention from his seeming psychologism to his central modal logic, which has received far less discussion.

A philosopher who accepts some form of a principle of sufficient reason may have some basis for saying that something is possible: there is no cause or reason why it should not be so. What, though, could have been Hume's support for his use of a notion of possibility? How could he have been in a position to assume that anything might be metaphysically possible

(or, in fact, possible at all in any noncircular sense) because he could not think of a reason why it should not be so? How could metaphysical possibility—or absolute availability—be assumed as part of a critique of alleged knowledge of metaphysical necessity? A wide, nonstandard concept of possibility is, after all, at least as much in need of justification as any notion of causal necessity; perhaps rather more so (“there is as good reason for taking everything to be impossible, as to be possible . . .”²⁴). The reader might suspect that Hume intended irony in referring to “an establish’d maxim in metaphysics”—“*whatever the mind clearly conceives includes the idea of possible existence or in other words, that nothing we imagine is absolutely impossible*”—but it seems that he did not.²⁵ It takes little to persuade me to believe that the sun (in one sense) must rise tomorrow, but surely rather more to persuade me to even suppose that (in any sense) it might not. A supporter of the force of natural law might have some justification for identifying causal or explanatory availability with possibility. Hume was as entitled as anyone to make use of the concept of being not-self-contradictory, but he had less justification than anyone for identifying this concept with possibility of any kind. To do this would be to beg the question by assuming that what can happen would be what is not ruled out by contradiction. But what would be the force in *not ruled out* here, and from what context would it derive its sense? If the sense was the same as *logically available*, then this would be uncontroversial, but also unhelpful or even useless for any purpose he might intend.

Here is a typical Humean argument:

as all distinct ideas are separable from each other, and as the ideas of cause and effect are evidently distinct, ‘twill be easy for us to conceive any object to be nonexistent this moment, and existent the next, without conjoining to it the distinct idea of cause or productive principle. The separation, therefore, of the idea of a cause from that of a beginning of existence, is plainly possible for the imagination; and consequently the actual separation of these objects is so far possible, that it implies no contradiction nor absurdity; and is therefore incapable of being refuted by any reasoning from mere ideas; without which ‘tis impossible to demonstrate the necessity of a cause.²⁶

The important step is from the separation which is “plainly possible for the imagination” to the possibility of an “actual separation.” The obvious, superficial difficulty in the use of Hume’s imagination masks the more fundamental logical problem of identifying any kind of possibility with that which “implies no contradiction nor absurdity.” The reality was that Hume

had nothing solid to support the notion of possibility he assumed. He must have wanted his readers to think that the "actual separation" could happen in some sense; after all, what else could "actual" imply? Taken for granted in his argument was a principle that anything can happen unless there is a reason why it should not (a principle with clear echoes in his social philosophy and his views on free will). Yet he could have no justification for accepting that principle. There are excellent reasons why two billiard balls do not stop dead on collision. To claim that in any sense they might not stop dead—that there are not sufficient reasons why they should not—was either straightforwardly false or was to apply a less stringent standard to what is not ruled out by reason than the standard applied to what reason is assumed to allow or support.

There are contexts in which a notion of what is 'not unallowable' may be useful. But any identification of such a notion with a notion of 'what can happen' needs some justification. A body of natural law might aim to provide one kind of justification (but obviously not for Hume). More plausibly nowadays, a body of scientific theory may be hoped to provide another. What can happen in nature may be identified with what is allowed (or not excluded) by the terms of a theory, although it must be doubtful whether such a view could be defended beyond a pragmatic level.

The superficial similarity in logic between Descartes and Hume is misleading. The argument for the Real Distinction, once again, says that "the fact that I can clearly and distinctly understand one thing apart from another is enough to make me certain that the two things are distinct, since they are capable of being separated, at least by God." That sounds not unlike Hume's "the separation . . . of the idea of a cause from that of a beginning of existence, is plainly possible for the imagination; and consequently the actual separation of these objects is so far possible, that it implies no contradiction nor absurdity." The common form is: I can represent . . . to myself, so . . . is possible. The supports beneath the use of that form were not the same for Hume as for Descartes, but they did share one significant feature: they rested on assumptions that should not have been used at the stage of the argument where they were used. For Descartes, God's perspective was not an optional extra: it could be modernized into an absolute, objectivized conception but not eliminated from the argument altogether.

