An Intellectual Entertainment: Thought and Thinking

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Abstract
This dialogue is on the nature of thought and thinking. The five disputants are Socrates, an imaginary neuroscientist from California (whose opinions reflect those of contemporary cognitive neuroscientists), an Oxford don from the 1950s (who employs the linguistic analytic techniques of his times), a Scottish post-doctoral student, and John Locke (who speaks for himself). The discussion takes place in Elysium in the late afternoon. They examine the idea that thinking is an activity of the mind or the brain, whether the medium of thought consists of words or ideas, whether thoughtful speech is speech accompanied by thought, whether thinking, i.e. reasoning and inferring, is a process, and what is meant by the claim that 'thinking is the last interpretation'. The dialogue ends when the protagonists go to dinner, but will be resumed after the meal.

Protagonists:
Socrates: gravelly voice, slight regional accent. Dressed in ancient Greek manner. (It should be noted that Socrates has spent a great deal of time talking with his friend Wittgenstein.)
Frank: a contemporary American neuroscientist in his forties, casually dressed, Californian accent.
Paul: a middle-aged Oxford don of the 1950s, dressed in well-cut sports jacket, waistcoat and tie. Oxford English accent.
Alan: a bright Scottish post-doc, tweed jacket and woollen tie. Soft Scots accent.
John Locke: in seventeenth century scholar's garb. A pedantic and slightly reedy voice.

The scene is a garden in Elysium. The evening sun is shining. A rich verdant lawn is surrounded by flower beds and rose bushes in bloom, with tall trees behind. Beyond: a beautiful view of lake and mountains. Frank, Paul, Alan and John Locke are seated on comfortable garden chairs, placed in the shade beneath some trees. There is a low table on which there are some scattered books, a couple of bottles of wine and spare glasses. Each person has a glass of wine before him from which he occasionally drinks. Socrates has just joined them, and is about to sit down.

Socrates: Thank you, I should be delighted to join you. And I fancy that I might assist you in consuming one of those excellent

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bottles of Nectarian. Haha! Drinking gets my approval, my friends. Is it not indisputable that wine refreshes the soul, allays our worries, and feeds the flame of good cheer? [*Paul pours him a large glass of wine*] Of course, in moderation. [*He quaffs half his drink and smacks his lips*] Ah, excellent! So, what is it you were talking about?

Paul: We've been talking about thinking, Socrates, and the longer we talk about it, the more mysterious *it* becomes, and the more confused *we* become. So we thought that you might be able to help us.

Socrates: Don't you know what thinking is? After all, you are as familiar with thinking as you are with walking, and you know perfectly well what walking is.

Alan: Ay. I can walk – and think too. I ken wha' walking is and wha' thinking is. But while if you ask me wha' walking is, I can easily tell you, if you ask me wha' thinking is, I find it very difficult to say. I mean, we've been talking about it for the last hour, but we always seem to find ourselves up a dead-end.

Socrates: What sort of dead-end?

Alan: We agree tha' thinking is *an activity* tha' people engage in. And we agree that it's an *inner* – private – activity. For we ken our own thoughts in a way in which others canna ken them. But while it seems to Mr Locke and to me that thinking's an inner activity o' the mind, Frank thinks it is an inner activity o' the brain. And we canna seem to resolve this.

Frank: Yeah, that's right. We *know* that we think with our brains. Actually, we can be more specific, we think with the frontal cortices – that's where thinking takes place. If you put someone under an fMRI scanner – [*he turns to Socrates*] that's a modern machine that enables us to look into the brain and observe regional variations in its activity – then you can *see* thinking occurring.[1] So thinking just is a neural activity of the human brain.

Alan: But that canna be right, Socrates. After all, we ken wha' we think. But if thinking were an activity o' the brain, then we wouldna ken wha' we think, since we dinna have a clue wha's going on in our brains.

[1] Susan Greenfield, in one of her television broadcasts, pointing at a brain image on a fMRI scanner, remarked, 'Here, for the first time, we can actually *see* thinking.'

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Locke: Methinks Master Alan is in the right. Every Man is conscious to himself, That he thinks, and that which his Mind is employ'd about whilst thinking are the Ideas with which his Mind is furnished. For do we not perceive the Operations of our own Minds within us? 'Tis plain we apprehend Thinking by Inner Sense, or by Reflection – by which I understand that notice the Mind takes of its own Operations. 'Tis this that Master Leibniz called Apperception,[2] by which he intended what I denominated the Perception of our Perceptions, and 'tis this that was denominated Introspection by Sir Matthew Hale.[3] But no Man is conscious to himself of the Operations of his own Brain.

Frank: But that's no argument against the identification of thinking with neural activity. Most of the operations of the brain are *unconscious*.[4] But some are *presented* to consciousness, and it is these that we perceive by introspection. When we're conscious of thinking, we see the operation of the brain *from the inside*. When we see the neural activity on a scanner, we see thinking *from the outside*.

Locke: This I cannot acknowledge. 'Tis true that these Subjects have in all Ages exercised the learned part of the World with Questions and Difficulties. But to say thus that we can see Thinking from the Inside and from the Outside is a confused Notion taken up to serve an Hypothesis. For the most that can be said of it is this: That when a Man thinks, one can see, in this ingenious Machine of which you speak, what occurs in the Man's Brain.

Paul: And anyway, it's quite wrong to say that *most* of the activities of the brain are unconscious. They're *all* unconscious. … Or better, the activities of the brain are neither conscious *nor* unconscious – just like the activities of the kidneys or liver. What is unconscious *could be* conscious, but isn't. Neural processes in my brain are

[2] Leibniz, *Principles of Nature and Grace*, §4.

[3] Sir Matthew Hale, *The Primitive Origination of Mankind* (1677).

[4] C. Blakemore, 'Why does the inner eye see so little? It gives us only a tiny glimpse, and distorted at that, of the world within. Much of what our brains do is entirely hidden from consciousness. … Most of the actions of the human mind are beyond the gaze of the inner eye of consciousness.' *The Mind Machine* (BBC books, London, 1988), 14; C. Koch, 'Much of what goes on in the brain bypasses consciousness' *The Quest for Consciousness* (Roberts, Englewood, Colorado, 2004), 3. See also F. Crick, *The Astonishing Hypothesis* (Touchstone, London, 1995), 266 and *passim*.

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not processes that I *could* become and then be conscious of. They are non-conscious.

Frank: No. I don't see that at all. No, no, I think …. [*He is interrupted by Socrates*]

Socrates: You all seem to be trying to weave a tapestry before you have removed the knots from the thread. Small wonder that there are snags everywhere.

Let me see. You all agree that thinking is an activity. You all agree that it is, so to say, 'inner' – something that is private to the thinker. And you all agree that we know what we think by introspection or inner sense. But you quarrel over whether it is the mind or the brain that thinks. Oh, and Master Locke holds that thinking is an operation with ideas. Are you all ready to go along with that?

Paul: Well, no. I'm not. Thinking is not watching a parade of ideas in the mind. Surely, thinking is operating with words.[5] We think in words and sentences. And didn't you yourself, Socrates, say that thinking is a discourse the mind carries on with itself about any subject it's considering?

Socrates: Did I say that? I don't think I did, you know. Who told you?

