THE THINKING OF THOUGHTS

WHAT IS 'LE PENSEUR' DOING?

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I begin by drawing your attention to a special, but at first sight merely curious feature of the notion of doing something, or rather of trying to do something. In the end I hope to satisfy you that this feature is more than merely curious; it is of radical importance for our central question, namely, What is *le Penseur* doing?

Two boys fairly swiftly contract the eyelids of their right eyes. In the first boy this is only an involuntary twitch; but the other is winking conspiratorially to an accomplice. At the lowest or the thinnest level of description the two contractions of the eyelids may be exactly alike. From a cinematograph-film of the two faces there might be no telling which contraction, if either, was a wink, or which, if either, were a mere twitch. Yet there remains the immense but unphotographable difference between a twitch and a wink. For to wink is to try to signal to someone in particular, without the cognisance of others, a definite message according to an already understood code. It has very complex success-versus-failure conditions. The wink is a failure if its intended recipient does not see it; or sees it but does not know or forgets the code; or misconstrues it; or disobeys or disbelieves it; or if any one else spots it. A mere twitch, on the other hand, is neither a failure nor a success; it has no intended recipient; it is not meant to be unwitnessed by anybody; it carries no message. It may be a symptom but it is not a signal. The winker could not not know that he was winking; but the victim of the twitch might be quite unaware of his twitch. The winker can tell what he was trying to do; the twitcher will deny that he was trying to do anything.

So far we are on familiar ground. We are just drawing the familiar distinction between a voluntary, intentional, and, in this case, collusive and code-governed contraction of the eyelids from an involuntary twitch. But already there is one element in the contrast that needs to be brought out. The signaller himself, while acknowledging that he had not had an involuntary twitch but (1) had deliberately winked, (2) to someone in particular, (3) in order to impart a particular message, (4) according to an understood code, (5) without the cognisance of the rest of the company, will rightly deny that he had thereby done or tried to do five separately do-able things. He had not both tried to contract his eyelids and also tried to do a second, synchronous thing or several synchronous things. Unlike a person who both coughs and sneezes, or both greets his aunt and pats her dog, he had not both contracted his eyelids and also done a piece of synchronous signalling to his accomplice. True, he had contracted them not involuntarily but on purpose, but this feature of being on purpose is not an extra deed; he had contracted them at the moment when his accomplice was looking in his direction, but its being at this chosen moment is not an extra deed; he had contracted them in accordance with an understood code, but this accordance is not an extra deed. He had tried to do much more than contract his eyelids, but he had not tried to do more things. He had done one thing the report of which embodies a lot of subordinate clauses; had had not done what the report of would embody several main verbs conjoined by 'ands'. There are five or more ways in which his winking attempt might

have been a failure, but he was not attempting to do five things. If he is successful, he has not got five successes to put on a list, but only one.

Similarly, sloping arms in obedience to an order differs, but does not differ in number of actions from just sloping arms. It is not a conjunction of a bit of sloping arms with a separately do-able bit of obeying. It is obeying by sloping arms; it is obediently sloping arms. This adverb 'obediently' does import a big difference, but not by recording any something else, internal or external, that the soldier also did, and might have done by itself. If the officer had shouted out of the blue 'Obey', he would have given the soldier nothing to do. Obeying is not a separately orderable action, for all that obediently sloping arms does not reduce to just sloping arms. The verb 'obeyed' cannot be the sole verb in a non-elliptical report of what someone did. It functions, so to speak, in an adverbial role, and can be replaces by the adverb 'obediently' or by the adverbial phrase 'in obedience to the order'.

