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Real Intentionality v.2: Why Intentionality Entails Consciousness?

Abstract

Intentionality is an essentially mental, essentially occurrent, and essentially experiential (conscious) phenomenon. Any attempt to characterize intentionality that detaches it from conscious experience faces two insuperable problems. First, it is obliged to concede that almost everything (if not everything) has intentionality – all the way down to subatomic particles. Second, it has the consequence that everything that has intentionality has far too much of it – perhaps an infinite amount. The key to a satisfactory and truly naturalistic theory of intentionality is (1) a realistic conception of naturalism and (2) a properly developed understanding of the phenomenon of cognitive experience.

1. 'Intentionality', 'Experience', 'Physicalism' and 'Naturalism'

My subject is concrete intentionality, intentionality considered as a real, concrete physical-world phenomenon, something that can be correctly attributed to (states of or occurrences in) concrete entities like ourselves and dogs. I'm not concerned with intentionality considered as a property of entities like propositions.

Since I'm only concerned with concrete intentionality in this sense, I'll simply call it 'intentionality'. My question is:

[1] What is intentionality? What is it for intentionality to exist?

I take this to be a straightforwardly metaphysical question.

I'm going to *assume* that conscious experiential states can and do have intentionality, in the fullest possible sense, and *argue* that all intentionality involves consciousness, or conscious experience, or experience; whichever term you prefer. I will use the terms 'experience' (taken as a mass term) and 'experiential phenomena'. I will use them to refer specifically and only to the *experiential qualitative* character of conscious mental phenomena: to the phenomenon of experiential *what-it's-likeness* whose nature is clearly and accurately understood by everyone in the world except a few philosophers.

I assume that physicalism and naturalism are true, but I haven't yet floated completely off the planet (unlike many who call themselves 'physicalists' or 'naturalists') and so I am of course an outright realist about experience.

2. 'Intentionality', 'Aboutness'

What is intentionality? What is it for intentionality to exist? Consider, first, the well known distinction between *underived* ('original', 'intrinsic') inten-

tionality and *derived* intentionality. The paradigm cases of underived intentionality are conscious or experiential states. The paradigm cases of derived intentionality (which is of course derived from underived intentionality) are things like books, roadsigns, pictures, computers, programmed robots and so on. Dennett and his followers reject the distinction, because it marks no real line on their view, but it does not beg any questions in the present context and I am going to take its viability for granted simply in order to put aside all the phenomena of derived intentionality; they are not of any great philosophical interest.

Many people equate intentionality with aboutness, and the derived/underived distinction applies to aboutness just as well as it does to intentionality, but I am now going to distinguish the two things. I accept of course that intentionality (I) entails aboutness (A):

 $[I \rightarrow A]$

but deny that aboutness entails intentionality:

 $[A \rightarrow I].$

Books, films, pictures, and so on are certainly *about* things, but they certainly do not involve *intentionality*, on my terms. This is a terminological decision that I find helpful, and I hope you will too.

There is plenty of aboutness in the world, on these terms, but a lot less intentionality; for all intentionality involves aboutness, while not all aboutness involves intentionality. The natural question, then, is

[2] What does aboutness have to be like to be or involve intentionality?

and the first part of the answer is immediate: only underived aboutness can qualify as genuine intentionality.

This raises the question whether underived aboutness is not only necessary but also sufficient for intentionality. And this in turn raises the question

[3] What sorts of underived aboutness are there?

We know that there is *experiential* underived aboutness, for the paradigm of genuine intentionality remains experiential underived intentionality, which entails experiential underived aboutness, so the question now is whether there is also *non-experiential* underived aboutness. Or, to put it slightly differently,

[4] Can there be *underived aboutness in a non-experiential being–UNA* for short?

This, I believe, is the key question in the current context of debate.

Many take it that the answer to [4] is Yes: UNA can and does exist. A puddle, for example, may reflect San Vitale, and in that sense genuinely contain or constitute a representation *of* San Vitale. A mirror may reflect an image of you, so that it is natural to say that there is a representation of you right in front of you. Some are happy to say that certain of the states of phototropic beetles represent light, or at least represent certain opportunities for behaviour, even if the beetles are experienceless. Perhaps we can also say that the fingerprint on this guitar has aboutness; certainly it carries information that uniquely identifies you. Many are inclined to say the same

about tree rings that carry information about climate and the tree's age. It is arguable that everything is about everything else, for according to Mach's Principle 'the slopping of your drink in [a] lurching aeroplane is attributable to the influence of all the matter in the universe'.

This might be going too far (we shall see), but some of these UNA claims seem uncontroversial and natural, and their naturalness, combined with the standard outright identification of intentionality with aboutness, can seem to sweep us smoothly into a view of things according to which the essentially mental phenomenon of intentionality seems essentially similar to, deeply continuous with, forms of aboutness that are underived and that occur in non-experiential beings (i.e. UNA) in such a way that both are correctly classified as genuine intentionality.

I agree that there are important similarities and continuities between ourselves and experienceless phototropic beetles, TV cameras, heat-seeking missiles, thermometers, and so on. And I'm quite certain that I don't disagree on any actual matter of fact with those who like to say that states of robots, microbes, grass, thermometers and so on can have intentionality. I don't, however, think that saying this is a good way to characterize the similarities between ourselves and these things. I think, in fact, that the best thing to say may be that there is no UNA at all: that, once we put philosophically uninteresting derived aboutness aside, *no states of non-experiential beings are ever really about anything at all*.

- How can this be right? Consider a crack in the curtains that functions fortuitously as a *camera obscura*, casting a perfect upside-down image (representation) of the view from a window onto the opposite wall. Surely this is a case of UNA? Consider a camera functioning on its own, taking photographs and films that are indisputably about or of things. You don't need to have someone who intends to take a photograph of X, or indeed of anything, to get a photograph of X. It's true that cameras are designed to do what they do, and this can seem to be a reason for saying that films and photographs have derived aboutness, but a thing physically identical to a functioning camera could conceivably come into existence by cosmic accident and produce admirable films and photographs of things. These would be about things and they would no more have derived aboutness than all the naturally occurring *camerae obscurae* in the world.