Paul: Why Plato did. He put those very words into your mouth in his dialogue the *Theaetetus*,[6] and in the *Sophist* he has you say that when the mind is thinking, it's simply talking to itself, asking questions and answering them, and saying yes and no.[7]

Socrates: Did he really! The naughty fellow [*he chuckles*]. No, no, I said no such thing. After all, it should be obvious that we can say things to ourselves in the imagination *without thinking*, as when we recite a poem to ourselves. After all, when I recite Ajax's famous lines to myself, I don't *think* that

'Here I am, the bold, the valiant,
Unflinching in the shock of war,
A terrible threat to unsuspecting beasts.'

[5] A view briefly adopted by Wittgenstein in the early 1930s but later abandoned.
[6] Plato, *Theaetetus* 189e.
[7] Plato, *Sophist* 263e.

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I'm no Ajax, but I know my Sophocles.[8] [He laughs] And when we want to fall asleep, we count goats in our imagination – we say to ourselves: 'One goat, two goats, three goats' and so on, *in order to stop ourselves from thinking*. So we can obviously talk to ourselves without thinking. But equally, we can think without talking to ourselves, as when we speak with thought – as I am now doing [*he laughs again*], and equally, when we engage in practical activities with thought and concentration – as when we carve a beautiful sculpture with the skill of a Praxiteles, or paint a painting with the subtle thoughtfulness of a Zeuxis.

Locke: I would be glad also to learn from these Men, who so confidently pronounce that thinking be inner Discourse, how they would explain that the Words of such inner Discourse have Signification. For Words are themselves signs of internal Conceptions. If they stand not for Ideas, they are Signs of nothing, and are without Signification. It is Ideas that are the materials for Thought.[9]

Frank: Hey, hold it. Did I hear you right? Y'mean to say that we think in ideas and then translate our thoughts into words?

Locke: This I cannot forbear to acknowledge. Did Master Hobbes not write that the most noble and profitable Invention of all other, was that of *Speech*, consisting of *Names* or *Appellations*, and their Connection; whereby Men register their Thoughts and also declare them to one another? The general Use of Speech, he said, is to transfer our mental Discourse into verbal, the Train of our Thoughts into a Train of Words.[10] Besides this, he wrote also that Men, having invented Language to the end of showing others the Knowledge, Opinions, and Conceptions which are within them, have by that means transferred all that Discursion of their Mind by the Motion of their Tongues, into Discourse of Words, and *Ratio* now is but *Oratio*.[11] I would have you know, That the Commonwealth of Learning in my times, was not without other Master Builders. Did not the admirable Arnauld, in his lasting Monument *The Art of Thinking*, write that Words are Sounds distinct and articulate, which Men have taken as signs to express what passes in their Mind?[12]

[8] Sophocles, *Ajax*, ll. 365–8.
[9] Locke, *An Essay Concerning Human Understanding*, III-i-2, III-ii-1.
[10] Hobbes, *Leviathan*, chap. iv.
[11] Hobbes, *Human Nature*, chap. 5, §14.
[12] Arnauld, *The Art of Thinking*, Part II, chap. i.

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Frank: OK. That's what they wrote. But what do *you* think?

Locke: I do hold what I wrote. Man, though he have a great variety of Thoughts, and such, from which others might receive Profit and Delight; yet they are all within his own Breast, invisible, and hidden from others. The Comfort, and Advantage of Society, not being to be had without Communication of Thoughts, it was necessary, that Man should find out some external sensible Signs, whereby those invisible *Ideas*, which his Thoughts are made up of, might be made known to others. Thus we may conceive how *Words* come to be made use of by Men, as *the Signs of* their *Ideas*.[13]

Frank: Well, I don't go along with that. It seems to me that words are, for the most part, names of things, of objects and of properties and relations, and so on.

Socrates: Well, my dear fellow, let's defer that subject for the moment. We surely have enough on our plate already. Let's start with the idea that thinking is an activity.

Alan: But we all agree wi' tha'.

Socrates: Precisely. When men argue for centuries over some great subject in philosophy, like the nature of thinking, we are all tempted to examine the matters they disagree over, and after carefully attending to both sides of the debate, we try to decide between the contestants.

Frank: Yeah, sure we do. How else should we get at the truth?

Socrates: Well, now, if a philosophical debate has been going on for century after century without resolution, like the debate about the nature of thought, then something must be wrong. For it is not as if we are dealing with an unfamiliar phenomenon. And it is not as if our puzzles and muddles about thinking can be resolved by observation or experiment. And it's not as if the question is obviously so much *more* difficult than questions about the nature of the cosmos. But much more progress has been made in the investigations of the cosmos since my days on earth.

Alan: So what are we t' do?

Socrates: We should look closely at what is *agreed upon* by all sides, and challenge precisely those propositions. [*He chuckles*] In

[13] Locke, *Essay*, III-ii-1 (abbreviated).

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philosophy, we go wrong before the first step is taken. We go wrong in something we all take for granted.

Locke: That is most ingenious.

Socrates: So let's proceed to examine the idea that thinking is an activity.

Paul: Or process. Thinking is something we *can* do voluntarily, intentionally and deliberately. And that surely is an activity. But very often we *find* ourselves thinking about this or that, and thoughts cross our mind whether we like it or not. That sort of thinking is not voluntary, and I suppose that we should conceive of it as a mental process rather than activity.

Socrates: All right, Paul. But I don't think that matters for present purposes. Now what, in your view, speaks for the idea that thinking is an activity?

Locke: Do we not busy ourselves with thinking? Does Thought not take time, no less than Motion? And can we not often remove our Contemplation from one Idea to another at pleasure? Such phaenomena speak for the Supposition that Thinking be an Activity of the Mind.

Alan: Tha's right. And we can think quickly, or take our time and think slowly. Thinking may be easy or difficult, just like climbing – which is an activity. It can be interrupted, as when the telephone rings while one is thinking one's way through a problem. And thinking, once broken off, can be resumed, as when the telephone conversation stops and one can turn back to the problem.

Paul: Indeed. And one may be wholly absorbed in thinking. The utterance 'I was thinking' answers the question 'What were you doing all that time?' We say 'Don't disturb him, he is thinking his way through a difficult problem' – and that surely shows that thinking is an activity.[14]

Frank: Yeah. And whether your pupil Plato was right or wrong about thinking being a silent conversation with oneself, it's undeniable that we often-times talk to ourselves in the imagination. And talking to oneself in the imagination, just like talking to someone else out loud, is an activity. I don't see how anyone can deny this, and I don't see why we should challenge it.

[14] P. T. Geach, 'What do we think with?' in *God and the Soul* (Routledge and Kegan Paul, London, 1969), 31.

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Socrates: Good! And now let's look more closely. Remember that we are speaking, at any rate for the moment, of only one aspect of thought. We are not concerned with thinking *qua* opining, as when we say that someone thinks that this statue is more beautiful than that one. Nor are we discussing thinking *qua* qualified judgment, as when someone says that he thinks, but is not sure, that Speusippus will attend Plato's lecture tomorrow evening. Our interest is in reasoning, reflecting, deliberating, ruminating and musing, in thinking before we speak, in speaking with thought, in doing something with thought and attention. Here it does indeed look as if thinking is an activity.

Paul: There is a further point, Socrates. One can strengthen our case that thinking is an activity – if indeed it needs strengthening at all – by an appeal to grammar. The verb 'to think', like the activity-verbs 'to speak', 'to work', and 'to talk', has a continuous tense – we say such things as 'Don't interrupt me, I'm thinking'. It has an imperative mood, for we can say to another 'Think it over!'. Like all activities, it can be qualified by manner adverbs, such as 'quickly', 'laboriously', 'reluctantly'. And similarly it can take 'for … sake' constructions, as in 'I thought quickly for Jill's sake', which is like 'I worked quickly for Jack's sake'. These features, according to the grammarians, are marks of activity-verbs. So how can there be any objection to something as evident as the claim that thinking is an activity – in my view, an activity of the mind.