Certainly, Hume wanted to dispense with theological assumptions. His hope may have been to use possibility at what might now be called a logical level: his separation of objects was possible in that "it implies no contradiction nor absurdity." One problem was in the step from (loosely) *not*

Copyrighted Material

ruled out (by logic) to *possible*, as just discussed. Another, as noted, on the surface, was his psychologism: why should we care what he was able to imagine? A more fundamental difficulty was his use of representation, putting to one side the fact that the representation he favored was psychological, veering painfully close to mental picturing. To understand that a separation of objects "implies no contradiction nor absurdity," Hume had to represent the separation to himself. The logic in the passage quoted earlier from his *Abstract* was oblique: "The mind can always *conceive* any effect to follow from any cause, and indeed any event to follow upon another: whatever we *conceive* is possible, at least in a metaphysical sense: but wherever a demonstration takes place, the contrary is impossible, and implies a contradiction." We might think that the latter part of this—"wherever a demonstration takes place . . ."—was independent from, and stronger than, the first part—"whatever we *conceive* is possible. . . ." But that is not so. We have to *conceive*—represent to ourselves—the possible existence of "the contrary." Here, Hume was not far from Descartes. To get any useful inference from "I can represent . . . to myself," some nonsubjective understanding was required: ". . . can be represented . . . is representable." Unlike Descartes, Hume might have wanted to appeal to the representational capacities of the ordinary, rational person rather than to the eye of God. But still, "can be represented" would have to be taken as "can be represented by somebody, in principle." (This is so whether we regard his intentions towards causality as being essentially critical or as a constructive account grounded in Human Nature.) One might wonder how far that sort of implied understanding relied upon a religious past to give it legitimacy. And still the important difficulties would remain: what was the plausible connection between representability-in-principle and any valuable sense of possibility? A link could be made by definition; but why should such a definition be accepted?

THE TRACTATUS

Hume relied upon an indeterminate notion of representability to maintain his belief in an idea of what was possible, or not ruled out, "at least in a metaphysical sense." His only systematic support could have been some back-door assumption, along the lines that an absolute or nonsubjective conception owed its legitimacy (or rather, plausibility) to some recollection of a divine perspective.

The link between representation and possibility reached its clearest extreme in Wittgenstein's *Tractatus*. There, the link was direct, but not in the

manner of psychological empiricism, despite the apparent parallel between “What can be described can also happen . . .” [6.362] and Hume’s “whatever we *conceive* is possible.” When Wittgenstein wrote that “Thought can never be of anything illogical . . .” [3.03] he was not saying anything either for or against the traditional empiricists’ thought-experiment to test for the presence of logical possibility. The linkage in the *Tractatus* was not between possibility and psychological representation or the capacity of our imaginations (or alleged intellection) but between possibility and sense. Paul Engelmann emphasized how thoroughly the psychological was purged:

One of the very few corrections written by hand into the original typescript of the *Tractatus* deletes the decisive sentence “We conceive facts in pictures” [“Die Tatsachen begreifen wir in Bildern”], and substitutes “We make for ourselves pictures of the facts.” [“Wir machen wir uns Bilder der Tatsachen” 2.1]²⁷

What was possible was what could be said. What was said was what was possible: this itself could not be said, but only shown. Plainly, this was the important part of what Wittgenstein meant in stating that what can be described can also happen: the fact of representation was the fact that something was possible.

The medium of representation came to be not the mind but the proposition. A proposition (true or false) showed a possible state of affairs. The proposition was the unit of (possible) sense. “A proposition *shows* its sense. A proposition *shows* how things stand *if* it is true. And it *says that* they do so stand.” [4.022] It was able to do this because it was in essence a picture. The picturing—representational—capacity of the proposition derived its legitimacy from the presumption that language works: we do convey sense to each other. We do that by means of propositions, true or false. Sense in language—the fact that we make sense—depended on the sense made by propositions. We could not make sense, convey truth, or understand each other unless language rested upon the picturing of possible states of affairs by propositions. “The possibility of propositions is based on the principle that objects have signs as their representatives.” [4.0312]