Come back to our winker. Perhaps, being new to the art, he winks rather slowly, contortedly and conspicuously. A third boy, to give malicious amusement to his cronies, parodies this clumsy wink. How does he do this? Well, by contracting his right eyelids in the ways in which the clumsy winker had winked. But the parodist is not himself clumsily trying covertly to signal a message to an accomplice. He is deftly trying conspicuously to exhibit something, and he fails if his cronies are not looking, or are not amused, or mistakenly suppose him to be trying covertly to signal to an accomplice. There is only one thing that he is trying to do, namely to take off the winker, and he does this just by contracting his right eyelids. Yet there is now a threefold internal complexity in his own report of what he has been trying to do. For he may say, 'I was trying (1) to look like Tommy trying (2) to signal to his accomplice by trying (3) to contract his right eyelids.' There is, so to speak, the beginning of a Chinese box of internal subordinate clauses in the parodist's report of what he was trying to do - for all that there was only one thing that he was trying to do, namely to parody the winker; and for all that the cinematograph-film records only the one eyelidcontraction. We can easily add to this nest of Chinese boxes. For our parodist, to make sure of getting his parody pat, may in solitude practise his facial mimicry. In so practising he is not yet trying to amuse anyone, for he is alone. He is rehearsing for a subsequent public performance. So he could report what he is now doing by, 'I am trying (1) to get myself ready to try (2) to amuse my cronies by grimacing like Tommy trying (3) to signal covertly to his accomplice by trying (4) to contract his eyelids. Another box can easily be added. For our winker himself might report that he had not, on this occasion, really been trying covertly to signal something to his accomplice, but had been trying to gull the grown-ups into the false belief that he was trying to do so. So now our parodist, in practising his parody of this, would have to be described with the help of five verbs of trying - and still there is only one thing he is trying to do, and still there is only the one contraction of the eyelids that, at a given moment, the cinematograph film records. The thinnest description of what the rehearsing parodist is doing is, roughly, the same as for the involuntary eyelid twitch; but its thick description is a many-layered sandwich, of which only the bottom slice is catered for by that the thinnest description. Taking the word 'only' in one way, it is true enough that the rehearsing parodist is, at this moment, only contracting his right eyelids. Taken in another way, this is quite false; for the account of what he is trying to effect by this eyelid-contraction, i.e. the specification of its success-conditions, requires every one of the successively subordinate 'try' clauses, of which I will spare you the repetition.

Part of this can be brought out in another way. A person who, like most small children, cannot contract his right eyelids without also contracting his left eyelids, cannot wink. He must acquire the nursery accomplishment of separately contracting

his right eyelids before he can learn to send signals by winking. The acquisition of this little muscular accomplishment is a pre-condition of the acquisition of the ability to wink. Knowing how to wink requires, but does not reduce to, being able separately to contract the right eyelids. But further. A boy who cannot wink cannot parody a wink. Knowing how to parody a wink requires, but does not reduce to, knowing how to wink. Further still. A boy trying by private rehearsals to prepare himself effectively to parody a wink must know what it is to parody well rather than badly. Else there is nothing for him to practise for or against. So we might say (1) that voluntary contracting the right eyelids is on a higher level of accomplishment than an involuntary twitch, since the former did but the latter did not require some learning or practising; (2) that winking is on a higher sophistication-level than that of voluntarily contracting the eyelids, since more, indeed in this case a lot more, needs to have been learned for signalling to be even attempted; (3) that parodying a wink and (4) that rehearsing the parodying of a wink are in their turn on still higher sophistication-levels or accomplishment-levels. Learning a lesson of one level presupposes having learned lessons of all the levels below it. By no pedagogic ingenuities could you teach a child what stealing is before teaching him what owning is; or teach a boy to parody a wink before teaching him to wink and to recognisewinks; or train a recruit to obey orders to slope arms before training him to slope arms. For future purposes we should already notice that, for the same reasons, there can be no question of my being able to direct you to Larissa before I have learned the way to Larissa; or of my being able to locate and correct mistakes in my multiplication sum before being able to multiply. Some lessons are intrinsically traders on prior lessons. Such tradings can pyramid indefinitely. There is no top step on the stairway of accomplishment -levels.

It is now time to begin to apply these short ideas. I start at a stage a good long way short of that which I hope to reach in the end. In the end I hope to be able to throw some light on the notions of *pondering*, *reflecting*, *meditating* and the *thinking of thoughts*, that is, roughly, of what *le Penseur* looks as if he is engaged in - in the end, but not straight away.