Consider R1, an experienceless robot that travels round a room littered with multicoloured geometrical shapes picking up all and only the purple pyramids and dropping them in a box, thereby replenishing its energy supply. R1, also known as Luke, was built and programmed by us to perform the pyramid task straight out of the box, and may accordingly be said to have derived aboutness. But there is also R2, hardware-identical to R1 but 'programmed' entirely by a freak burst of radiation that makes it software-identical and hence behaviourally identical to R1. Then there is R3, hardware-identical to R1 and programmed by us, not in such a way that it can perform the pyramid task straight off, but rather in such a way that it learns to perform the pyramid task. Then, importantly, there is R4, also known as Fluke, physically (hardware and software) identical to R1 although it came into existence by cosmic fluke. Finally, R5, another product of cosmic accident that is physically (hardware and software) identical to R3. I assume you will allow derived aboutness to R1 and perhaps R3, but how, as they continue to function perfectly over the years, are you going to deny underived aboutness, UNA, to the rest of them? Surely they are all indisputably in states that *represent* purple pyramids and all sorts of other things and are *about* these things?

I know it can seem natural to say this. But if you insist on talking in this way, as is of course your terminological right, then I think you will find there is just too much UNA, more than you can handle.

3. The Ubiquity of UNA

As far as I can see, this follows almost immediately from some very general considerations about causation and information. I take it, to begin, that

[1] there are objectively legitimate ways of cutting the world, the worldflow, into causes and effects

and that this can be done in such a way that

[2] the things picked out as effects are reliable signs of the things picked out as their causes

and that in this sense

[3] every effect may be said to 'carry information' about its cause.

It may be, in fact, that there is a way of cutting the world into causes and effects in such a way that

[4] every effect carries uniquely identifying information about its cause.

But whether or not this is so - it doesn't matter if it isn't - it seems plausible, to expand [3], that

[5] every effect can be said to carry information about its cause, and in that sense to be about its cause, and in that sense to represent its cause,

and therefore that

[6] UNA is utterly ubiquitous.

The first objection is likely to be that if one is going to talk in this way then one has to acknowledge that there is aboutness and aboutness, and that not all aboutness is aboutness of the kind we care about when we are interested in content, intentionality, and so on; and that this is so even when we are concerned only with UNA. On this view, the alleged UNA of the flight of a kicked ball that, on the present view, carries information about its cause and can in that sense be said to be about – to carry or constitute a representation of – its cause is of a completely different order from the UNA of a reflection of the moon in a puddle, or an image of the moon produced by a (fluke) camera. The puddle and camera cases are somehow special, and involve real representation, while the football case doesn't.

This seems at first an intuitive distinction. The question is whether it can be defended in such a way as to stop the supposedly more special cases of UNA from being swallowed up in the ubiquitous UNA of the whole heaving universe. I don't think it can. If we find the UNA of the puddle or the fluke camera image special it is because we are overcome, as so often, by the vividness of light-involving cases which we assimilate to our experience of vision. In order to find a candidate for moon-aboutness in the puddle we have to imagine an observer, and an observer in a particular position (there are – infinitely – many ways of looking at the puddle that do not render an image of the moon). This is because all that we have, in fact, in the case of the puddle, is a body of water and the incidence upon and reflection by its surface of certain wavelengths of light, and when we consider it this way, taking, as it were, the 'view from nowhere', it seems that we face a choice.

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Either there is no good reason to say that there is anything here that is about anything or intrinsically a representation of anything, or, if we allow that there is good reason to say this, then there is certainly no more reason to say it when considering the incidence and reflection of light waves than when considering the incidence and reflection of sound waves, or indeed the causal impacts of anything on the puddle. In fact, as far as I can see, there is in the case of any entity X and any possible physical effect of X on the puddle a possible observer who, on detecting this effect, naturally experiences it as being or giving rise to a representation of something, and indeed as a representation of X or an X-type thing. What distinguishes us is simply that we feel particularly happy and familiar with visual cases or cases analogous to visual cases.

The case of the photograph may seem more compelling than that of the puddle, but here again we are overimpressed by a light-involving case assimilable to vision, and here too we have to introduce a possible sighted observer to give body to the idea that we have some special sort of aboutness and not just a certain sort of effect, one among trillions, that is no more (and if you like no less) intrinsically *about* anything or a representation *of* something than the flight of the ball or the shape of the weatherworn rock or the sonic effects of the traffic on the puddle or the precise nature and pattern of the digestive processes now occurring in someone's alimentary canal. The universe is alive with information transfer; some say that it consists of (concrete) information and information transfer. And if information transfer requires representation, then representation is everywhere, and so is aboutness, and there is no way of holding on to cases like the photo while ruling out almost everything else. Conclusion: if UNA exists, it is ubiquitous. If any photo has it, so does any photon.

Some philosophers (e.g. defenders of 'teleological' theories of content) may now say that there is something very special about the representational states of biological entities (at present we are considering only experienceless ones) because they were 'designed' by evolution for specific tasks. But there is no deep difference here, in the great story of the universe. Nor will any such biological criterion distinguish light-detecting states of experienceless phototropic beetles from states of developing foetuses that appear to engage in fiendishly cunning behaviour in the womb (pursuing, roughly, the be-as-selfish-as-possible-short-of-killing-your-host strategy). Defenders of teleological theories of content will also have to accept that experienceless beings can have aboutness if naturally evolved while their cosmic-accident perfect duplicates can't - ever. They will have to accept that naturally evolved experiencing beings like Freddy the frog, Fido and myself can have aboutness and intentionality, while our cosmic-accident Twins can't – ever. This seems awfully unfair (fabulously counterintuitive). Other philosophers try to narrow things down in another way: by according special status to representational states in individuals that depend on some kind of ontogenetic learning process (I'm allowing that experienceless entities can learn), and not on something entirely hard-wired; but the case is at bottom the same.