Socrates: Very good. So we can say that *thus far*, and *in these respects*, thinking is an activity.[15]

Frank: OK. So where's the snag?

Socrates: Look at the kinds of things we *call* 'activities', Frank. Do they not consist of a sequence of acts unified by some end? They may be a repetition of acts, like digging; or an ordered sequence of acts, like cooking according to a recipe; or they may be an unordered but non-repetitive sequence of acts determined by circumstances, as when we engage in conversation with our neighbours. Such sequences of acts take time, can be interrupted and later resumed, and at any given time in the course of the activity, one is doing something that is a phase or stage of the activity. So far, so good?

Locke: 'Tis undeniable. Pray proceed.

[15] Severin Schroeder, 'Is Thinking a Kind of Speaking?', *Philosophical Investigations* **18** (1995), 146.

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Frank: Sure.

[*the others nod*]

Socrates: Now look at thinking, musing and ruminating. One may be thinking how to solve a geometrical problem or an empirical problem in which we reason from evidence to conclusion. Or one may be doing something with thought. One may be speaking thoughtfully. One may be concentrating as hard as one can on the task at hand. But at any given moment, *there may be nothing at all going through one's mind* – no mental images, and no internal dialogue with oneself. There may be no mental events or acts occurring that are phases or stages in a process or activity. But that does not mean that one has stopped thinking or is not thinking. And even if something is crossing one's mind, what is going through one's mind may be no more than saying to oneself 'Hm!', 'No', or 'Aha!' – and that is surely not *what* one is thinking.

Frank: But Socrates, that's just because it's your brain that is thinking, and a large part of what it thinks, when it's solving the problem you face, is unconscious. Thinking is going on alright, but it's not conscious thinking.

Paul: And I fancy that cognitive scientists would claim that most of the activities of the *mind* are unconscious.[16] Even if nothing is going on in the conscious mind at any given moment, a whole host of procedures of protocol analysis, information processing, computation and parallel distributed processing, and so forth, are going on in the unconscious mind.

Alan: No, no! Tha's just a fiction. It's …

Socrates: [*interrupting*] We'll come to these points later, my friends. We can't tackle all the problems at the same time. Every worthwhile philosophical confusion is held in place by many different struts. Each such strut has to be examined separately as one walks around the problem. And each one has to be condemned for good reasons. Only then can we bring down the artifice of confusion. But we can't examine all the supporting struts simultaneously.

Let me move on to a second objection to the idea that thinking is an activity – just like physical activities, only an 'inner', mental,

[16] E.g. P. N. Johnson-Laird, *Mental Models* (Harvard University Press, Cambridge, Mass., 1983); R. Jackendorff, *Consciousness and the Computational Mind* (MIT Press, Cambridge, Mass., 1987).

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one. We *can say* what we're thinking or have thought. But we can't say what we're thinking *on the basis* of what passes in our mind *when* we are thinking. We cannot read off what we're thinking from any inner goings-on in the mind. But if thinking were an inner activity, we ought to be able to do so.

Locke: I should be in your Debt, Socrates, were you to explain this a little more particularly, for I see it not.

Socrates: Of course. Let's suppose that while you're thinking, you say to yourself 'I'm sure he'll be there on time'. Now, you can't read off from this fragment of inner speech the fact that what you have concluded is that Crito will join our symposium at Agathon's mansion at sunset tomorrow. By contrast, if you see me digging in the field, planting seeds and covering them with soil, watering the soil, and so on, you *can* read off in words a description of what I am doing.

Paul: But if you say out loud 'I'm sure he'll be there on time', we can't read the thought expressed off the overt utterance alone either.

Socrates: No, of course not. But there are public reference rules for the use of personal pronouns in discourse, to which speakers must conform on the pain of unintelligibility. If someone says 'I'm sure he'll be there', then he is referring to a man, and there are anaphoric and cataphoric conventions that partly determine, in the given context, to whom he is referring. But there are no conventions or rules of reference that determine of whom you were thinking when you said to yourself, 'I'm sure he'll be there'.

Paul: Yes, but we *can* say what we think.

Socrates: Of course. You can say that you think that Crito will be at Agathon's mansion tomorrow at sunset for our symposium, but not by reading this off the words you said to yourself. Moreover, if thinking were talking to yourself in the imagination, then if what you said to yourself was 'I hope he'll be there', then in reporting what you think, you would *not* be able to say whom you meant, or when and where you meant.

Alan: Why not?

Socrates: Because, my dear boy, if your thinking *is* your saying whatever you say to yourself, and all you said to yourself is that you hope that he will be there, then that is all you thought. In overt speech, you *can* elaborate whom and what you meant if it

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isn't clear – given that you were thinking of Crito, of Agathon's mansion, and of tomorrow evening. But *if* thinking is no more than discourse with oneself, then it *makes no sense* to ask whom, what, and when you meant. *What you thought* is precisely what you said to yourself – no more and no less. As my friend Wittgenstein puts it, thought is the last interpretation.

Locke: I grant you that. But if we think in Ideas and not in Words, as I am inclined to suppose Man to do, then you would perceive what you are thinking, and you could read it off from what you perceive in your Mind.

Socrates: How so?

Locke: You would perceive there the Idea of Crito, conjoined with the complex Idea of walking to Plato's Mansion. The first Idea indicates of what you are thinking, the second what you are thinking of it.

Socrates: But, Master Locke, such a parade of ideas or mental images in my mind could not show me that I expect Crito to walk to Agathon's mansion and not right past it. Might not my mental image of Crito be no different from my mental image of his identical twin? What in this train of ideas would indicate the time at which I expect him? And what shows that we are meeting for a symposium? No, no. Ideas – mental images – can *illustrate* a thought, just as a picture can illustrate a story. But a picture cannot, without a great deal of assistance, *tell* a story – and neither can an idea in the mind. Bethink you: a picture of a hoplite might be a portrait of Aeschylus at Marathon, or it might be just a picture of a hoplite, or it might be a picture of how a hoplite should stand in line, or [*he laughs*] it might be a picture of how a hoplite should *not* stand in line. Moreover, the very same ideas might be present when you *wonder* whether Crito will arrive on time, or when, knowing Crito, you *doubt* whether he will be on time. And these are not *thinking* that he will be on time.

Locke: Ah, … Ah, yes. 'Tis plain 'tis so. I must needs somewhat to alter the Thoughts I formerly had.

Socrates: Good! Excellent! [*He pours himself another glass of wine and quaffs it*] Very good! But we should press on. [*The others pass the bottle of wine around*] Thinking is evidently not a train of ideas passing through the mind. But it is not an inner monologue either.

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Paul: Yes. I see. So neither words spoken in the imagination, nor ideas that occur *while* thinking are either necessary or sufficient for thinking.

Socrates: That should be evident, Paul. Look, say something with thought, after reflection, with considered judgment.

Paul: For example?

Socrates: As you please.

Paul: Oh, … All right: What about : 'Alcibiades should not have left Antiochus in charge of the fleet at Notium'.

Socrates: Alas, yes. [*His face clouds over*] Indeed … Still …No matter. Now, do what you did when you said it with thought, only without saying anything!