You hear someone come out with 'Today is the 3rd of February'. What was he doing? Obviously the thinnest possible description of what he was doing is, what would fit a gramophone equally well, that he was launching this sequence of syllables into the air. A tape-recording would reproduce just what he was doing, in this thinnest sense of 'doing'. But we naturally and probably correctly give a thicker description than this. We say that he was telling someone else the date. He was trying to impart a piece of wanted calendar-information, so that his attempt was unsuccessful (1) if his companion did not hear or misheard the noises, or (2) did not understand or misunderstood what he had heard, or (3) did not believe or already knew what he was told, or (4) if the speaker had himself got the date wrong. Our natural and probably correct thick description of what the utterer of the noises was up to in uttering them has to indicate success-versus-failure conditions additional to and quite different from the purely phonetic success-conditions to which the mere vocal uttering was subject. Yet the speaker could not have failed or succeeded in his attempt to give his companion the calendar-information, if, owing to catarrh, he had not succeeded in voicing the noises 'Today is the 3rd of February'. Saying, e.g. giving calendarinformation, does not reduce to voicing; but it requires it or some substitute for it. Nor is saying doing two things, voicing noises and also doing something else. It is, e.g., conveying information or misinformation by voicing some noises.

There are, of course, alternative possible thick descriptions of what the utterer of the noises might have been trying to do. For he might have been lying, i.e. trying to get his enemy to accept a piece of misinformation; or he might have been an actor on the stage, playing the hero's part of a calendar-informant or the villain's part of a

deliberate calendar-misinformant. For him to be trying to do one of these things, he must already know what it is to say things informatively; and, for that, he must already have got the ability to voice syllables. Or he may be trying to render into English a German sentence conveying correct or incorrect calendar-information. If so, the translator is not telling anyone the date, right or wrong. If faulted, he can be faulted only for mistranslation. But to give this English rendering or misrendering to the German sentence, he must already know how to tell someone the date in English when the date is the 3rd of February. Or he may be drawing a conclusion from premisses given him by someone else - in which case he is not informing anyone else of the date, but arriving himself at the right or wrong date. He might regret the fallaciousness of his inference despite the fact that his conclusion happened to be true. And so on.

Under none of these alternative thick descriptions is what he is doing just voicing some syllables; yet nor is it doing some things do-able separately from that syllable-voicing. The handy umbrella-word 'saying' covers a wide variety of different things; the saying may be on any accomplishment-level above the merely phonetic one.

To give ourselves more material let us notice fairly summarily a whole run of action-describing verbs which, like the verb 'to say', cannot also function as the verbs of bottom-level or thinnest action-reports or orders.

- (a) We have seen that there is no such action as obeying, though sloping arms in obedience to an order differs importantly from just sloping arms for fun. Complying with a request and keeping a promise are obvious parallels. If you just say 'please', there is, as yet, nothing that you have requested me to do; and if I say just 'I promise' (period) there is nothing that I have promised to do, so I have not yet even promised.
- (b) Mimicking, parodying, pretending and shamming are also not lowest-level actions. Our parodist did mimic the winker, but only by contracting his eyelids in the way in which the winker had done so. To sham irritation I have, for example, to utter an expletive and thus sound as swearers sound. 'He is shamming (period)' cannot, context apart, tell us what he is doing. 'He is shamming irritation by voicing expletives' does.
- (c) Doing something experimentally differs from just doing it. Doing it experimentally is trying to fin out, by doing it, whether it can be done, or how to do it, or what will be the outcome of doing it. So the boy experimentally jumping the stream is vexed by a helping shove, since this interfered with his experiment. Notice that he may jump partly in order to cross the stream and partly in order to find out whether it is jumpable. So if he lands in mid-stream he has failed in part, but succeeded in part of his undertaking. But he was not making two jumps.
- (d) Practising is rather similar. I may converse with a Frenchman just for the sake of conversation, or just to practise my French. But again I may converse with him with a sociable intent ad also to give myself practice. It may turn out that the conversation was boring, but the practice was rewarding. Clearly there is no practising pronunciation without pronouncing syllables; and clearly, too, pronouncing syllables for practice is not doing two separately do-able things. I cannot just practise (period) any more than I can just obey (period). In practising pronunciation I a pronouncing with a self-drilling intention, and my pedagogic intention is not a second thing that I am doing, or a thing that I might be ordered or advised to do by itself.
- (e) Sometimes we do things as demonstrations. The sergeant slopes arms in front of the recruits to show them how to do it. He demonstrates in vain if they do not look, or look only at his face. He, too, might in one and the same action be sloping arms, like everyone else, in obedience to the company commander's order and also doing it as an

instructive exhibition of the manual operation. If he had misheard or anticipated the order, he would have failed to obey, while still succeeding in demonstrating the motions.

