WHAT I AM ABOUT TO PRESENT can perhaps best be seen as the second of a pair of sermons on a single text. The decisive reason why I do not propose on this occasion to preach both is that it would take far too long. The reasons why I will present the second rather than the first sermon are: first, that some of what I would have had to say in the first sermon is already available in print; and, second, that this second sermon is likely to be more excitingly controversial. However, I shall nonetheless briefly indicate the line taken in the first and today unpreached sermon. This exercise will serve as an equivalent for the “what-has-happened-so-far” paragraph at the start of the latest installment in a serial.

The text under discussion is taken from Peter Geach’s dissertation on *The Virtues*.

When we hear of some new attempt to explain reasoning or language or choice naturalistically, we ought to react as if we were told someone had squared the circle or proved \( \sqrt{2} \) to be rational: only the mildest curiosity is in order—how well has the fallacy been concealed?

**ON EXPLANATIONS**

In explaining and justifying this text the first points to seize are: that every explanation is an answer to a question; and hence that, whenever more than one question can be asked, there must be room for more than one answering explanation. Such alternative explanations, therefore, will not necessarily be rivals for the same logical space.

(a) the primary contention that explanations are answers to questions can be somewhat frivolously enforced, yet enforced nonetheless effectively, by reference to a recent Andy Capp comic strip. The tried
and suffering Flo is shown protesting: "There was twelve light ales in the pantry this mornin'—now there's only ONE! 'ow d'yer explain THAT?" To which her incorrigible husband responds, with deadly predictability: "It was that dark in there I didn't see it." The cartoonist Smythe felt no call to spell out the ways in which the question intended—about the 11—differed from the question answered—about the one. Any such superfluous and heavy-footed spelling out should have taken notice also of the fractionally less obvious truth that the original challenge was, as so often, rather to justify the questionable than to explain the perplexing.

(b) The corollary of that primary contention—which is that explanations or, for that matter, justifications directed at different questions do not of necessity have to be competitors—had better be illustrated in a less-lighthearted and more-abstract way.

So consider next the speech act of asserting the familiar, colourless proposition \( p \). There are certainly two, and indeed more than two, categorically different questions that can be asked about this pedestrian performance. One, in requesting an explanation why the performer believes that \( p \) is true, asks for a statement of that performer's warrant for so believing. It asks, that is to say, for his or her evidencing reasons for harboring the belief that \( p \) is true; for his or her justification for so doing. The other, in requesting an explanation why the same person chose this particular occasion to express the belief that \( p \) is true, asks what was the point and purpose of this particular speech act. It asks, that is to say, for his or her motivating reasons for so acting. The answer given is always in the first instance an explanation, though sometimes it may also constitute an attempt at justification.

Now the relevant moral of all this, which would have been developed had I been preaching the first sermon, is that Geach's naturalist opponent refutes himself \( \text{if, but only if} \), he presents his naturalistic explanations as necessarily precluding any alternative or additional explanation or justification in terms of evidencing or warranting reasons. Geach's naturalist refutes himself, that is, \( \text{if, but only if} \), he states or suggests that his own specialist knowledge reveals or entails that there is no room at all for anything which in the ordinary and traditional understanding could be rated as knowledge. I myself would argue—and do—that naturalists do not have thus disastrously to refute themselves. Nevertheless, there is no escaping the fact that a great many of them have done, and still do—most notably nowadays the militants of the discipline persistently and significantly mis-described as the sociology of knowledge.

**CHOICE AND CAUSATION**

My first sermon, as that brief indication of its general line will have shown, concentrates on two of the three terms in Geach's warning. Geach was telling us, it will be remembered, how we ought to react to
hearing "of some new attempt to explain reasoning or language or choice naturalistically." So far I have attended only to language and reasoning, and I have tried to bring out what Geach has in mind when he speaks of naturalistic explanation. The crux is that Geach assumes, at any rate when applied to "reasoning or language or choice," that such an offering does not so much pretend to explain as to explain away. It is either made or mistaken to imply a total rejection of the meaningfulness of any language, of the actuality of human choice, and of the realized possibility of having and giving, and of knowing that you have and are giving, good evidencing reasons. Since the first and last of these rejections must make an incoherent nonsense of the whole project of rational inquiry—the very project of which they are offered as a fruit—it is indeed right for us in those cases at least "to react as if we were told someone had squared the circle or proved \( \sqrt{2} \) to be rational."