Paul: Ah, yes. I see. … So what *is* saying something with thought, if it isn't accompanying one's speech with anything?

Socrates: Is it not, at least in many cases, simply speech that *takes the relevant factors of the subject into account*. *Then* it is thoughtful speech.

Paul: Yes… But we often think before we speak, and what is that?

Socrates: It may be no more than pausing to take in what was said by another, and then giving a pertinent response.

Paul: But, Socrates, what makes it *pertinent* is that you have thought up the response – and what is this *thinking-it-up*?

Socrates: Well, suppose Frank says something. You pause for thought, and then respond with a counter assertion that is pertinent. Frank asks you why you think thus, and now you respond by giving reasons for your assertion. Does it matter what happened in your mind? For all Frank cares, Apollo and his chariot may have driven through it. What he wants is for you to *explain* your thought. So what matters is not whether your mind boiled or froze, but what reasons you have for saying what you thoughtfully said. For it is your reasons that make your response to Frank thoughtful.

Locke: Methinks I apprehend the Argument. To give reasons for your Assertion is not to describe a precedent Process *in foro interno*, but to cite a Justification. 'Tis this that is the Cogitation. Or rather, such Cogitation is the *active Power* to do so, whether or not it be exercised.

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Paul: I'm starting to feel as if thinking is disappearing into thin air! What about the kind of thinking that consists of reasoning one's way through an argument? And let's suppose that this inner reasoning takes place when you are alone – so nothing at all is said.

Socrates: Need it be more than apprehending – being able and willing to affirm – that such-and-such a conclusion follows from such-and-such premises.

Paul: But surely inferring, reasoning, is a mental process of some kind – a *movement of thought*.

Socrates: Surely! [*Chuckles*] Surely not! A transition in thought is not a movement – how would thoughts move, haha! Where would they move to? Apprehension of a *warrant* is not a kind of movement.

Alan: Socrates, you're losing me. What d'you mean by 'apprehension of a warrant'?

Socrates: To draw an inference in rational *discourse* is to transform a set of enunciated propositions – the premises – into an enunciated conclusion, *in accordance with rules*. To reason one's way to a conclusion *in foro interno* as Master Locke puts it, is to *apprehend such transformability*.

Alan: But what is this 'apprehending'?

Socrates: Well, my dear boy, it is certainly not an activity of any kind, is it?

Frank: But we know for sure that thinking cannot take place without neural activity in the brain. And *that's* what thinking really is.

Alan: But that's wrong.

Frank: What's wrong about it?

Alan: Well, for one thing, the fact tha' we wouldna be able to think without the right brain activity doesn't show tha' the brain activity is the thinking, any more than the fact tha' we wouldna be able to walk without activity in the motor-cortex shows tha' the brain activity is the walking.

Paul: Good. I agree with that.

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Alan: And for another, if thinking – that is: reasoning – is apprehending the transformability of premises into a conclusion, tha's no *activity*. So whatever *brain activity* may be going on while one is thinking, it can't *be* the thinking since the thinking isna an activity at all.

Paul: But Socrates, that still leaves 'apprehending' in the air. What does this apprehending consist in?

Socrates: Why should it consist in anything? But it is clear enough what the criteria are for someone's having apprehended that a conclusion follows from a set of premises. After all, if he asserts the conclusion, and you ask him why – he'll give you the *because*s! Haha!

Paul: You mean that he will justify his conclusion by reference to the premises and the appropriate rules of inference.

Socrates: Exactly. Good… [*He takes another drink from his glass and replenishes it. The bottle passes around to the others*]… Now, let's turn to some other interesting contrasts between activities and thinking. We can measure the time of speaking: when the speaker began to talk, how long he continued to talk, and when he stopped talking. But now reflect upon the relation of thinking to time.

Frank: Well, both talking and thinking go on in time.

Socrates: Of course. We've already granted you that, Frank. But now reflect. When you speak with thought, when do you finish thinking the thought you express by your utterance?

Frank: Well, I guess you finish thinking when you finish expressing the thought you think.

Socrates: [*incredulously*] Really? Come now!

[*A brief silence*]

Paul: Oh, I see what you mean. If you hadn't finished thinking before you finished speaking, you would not know what you're going to say until you'd said it! But that is obviously wrong, since if I didn't say what I was thinking, or if I was interrupted while I was speaking, I *do* usually know, and can tell someone, what I was thinking and what I was going to say.

Locke: The want of these sundry Distinctions is the cause of no small Obscurity and Confusion in Men's Thoughts and

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Discourses. 'Tis plain that things are not as I believed them to be. But it seems very strange in this Doctrine that we cannot say when a Man hath finished his Thought, or even when he has begun it. Pray explain this a little more.

Socrates: Let me put it this way: You can have half a loaf in the pantry, but you can't have half a thought in your mind. [*He chuckles*] We can utter half a sentence, but we cannot think half a thought.

Paul: Of course: 'At sunrise the cat was' is half of the sentence 'At sunrise the cat was hunting mice in the garden', but it is not the expression of half of the thought I express when I utter the whole sentence.

Socrates: Of course not. There is no such thing as half a thought.

Frank: OK. But we can measure how long it took you to think your way to the conclusion of a piece of reasoning. Thinking the thought that is the conclusion of a piece of reasoning may take no time, but the reasoning takes time, and we can often measure how long it took you to come up with the conclusion you reached.

Socrates: In so far as you can *sometimes* specify when I began thinking about a problem, and when I reached a conclusion, then I agree. And in so far as I can be interrupted in the middle of thinking my way through the problem, I also agree. But only thus far.

[*A brief silence*]

Paul: Ah, I see what you are driving at. We can ask someone to solve a complex empirical or practical problem for us, and they may take a few minutes or half an hour to reach their conclusion, on the basis of the available evidence. But a description of what went through their minds while they were thinking their way through the problem is not akin to a description of an ordered sequential activity. And at any given moment, there may be nothing going through their mind – but that does not mean that they have stopped thinking for a moment.

Socrates: Just so.

Paul: Still, the cognitive scientists will say that the information-processing activity and the computational activity occurs in, and is the activity of, the *unconscious* mind. And when it comes to speech and comprehension, that is the doctrine advanced by the

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most famous linguistic theorist of the twentieth century, Noam Chomsky.

Socrates: It was advanced long before then by my friend Wittgenstein, when he was writing his first masterpiece, the *Tractatus*. And long before Chomsky advanced this misbegotten idea, Wittgenstein realized that it was completely mistaken. [*He laughs*]

Paul: Why did he reject it?

Socrates: For many different reasons. It is a long a complicated story, and we shouldn't get waylaid by what is no more than a digression into mythologies of the mind and of the mental. But to put matters in a nutshell, it is no more the mind that thinks than it is the brain. It is not my mind that reasons, or that changes its mind – it hasn't got a mind [*he laughs*]. It is not my mind that sees and hears, and it is obviously not my mind that decides that I shall go to the Ambrosian for dinner, any more than it is my mind that has intentions and purposes, that wants and wishes – it is I, Socrates.

Alan: So Thomas Reid was wrong to say that the mind is that in man which thinks, imagines, reasons, wills.[17]

Socrates: Quite so. The mind is not an active agent, even though we often speak of it as a patient.

Paul: What do you mean, Socrates?

Socrates: Well, do we not say: My mind is in a whirl, or in a turmoil, or is wandering, or has gone blank? But we don't say: my mind thinks, or my mind reasons, or my mind has decided.