Not all demonstrations are exhibitions of how to do things. The witness might tell part of his story in dumb show, i.e. with a narrative intention.

- (f) Very many of the things that we do are steps towards or stages in some ulterior undertaking. I may walk to the village to make a purchase, or as the first stage of a walk to a second village. In the one case I have walked to the first village in vain if the shop is shut; in the other case I have walked to it in vain if a flood lies between the two villages. But I might walk to the first village with both ends in view and succeed in both, fail in both, or succeed in one and fail in the other.
- (g) One final specimen. We do some things in cancellation or correction of other things that we have done. There is such a thing as *undoing*. We erase or cross out things miswritten, shelve what had been projected, dismantle what we have assembled, get out of skids, unsay things that we have said. There can be no unsaying or withdrawing where nothing has been said, and scrawling a line across the page is not crossing our unless there was something already written on that page.

Why have I produced this long, but far from complete series of kinds of so to speak, constitutionally adverbial verbs - active verbs that are not verbs for separately do-able, lowest-level doings? Because, if I am right, most of them plus others that I have not listed, are going to enter into the thick description of what *le Penseur* is doing in trying, by reflecting, to solve whatever his intellectual problem is.

It is often supposed by philosophers and psychologists that thinking is saying things to oneself, so that what *le Penseur* is doing on his rock is saying things to himself. But, apart from other big defects in this view, it fails because it stops just where it ought to begin. Very likely *le Penseur* was just now murmuring something under his breath or saying it in his head. But the question is, 'What is the thick description of what he was essaying or intending in murmuring those words to himself?' The thin description 'murmuring syllables under his breath', though true, is the thinnest possible description of what he was engaged in. The important question is 'But what is the correct and thickest possible description of what *le Penseur* was trying for in murmuring those syllables?' Was he, for example, murmuring them? And if so, just *what* would have rendered his experiment successful or unsuccessful? Or perhaps he had murmured them in cancellation of something previous; so just *what* was he wishing to cancel, and for what defects? And so on.

To say that *le Penseur* was just saying things to himself is like saying that our schoolboy parodist was just contracting his right eyelid; or that the sergeant was just fetching his rifle up on to his left shoulder; or, if you like, that the helmsman was just twiddling the helm, or the explorer was just treading on blades of grass.

Incidentally, not only is it quite wrong to say that *le Penseur* is merely voicing things to himself, in his head or under his breath, but it is also too restrictive to say that he must be saying things to himself at all. For just one example, he might be a musician composing a piece of music, in which case he might be humming experimental notes and note-sequences to himself. He would the be voicing or sub-voicing notes but not words - what words are there for him to voice which would further his work of composition? For him, too, it would be grossly inadequate to say that he is merely voicing notes. If he is composing a sonata, say, then the thinnest description of the note-voicing that he is doing would be silent about the intended musical structure and qualities of the sonata-to-be. It would be silent about what the composer is trying to

accomplish by his tentative, self-critical and persevering note-voicings. It would say nothing about the composer's skills, repertoires, purposes or difficulties.

Now, I hope, we are in a position to approach the heart of our question 'What is *le Penseur* doing?' We shall approach him ladder-wise. Suppose there are, in a public park, a number of people sitting still, chin in hand, each on his rock. The first man has the job of making a count of the vehicles travelling in both directions along the road beneath him. Not merely are his eyes open, but he is carefully eyeing the vehicles in order to keep a correct tally of them. He is not just gazing, but visually keeping a tally, so he is thinking what he is doing. Nevertheless, he does not qualify as a thinker of thoughts. He is not reflecting, musing, composing or deliberating - or if he is, he thereby stops attending to his set task. Why does he not qualify? Because his attention, intentions and efforts are riveted to things going on in the adjacent outside world. Like those of a tennis-player or a car-driver, his tasks are imposed on him from external circumstances that are not of his choosing.