So possibility was seen in two different ways. The possibility *in* a proposition was simply enough the fact that it was a proposition. Here, a possible state of affairs was one which could be pictured—conveyed successfully as sense. “A picture contains the possibility of the situation that it represents.” [2.203] There was also the possibility *of* propositions, which must have been a transcendental possibility propped up by a characteristically two-way

transcendental conditional: propositions were (possible) portrayals of sense because “objects have signs as their representatives”; signs must represent objects because “If the world had no substance, then whether a proposition had sense would depend on whether another proposition was true.” [2.0211] Wittgenstein said nothing about transcendental possibility in the *Tractatus* (nor would he have described it in that way), no doubt because it would fall plainly into the category of the showable rather than the sayable or describable. The picturing relationship itself, and hence the fact that a proposition pictures a state of affairs, was not picturable: “A picture cannot . . . depict its pictorial form: it displays it.” [2.172]²⁸

The *Tractatus* matters because it offered the clearest account of logical possibility, brought unambiguously into identity with the possibility in logic, itself brought unambiguously into identity with the possibility of what we can or cannot think. (“A thought contains the possibility of the situation of which it is the thought. What is thinkable is possible too.” [3.02]) At the time of writing the *Tractatus*, Wittgenstein had no overt interest in any notion of everyday, commonplace possibility. He used a negative form of expression—“The only impossibility that exists is *logical* impossibility” [6.375]—which suggests that the only possibility that exists is logical possibility. Whether or not that was so, we can be certain that he was not concerned about changing the way we speak. Our language is in order as it is [5.5563]. He was not even concerned about what makes possible, in the sense of transcendental conditions, “our” use of normal modalities. (You can understand “I could be in Los Angeles today” because, in some way—there is some world in which—I am, or possibly-am, in Los Angeles.) Rather, he was interested in the absolute force of logical impossibility and in the fact that sense relies on the portrayal of possible states of affairs [3.3421].

Nevertheless, there remained an analogy between his views and the most straightforward appeal to the powers of the mind. Compare:

Euphranor: Pray, Alciphron, which are those things you would call absolutely impossible?

Alciphron: Such as include a contradiction.

Euphranor: Can you frame an idea of what includes a contradiction?

Alciphron: I cannot.

Euphranor: Consequently, whatever is absolutely impossible you cannot form an idea of?

Alciphron: This I grant.

Here, for Berkeley, to "frame" or "form" an idea was exactly analogous to the expression of sense, that is, just expression, for Wittgenstein. The force of the impossibility was the veto of the unthinkable: you are simply not able, he said, to form certain ideas (and for Berkeley, specifically, there could be no question of any state of affairs distinct from the idea someone formed of it).²⁹ The force of impossibility for Wittgenstein must have been the threatened breakdown of sense. If it were, per impossibile, possible to portray, or convey in language, an impossible state of affairs, then the communication of truth and falsity could not operate and sense would collapse. (Any parallel with Berkeley breaks down significantly here. Alciphron was arguing that theological discourse could be used meaningfully when no representable ideas could be in the mind.)

For the early Wittgenstein, the connections between possible thought, logical thought, and logical possibility were intimate. He would have derided any notion of logic as the laws of thought, or rational thought, in a psychological sense. Yet anything that was to qualify as a thought would have to be expressible, hence to be a proposition, hence to have sense,³⁰ hence to picture a possible state of affairs. Logical impossibility would be excluded as *sinnlos*, senseless. Also excluded would be *Unsinn*, the nonsense that derived from attempts to say the unsayable, portray depiction, or, as we might put it, enunciate the transcendental conditions of sense.

WITTGENSTEIN: LATER POSSIBILITIES

The real difficulty in all this emerged as Wittgenstein's thinking developed after 1929. The fault line created by the color-exclusion problem was discussed exhaustively in the 1930s as a question about necessity. In fact, in his own words, the issue was one of impossibility: the simultaneous presence of two colors was "logically impossible." [6.3751] The development of his views on possibility and impossibility has been far less well studied.