But now, nothing said so far even begins to establish either that the same applies to all attempts to show that there is no such thing as choice; or that there can be no question of discovering causally sufficient physiological conditions of all the speech acts and other ongoings that are in fact involved when someone is truly said to have come to recognize the excellent evidencing reasons for believing this or that. It is in effect these bolder conclusions that I shall attempt to establish in this present, second sermon.

I shall, that is, try to show three things. First, that choice—choice between at least two real alternatives either of which the agent possibly could take—must be a presupposition of any actual knowledge. For no creature incapable of making choices between alternative possibilities of belief could properly be said "to know something." Second, choices, in this understanding, cannot be causally necessitated. For to say that there was necessitation in one particular sense would be to deny that there were any real alternatives to that particular commitment. Third, we all acquire the crucial and complementary notions both of practical necessitation and of being able to do other than we do in what is, surely, the only way in which such fundamental notions could be acquired. We acquire them from our everyday and utterly familiar experience both of making choices in action, and of bringing some things about while finding it utterly impossible to effect others.

Consider now one throwaway statement from a generally excellent book described by Fortune magazine as "A powerful indictment of the American criminal justice system." This statement runs:

> Stated another way, if causal theories explain why a criminal acts as he does, they also explain why he must act as he does, and therefore they make any reliance on deterrence seem futile or irrelevant.

This, in what is here the appropriate sense of "cause," is false. It is as essential as it is uncommon to distinguish two fundamentally different senses of the word "cause." In one of these, the sense in which
we speak both of the causes of astronomical phenomena and of ourselves as agents causing movements of inanimate objects, causes truly do—\textit{pace} Hume and the whole Humian tradition—bring about, and thus factually necessitate, their effects. Given the total cause, that is, nothing except a miraculous exercise of supernatural power can prevent the occurrence of whatever is in fact the due effect. In this first, physical or necessitating interpretation, complete causal theories do indeed explain why what does happen \textit{must} happen.

Yet it is only in a second, quite different, personal or inclining sense that we can talk of the causes of human action; whether criminal or otherwise. If I give you good cause to celebrate—perhaps by sympathetically informing you of some massive misfortune afflicting your most-detested enemy—then I provide you with a possible motivating reason for celebration. But I do not thereby necessitate the occurrence of appropriate celebrations. You yourself remain not merely an agent but, as far as this goes, an altogether free agent.

Certain criminologists, seeking the supposed concealed causes of crime, once asked a convicted multiple bankrobber: "Why did you rob banks?" He replied, with the shattering directness of an Andy Capp: "Because that was where the money was." Not yet corrupted by any supposedly rehabilitating Open University courses in sociology, he did not pretend that his criminal actions had been anything but his actions. As an agent he was not, and could not have been, inexorably necessitated. This has to be true since, from the mere fact that someone was in some respect an agent, it follows necessarily that they were in that respect able to do other than they did.

Once this basic distinction between the two causes is mastered it becomes obvious that we need a parallel distinction between two determinisms. Certainly, to say that some outcome is fully determined by physical causes does carry rigorous necessitarian implications. But, equally certainly, to say that someone's actions are completely determined by causes of the other sort—earlier called motivating reasons—is, if anything, to presuppose the contrary. The "psychic determinism" to which Sigmund Freud appealed in the psychological area is thus not the local application of a universal determinism of the first, necessitating sort. Instead, the two appear to be flatly incompatible.

It is, therefore, diametrically wrong to try to conscript what historians and other social scientists offer as explanations of human actions \textit{qua} actions to serve as support for a necessitarian determinism. On the other hand, if a naturalistic explanation is to be construed as one that provides a complete account in terms of necessitating physical causes, then Geach must be dead right to dismiss the possibility of any such explanation for the phenomena of choice.