The occupant of the neighbouring rock is similarly not detached from external circumstances. He is listening carefully to an unfamiliar tune that is being played in his hearing by the town-band, he is lending his ears and his mind to strains of which not he but the town-band is the source. He cannot choose what to hear, or whether to hear or not.

Compare with these two men the occupant of the third rock. He is going over, in his head or under his breath or aloud, a perfectly familiar tune or poem. He is humming or murmuring it not absentmindedly but with some interest and even some degree of absorption. He can, though maybe not perfectly easily, call his tune or poem to a halt when he chooses; and in going over it he is fully detached from external circumstances. What he is giving his mind to comes out of his own resources. Yet he does not quite qualify as a *Penseur*. For the tune or poem is not his creation; and the way it runs is to subject to his choices. He cannot, or cannot easily, put his own variations into it. It runs in a rote-groove, rather as the gramophone-needle runs in a groove. Nor can we, after starting to run through the alphabet, easily insert amendments of our own; or even perfectly easily stop it at the letter 'q'.

In contrast with him, and with the occupants of the first two rocks, the occupant of the fourth rock is composing a tune, song or poem of his own. The notes or words that he voices or sub-voices are at his own beck and call. Independent of and indifferent to what is going on around him, he can produce his notes or words, arrange and rearrange them, scrap them, shelve them, and rehearse selected sets of them under no duress either from external circumstances or from rote-channelled grooves. He is the author of the notes or words that he voices or sub-voices. He gives them their existence, relegates them back into non-existence, marshals them, memorises them, and so on, at his own sweet will. He is in full control. So he qualifies as at least a candidate for the status of a thinker of thoughts. For I suggest first that part of what we require of the momentary occupation of a thinker is that it is completely or nearly completely detached from what external circumstances impose; and second, that the obverse side of this detachment from alien circumstances is the thinker's uncoerced initiation and control of his own bottom-level moves and motions, like the word-voicings and the note-voicings of a composing poet or musician.

Accordingly we would allow that the man on the next rock, who is pencilling dots and lines on paper, may be engaged in pondering. For, though he may depend on circumstances for his possession of pencil and paper, he is free to put down what marks he likes, which to erase, which to amend and which to connect up, in which ways, with which others. If he is trying to design new riggings for his yacht, or

drawing from memory a sketch-map of the foot-paths in his parish, then he is certainly meditating or pondering just as much as a man who is voicing or sub-voicing words in trying to compose a sermon or a lecture, or just as much as a man who is humming notes in trying to compose a dance-tune.

The young chess-player on the next rock may be trying to think out his next move, or his next three moves, when he is physically waving his knight some two inches above the alternative squares into which it might go. He is somewhat like the housewife, (for whom I do not provide a rock) who might try to plan the floral decoration of her dining-room by shifting and re-shifting vases and bowls to alternative positions in the room, and by shifting and re-shifting flowers, leaves and branches to alternative vases and bowls. Momentary circumstances restrict her to these vases and bowls, to these flowers, leaves and branches, and to these tables, shelves and window-sills. But circumstances do not coerce her into this as opposed to that arrangement. Notice that in each case there is a thinnest description of what the person is doing, e.g. pencilling a line or dot on paper, and that this thinnest description requires a thickening, often a multiple thickening, of a perfectly specific kind before it amounts to an account of what the person is trying to accomplish, e.g. design a new rigging for his yacht.