The survival of any sort of logical possibility into his later works might seem surprising. He did say in the *Philosophical Grammar* that a "question about absolute possibility" is "always nonsense";³¹ but there, as elsewhere, his understanding of mathematical (and particularly geometrical) possibility may have constrained the apparently inexorable line of his thinking. We might expect him to have believed that logical possibility is an archetypal philosophers' invention. In fact, his later attitude seems to have been more ambivalent than on almost any other topic. We see a blurring between possibility and logical possibility: "There are cases where doubt is unreason-

able, but others where it seems logically impossible. And there seems to be no clear boundary between them." "We are not made aware of how various the employment of the assertion "... is possible ..." is!"³² In places he adopted a startlingly realist-sounding tone: an analogy between logical possibility and chemical possibility suggests powerfully that modality belongs unequivocally in things and not in how we talk or think about them. Much of his thinking in the notes published as the *Remarks on the Foundations of Mathematics* may have been intended to suggest both a blurred spectrum or family of cases and some analogy with practical, almost mechanical possibility.³³

More often, though, there are signs of a different-looking approach: "We tend to think of a possibility as something in nature ..." he said in the *Yellow Book*, and he ended his case by saying "We have the idea that we are putting up a standard of usage in nature, but in fact we are only putting up a standard of usage in grammar." Or "One might even say that philosophy is the grammar of the words *must* and *can*, for that is how it shows what is a priori and what a posteriori."³⁴ Discussing the possibility of trisecting an angle in the *Philosophical Grammar*, he said that "The question whether trisection is possible is ... the question whether there is such a thing in the game as trisection." In his 1934–1935 lectures, leaving apparently almost no room for finer shades of interpretation: "The essence of logical possibility is what is laid down in language," and "To talk about logical possibility is to talk about a rule for expressions." And once again, in the *Yellow Book*, going back to the subject which had caused him so much trouble and which was filling the pages of philosophical journals through the 1930s, he asked, "When we say a thing cannot be green and yellow at the same time we are excluding something, but what?" The reply was that "We have not excluded any case at all, but rather the use of an expression."³⁵

It is pointless to weigh up any realist-versus-idealist or conceptualist strains in his later approaches to logical possibility (does it reside in the world or in us?). On this point, Anscombe's otherwise cautious discussion seems to lose focus. Writing about *Investigations*, section 521, on chemical possibility, she says that the exclusion of a chemical or logical possibility "belongs to the system, a human construction. It is objective; that is, it is not for me to decide what is allowable here."³⁶ That only transfers logical possibility from me and how I talk to us and how we talk, which in theoretical terms may be no more than a shift from idealism to conceptualism. It does not do much for someone inclined to think that it is something about space that prevents the trisection of an angle with a straight-edge and

compasses or about water and sand that prevents them from mixing. How are chemical properties human constructions? "The syntax of reality and possibility" does not help a lot.³⁷

The fact is, though, that any imagined opposition between modal realism and nonrealism must be out of place in considering how Wittgenstein saw his thinking. If a label is needed for his view, it could be *transcendental naturalism*.³⁸ His position remained transcendental because it still contained the double conditional characteristic of transcendental arguments: the logical possibilities embodied in the grammar of our language were there because things were like that, *and* things were seen like that because of the construction of logical possibilities in the grammar of our language. To think about the use of language "creating" modalities or modalities in reality "determining" the framework of language is to miss the two-way double dependence. We think of naturalism because things indeed are like that, not otherwise, as seen in the example from *On Certainty*: "A principal ground for Moore to assume that he was never on the moon is that no one was ever on the moon or *could* ever come there; and this we believe on grounds of what we learn."³⁹ The *could* might be logical or not; it is as absolute as nature requires.

What is important—and the reason for dwelling on Wittgenstein's later views—is that a link was retained between possibility and making sense. Going back to the remarks about chemical possibility in the 1939 lectures: "When you say 'H₂O₄ is possible' you simply mean it as a sign in your system. . . . We have adopted a language in which it *makes sense* to say 'H₂O₄ . . . '—it isn't true, but it makes sense." More centrally, in the middle of the private language passages in the *Investigations*: "In so far as it makes *sense* [Soweit es Sinn hat] to say that my pain is the same as his, it is also possible for us [soweit können wir auch] both to have the same pain."⁴⁰

It is improbable that Wittgenstein could ever have accepted a position as stark as the caricature in Waismann's *Principles of Linguistic Philosophy*:

One meaning of "possible" of particular importance is obtained when the rules involved are those of logical grammar. In this case we will speak of "logical possibility." That water should run uphill is physically impossible, but logically possible. The criterion for whether a state of affairs is logically possible is whether the sentence which describes it makes sense.⁴¹

More likely, he was too sensible to believe that it was possible that water should run uphill in any way whatever. His link between logical possibility and sense cannot have been so crude, but it did contain great difficulties.