The conclusions of the previous discussion still leave room for both a question and an objection. The question is, "What is the link between choice, in this libertarian understanding, and rationality?" The objection is that, if this is what choice implies, then there neither is nor could be any such thing. A suggestion in answer to the question comes from the second volume of the Postscript to Sir Karl Popper's \textit{The...}
"Logic of Scientific Discovery. But in order to overcome the objection I shall—albeit, as Gilbert Ryle loved to say, not very shamefacedly—have to defy Popper’s warnings against plunging “into the morass of language philosophy.”*

Popper himself proceeds to quote an argument deployed by J. B. S. Haldane in *The Inequality of Man*:

> I am not myself a materialist because if materialism is true, it seems to me that we cannot know that it is true. If my opinions are the result of the chemical processes going on in my brain, they are determined by the laws of chemistry, not those of logic.°

As it stands this argument is vitiated by a false antithesis. Suppose we elaborate and refine upon the illustration offered and the distinctions sketched earlier. Then we can now distinguish a third kind of question to be raised about all the ongoings involved in what would normally be described as the speech act of asserting the proposition \( p \). This kind of question asks about the physical necessitating causes of some or all these events. If we discount for the moment the necessitarian implications of such physical causation, then there would seem to be no inconsistency in asking at one and the same time: both for the evidencing reasons which the person had for believing \( p \); and for the causes of all the various events which occurred in the course of that person’s expressing the belief that \( p \) is true. On that first, temporary, discounting assumption no incompatibility subsists between—as Haldane at that stage put it—determination by the laws of chemistry and determination by the laws of logic.

But, after noticing that Haldane himself later repudiated both this argument and the conclusion it was offered to support, Popper nevertheless urges that what Haldane really meant was something else:

This is precisely Haldane’s point. It is the assertion that, if ‘scientific’ determinism is true, we cannot in a rational manner, know that it is true; we believe it, or disbelieve it, but not because we freely judge the arguments or reasons in its favour to be sound, but because we happen to be so determined (so brainwashed) as to believe it, or even to believe that we judge it, and accept it, rationally.°

Now the heart of the matter becomes not whether our beliefs were caused by evidencing reasons, rather than by chemical processes in our brains; but whether we could by any means have believed other than we did. Unless we could we cannot take credit for having, as rational beings, judged that these beliefs and not others, are true. Popper proceeds to add an important, correct comment:

This somewhat strange argument does not, of course, refute the doctrine of ‘scientific’ determinism. Even if it is accepted as valid, the world may still be as described by ‘scientific’ determinism. But by pointing out that, if ‘scientific’ determinism is true, we cannot know it or rationally discuss it, Haldane has given a refutation of the idea from which ‘scientific’ determinism springs.
This seminal idea is, we assume, part of what Geach would call naturalism; and it is in this way refuted inasmuch as such a naturalist can be taken to claim to know that his scientifically grounded naturalism is true. If, however, Popper's argument is to go through, it has to be allowed that no computer or other device the ongoing in which are completely determined by necessitating causes can correctly be said to know that any of its operations are valid or that any of its output is true. I myself gladly accept this essential limitation upon the potentialities of all such artifacts. Yet to Popper it might seem uncomfortably like a finding of the despised "language philosophy."

Before plunging headlong into that forbidden morass we must in passing notice both that much if not all belief is immediately necessitated; and that this fact can be used to bring out one particular corollary of the previous contention. This is a corollary that cannot but be agreeable to anyone who has ever been to school with Popper.

That at least some beliefs are immediately inescapable is best seen by recalling Hume's doctrine of what Kemp Smith christened "natural beliefs"—the belief, for instance, that in perception we are directly aware of some mind-independent reality. The congenial corollary is that the more beliefs we find to be, in certain circumstances, immediately inescapable, the more vital it becomes to try to withdraw from such possibly deceiving situations and to expose ourselves and these beliefs to the full force of all rational objections—that is, to criticism.