Others again seek to restrict the class of entities that can be said to have intentionality or aboutness – and a fortiori UNA – in a 'functionalist' way. On this view a state of or episode in an entity X has aboutness only if it has some functional role in X: only if it is disposed to interact with other features of X and thereby affect X's behaviour. But this imposes no significant

restriction at all if we take the notion of function generally, i.e. in a nonnormative way that does not tie the very general notion of function to the very specific notion of contributing to X's survival or flourishing; it lets in atoms as automatically as animals. If instead we take the notion of function normatively, it appears to render the idea of God's intentionality (aboutness) incoherent. God aside, a conscious, cognitively sophisticated 'Pure Observer' or 'Weather Watcher', a being constitutionally incapable of any sort of adaptive behaviour, could conceivably come into existence and enter into many intentional/aboutness states although none of them ever had or could have anything to do with its survival or wellbeing.

Another popular suggestion has been that aboutness comes on the scene only when we can make sense of the idea that X (or states of or episodes in X) can be said to *misrepresent* something. There has been a great quantity of sophisticated argument about what is required for the notion of misrepresentation to be properly applicable, and it seems clear enough that it does impose a significant restriction on candidates for aboutness. It seems clear that the puddle's representation of the moon doesn't pass the test, for example, along with almost all the rest of the causation in the universe. One problem with this idea, however (and very briefly), is that the discussion of has tended to take it for granted that we need a survival-andwellbeing-based normative notion of function in order to make sense of the notion of misrepresentation (it has focused on finding the minimal case of aboutness, canvassing frogs, robots, bacteria and such like). This cannot be right, for there is again no incoherence in the idea of a Pure Observer

who can represent and misrepresent, and know it, in a way completely unconnected with survival and wellbeing. The Pure Observers show with great clarity that intentionality and aboutness can exist in cases where there is no question of (normative) function. They are, however, fatal to a whole realm of theories, and are therefore fogged over for many philosophers.

- I don't have to consider such a case in trying to give a 'naturalistic' account of intentionality because it's not a case that involves a natural being.

Many would say that this objection misunderstands the philosophical problem of giving a naturalistic/physicalist account of intentionality. To allow it is to let naturalism come apart from physicalism in such a way that the problem of giving a physicalist–real physicalist–account of intentionality remains.

It seems, further, that even if we accept the tie between aboutness and misrepresentation (± normative function) it won't stop UNA spreading everywhere. We can make sense of the idea that an X-type particle might go anomalously into state S1, a state that it normally goes into only when interacting with a Y-type particle, even though it has not interacted with a Y-type particle, and on one view this is already enough for misrepresentation. We can further suppose that the X particle normally goes into S2 when and only when it has gone into S1, and that going into S2 in the absence of a Y particle shortens its 'life', and is in that sense dysfunctional for it, although its tendency to go into S2 on going into S1 is not the product of any process of evolution by natural selection. So too a non-self-moving organism like a tree can be in the state it would have been in if it had been exposed to certain environmental conditions (its propensity to go into that state in those conditions being an evolved response) although those conditions do not obtain; and it can react inappropriately - fatally so - in consequence of this 'misrepresentation'.

It may be said that this kind of case is irrelevant, because we are interested in 'purposive' behaviour, pursuit of goals, and so on. But this fact about human interests can't ground any kind of metaphysically solid distinction. Any line that we try to draw between purposive behaviour and non-purposive behaviour in the domain of the experienceless (for we are still in pursuit of UNA) will once again be wholly a matter of anthropomorphic/zoomorphic human prejudice. There is no metaphysically fundamental line to be drawn between the complex reactive behaviour of a developing embryo, which can look intensely and sophisticatedly goal-directed, or indeed of any selfmaintaining system like an individual cell (or any of its biologically distinguishable subparts) and the 'purposiveness' of an undesigned robot like Fluke or - supposing for the sake of argument that birds are experienceless - a nesting bird. It is just that we find it more intuitive to call the latter behaviour 'purposive', given the biases built into our (zoomorphic) interests and ways of understanding things. We naturally favour things that move around on their own in pursuit of things in their environment, for example, over embryos and cells.

One proposal, then, is that misrepresentation goes all the way down, in which case the misrepresentation requirement places no significant restriction on UNA. One may counter this by stipulating that misrepresentation (and so aboutness) can only occur in entities to whom the very specific survival-and-wellbeing-related notion of normative function applies, and this is a pretty good first shot at a significant restriction on genuine aboutness, for it excludes about 99.9 recurring per cent of all the candidate cases of UNA in the universe. It isn't enough, though, for it still lets through a vast array of the states of the embryo that govern its complex reactive behaviour, not to mention states of individual cells and their biologically distinguishable subparts. It seems that yet another restriction is needed to get us anywhere near a satisfactorily limited notion of UNA: restriction to a certain subclass of phenomena that we happen to find particularly interesting and intuitively classify as instances of 'purposive behaviour'. But this restriction simply begs the question, and is completely arbitrary from a metaphysical point of view.

Other reasons can no doubt be given for discerning UNA only at certain special points in the great nexus of cause and efect, but I think they are bound to be metaphysically superficial, for reasons just given. The idea needs development, but it is I think plain. It's not as if it can be undermined by special theories of causation. Nor does it depend on determinism. Even if determinism is false and there are events that carry no information about the past there are innumerable events that do, and the claim remains the same: if there is any underived aboutness to be found in nonexperiential beings then it is all pervasive.