However we have a long way to go yet. For the boy on the penultimate rock, trying for the first time to run through the alphabet backwards from 'Z, Y, X' to 'C, B, A', will hardly qualify as a thinker of thoughts just be being free to nominate what letters he pleases in what order he pleases, and by having a quite specific objective, together with competence to correct mis-orderings, omissions and repetitions of letters. He is thinking what he is doing, and his trying is on an accomplishment-level higher than that of being able to run by rote through the alphabet from A to Z. But its level is not high enough for what we are after. He has mastered a new trick, a trick which may or may not have utilities, but has no fertility. It is an exercise undertaken just for the sake of that exercise. Its performance leads nowhere, save towards the acquisition of a new rote-groove. What le Penseur is engaged in is more than this. But in requiring more than this I am not requiring that *le Penseur* be an intellectual giant, or that his intellectual problem be one of history-making dimensions. He may be an Aristotle, but he may b just one of Aristotle's students. He may be a Bismarck, but he may be just a back-bencher M.P. He may be a Beethoven, but he may be just one of us. I am going, for the sake of expository economy, to take it that in his ponderings le Penseur is saying things to himself; and that what he, unlike our alphabet-reverser, is trying to achieve will be a verbally formulatable theory or policy. So what I say about him will not apply directly to the thinkings of, say, a Beethoven, a Cézanne or a Mercator. These I leave on one side with a promissory and apologetic 'mutatis mutandis'.

Still *en route* for our wanted sketch of the thick description or descriptions of what *le Penseur* is after in saying or sub-saying things to himself, let us look at the corresponding thick descriptions of three other people who are, quite likely audibly, saying things to themselves. Take (1) the meditating of the man who is now preparing an after-dinner speech; (2) that of the man who is preparing a electioneering address, and (3) that of the man who is preparing a lecture to students.

First of all, all are alike (1) in that they are not merely nattering, i.e. aimlessly voicing words and phrases; (2) in that they are not merely trying to think up conversational remarks. Conversational remarks are not circumstance-detached. What I conversationally say hinges in some measure on what you have just said; and your remark was not subject to my choice or control. Roughly, a conversation is an exchange of remarks (and not paragraphs) between two or more independent speakers. But the successive sentences of a speech or a lecture or sermon are intended by their single author to be in some measure internally threaded to their predecessors and

successors, of which he himself is also the author. A remark interjected by a listener breaks the thread. So what the composing speaker or lecturer is at this moment saying to himself is meant to be a development out of and a lead towards other parts of his future speech or lecture. That it would be a digression irrelevant, repetitious, redundant or incongruous are scores on which a meditated phrase or sentence or story is dismissed. So the notion, quite popular among philosophers, that thinkers in saying things to themselves are therefore conducting something like inward conversations is not merely insufficient, it is wrong. Our composing speakers are trying to compose non-conversational, internally threaded sequences of dicta. In this respect *le Penseur's* task is like theirs. There are not a thousand things that he wants to be able to propound. There is one thing, even if its propounding takes 1,000 sentences.

Next, unlike the composing electioneer and unlike the composing lecturer, the will-be after-dinner speaker does not aim to convert or to instruct his hearers, or not much. His speech will be a bad after-dinner speech is it is even a good harangue, lecture or sermon. It is meant to entertain, or to move, or to remind or to amuse, etc.; it is not meant to make a difference to what his listeners think or know. They are fellow-guests, not members of his congregation, his electorate or his seminar. In contrast with him the composing electioneer says what he says to himself as potential ingredients in a vote-winning harangue. He means to make new converts and to strengthen the convictions of his more faint-hearted supporters. He is out to persuade; and if sufficiently fanatical or unscrupulous he may use any persuasively effective tricks that he can think up. A plausible but bad argument may suit him better than a good but difficult one. The dominant success-condition of his undertaking is the winning and retaining, versus the losing, of votes.

In contrast with the electioneer, the will-be lecturer, at least if he cares about his subject and about his students, intends not to persuade them of anything, but to instruct them. The last thing that he wants is that his hearers should vote for his doctrine without having thought it through. He wants them to accept it for its merits, or even to doubt or reject it for its demerits. If he is a geometrician, Euclid say, he wants them to accept or reject it *qua* good geometricians in the making, and not *qua* rabid Euclideans or rabid anti-Euclideans.

In this respect *le Penseur*, if he merits our respect, is unlike the composing electioneer and like the composing lecturer. He does not want to pull wool over his own eyes, but to pull the wool from his own eyes. He wants to acquire, what the lecturer wants to help his students to acquire, a grasp or mastery of something that is not yet within reach. As what the will-be lecturer is here and now saying to himself is mooted an examined for its possible future educative effectiveness, so what *le Penseur* is here and now saying to himself is mooted and examined for its chances of being a contribution to his own conquest of his own problem. He produces a candidate-phrase, but he dismisses it for being too foggy or too metaphorical for him himself to be helped y it; or he begins to try to adapt to his own present search a line of argumentation which has worked well elsewhere, and moots one candidate-adaptation after another with growing discontentment, since each adaptation in its turn threatens him himself with new obstacles.