Alan: So if it makes no sense to ascribe such agential attributes to the conscious mind, it certainly makes no sense to ascribe them to something called 'the unconscious mind'.

Socrates: Whatever that may be! Haha. I may think and reason, reflect and come to conclusions, but these are not things we can ascribe to the mind or to the agency of the mind, since the mind is no agent. In so far as the mind is *an anything*, it is an array of powers of the intellect and will, and powers are not actors.

Alan: Ay. And these are powers of human beings, not o' their brains or o' their minds.

[17] Thomas Reid, *Essays on the Intellectual Powers* [1785] (Edinburgh University Press, Edinburgh, 2002), 20.

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Paul: But, Socrates, these cognitive scientists have very elaborate theories about the unconscious processes of the mind, about information processing, mental lexicons, meaning analysis units, concept stores, buffers, conversion units, and so forth.

Alan: But these are just fictions. There can be no such thing as a lexicon in the mind – it's just a fancy way of saying tha' you can remember what words mean. And you canna store concepts any more than you can store abilities.

Socrates: Paul, don't let the jargon deceive you. It's just a mind-model that's part of a psychological theory.

Frank: Y' mean just like the hydro-dynamical model of electricity is a model in terms of which to describe electrical phenomena.

Socrates: My understanding of electrical theory is not what it should be, even though Michael Faraday tried to explain it to me. What I was trying to get you to see is that the mind-model of your cognitive scientists is part of the *symbolism* of the theory. It is not what the theory describes, but the means whereby the model represents what is described.

Paul: I'm not sure I follow you, Socrates. Can you elaborate?

Socrates: No, I don't think we should go down that road, Paul. It is a problem for psychology, not for philosophy. The conceptual errors committed when the model is taken to be what it is a model of, and when features of the model are projected onto reality, are not our current concern. Let us pick up the threads where we broke off. We noted that the relation of activities to time is interestingly different from the relation of thinking to time. So although thinking, in some of its forms, is akin to an activity in some respects, in other respects it is not at all like an activity.

Alan: But if thinking is like an activity in some respects, and unlike an activity in other respects, what on earth is it. Thinking's becoming mickle more mysterious, no' less mysterious.

Socrates: No, my dear boy, not at all. It is only as long as you look at it with the prototype of an inner activity in mind that it *looks* as if it is becoming more mysterious. Then, as we point out more and more features which make it *unlike* an inner activity, the more mysterious an activity it appears to be. So stop conceiving of it on the model of an inner activity! The relation of thought to time only looks peculiar if we expect it to be like the relation of activities to

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time, only hidden from view. But that expectation is unwarranted: [*he chuckles*] Who was it who said that everything is what it is and not another thing?

Alan: D'you mean that there are no inner activities at all?

Socrates: No, no, my dear fellow. You might describe counting goats in order to go to sleep or reciting a poem in your imagination an 'inner activity'.

Paul: Yes… I see… So we can conclude that the temporal microstructure of thinking, so to speak, is altogether different from the temporal microstructure of activities.[18] But that is no mystery, since all it amounts to is that the grammar of thinking is unlike the grammar of activity-verbs in many crucial respects. The distinctions we draw with respect to thinking are very unlike the distinctions we draw with respect to talking, no matter whether aloud or in the imagination.

Socrates: Yes, and that is hardly surprising, since the point and purpose of the concept of thinking in all its multiplicity is completely different from the point and purpose of standard activity concepts. It is bound up with judgment and the reasons for a judgment, with warranted transformations of judgments in reasoning, with qualifications on judgments, and with the evaluation of judgments.

Alan: Ay, and with problem-solving and deriving conclusions.

Paul: And doing things with thought is not doing two things at the same time: thinking and acting, but doing one thing thoughtfully, like singing with expression, and not like singing to accompaniment.

Alan: But for all tha', doing something thoughtfully is not a manner of doing it, is it?

Paul: Hmm… I think one must say: yes, and no! In so far as it is engaging in an activity with intense concentration, then one might say that it is. But in so far as it is engaging in an activity with an awareness of what may go wrong and a readiness to respond to what may go wrong, then doing something thoughtfully moves away from the adverbial prototype.

[18] Schroeder, 'Is Thinking a Kind of Speaking', 148.

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Alan: It occurs to me tha' these considerations concerning the relation of thought to time surely show tha' thinking isna identical with *any* neural state or process. For neural states and processes are continuous, but thinking is not.

Frank: Well, William James certainly held thinking to be continuous. That's why he coined the term 'the stream of consciousness'. He claimed that consciousness is not, as he put it, 'jointed'. Rather, it *flows*.[19] And that was what the stream of consciousness writers, like Joyce or Virginia Woolf, held too.

Paul: But they conflated what passes through one's mind *while one is thinking* with *what it is that one is thinking*. That's why they wrote ungrammatical, truncated sentences without punctuation to represent their character's thinking, as in Molly Bloom's stream of thought at the end of *Ulysses*. But that, attractive conceit as it may be, *is* confused. For it is, at best, an imagined account of what was passing through Molly Bloom's mind while she was lying in bed thinking. But it is not a super-accurate record of her thinking or of what she thought. Look, if you want to know what Kant thought, you don't want to know what, if anything, was passing through his mind while he wrote *The Critique of Pure Reason*. You want to read *the book*. *That* tells you what Kant thought.

Locke: I would that you explain this a little more particularly.

Paul: Well, we have seen that when one speaks with thought, as we are all doing in this discussion, or when we write with thought and intense concentration, then no mental events need accompany our cogent speech. After all, Mr Locke, if I sincerely tell you that when I am speaking with thought, as I am now, *no* mental images are crossing my mind at all, you will surely not say that I am speaking without thought.

Locke: Why should I not?

[19] W. James, *The Principles of Psychology* (Holt, New York, 1890), vol. I, 239: 'Consciousness, then, does not appear to itself chopped up in bits. Words such as 'train' or 'chain' do not describe it fitly as it presents itself in the first instance. It is nothing jointed; it flows. A 'river' or a 'stream' are the metaphors by which it is most naturally described. *In talking of it hereafter, let us call it the stream of thought, of consciousness, or of subjective life*.' Thomas Reid anticipated James. He wrote: 'the stream of thought flows like a river, without stopping a moment' *Essays on the Intellectual Powers of Man* [1775] (Edinburgh University Press, Edinburgh, 2002), 420.

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Paul: Precisely because, as Socrates just made clear, to speak with thought is, among other things, to speak having taken all the relevant factors into account.

Locke: Ah, yes. I had forgot.

Paul: Now, perhaps an idea or mental image sometimes crosses our mind while we are speaking, but it adds nothing to what we thoughtfully say. What we are thinking is what we say when we sincerely say what we are thinking. And when we think without saying anything, what we think is fully expressed by what we *would* say were we to answer the question 'What were you thinking?' truthfully.

Locke: But this is unintelligible. For to speak Words without ideas is to speak no otherwise than Parrots do. For a Parrot may speak Words only because it has learn'd them, and has been accustom'd to those sounds. But so far as Words are of Use and Signification, so far is there a constant connexion between Sound and the *Idea*; and a Designation, that the one stand for the other: without which Application of them, they are nothing but so much insignificant Noise.[20]

Socrates: You mean, Master Locke, that it is the ideas that accompany speech that make the difference between the meaningless squawks of a parrot and the speech of a human being.