And that's only the half of it. The problem is not only that almost everything (if not everything) has aboutness, it's also that everything that has it has far too much of it – perhaps an infinite amount. Suppose E carries information about D (with sufficiently detailed information about E we can know that D happened because only a D could have brought about E) and that the same goes for D and C, C and B, B and A. In that case the same also goes also for E and A and all stations in between and beyond.

I will return to this second problem of excess shortly. So far we have the idea that if UNA exists at all it is all pervasive.

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How should we treat this conclusion? We could contrapose. We could raise our hands in supplication and confess that it's all too much - that the best thing to say (the only sensible thing to say, given our starting theoretical interest in intentionality) is that there isn't really any such thing as UNA, there isn't ever any real or true underived aboutness in a non-experiential being. I think this is a natural terminological reaction, and the most intuitive in certain contexts, if only because it allows one to withdraw the rejection of $[A \rightarrow I]$ that must have seemed so unnatural to many in $\beta 2$. For the moment, though, I am going to take the second option of continuing to allow that there is UNA while insisting that [a] it falls *infinitely* short of any kind of genuine intentionality and that [b] it is utterly ubiquitous, if it exists at all, in such a way that none of the usually favoured candidates - states of naturally evolved experienceless organisms, cosmic-accident robots, and so on - are special in any way at all, as compared with kicked footballs, ripples in ponds, gravitational effects, and so on. There is, I suggest, no significant or substantive metaphysical line, of the sort that one would expect when dealing with a fundamental, real-world, concrete phenomenon like intentionality, to be drawn between the sense in which states of a purposively efficient naturally evolved experienceless organism or cosmic-accident-programmed robot can be said to be about purple pyramids and the sense in which any effect is about its cause(s). There are plenty of compelling, intuitive, anthropomorphizing, human-interest, purposivebehaviour-focused lines to be drawn between the two cases, but that is really quite another matter.

The choice is stark. Either Dennett is right – there's really no such thing as intentionality, it's just natural and useful to *talk* in such terms when explaining and predicting the behaviour of certain things – or I am right that there really is intentionality, but that all intentionality is experiential. There is no middle ground – and this is something about which Dennett, unlike so many others, has always been very clear.

(But I *know* that my conscious thoughts really are about particular things as a matter of physical and metaphysical fact, quite independently of any explanation and prediction of my behaviour. I know it as certainly as I know that I exist. And you know the same about yourself. So Dennett is wrong! Intentionality is a real, wholly objective, concretely existing phenomenon. *QED*.)

But if experience is necessary for this thing I'm calling 'intentionality', what exactly do I have in mind? What is the nature of the relation between experience and this thing that makes the former necessary for the latter, whether we are thinking about a purple pyramid we can see right in front of us, the church of San Vitale a thousand miles away, the tallest tree in the Amazonian jungle, p, W. V. Quine's second-best sloop, marshmallow camshafts, or round squares? What *exactly* does your and my conscious thinking about the pyramid add to whatever it is in robots like Luke and Fluke that is involved in their efficient and successful search for the pyramid and their depositing of it in a designated box? What exactly does my conscious experience add to my thinking about p, given that Luke and Fluke (equipped with a maths module) are now smoothly engaged in calculating p's decimal expansion? To answer this question I must first say something about cognitive experience.

4. Cognitive Experience

When people today talk of experience, of experiential qualitative content, EQ content for short, they standardly have in mind only things like sensations and sensory images, emotional feelings and moods considered (so far as they can be) just in respect of their non-cognitive felt character – all of which I will bring, for the purposes of the present discussion, under the heading 'sensory EQ content' or 'sensory experience'. This is most unfortunate, because there is also non-sensory EQ content, cognitive EQ content, cognitive phenomenology, *cognitive experience*, and it is analytically speaking quite distinct from sensory EQ content or sensory experience although the two things are profoundly undisentanglable in daily life. The existence of cognitive experience, of cognitive, non-sensory EQ content, is hopelessly obvious to unprejudiced reflection, for it fills almost every moment of our lives. In analytic philosophy, however, its existence is very often denied or at least ignored, even when the existence of sensory experience is conceded.

(Remember that the words 'experience' and 'experiential' have been defined as referring only to the phenomenon of the experiential qualitative character of conscious mental phenomena. For purposes of emphasis I will sometimes speak pleonastically of the '(experiential) qualitative character of experience'.)

The term 'cognitive experience' covers every aspect of experience that goes beyond sensory experience considered just as such. Quantitatively speaking, it covers the vast bulk of our experience. The cognitive EQ content of experience goes far, far beyond sensory experience, and is central to almost everything in our lives. Here, however, I am particularly interested in the cognitive experience involved in comprehendingly entertaining propositions in reading, writing, listening, or thinking, and I am going to limit my attention to this.

I have argued the point elsewhere and will be brief. You are now understanding this very sentence. Clearly this understanding - it is going on right now – is part of the character of the current course of your experience. It is, to put it pleonastically, part of the experiential character, the EQ character, of your current experience. Your experience in the last few seconds would have been very different if the last two sentences had been 'The objection to the Realist Regularity theory of causation is very simple. It is that the theory is utterly implausible in asserting categorically that there is no reason in the nature of things for the regularity of the world.' And the difference wouldn't have been merely auditory. It's the conceptual content of the sentences - and now of this very sentence - that plays the dominant part in determining the overall character of this particular stretch of the course of your experience, although you may also be aware of many other things. Consider (experience) the difference, for you, between my saying 'I'm reading War and Peace' and 'barath abalori trafalon'. In both cases you experience sounds, but in the first case you experience something more: you have understanding-experience, cognitive experience. Cognitive experience of the sort I am focusing on at present is a matter of whatever EQ content is involved in episodes of consciously entertaining and understanding specific cognitive or conceptual contents after one has subtracted any sensory EQ-content trappings or shadings or accompaniments that such episodes may have.