There is, I think, a good deal of promise in this assimilation of the thick description of what *le Penseur* is doing in saying things to himself to that of what the will-be lecturer is doing in lecture-preparingly saying things to himself. But it will not do as it stands. For there remains this huge difference between the teacher and *le Penseur*, that the teacher has already mastered what he wants his students to master. He can guide them because he is on his own ground. But *le Penseur* is on ground unexplored by himself, and perhaps unexplored by anyone. He cannot guide himself through his jungle. He

has to find his way without guidance from anyone who already knows it, if anyone does know it. The teacher already knows up which paths and away from which blind alleys to beckon to his students. For him these paths and these blind alleys are already signposted. But for *le Penseur* no paths or blind alleys are yet signposted. he does not know in which directions he should, so to speak, beckon encouragingly or signal warningly to himself. To exaggerate a bit, the teacher is a sighted leader of the blind, where *le Penseur* is a blind leader of the blind - if indeed the very idea of his being or having a leader fits at all.

We are reminded of Socrates' puzzle in Plato's *Meno*: How possibly can Socrates, just by asking questions, get the geometrically innocent slave-boy to think out the right answer to a geometrical problem? Socrates' obviously unsatisfactory answer is that the slave-boy must have learned this geometrical truth in a previous existence, and that Socrates' questions had served merely as memory-floggers. The slave-boy was just, with Socratic promptings, resurrecting a piece of already acquired but submerged knowledge; and Socrates was only doing what the barrister cross-examining a witness often does, namely retrieving half-forgotten knowledge. Socrates' answer obviously will not do, since it merely postpones the question: 'How was the geometrical truth originally discovered in that supposed previous existence? Was it thought out then? Or again only resurrected?

Consider this particular pedagogic technique of posing questions in order to tempt or provoke the students into suggesting their own incorrect or correct answers. Asking questions and then critically examining the answers, perhaps by further questions, really is one way, among many, of inducing students to think, i.e. to make their own unsteady steps forward. Now *le Penseur* does, quite likely, some of the time pose questions to himself in the hope that some of them will tempt or provoke himself into mooting tentative answers of his own for subsequent critical examination. But the huge difference between the teacher and *le Penseur* here is that the teacher knows, and *le Penseur* cannot yet know, which questions to pose, or a *fortiori* in what sequence to pose them. There is something of a method or a strategy controlling the sequence of questions that Socrates puts to the slave-boy; there can, at the start, be no such method or strategy, or hardly any, controlling *le Penseur's* self-questionings. He does not yet know where he needs to get, or which paths will lead towards and which will lead away from where he wants to get, and which will lead nowhere at all.

But perhaps this is too pessimistic. For sometimes, from having been in partly similar jungles before, *le Penseur* may, not indeed know but have some idea which directions look a bit more promising than which. In any particular case such a faintly promising look may prove to be a cheat; but it remains a sensible policy to try out the promising ones before trying out the unpromising ones. If from previous explorations he has acquired something of an explorer's eye for country of this general sort, then in the long run the initially promising-looking ways will have been rewarding more often that the unpromising-looking ones. Else he would not have acquired anything of an explorer's eye for country of this general sort.