The tendency in his later work was entirely against any theoretical essence of meaning—any set of conditions that might determine what makes sense. In the *Tractatus*, the “essence of all description” was given in the “essence of a proposition” or “the general propositional form”: “This is how things stand” [Es verhält sich so und so, 5.4711, 5.471, 4.5]. Later, this was not seen as wrong so much as “the same as giving the definition: a proposition is whatever can be true or false.” But the nature of a proposition, even if created or defined, could reveal nothing about the essence of making sense.⁴²

Yet possibility and making sense were directly connected through Wittgenstein’s naturalism. In his *Philosophical Remarks*, referring to Mach, he noted, “a thought-experiment is of course not an experiment at all. At bottom it is a grammatical investigation.” And in any case, what is not imaginable may be what I “declare” to be unimaginable.⁴³ His view must have been that what is possible (in a broad, logical interpretation, if we want to add this) will be what it makes sense to say, and that will depend on the fabric of the language in which it is said, which in turn will depend on a scaffolding of “certain very general facts of nature”: “It is as if our concepts involved a scaffolding of facts.” That would presumably mean: If you imagine certain facts otherwise, describe them otherwise, than the way they are, then you can no longer imagine the application of certain concepts. . . . All this was more fragile than it might seem. In the *Yellow Book*, he said: “It is queer that we should say what it is that is impossible, e.g., that the mantel piece cannot be yellow and green at the same time. In speaking of that which is impossible it seems as though we are conceiving the inconceivable.”⁴⁴

His conclusion was that “what we exclude has no semblance of sense.” This is curious—maybe it was just rhetoric—because that is actually the real difficulty: there is a genuine *semblance* of sense in many such cases. Why have philosophers wasted their time on discussions about the possibility of time travel or artificial intelligence if these projects contained no semblance of sense? The treatment could not be said to be satisfactory (and these arguments did not recur in writings intended for eventual publication). Wittgenstein went on to say that “we exclude such sentences as ‘It is both green and yellow’ because we do not want to use them,” and then he added, cagily, “Of course we *could* give these sentences sense.”

The color example was well chosen, in that it might have helped his presumed point. His difficulty was that what he said was hard to apply where logical impossibilities may apparently be used with sense. “Is it a genuine question if we ask whether it’s possible to trisect an angle?”⁴⁵ Here was

the real trouble, as seen in Wittgenstein's own questions in the *Philosophical Grammar*: "If the trisection of an angle is impossible—logically impossible—how can we ask questions about it at all? How can we describe what is logically impossible and significantly raise the question of its possibility?"⁴⁶ The emphasis should be on how we can describe what is logically impossible, because no one doubts that we can ask whether, or suppose that, or tell someone falsely it is possible to trisect an angle with a ruler and compass. And here the trouble was of Wittgenstein's own making. He was caught both ways. If we can "describe what is logically impossible," then his notion of logical impossibility loses its only support: severed successfully from unimaginability, it has to rest solely on a relationship with making sense, with what can be said. If we can not describe what is logically impossible, then Wittgenstein's broad, nontheoretical account of sense seems to be undermined. On what basis, after all, could he say that an apparently well-formed, intelligible description could not make sense to someone? (Interestingly, Drury recounted a conversation with Wittgenstein in 1929 in which he reported a comment by W. E. Johnson: "If I say that a sentence has meaning for me, no one has a right to say it is senseless."⁴⁷)

In so far as he retained any concept of logical possibility—even as an extreme case, with blurred edges—he may have been resting it, as much as in the *Tractatus*, on making sense. Where "a combination of words is being excluded from the language,"⁴⁸ this may be because it has no use. Or rather we want to say *can have* no use, but that would beg the question and at the same time go against Wittgenstein's naturalism. Once sense was severed from the conditions that supported it in the *Tractatus*, it could no longer sustain a form of possibility or impossibility that could be used with any sort of critical force.

The upshot was that logical possibility would have been stranded philosophically. Suppose, for example, someone were to conduct a "grammatical investigation" into time travel. Superficially, one might come to a conclusion that time travel is impossible (*logically adds nothing here*) because of contradictions that would soon crop up with "our" normal discourse (e.g., "I was living before my father")—apparent nonsense. Wittgenstein would not accept that simplistic approach. His view might be that "our" language about time gets its sense from its use in relation to what we know about time, that much (but not all) of what we now know excludes time travel, that (for all we know) further discoveries may produce developments in the grammar of our language, and so forth. The conclusion from that plausible line of thought is that logical possibility ceases to matter. What

can be said ("with sense") depends to some degree on how things are, which particle physicists will tell us in due course.