Here is another proof of its existence. *Have you really been having merely sensory experience for the last two minutes*? That's a rhetorical question and the answer is of course not. But if there's no such thing as cognitive experience the answer is certainly Yes. One can imagine the rhetorical question being interrupted.... Have you really RELIGIOUS DISSENT had nothing WILLIAM JAMES'S PLUMBER'S BILL but sensory experience SHOW ME SOME DARK MATTER for the last thirty seconds? If there's no such thing as cognitive experience the answer is certainly Yes....

I think that the main difficulty that philosophers have with the idea of cognitive EQ content derives from the fact that they fail to distinguish it sharply from cognitive content. So let it be said: *cognitive EQ content is not cognitive content*. Suppose you think consciously *The average distance from the moon to the earth is 238888 miles*. What is the cognitive EQ content of this thought-episode? Well, consider your 'Twin-Earth' Twin, your 'Brain--in-a-Vat' Twin and your 'Instant' Twin who has just now popped flukishly into being. By hypothesis, all three of them have exactly the same thought-experience, the same cognitive EQ content, as you, and the cognitive EQ content of your thought-episode is precisely what you have in common with them, experientially speaking.

So much for your thought-episode's cognitive EQ content. What, now, of its cognitive content?

Accounts differ. According to one central account cognitive content, whatever the details of its nature, is something that is essentially semantically evaluable, evaluable as true or false, accurate or inaccurate. This is the account that will concern me.

There is a different, fashionable account I mention to put aside: the externalist, direct-reference, 'representationalist', Russellian (etc.) account, according to which the cognitive content of the thought-episode consists of the moon itself, the earth itself, and the distance between them itself, or the state of affairs that consists of the moon's being this far from the earth. Since the moon and the earth are not semantically evaluable entities, or representational entities, or mental entities, being things that could exist without there being any minds or representations at all, they are in no danger (one lives in hope) of being confused with the EQ content of a thought-episode, which is an essentially mental phenomenon that could not exist if there were no minds at all. I take it, accordingly, that the danger of failing to distinguish cognitive EQ content sharply from cognitive content arises only when cognitive content is at least taken to be something semantically evaluable and hence something that represents something, and hence something that is as a representation ontologically distinct from what it represents. The possibility of confusion is then provided for, because we also often take mental phenomena to represent something - and to be of course ontologically distinct from what they represent. (Note that both sorts of cognitive content can happily coexist, so long as they do not insist on being called the same thing, and they can equally well coexist with cognitive EQ content. In the case of my thinking The average distance from the moon to the earth is 238888 miles, there is [1] the Russellian cognitive content, i.e. the moon, the earth, and so on plus [2] the cognitive EQ content, i.e. that which I share fully with my Twins plus [3] the semantically evaluable cognitive content, i.e. that feature of my thought, whatever your preferred theory of its nature, in virtue of which my thought has the property (which it certainly has) of being able to be true or false.)

It remains only to say that the cognitive EQ content of my thought-episode, which is by hypothesis identical to the cognitive EQ content of my Twins' real or apparent thought-episodes, is in itself no more semantically evaluable than sensory EQ content is – by which I mean sensory EQ content considered just as such, i.e. entirely independently of its causes. Cognitive EQ content is just a matter of the qualitative character of experience and the fundamental block to understanding it clearly and distinguishing it cleanly from cognitive content is simply a profoundly inadequate (because merely sensory) conception of *the (experiential) qualitative character of experience*.

I don't see how there can be any real progress with the problem of intentionality until we acquire or recover a good grasp of the reality of cognitive EQ content and its all-importance in human life. The key to the problem of intentionality (including the supposed problem of intentionality with respect to so-called 'non-existent objects') lies here, and yet many analytic philosophers deny the existence of cognitive EQ content, making a mistake comparable to the mistake made by those by no means entirely legendary philosophers who thought that thinking was wholly a matter of having images in the head.

We may now return to the question raised at the end of β 3: What is the relation between experience and intentionality?

5. What is the Relation Between Experience and Intentionality?

Lucy and Louis, who live in the real world, as we do, are having qualitatively identical experience – call it 'M-experience'. It is experience just like experience of thinking about, or perhaps visualizing, a moose. In fact it is just like the experience someone might have if thinking about, or visualizing, a certain real moose, Mandy, M for short. And in fact Lucy's Mexperience has normal causal links to seeing M or pictures of M, or reading about M. Louis's M-experience, by contrast, and his whole accompanying M-experience-related dispositional set, which I assume to be identical to Lucy's, are caused by a freak brainstorm. He has had no contact with moose, still less M.

Lucy's M-experience is about M; it has classic intentionality with respect to M. Louis's M-experience isn't; it has no intentionality with respect to M. It is not about any concrete object, although Louis thinks it is. So the two experiences differ dramatically in their intentionality. But the only relevant difference between them lies in their causes. It does not (by hypothesis) lie in their intrinsic EQ character as experiences. Nor is there any difference between Lucy and Louis so far as their relevant behavioural dispositions (including their mental-activity dispositions) are concerned, for I have supposed that they are identical in this respect. It is simply the difference in the causes of their experiences that makes the difference in respect of M-intentionality. And this causal difference is not itself philosophically mysterious. It is not significantly different from the causal difference that explains why this picture is a picture of Isaiah Berlin (it is a photograph or portrait of Isaiah Berlin), whereas this qualitatively identical picture is not, since it is a work of pure imagination or a complex accident of paint.

We have, then, a very plain causal factor, and it raises a problem that is familiar from other causal theories like the causal theory of perception. For

the fact is that Lucy's thought is about *Mandy*. It is not about the neuronal happenings that directly causally precede and precipitate the (neural happenings that are the) thought, for example. Nor is it about the light waves and optic-nerve electrical activity that are causally involved in Lucy's coming to know about *M* by seeing or reading about her. Her thought is *quite unequivocally* about *M* rather than any of these other things. This is not merely some kind of natural *interpretation* of the situation, some kind of 'intentional-stance' hypothesis. It is an immoveable objective fact, however inconvenient it is (you may test it by thinking of an absent friend).