Locke: Of that I am fully persuaded. For Words are the Instruments whereby Men communicate their Conceptions, and express to one another those Thoughts and Imaginations, they have within their own Breasts.

Frank: Yeah, I guess that's right. The jargon's a bit dated, but that's what we scientists think too. I mean it's a well-established fact that words are names of concepts. People suffering from dementia or Alzheimer's are unable to recollect words. But at least in the early stages, it's clear that they possess the relevant concept. What's going wrong is failure to access the word-store in the brain that would deliver the name of the concept that is selected from the concept-store.

Paul: What on earth do you mean?

Frank: Look, psycholinguists and cognitive neuroscientists have shown that language processing by involves a conceptual

[20] Locke, *Essay*, III-ii -7.

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preparation module that feeds into the lexical selection module, which is responsible for selecting the appropriate words from the mental lexicon. Hell, all this is old hat – it was shown by Levelt in the 1990s and further developed by Coltheart.[21] And it's obvious that these functions are distributed in the brain, and that was well-established by positron emission tomography and fMRI.

Paul: Oh, come now, Frank. We've already rejected that piece of mythology. If we are right – and I am convinced that we are – then talk of dictionaries in the brain is no more than a metaphor for our ability to remember words. There is obviously no such thing as storing an ability in the brain. Our ability to remember words is not *in* the brain, but due *to* the brain. And talk of concept-stores is no more intelligible than talk of storing abilities. Concepts are not storables. Rather, to possess a concept is to be able to use a word or phrase that expresses a concept. And the ability to use a word is not to be found in the brain any more than the horse power of a car is to be found under the bonnet.

Frank: Sure. I never said that the ability is *in* the brain. But it's an ability *of* the brain, just as the horsepower isn't in the engine of an automobile, but it is a power *of the engine* of the automobile.

Paul: I agree with you that the horsepower is the power of the engine, and hence of the car. But the ability to learn and remember what words mean is an ability *of the human being*, not of his brain. Of course, I grant you that it is an ability possessed by the human being *because of* the normal functioning of his brain. On the other hand, it has nothing to do with 'concept-stores' and 'mental lexicons' – they're just fictions, as Alan said.

Frank: So how do *you* explain anomia and lethologica, Paul? Hell, these old folk know the concept alright, but they can't specify its name. That's because the concept is stored in the concept module, and the name of the concept is in the mental lexicon, but the connection between them has been broken as a result of neural degeneration or lesion.

Paul: Frank, you chaps really are barking up the wrong tree. Your so called explanation is merely a re-description of the phenomena

[21] W. J. M. Levelt, 'Accessing words in speech production: stages, processes and representations', *Cognition* **42** (1992), 1–22. See also M. Coltheart, K. Rastle, C. Perry, R. Langdon, and J. Ziegler, 'A dual route cascaded model of visual word recognition and reading aloud', *Psychological Review* **108** (2001), 204–56.

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in picturesque but misleading form. Look, suppose an elderly person, in mid-speech, can't produce the word 'horse'. So he says, 'She was riding a … a … Oh damn! what's the name of the animal jockeys ride at races?' That shows that he can't bring to mind the word he wants, but he remembers its explanation. The idea that there is a lexicon and a concept store, and that they have become disconnected is just an alternative way of describing the phenomenon of failing memory. It is, as Socrates explained, a part of a mental model that belongs to the symbolism. It's a means of representation, not a truth about memory. The phenomenon of mnemonic failure is that the speaker can remember the meaning of the word he wants to use, but can't come up with the word. That does not show that there actually is a meaning store and a word store! Meanings are no more storables than concepts, but we can and do remember *what words mean*. To remember what a word means is not to remember an object called a 'meaning', let alone a concept, but rather to be able to answer a question, namely: 'What does such-and-such a word mean?'

[*A few moments silence. Paul pours himself another glass of wine and takes a sip*]

Socrates: Well, that was a most interesting exchange. Very good indeed! Er, Paul, could you pour me another glass of wine too?

[*Paul does so, and hands the glass to Socrates, who quaffs half of it. Paul then fills up the glasses of the others, while Socrates continues talking*]

Now let's get back to Master Locke's worries. Words are not the names of ideas, and they are not the names of concepts either. It is neither ideas nor concepts that animate words, that give them a meaning – that infuse them with life, as my friend Wittgenstein says. What animates words is their use – not what they stand for. What the squawking parrot lacks is not ideas, but mastery of the language. It can't perform any act of speech with the word it squawks, although it may have learnt that a certain squawk in the presence of its owner has a certain effect. But the noises it emits are not symbols, and they mean nothing to the bird. Imagine that a parrot has been taught that when it gives its master a drachma from a pile of coins, it gets a nut to eat. Has it bought a nut? Does it know what a drachma is? Does it know its value? Does it know that it is equivalent to four obols? Haha!

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Alan: I see. What lies behind a word, and animates it, is not anything in the mind, but its use in the practice of human discourse. And we don't explain what a word means by referring you to an idea in the mind, but by explaining what it means – in other words.

Paul: That's very good.

Locke: 'Tis clear that we had puzzled ourselves, without coming any nearer a Resolution of our Perplexities, because we took the wrong course from the beginning.

Socrates: [*raising his finger in the air*] Precisely. [*He chortles*] Was that not what I told you when we began our discussion? [*He laughs*] Now, let's see where we are. We have established, have we not, that thinking is not strictly speaking an *activity* of the mind, nor is it a *process* going on in one's mind while one thinks. Furthermore, we have distinguished between different forms of thinking, the thinking that *informs* physical activities, the thinking that informs thoughtful speech, the thinking that may precede thoughtful speech, the thinking that consists in reasoning and inferring. There are, of course, other forms that thinking may take, but we need not concern ourselves with them now. [*He pauses to drink his wine*]

Now, the other thing you all seemed to agree on was that thinking is something 'inner'? Why is this such an appealing idea?

Alan: Surely that's obvious, Socrates. We can think something and not say what we think. So my thinking, as well as what I think, is concealed from others. Thoughts are in our mind, and no one else can see into our minds.

Frank: Well, like I said before, I think that thoughts are in the brain, and that's why they're hidden from view. It's the brain that thinks, and if you don't tell others what you think, they can't know what you think, because they can't see into your brain. Or at any rate, they can't see into another's brain without a fMRI scanner. When we've developed these scanners further, and have a good cognitive theory in place, then we'll be able to read off what someone is thinking from the neural activity of their brain.

Locke: I know not how to reconcile these different Opinions. But 'tis clear that we perceive our own Thoughts by Inner Sense or Introspection. Each Man is privileged in having Access to his own Thoughts. For no one can enter the Mind of another to perceive there what he thinks. And is that not why we speak of

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Thoughts as Inner? If I tell not what I think, no Man can know it. And if I honestly and sincerely say what I think, no Man can gainsay it. I know what I think, and if I tell them not, others must perforce guess it.

Socrates: But Master Locke, you have conceded that if a man were, so to speak, to enter the mind of another who is thinking, he would *not* be able to perceive there what he is thinking. He might, so to say, see a jumble of fleeting images; he might, in a manner of speaking, hear a few exclamations such as 'No, never!' or 'It's her' or 'Yes, I must go there'. But even if he, as it were, heard what he was saying to himself, he would not know whether it was meant or what was meant by it.