Such constant willingness to expose ourselves to serious and well-girded criticism is, beyond doubt, always within our power. It is also, as recently I have been arguing in many different places, the one "most-certain test" of the sincerity of professed personal commitments to the theoretical search for truth. I have also argued on the same occasions that such willingness is also the most-telling touchstone of the authenticity of our professed dedication to the stated objectives of whatever practical policies we may choose to favor.12

**AGENCY AND NECESSITY**

At the beginning of The Open Universe Popper announces his intention to present "my reasons for being an indeterminist." At once he adds: "I shall not include among these reasons the intuitive idea of free will: as a rational argument in favor of indeterminism it is useless."13 His warrant for saying that any such direct appeal to experience is useless is that he may be mistaken even about the nature of what the behaviorist would call one of his own behaviors. Insofar as this is a token of a Cartesian-type argument (contending that in any area where we may conceivably be mistaken, we can never truly know), its validity, if it were valid, would have to be recognized as putting an insuperable obstacle in the way of the achieving by any fallible being of any knowledge whatsoever.14

Even Popper's original disclaimer, referring as it does to "the in-
tuitive idea of free will,' is importantly misleading. For the crucial question is not whether we ever act of our own free will, but whether we ever act at all. When we say of someone that they acted not of their own free will but under compulsion, still they did act. The case of the businessman, who received from the Godfather "an offer which he could not refuse," is thus vitally different from that of the errant mafioso, who was without warning gunned down from behind.

We may both truly and colloquially say of the former, offered the urgent choice of having either his signature or his brains on a document within 30 seconds, that he had no choice, and hence that he could not have done other than he did. (He signed away the whole family business to—if that is the correct phrase—the Organization.)

But of course these everyday idioms must not be misconstrued, as so often they are, at the foot of the letter. For in more fundamental senses the businessman who acted under compulsion did have a choice and could have acted other than he did, however understandably intolerable was the only alternative remaining open to him. In these same more fundamental senses, to have a choice, to be able to do otherwise, is essential to what it is to be an agent. In these same more fundamental senses, again, the errant mafioso actually did have no choice; and, because he did not do anything, he could not have done otherwise. For, in that moment of unexpected and sudden death, he ceased both to do and to be.15

The final part of my discussion is going to sketch an argument for saying that the two mutually exclusive notions of physical necessity and of being able to do otherwise are only understood, and only can be, by people who have had, and who throughout their lives continue to enjoy, experience of both realities. They—which is to say we—have enjoyed and are continuing to enjoy experience both of unalterable necessity and of effective agency. It is, therefore, just not accurate to maintain that the entire universe is subject at every point to ineluctable necessity. Were this claim true we should not be able even to understand it, much less to know it to be true.

By far the best place from which to start to establish our last contention is the splendid chapter "Of Power" in John Locke's Essay Concerning Human Understanding. This is a chapter the message of which was missed by Hume—as Popper says here, "one of the very greatest philosophers of all time."16 He missed it because he could not entertain any idea of necessity other than the logical, and because he had to defend his insight that causal propositions could not compass any necessity of that logical kind.17 Locke starts with a statement of what he proposes to prove:

Every one, I think, finds in himself a power to begin or forbear, continue or put an end to several actions in himself. From the consideration of the extent of this power... which every one finds in himself, arise the ideas of liberty and necessity.18

Locke's technique for enforcing this point about our familiarity
with our agent powers—our experience of them—is to contrast what we do know or may know about what we cannot do. Unfortunately, Locke, like Popper, wrongly assumes that the 64 thousand dollar question is not whether we are, and can know that we are, agents choosing this alternative when we could have chosen that, but whether we are, and can know that we are, free agents choosing between alternatives at least two of which we find tolerable. This fault we have simply to discount, making the necessary mental transposition as we go along:

We have instances enough, and often more than enough, in our own bodies. A man's heart beats, and the blood circulates, which 'tis not in his power by any thought or volition to stop; and therefore in respect to these motions, where rest depends not on his choice, nor would follow the determination of his mind, if it should prefer it, he is not a free agent. Convulsive motions agitate his legs, so that though he wills it never so much, he cannot by any power of his mind stop their motion (as in that odd disease called Chorea Sancti Viti,) but he is perpetually dancing. He is...in this...under as much necessity of moving, as a stone that falls, or a tennis ball struck with a racket. On the other side, a palsy or the stocks hinder his legs from obeying the determination of his mind, if it would thereby transfer his body to another place.¹⁹

What truly there is want of, we must repeat, is not freedom but agency; not the lack of any tolerable and uncoerced alternatives, but the lack of any alternatives at all. Against this straightforward appeal to experience Popper would argue that it is always conceivable that we are mistaken about what is or is not in fact subject to our wills: that some of us in the past have been afflicted by sudden paralyses; or that we any of us may now have suddenly acquired unprecedented powers. Certainly this is conceivable: we are none of us either infallible or all-knowing. But the great mistake is to assume that knowledge presupposes infallibility; that, where we may conceivably be mistaken, there it is impossible for us ever to know. The truth is that we need only to be in a position to know, and to be claiming to know something that is in fact true.