But what makes Lucy's thought unequivocally about M and M alone? How do we – how does intentionality – know where to stop? We may compare the question of what justifies our taking photographs and sound recordings to be only of things that are located at a certain stage in their causation. Is it an immoveable objective fact that this is what they are of or about, independently of what we human beings take them to be about, or do we find such objective facts only in cases like Lucy's?

The problem of where to stop (how to stop) is, as just remarked, a routine problem in theories that have a causal component. It certainly doesn't constitute a difficulty that is peculiar to the present account of intentionality. On the contrary: it is precisely the stopping problem that justifies the present account's insistence on the necessity of experience. For we need an account of how, given all its causes, Lucy's thought manages to be only and precisely about M. And here we reach the crux: it is precisely the EQ character of her experience, and in particular her cognitive experience, that allows us to stop at a certain specific point as we proceed down the chain of causes - in a way that nothing else can. How can it do this? Because the EQ character of her experience includes her sense, her conception, of what particular thing -M – her experience is about; it includes her taking her experience to be experience of a certain particular thing. It is this taking, which is part of the EQ character or content of her experience, and in particular the cognitive-experiential character or content of her experience, that settles the question, given her causal context, of which of her thought's causal antecedents her thought is about - in a way that nothing else can. Her experience is a real, concrete, natural, empirical phenomenon, albeit not one that is open to public inspection, and its EQ character, cognitive or otherwise, is equally a concrete empirical phenomenon, albeit one that is not open to public inspection.

Consider a simple perceptual case. There is a glass in front of you. You are thinking about it and it alone. How can you do this? What makes it the case that you are thinking about the glass, rather than about the neural activity immediately preceding your thought, or the stimulus pattern on your retina, or the glass reflected light waves a metre away from your eye? There are really only two candidates in play. Either it is [1] the EQ character, and in particular the cognitive EQ content, of your current experience – the fact that your experience includes your taking it to be experience of a certain thing (note that one does not have to posit any kind of higher-order experience to account for this 'taking'; the taking in question is simply built in to the character of the experience). Or it is [2] your current overall behavioural disposition, plus anything else about you that anyone wants to cite so long as it excludes [1], the very existence of which is denied by many participants in the debate.

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It is, however, silly to think that behaviour can settle this question. It is not really a candidate at all. It has seemed to be a candidate (when the question has been faced at all) only because many have either denied the existence of EQ character outright, or have allowed it but denied that it is in any way relevant to the question of intentionality. Consider the experienceless, pyramid-fixated robot. It may be overwhelmingly natural for us to say that certain of the states that it is in when it is interacting with purple pyramids - I'll call them P-states, where P-states are understood to be identified by their intrinsic or non-relational character – are about the pyramids, given how it behaves (it picks up the pyramid and drops it in the box). But this behaviour doesn't really show that its P-states are about the pyramid in any sense in which they are not equally about the proximal inputs to its central control system, or about what causally precedes those inputs by 50 ms, and so on. One can train the robot in a virtual environment on an electronic simulator until it is rich in P-states and many other such states (R-states for red spheres, to be avoided, B-states for blue cubes, to be ignored), and then transfer it into an exactly matching physically real environment in which there are purple pyramids, red spheres, blue cubes. (An alternative is that its software configuration is a product of cosmic fluke.) Its P-states are not about the real pyramids before it is transferred, and the transfer, the embedding in the real world, cannot make it true that its P-states are now about the pyramid in any sense in which they are not equally about the proximal inputs to its control system, or whatever immediately causally precedes the proximal inputs; and so on. Nor can there be any sense in which it is wrong about what its states are about.

You have to choose, as already remarked. Either experience is essential to intentionality, or Dennett is right across the board and there is really no such thing as intentionality: there are no matters of fact about intentionality, all attributions of intentionality are just a matter of theoretical convenience. There is no tenable middle ground. (It will not help to include linguistic behaviour, or appeal to facts about the public nature of language.)

This returns us to the second problem of excess, the problem that if there is UNA then anything that has it has far too much of it (the first problem is that if anything has UNA then everything or almost everything does). Compare what happens when we, brought up in the real world, are switched unknowingly onto a perfect simulator. We are then wrong, completely wrong, about what our thoughts and experiences are about. We can get things completely wrong because there are hard, wholly non-behavioural, real-world, concrete facts about what we take our experiences to be about. These takings are themselves real-world, concrete phenomena-EQ phenomena. They are features of the cognitive EO character of our experience, and they, they alone, make it possible for us to get things wrong. They alone can confer sufficient determinateness on intentionality, determinateness sufficient for making sense of error. The experienceless do not and cannot get things wrong, so if their states are about anything they're about all their causes indiscriminately. When it comes to aboutness and intentionality, consciousness kicks ass.

There are certain complications. If Lucy is contemplating a rock in the mist which she takes to be a moose, and indeed to be M, then that taking-something-to-be-a moose, which is also a taking-something-to-be-M, and which is, as a taking, entirely a matter of cognitive EQ content, is obviously

not going to settle the question of which of her experience's local causal antecedents it is about (i.e. the rock). Fortunately, however, she also takes it that *that thing* (the thing she believes to be a moose, and to be M) is a physical object over there in the mist, and that taking, too, is part of the content of her experience, and it does allow us to stop at a particular place as we go back up the chain or cone of causes. The same goes if the thing in question is just a dark curl in the mist. If the cause of her thought is a brainstorm, on the other hand, then it is not about that brainstorm, but it is still about moose, and indeed about M. And so on.