Alan: Tha's very good, Socrates. But y' haven't explain'd to us how it is tha' we do actually ken what we're thinking. I mean, we all agreed tha' we know what we think by introspection! Mr Locke called it 'perceiving our perceptions' or 'inner sense'; Leibniz called it 'apperception'; and William James called it 'introspection'. But you've argued, and almost persuaded us tha' no matter what we introspect, it isn't the real thinking.

Paul: Yes, I agree with Alan, Socrates. Inner sense or introspection was supposed to explain just that. You've taken us out of the frying pan, only to drop us into the fire. How, on your account, do we know that we're thinking or what it is that we're thinking?

Socrates: [*laughs*] Yes, I know that's what it looks like. We have two problems on the table now. First, is it correct to say that thinking is, in some sense, 'inner'. And secondly, how do we know that we are thinking and what it is that we think. Hmm. [*He pauses for thought*] Perhaps we should handle the second question first.

Locke: Surely, common Experience makes it Impudence to deny that it is by inner Sense that we know what we think.

Socrates: Tell me, Alan, how did Professor James define 'introspection'?

Alan: Ay, I remember tha' clearly. I heard him give tha' lecture at the Athenaeum Lecture Theatre here last year. He said that introspection means 'the looking into our own minds and reporting wha' we there discover'. And he remark'd that wha' we discover, when we introspect, are states of consciousness. I remember he added a purple passage. Tha' we have *cogitations* o' some sort, he said, is the ultimate unshakable certainty in a world whose other

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facts have tottered in the face o' philosophical doubt. *All* people, he said, unhesitatingly believe tha' they *feel* themselves thinking, and tha' they distinguish the mental state as an inward activity or passion. He added tha' he considered this belief as the most fundamental of all the postulates o' Psychology.[22]

Locke: Most curious. Master James must have learnt much from Monsieur Des Cartes.

Socrates: Excellent. Now we have something into which we can sink our teeth [*he chuckles with glee*]. Now do you really *feel* yourself thinking? What with? With your finger tips? Hmm! And where do you feel the thinking? In your head? Is this feeling like a headache? Or is it like an itch? Can you scratch it?

Locke: No, no. We perceive the Operation of the Mind that we denominate Thinking, and so too, we perceive, at the same time, the Object of Thinking.

Socrates: And pray what do you perceive it with? With the eyes of the mind? So you *see* your thoughts – and don't feel them? And if it is with the eyes of the mind, is the light in there always brilliant sunshine, eh? And how could you *see* a thought? Can you also *see thinking*? I know what it is to see *someone* thinking. He may perhaps frown, and put his chin on his fist and concentrate. But how, Master Locke, would you see thinking in the mind, eh?

Locke: No, no. If it shall be demanded with what Sense Organ I apprehend the Operations of my Mind, then I think the true Answer is that 'tis not with a Sense *Organ* that I apprehend my own Thoughts.

Socrates: But you do 'apprehend' them?

Locke: 'Tis plain 'tis so – otherwise how could I say what I think?

Socrates: Ah, now we reach the nub of the matter. Is it not enough that you think things to be so, and then you say what you think?

Locke: But I must certainly know what I think before I say what I think? I would be glad to learn from you how I could say what I think if I did not know it.

Socrates: Take it slowly, Master Locke. You are now in very treacherous seas, and if you don't steer your galley carefully,

[22] James, *Principles of Psychology*, I, 185.

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you'll end up on the rocks. Reflect a moment. When *do* you say that you *don't* know what you think?

Locke: [*pauses*]… I think the Answer must be: when I am undecided what to think.

Socrates: Precisely. So it is not like not knowing what another thinks. I mean, if you see our friend Plato sitting at a table with his quill paused, with a far away look on his face, and his brow furrowed, then you may know *that* he is thinking something over. But you don't know *what* he thinks. But when you tell me that you don't know what *you* think on some topic, it is *not* a matter of your definitely thinking something, but not knowing what it is that you think.

Locke: No. … 'tis strange. For no one would pronounce that he doth not know *that* he thinks things to be so. He would rather say that he knows not *what* he thinks.

Socrates: So if someone, confronting a problem, does not know what he thinks, that does not mean that he thinks something but knows not what?

Locke: No, no. That would be mere Confusion. If a Man knows not what he thinks, that signifies that he knows not WHAT TO think.

Socrates: Quite so. And if he knows not what to think, does he then *introspect*, or *perceive his perceptions* in order to discover what he thinks?

Locke: Ah, I see where you are leading me. No, when a Man knows not what he thinks concerning a disputed Question, he must turn to the Evidence that speaks in favor of one Opinion and compare it to the Evidence that supports the other. Then he must decide.

Socrates: Exactly. And when he decides, does he not say 'Now I know what I think'?

Locke: Ah, yes. So 'I know what I think' signifies that I have come to a conclusion, have decided what TO think. It does not signify that I have perceived my Thoughts and can say what they are. It signifies that I have deliberated and come to a Conclusion, and THAT is why I can say what I think.

Paul: Socrates, do you then mean that we *don't know* what we think when we think something to be so?

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Socrates: No, my dear fellow. You don't know what you think when you are undecided – when you don't know what to think. When you say 'Now I know what I think', that is an exclamation that you have decided what to think. If you say to someone that you know what you think but you are not going to tell him what you think, what that means is that you can say what you think but you are not going to.

Alan: So you jus' have to think thro' whatever problem concerns you, and then say wha' you've concluded. So perceiving your own thoughts does na come into it.

Frank: I still have to wrap my mind around this. Do you mean that there's no such thing as introspection?

Socrates: No, of course I don't. But what I suggest is that the way you represent introspection is mistaken. Reflect that when a potter *throws a pot* he does not throw anything at anyone [*he laughs gleefully*], and introspection, despite Professor James, is not a matter of looking into one's mind. [*He chuckles*] It is a matter of reflection on one's character and behaviour, and on the reasons for one's passions and attitudes.

Paul: Yes, *of course*. It is the Marcel Prousts of the world who are introspective [*he laughs*] – and their introspective endeavours are none too reliable either! Being able to say that one thinks this or that involves no introspection. It involves only having come to a conclusion, that is: thinking, making a judgment, and saying what one has concluded.

Locke: I am persuaded. I confess that I confus'd the ability *to say* for the ability *to see*. To say what one thinks, one need not perceive one's thinking. One need but think and say what one thinks.

Paul: No, Mr Locke. It is not that you *need not* perceive your perception. The only perception you *can* perceive is another person's perceiving. There is no such thing as perceiving your own perception.

Locke: This I must concede. I stand corrected.

Socrates: Good. Now let us not lose sight of our quarry. We have not yet got to the bottom of the idea that thinking is something *inner*, which only the thinker can see, and others can merely surmise.

Locke: But are a Man's Thoughts not hidden within his Breast?

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Socrates: Is that what you think, Master Locke?

Locke: Yes, it is.

Socrates: But there is nothing hidden about it – you just told us what you think, and now we all know.

Locke: Yet had I not told you, you would have been ignorant.

Socrates: But you did tell us. So nothing is hidden!

Locke: But had I not told you, I would have known and you would not.

Socrates: I thought we just agreed that had you not told us, you *could* have told us – but not because *you knew what you thought by introspection*, but because you can *say* what you think. You can *express* the conclusion you come to after thinking – namely: that things are thus-and-so. And, of course, you can tack on an 'I think' in front of it. But there is here no room for knowledge or ignorance in the manner in which there is in the case of the thoughts of another.

Alan: But surely, Socrates, we do sometimes hide our thoughts from others.

Socrates: Yes. You might keep your commonplace book or diary under lock and key. That would be hiding your thoughts.