Locke also suggests, albeit it in less-satisfactory terminology, that where action is not, there necessity reigns; that the human behaviors that are not actions must be necessary. Thus he writes:

Wherever thought is wholly wanting, or the power to act or forbear according to the direction of thought, there necessity takes place'" (II (xxi) 13). And, a page or two earlier, we read: "A tennis ball, whether in motion by a stroke of a racket, or lying still at rest, is not by anyone taken to be a free agent...because we conceive not a tennis ball to think, and consequently not to have any volition, or preference of motion to rest, or vice versa; and therefore...is not a free agent; but all its both motion and rest come under our idea of necessary, and are so call'd...So a man striking himself, or his friend, by a convulsive motion of his arm, which it is not in his power...to stop, or forbear;...every one pities him as acting by necessity and constraint.²⁰
Once again, of course, the reason why we should pity such persons is not that they would be acting under constraint, but that their behaviors would be completely necessitated, and therefore not actions at all. Especially to those familiar with Hume's criticisms of this chapter, in his discussions both "Of Liberty and Necessity" and "Of the Idea of Necessary Connection," what is most curious is Locke's actual failure to go on to emphasize that, notwithstanding that those behaviors which are actions cannot have been necessitated, since the agents must as such have been able to do other than they did, still the behaviors aforesaid may themselves necessitate. For actions may bring about effects, making one alternative contingently necessary and another contingently impossible.\footnote{21}

We know how Hume would have tried to dispose of this contention, had Locke developed it. We know because, though Locke did not, Hume did. Hume, like Popper, insisted upon the perennial conceivable alternatives: it must always be conceivable that what does usually happen one day will not. And, again like Popper, Hume draws an invalid inference from this true premise. Hume's inference is that, since there cannot be logical necessities linking those events or sorts of events that happen to be causes with those events or sorts of events that happen to be their effects, therefore there cannot be and are not objective necessities and objective impossibilities in the non-linguistic world. But this is false, and our consideration of choice has shown how we can know it to be false. It is precisely and only from our altogether familiar experiences as agents making things happen, yet agents always limited in the scope of their agency, that we can and must derive two—if you like—metaphysical basics. For this is the source: both of our ideas of agency and of this kind of necessity; and our knowledge that the universe provides abundant application for both these ideas. If anyone doubts this, I invite them to devise completely nonostensive and mutually independent explanations of these terms—explanations that could benefit creatures not themselves able, and required, to make choices and to deal with often intrinsically autonomous realities. It is the final challenge of the archetypically incredulous man from Missouri: "Show me!"\footnote{22}

This whole paper has tried to explain and defend the Geach motto from which we began. We must not stop without reiterating that it has at best provided a refutation only of those imprudently aggressive forms of naturalism that promise to banish "reasoning or language or choice." But such claims in truth are not essential to naturalism. Consider, for instance, the consistently Aristotelian naturalism of Strato of Lampsacus, who was next but one to the philosopher himself as Director of the Lyceum. Neither he nor his followers seem to have suggested anything of the sort: they had—poor things—never heard of the sociology of belief. Nor did they feel bound to labor to explain human action in the same necessitarian terms as were found convenient in astronomy or meteorology.\footnote{23} If we are to accept Geach's motto, then we must interpret the words "explain...naturalistically"
as entailing discredit, denial, and explaining away. In that understanding, but in that understanding alone:

When we hear of some new attempt to explain reasoning or language or choice naturalistically, we ought to react as if we were told someone had squared the circle or proved $\sqrt{2}$ to be rational: only the mildest curiosity is in order—how well has the fallacy been concealed?