Perception provides the most vivid cases, but the point is general. It's not just that the EQ content of my experience allows me to stop (makes it the case that I stop) at the right object when I am having a perceptual experience of it. The same holds equally in the case of my thoughts about absent objects, and in the case of the concepts I deploy in thought – given always that I am in a certain causal context, am in fact in a real world more or less as I suppose myself to be. Suppose I am thinking about moose, or about some particular moose. The EQ character of my thought when I deploy the concept or thought-element MOOSE in the causal context I am in, makes the object of my thought determinate in a way that no representation in any non-experiential being can ever be (obviously the EQ character of my thought can't do it all on its own, causal context is essential). This is not to say that it makes it determinate in some magically absolute way. The claim is just this: given that we are in a real world more or less as we suppose ourselves to be, the intentionality of Lucy's overall experiential state is sufficiently fixed (sufficiently 'disambiguated', one might say) by the fact that she takes it to be experience of M, a moose, and is suitably causally connected to M.

But what exactly is this 'taking', that is, you say, part of the content of her experience?

It is an all-pervasive feature of our experience; your current experience is flooded with it. It is as plain as day, but obscure to philosophers who have so embrangled the notion of mental content. It is simply a matter of cognitive EQ content, something that Lucy and Louis have wholly in common, so far as their M-experience is concerned, although Lucy is thinking about M and Louis is not. All one has to do, to know what it is, is to think about what Lucy and Louis have in common, in the case in question (or Lucy and her experiential duplicate, whom we may now suppose to have no causal connection to moose at all).

One might say that it is *cognitive intent, intentional intent*, which is part of the cognitive-experiential content of a thought, that fixes intentionality in conjunction with the causal factor. It fixes what the thought is about in its causal context. It is essential. Nothing else will do. Every other attribution of intentionality is convenient fiction, 'intentional-stance', down-with-me-taphysics, behaviourist-or-neobehaviourist, don't-care anti-realism about mental states. When the robot or zombie comes off the simulator and enters the real world, it doesn't, to repeat, get anything wrong. Nor does the UNA that we have allowed that it can be said to have suddenly start to be about real, concrete, spatio-temporal, distal things in any sense in which it is not equally about its proximal inputs. The same goes when we put it back on the simulator. When you and I transfer between real world and simulator, by contrast, all sorts of things change. We are wrong about our situation, for example, because our intentionality is effectively determinate.

But how can experience ever deliver determinateness?

It just can. Cognitive experience in causal context can do just this. Such is its power. Thought is a remarkable thing. The whole philosophical difficulty, for some, is simply to accept this fact; to see that there is absolutely nothing suspect or question-begging or anti-naturalistic about it. It takes some getting used to if one has been brought up philosophically in a certain way.

- But 'cognitive intent', if there is such a thing (I don't really know what you mean) must be supposed to be non-experiential in many cases if not in most cases; something implicit, part of the background out of which thought arises, not something that is normally present in any way in the (EQ) content of conscious experience.

In my use the term stands for something experiential – I'll call it 'conscious cognitive intent' if you prefer. One can use the phrase 'cognitive intent' in a way that allows it to be non-experiential; and one can think of it as something that can be wholly latent, when one is thinking, in such a way that there is no sense in which it is part of the EQ content of one's thought. One will first, however, need to acquire a realistic view about how much can be part of the EQ content of experience without being in the focus of attention; for this is vastly underestimated in the analytic tradition. And even when one has done this I will continue to insist that *intentionality* comes on the scene only when cognitive intent is part of the EQ content of thought (stressing, again, how much can be part of the EQ content of experience without being in the focus of attention); so that whatever non-experiential cognitive intent is, it doesn't deliver intentionality. Nor does it deliver determinate aboutness, for it is subject to all the uncontrollability of UNA. When there is experiential cognitive intent, by contrast, everything is transformed.

– 'When there is experiential cognitive intent everything is transformed'. This is magic. You're simply asserting that experiential cognitive intent + causal context can constitute intentionality but that no non-experiential cognitive intent, conceptual capacity, or whatever can in any context. Your thesis is that when there's experience, pff', there's intentionality.

I'm saying that there's intentionality only when there's experience, but I think I see what you mean. I think you are imagining a case in which everything that can possibly contribute to the existence of intentionality is present, including everything that is possible in the way of experiential conditions given that conscious cognitive intent (intentional intent) is absent. And I think you're saying that simply adding conscious cognitive intent – i.e. a mere piece of experiential what-it's-likeness, albeit cognitive what-it's-likeness – could not make the difference.

If so, I disagree. I do hold the *pff!* thesis. It's a bit like looking at one of those pictures where you can't see what it is a picture of, and then suddenly you see (to offer an analogy that lies wholly inside the experiential realm). Suppose Louis is confronting a real scene in the world, and is seeing it, on account of some temporary mental fugue, just as an array of colours, without even any automatic taking of it as of the real world, without even any grasp of it as experience of anything at all. No intentionality here, I say, none at all. Then he comes to, he sees buildings, leaves, whatever it is. Such 'brown-study' fugues, in which intentionality fades to nothing, are not that uncommon in ordinary life, and one can precipitate them quite easily, fixing one's stare and letting go. Total intentional decoupling – because of the lapse in cognitive EQ content or cognitive intent.

- But what, for all love, *is* this cognitive intent? You can't propose to analyse intentionality in terms of intent, intentional intent, announce that this intent is essentially experiential, and that's it.

Given the way the notion of intentionality has been detached from mind and experience in current debate, to move from the notion of intentionality to a notion of intent isn't to move in anything like a circle of terms; for there is no intent in the experienceless. And if and in so far it is to move in a circle it brings insight, given the current debate in analytic philosophy, to see that this is so. It brings the notion of intentionality home, and it's a great step forward to see this – to see that this is home.

- It's still magic. How can the quality of experience pin things down determinately, or at least as determinately as you say it can? How can it be any more determinate than behaviour, in the end, in determining intentionality? You are, at bottom, dreaming.