That is as far as we need to go with Wittgenstein. He might not regard such comments as being critically negative, especially since they tend to subvert any pretensions towards a distinctly logical possibility under the guardianship of philosophers. Nevertheless, from the point of view of the exegesis of his later work we can see that a deep ambivalence remained. If, for example, geometrical impossibility is somehow a matter of grammar, which is somehow related to how things are in geometry, we can still press the question whether the "game" does or does not depend upon how things are—how space is.⁴⁹ Any plausible answers he might give will look unhelpful. It can be said that geometrical possibility is identifiable with availability or deducibility within a certain set of Hilbertian axioms, but that sort of possibility could never be projectible by analogy into a wider field, of ordinary sense, for example. Or it could be said that geometrical possibility relates in some way, however vaguely, to what can actually be done with a compass, straightedge and pencil. Perhaps an impossibility proof for trisection could be seen as an extreme case of innumerable, failed trisection experiments. Or as a kind of rule excluding such experiments. However plausible that might be, even in a far more sophisticated formulation,⁵⁰ it would equate possibility with practicability in a way which would give it no critical value in any wider context of discourse. Again, that could have been Wittgenstein's intention.

LOGICAL IMPOSSIBILITY?

The discussion may seem to have missed a crucial point. Logical impossibility might not be ruled out by divine sanction, or by what we cannot conceive, or by what we cannot express, but it can be ruled out, of course, by logic.

In a sense, that cannot be wrong, but it can be circular. In a Diodoran conditional, for example, *if P, then Q* could be read as *it is not possible that P and not-Q*. Circularly, then, the possibility of *P and not-Q* will be "ruled out by logic" simply enough, because the force of logic would be the same as the force of Diodoran possibility (which had to be understood in a temporal way). Or in constructivist terms, *P and not-P* may (or may not) be excluded by the force of whatever rule, convention, policy, or decision is favored. Logical impossibility might then be intelligible in terms of such exclusion. The point in both cases is that some context of exclusion is required.

This leads to paradox. Logical impossibility, on most readings, must be strongly excluding: the logically impossible has to be completely ruled out. Being ruled out within some specified context—the psychological context of what I can imagine, or a context of an axiomatized geometry, or within an agreed physical theory—will be reasonably unproblematic. But there may be two difficulties. First, the problem about many contexts of interest to philosophers is that they are not closed or well defined. An alleged context of *what we say*, for example, could never license useful inferences from local to wider impossibility. If we are debating, for example, whether the soul can (possibly) exist apart from the body, then the context of possibility is not at all obvious: within some frameworks of thought it might sound possible, in others not. Which leads to a second problem: that we may be hoping for a non-context-bound, absolute concept of possibility, where the impossible is ruled out not only in one context or in some contexts or even in all, but in all possible contexts. Taking the same example, the ambition (or pretension) might be to show that the separate existence of the soul is not just impossible if one thinks or talks in a certain way, but is completely impossible, absolutely ruled out. The paradox is that a sort of possibility which might apply within specified contexts will aspire to apply in all contexts. If the context is what enforces the possibility, then this looks like a big obstacle.

In historical terms, the progression towards some absolute context of representation seems to be tidy. We begin the story with appeals to God's representations, then slide towards the representational capacities of our minds, then try a more general concept of a proposition as a medium of representation, and then, perhaps, resort to pure logic. Parts of this story are variants of conventional philosophical narratives, from Foucault and Rorty.⁵¹

An omission from the story is Leibniz, with his modern admirers. Surely we can find a neutral supporting context for a strong form of impossibility in the notion of falsity in all possible worlds? Surely such a notion supports the invaluable step from one particular context to any context, evading any hazards of local context-dependence?

It could be as well to leave the historical Leibniz aside, because his possibility-in-possible-worlds was even more tinged with theological assumptions than any view of Descartes. For him, it was essential, not incidental, that it was possible for God to create worlds in certain ways. His thinking on possibility was formed in explicit response to problems about divine choice. It can be reduced to near nonsense when taken outside that context.⁵² But a modernized view of possible worlds may still seem help-