2. For this rather obvious yet crucially important distinction between evidencing and motivating reasons see, for instance, “Is Pascal’s Wager the Only Safe Bet?” in my *The Presumption of Atheism* (London: Pemberton/Elek; and New York: Barnes and Noble, 1976); or ch. 7, sec. 7 in *An Introduction to Western Philosophy* (Indianapolis: Bobbs Merrill; and London: Thames and Hudson, 1971).
3. Compare, for instance, the reckless claim once made by one who was in his day our leading Freudian psychoanalyst: “The analyst must above all be an analyst. That is to say he must know positively that all human emotional reactions, all human judgements, and even reason itself, are but the tools of the unconscious; and that such seemingly acute convictions which an intelligent person like this possesses are but the inevitable effect of causes which lie buried in the unconscious levels of his psyche.” See Charles Berg, *Deep Analysis* (London: George Allen and Unwin, 1946), p. 190.
4. This is true: not only of the reckless Radical assailed in chapter 1 of *Sociology, Equality and Education* (London: Macmillan; and New York: Barnes and Noble, 1976); but also of the [more patient and hardworking yet no less incorrigibly perverse] scholars of the Edinburgh Science Studies Unit, with whom I have also tried to deal faithfully elsewhere. See “A Strong Programme for the Sociology of Belief,” in *Inquiry* (Oslo) 1982.
6. The situation is complicated by the rarely noticed fact that the development of the notions of unconscious motivation involved not one but two conceptual innovations: it is not only a matter of attributing motivations to persons who are themselves unaware that they are being so moved; but also of construing as expressions of such unconscious desires, purposes, and what have you, behaviors which are not actions, and hence not under the conscious volitional control of the patient—compulsive symptomatinc tics and psychogenic paralyses, for instance. See *A Rational Animal* (Oxford: Oxford University Press, 1978) chaps. 8-9.
9. Ibid., p. 89.
10. Ibid., pp. 92-93. I treated various versions of the argument which Haldane did actually use in an article, “A Rational Animal,” in J. R. Smythies, ed., *Brain and Mind* (London: Routledge and Kegan Paul; and New York: Humanities Press, 1965). But I did not either at that time or for several years later appreciate the full force of the different argument which here Popper too generously attributes to Haldane.

14. Contemplate the devastation wrought by firing off both barrels in the first paragraph of Part IV of the *Discourse on the Method*: “... on the grounds that our senses sometimes deceive us, I wanted to suppose that there was not anything corresponding to what they make us imagine. And because some men make mistakes in reasoning... and fall into fallacies... I rejected as unsound all the reasonings which I had hitherto taken for demonstrations.” I give my own reasons for rejecting this argument type in chapter 9 of Flew, *An Introduction to Western Philosophy*.

15. For a fuller development of these points see *A Rational Animal*, chaps. 3, 4, and 9.


17. I first began to dispute with “the good David” on these issues in Hume’s *Philosophy of Belief* (London: Routledge and Kegan Paul, and New York: Humanities Press, 1961), chaps. 6-8. But it is only much more recently that I have begun to feel confident that I do at last know my way around. Therefore see, rather: *A Rational Animal*, chap. 3 and passim; “Inconsistency within ‘a reconciling project,’” in Hume Studies 4 (1978); “Of Another Idea of Necessary Connection,” in *Philosophy* (1982); and a Commentary on *Hume and the Problem of Causation*, in *Philosophical Books* (1982).


19. Ibid., II (xxi) 11.

20. Ibid., II (xxi) 9.


22. It has been suggested that the notions of practical necessity and practical impossibility might be derived from those of logical necessity and logical impossibility. This suggestion provides us with one more occasion to remind ourselves how misleading it is to represent logical necessity as just a very much stronger sort of practical necessity. When, for instance, people said that even God cannot do the logically impossible, they made it seem that there would be certain describable tasks which would be beyond the strength even of Omnipotence. But the less-exciting and less-impious truth comes out clearly if we transpose this piece of old-time Material Mode of Speech theology into the Formal Mode. For it would be quite obviously absurd to try to give sense or coherence to an incoherent or nonsensical predicate by replacing its grammatical subject with the three-letter word “God.” There is, therefore, no settable task which even God must find impossible; or, of course, necessary.

23. Why, by the way, are some of our own contemporaries so keen to insist that the most-complicated creatures known are subject to a total necessitation, while equally eager to maintain that the simplest particles discovered by microphysics are exempt from the rule of necessitating causality? Surely, if there is any indeterminism in the Universe, this is more likely to be found among the most complex rather than the least.