'Determinate' and its cognates are tricky words because they have metaphysical/ epistemological slippage built in to them. I can't answer until I'm sure that you're not using 'determinate' in any (to me uninteresting) epistemological sense, only in a metaphysical sense; and that you don't think, as so many did in the last century (and perhaps some still do), that a thing cannot be metaphysically determinate unless it can in principle be epistemologically determinate for us human beings.

- I'm not sure you can cut metaphysics off from epistemology like this, but I'll let it go.

Good, then my answer to your question 'How can the quality of experience pin things down determinately' is: Ah, it just can. That's how it is. This is what we do. This is the power of the entirely natural phenomenon of conscious thought. My intent (taking) fixes it that I'm thinking about the tree, not the proximal inputs. If God could look into my mind, he would certainly know what I was thinking about, given that he also knew – and how could he not – about my causal circumstances. He could know, given the EQ character of my experience, that I was thinking about the tree, not any intervening causal goings on, light waves, optic nerve electrical activity, and so on.

It may be hard to see – the reality, the power of conscious thought – after nearly a century of behaviourist and post-behaviourist (functionalist, interpretationist, representationalist) folly. It may seem like mere assertion, or trying to have something (something impossible) for free. It may seem like sheer irresponsibility, or a naïve relapse into hopeless old ways of thinking.

It is a return to old ways of thinking, but it is not a relapse and it is not naive. I think, however, that it will leave a feeling of dissatisfaction, partly because it terminates in something primitive, not further analysable: the mere existence of the experiential modality of cognitive experience, the mere existence of the phenomenon of cognitive EQ content. The only way to make progress here, I think, is to let go: to see that there is nothing to press for here, no legitimate philosophical demand that is not being met. The fact that cognitive experience exists, just as visual and auditory experience exist, is a fact we encounter (right on our doorstep) in naturalistic investigation. The key is to see that it raises no greater problem for (evolutionary) naturalism than the existence of any other kind of developed experiential modality, like vision or hearing. There is no new problem of principle. There is in the world cognitive EQ content, intentional intent, cognitive-experiential intentional intent, just as there is pain. It is plain that dispositional states (e.g. belief dispositions) cannot be intentional states, on the view I have expounded here, and this will worry many. Terminological habits are as powerful as any in human life, and the way of talking that allows that dispositional states can be contentful intentional states is deeply engrained in the idiom of analytic philosophy. Dispositional states have, indeed, been taken to be the paradigm cases of intentional phenomena. This is extremely odd, for it is an elementary point that a disposition, e.g. the disposition to answer Yes if intending to speak truly when asked if grass is green, is just not the kind of thing that can possibly be contentful in the way that it needs to be if it is to be an intentional thing – even if it can be identified as the particular disposition it is only by reference to the proposition (the content) grass is green, which is itself an (abstract) intentional entity. To think that a disposition is, metaphysically, the kind of entity that can be contentful in itself, and so intentional, is a bit like thinking that an object's disposition to cause red-experience in human beings in certain circumstances is itself something red, in the ordinary naïve understanding of the term 'red'; or that if an object has a fragile disposition, then it already in some sense contains or involves actual breaking. (No one, I think, will want to turn to the non-experiential, neural categorical ground of the belief disposition to provide a truly, intrinsically mentally contentful grass-is-green item.)

There are many more questions to address. There are questions about the minimal case of intentionality. If we suppose that babies don't have intentionality while children do we need to make sense of how intentionality dawns. If we take it (as I do) that cats have intentionality we need to say something about this; and just as we cannot hope to sort all conscious creatures scientifically into those that definitely have concepts (whatever exactly concepts are) and those that definitely don't, so too attributions of intentionality will sometimes be irredeemably uncertain. Questions about the innateness of the object concept, of the sort famously worked on by Spelke, Leslie and others, will be relevant; and they, no doubt, will link to questions about the innateness of intentional intent itself. There will be questions about the intentionality of peripheral awareness, and so on. For now this is enough.

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Galen Strawson

Reale Intentionalität v.2: Warum impliziert Intentionalität Bewusstsein?

Intentionalität ist ein essenziell mentales, essenziell ereignishaftes und essenziell auf Erfahrung beruhendes (bewusstseinsbetontes) Phänomen. Jeder Versuch, der die Intentionalität charakterisieren will und sie von der bewussten Erfahrung entkoppelt, sieht sich zwei unüberwindbaren Problemen gegenübergestellt. Erstens muss man einräumen, dass beinahe alles (wenn nicht geradezu alles) Intentionalität besitzt – bis hin zu den subatomaren Partikeln. Zweitens hat dies zur Folge, dass alles, was Intentionalität besitzt, viel zuviel davon besitzt – ja vielleicht sogar unendlich viel davon. Der Schlüssel zu einer zufrieden stellenden und wirklich naturalistischen Theorie der Intentionalität ist (1) ein realistisches Konzept des Naturalismus und (2) ein wohl entwickeltes Verständnis des Phänomens der kognitiven Erfahrung.

Galen Strawson

Intentionnalité réelle 2: pourquoi l'intentionnalité entraîne la conscience?

L'intentionnalité est un phénomène essentiellement mental, essentiellement événementiel et essentiellement expérienciel (conscient). Toute tentative de caractérisation de l'intentionnalité qui la sépare de l'expérience consciente est confrontée à deux problèmes insurmontables. D'abord elle est obligée de reconnaître que presque tout (sinon tout) – y compris meme les particules subatomiques – est doté d'intentionnalité. En conséquence de quoi, tout ce qui est doté d'intentionnalité en est beaucoup trop – peut-être infiniment. La clé d'une théorie de l'intentionnalité satisfaisante et vraiment naturiste est (1) une conception réaliste du naturalisme et (2) une compréhension correctement développée du phénomčne de l'expérience cognitive.