So *le Penseur*, if not an absolute novice, will, in posing questions to himself, be doing so, certainly not in the teacher's knowledge that they are the right ones to ask, but also not entirely randomly. Some of his self-interrogations strike him at once, occasionally wrongly, as obviously silly questions to ask; others as not obviously silly. So we can see that the enquirer's self-questionings are indeed unlike the pupil-questionings of the teacher just in the fact that they can be only experimentally posed. His very questions are themselves, so to speak, questions 'on appro' - query-questions. They have no assured *heuristic* strategy behind them. But they are also unlike the absolute novice's self-questionings, since they really are experimentally posed. He poses them, anyhow

partly, in order to find out whether or not they are the right questions to pose, that is, whether they are going to be heuristically rewarding or unrewarding. The enquirer is not saying didactic things to himself; he is experimentally saying questionable didactic things to himself. All of Socrates' questions to the slave-boy were pedagogically well chosen, and asked in a well-chosen order, since Socrates already knew Pythagoras' theorem. But Pythagoras himself, in first excogitating this theorem, had had no such guide. He got to his destination no by following signposts, but by experimentally and unconfidently following, often up blind alleys, experimentally planted signposts of his own, each with its warning question-mark inscribed on it. He had to find out by persevering trial and frequent error which of his experimental query-signposts would and which would not be misleading signposts, if read without the queries.

In short, I suggest that at least part of the thick description of what *le Penseur* is trying to do in saying things to himself is that he is trying, by success/failure tests, to find out whether or not the things that he is saying would or would not be utilisable as leads or pointers. They are not pointers, but only candidate-pointers; and most of them will have to be turned down after examination. Somewhat as my school-boy parodist was not winking but parodying winking; and somewhat as my stream-jumper was not trying to get across the stream, but to find out whether this or that track of his own making would or would not qualify as a guiding, as opposed to a mis-guiding or non-guiding, track.

Of course in real life the things said by the teacher to his students will not all or mostly be questions. He will suggest corollaries, counter-examples and reminders; he will predict difficulties and diagnose the sources of difficulties; he will reproach, command, exhort, advise and warn - and all as instructive pointers in what he knows to be the right direction. So, while he, the teacher, is, in solitude, preparing his lectureto-be, he will be thinking up, and critically thinking about, possible lecture ingredients of these and lots of other didactically well-qualified and well-directed kinds. Correspondingly, though now a slice higher up in the sandwich, le Penseur, in saying thins to himself, will be mooting and suspiciously examining not only questions, but also objections, warnings, reminders, etc., only not didactically as already certified instructive pointers, but experimentally to find out whether or not they would be or could be profitably followable pointers. It is their didactic potencies, if any, that he is trying to find out, be testing their very hypothetical promise against their mostly disappointing performances. So he says the things that he says to himself not, so to speak, in the encouraging tones of voice of the teacher or the guide who knows the way, but in the suspicious tones of the unoptimistic examiner of their credentials as potential didactic leads. The pioneer, having no leader's tracks to follow, makes his progress, if he does make any progress, by studying the fates of the tracks that he himself makes for this purpose. He is taking his present paces not to get to his destination - since he does not know the way - but to find out where, if anywhere, just these paces take him. The paces that had taken him to the quagmire would have been a traveller's bad investment, but they were, on a modest scale, the explorer's good investment. He had learned from their fate, what he had not previously known, that they would have been and will be a traveller's bad investment. It was for such a lesson, positive or negative, that he had taken them. He had, so to speak, taken those paces interrogatively and incredulously. But when he has finished his explorations, he will then be able to march along some stretches of some of his old tracks, pacing this time not interrogatively but didactically. He will be able to pilot others along ways along which no one had piloted him and delete some of the queries that he had inscribed on his own, originally hypothetical signposts.

As jumping a stream in order to find out if it is jumpable is on a higher sophistication-level than jumping to get to the other side so exploring is on a higher sophistication-level than piloting, which in its turn is on a higher sophistication-level than following a pilot's lead. Similarly, Euclid trying to find the proof of a new theorem is working on a higher accomplishment-level than Euclid trying to teach students his proof when he has got it; and trying to teach it is a task on a higher accomplishment-level than that on which his students are working in trying to master it.

None the less it may still be true that the only thing that, under its thinnest description, Euclid is here and now doing is muttering to himself a few geometrical words and phrases, or scrawling on paper or in the sand a few rough and fragmentary lines. This is far, very far from being all that he is doing; but it may very well be the only thing that he is doing. A statesman signing his surname to a peace-treaty is doing much more than inscribe the seven letters of his surname, but he is not doing many or any more things. He is bringing a war to a close by inscribing the seven letters of his surname.

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Updated Wednesday, August 21, 1996