Locke: 'Tis true. And a Man might write his Thoughts in code.

Socrates: Exactly. But merely not saying what you're thinking is no more hiding anything than not saying what you're currently perceiving is hiding anything.

Paul: Yes. That's very good. We confuse not-saying with concealing, and not being expressed with being hidden. All that is true is that others *may* not know what I am thinking if I don't tell them.

Socrates: Well, a little more than that, my dear friend. If you don't tell another what you are thinking *in order* that they should not know, or in a context in which they would naturally expect you to tell them, then too you might be said to be concealing your thoughts.

Paul: I see. You're right, of course. But it is still worth noting that if our thoughts were 'metaphysically hidden', as it were, then it would not be so difficult to conceal them – as it often is. Nor would it often be so easy to see what someone is thinking if you

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know them well and watch their face. [*He laughs*] I often know what my small son Thomas is thinking before he does!

Alan: But for a' that, Paul, don't we have privileged access to our own thoughts? After all, I *do* often have to *ask* you what you're thinking about. I mean, we say 'A penny for your thoughts'.

Locke: If I have correctly apprehended Socrates, then Access is here a misapply'd Word. A Man may have access to a lock'd Chest if he have the Key. He may have Access to a Library if he be permitted to enter it and to use it. He may have Access to the King if he be granted the Privilege to see him. But, if Socrates be right, no Man hath *Access* to his own Mind. For we are deceived by the Use of this Word. To be able to think and to say what one thinks or no as one pleases is not having Access to aught.

Socrates: Precisely. [*He beams and rubs his hands, and then pours himself another glass of wine*] Do we not confuse knowledge derived from privileged access – as when a man peeps into a closed box that others cannot look into – with having a privileged word?

Alan: I canna follow you, Socrates.

Socrates: Well, there is nothing incredible and nothing that calls for a special explanation if a man's expression of his own thoughts has a privileged *status*. After all, the thoughts that he honestly expresses are *his* thoughts. For remember, my sincerity does not guarantee the truth of my description of *your* thoughts, but when I tell you sincerely what *I* think, then *truthfulness guarantees truth*. I have no *access* to my thoughts, let alone privileged access to them. My thoughts aren't *hidden* somewhere, where only I can look. They are *made*, not found. *My thoughts* are the thoughts *I think*. And if I truthfully say what I think, my word, normally, overrides the words of others regarding what I think. And that is not because I can peep into a closed box into which others cannot look.

Frank: OK. Maybe you're right that just not saying what you're thinking isn't hiding anything. But still, the fact is that thoughts are in your brain. Now I agree that the brain is not a 'metaphysical' hiding place. But you can't see what's in the brain unless you use a scanner.

Paul: Frank, you're obsessed with your fMRI scanners.

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Frank: Well, if I am its because of what they teach us. It's the brain that thinks, and we can see it thinking when we make use of an fMRI scanner, and we can actually see where it's thinking.

Socrates: But Frank, is it the brain that walks? Surely you walk with your legs, not with your brain?

Frank: Yeah, OK. But it's the brain that thinks.

Socrates: Hmm. Well, it is true that thought needs a subject – a thinking thing.

Locke: 'Tis true. It is upon this that the esteemed Des Cartes insisted. Yet whether this Substance be Matter or Spirit is a Source of many Perplexities.

Socrates: And how do we identify a thinking subject?

Alan: Ay, … I see where you're going. We dinna say that a table thinks, or that it is thoughtless. And we dinna say that a heart thinks, or that it dinna think. Hearts pump blood – they're not in the thinking business. It dinna make sense to say that a table, or a heart, is thinking. So you're suggesting that it dinna make sense to say tha' the brain is thinking either?

Paul: Yes, that's dead right. We only say that something thinks if we know what it *would be* for it to display thought in what it says and does. For a being to be a thinking creature, it's normal behavioural repertoire must include thoughtful behaviour and behaviour that expresses thought. Then it also makes sense to say that it *hasn't* thought or *isn't* thinking. So we don't say that a table *isn't* thinking, any more than we say that it *is* thinking. For tables can't do anything that would *count* as manifesting thought. Indeed, tables don't *behave* at all. So they neither think nor fail to think – it *makes no sense* to ascribe thought or lack of thought to them.

Locke: So 'twould be an *Abuse of Words* to say that the Brain thinks or reasons. Such an Application of these Words must needs cause great Disorder in Discourses and Reflections about the Brain and Thinking, and be a great inconvenience in our Communication by Words.

Frank: OK. I can vaguely see what y'all are driving at. But you can't deny that we think *with* our brains, and that thinking takes place *in* the brain. Hell, y'can *see* it.

Socrates: Don't be so hasty, my friend. You see with your eyes, do you not?

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Frank: Yeah, sure.

Socrates: And you hear with your ears. You must grant me that.

Frank: Sure.

Socrates: And what do you *do* with your eyes in order to see with them?

Frank: Well, [*he laughs*] I guess I'd better open 'em.

Socrates: And to see better?

Frank: I'd go closer to look better, if that was possible. Or turn on the light to increase visibility. Or put my eye to the eye-piece lens on a microscope or telescope.

Socrates: Yes. And now what do you do with your ears? I mean: to hear better with them.

Frank: Oh, I see. And now you're gonna ask me what I do with my brain in order to think, or to think better.

Paul: Yes, of course. Because the brain is not an organ of thinking in the sense in which the eyes and ears are severally organs for seeing and hearing. You can't *do* anything with your brain in the sense in which you can do something with sense organs. And although you can think better when it's quiet than when it's noisy, there are no thinking conditions in the sense in which there are visibility conditions or auditory conditions.

Frank: So y'mean we don't think with our brains?

Paul: No, not in the sense in which you see with your eyes and hear with your ears. Only in the sense in which you walk with your brain.

Frank: What d'you mean?

Paul: I mean that just as you need a brain in order to walk, but you don't walk with the brain, so too you need a brain in order to think, but you don't think with your brain. You don't think *with anything*.

Frank: But surely you think *in* your brain.

Socrates: No, my dear fellow. What you see in this machine of yours is whatever takes place in the brain when you're thinking.

Frank: So where the hell *is* the thinking?

Paul: Look, Frank. What you see on a scanner is an increase in the blood oxygen level dependency signal in the frontal cortices that

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takes place while the subject is thinking. But the place where thinking goes on is not in the brain, but wherever the thinker is when he is thinking. You've been perceiving – that is: listening to – thinking for the last hour. And you've participated in it, to boot. If the phrase 'seeing thinking' means anything then that is what it means. If you want to see thought, then listen to and participate in a really good conversation … Like the one we've been having, thanks to Socrates.

Socrates: [*chuckles, and leans forward to finish his wine*] Good. Yes, that *was* a good conversation. I positively enjoyed it. Now [*he gets up*] let's all go to dinner at the Ambrosian.

Alan: But Socrates, we have na discussed the relationship between thought and language. And we have na spoken about animal thought either.

Socrates: [*starting to move away*] Dinner time, my dear fellow, dinner time. Haha. We can carry on later.

Frank: [*as he rises to his feet, he addresses Paul*] Hell, I'm still not sure. I mean, give us a few years more, and we'll be able to read off what people are thinking from the scanner. So how can the old boy say that thoughts aren't in the brain?

Paul: [*patting Frank on the shoulder*] Well, you'll just have to chew on it until after dinner, old chap!

[*They all walk off into the trees*][23]

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