

The Poverty of Consciousness

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- My title alludes to that of Marx's book, The Poverty of Philosophy— itself a play on The Philosophy of Poverty, a subtitle of a book by the French socialist and anarchist, Pierre-Joseph Proudhon.
- Marx's title reflects his harsh break with Proudhon, much as Karl Popper's later title, The Poverty of Historicism, encapsulates his deep hostility to Marxist thinking.
- By contrast, my own allusion is friendly, and is meant to point up a nice parallel my argument has with a schematic aspect of Marx's thinking.

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- The poverty of philosophy, Marx held, lay in its *idleness*— in its being geared only to *understand*, and *not also to change* the world.
- I'll argue that something similar holds for *consciousness*.
- Consciousness often—though not always—*reflects* our mental goings on, and because of that it can (to some extent) help us *understand* our mental lives.
- But consciousness *does little* in our lives, and so has *little efficacy or utility—even in our mental lives*.
- Hence the poverty of consciousness.

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- Marx urged that philosophy is idle because it's part of a *cultural superstructure* determined by an *economic base*—thus turning the tradition on its head *as to what's basic*.
- Similarly, whereas both *folk opinion* and *tradition* in both philosophy and psychology have held that consciousness is a crucial determining factor in our mental lives— I argue that consciousness is *just a picture* [superstructure] of our mental lives (a "surface phenomenon" [Nietzsche, II VI:3]), affected by *extraneous social factors* [also superstructure].
- What matters psychologically is what's *under the nonconscious hood* [economic base].

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OVERVIEW

- I. Preliminaries and Caveats
- II. Rational Thinking
- III. Intentional Action
- IV. Executive Control and Higher-Order States

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Overview of Sections

5

I. Preliminaries and Caveats

- It's often held that conscious states—unlike mental states that *aren't* conscious—have some special tie to *rationality*, or to *intentional action* or *executive function*.
- Perhaps a mental state's being conscious *enhances* rationality, intentional action or executive control—or even *enables* them.
- If so, these *functions* might help explain why creatures *evolved* with mental states that are sometimes, even often, conscious.
- Function here is just *utility for an organism*.

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§I: Preliminaries and Caveats

8

- I'll raise *doubts* about these ties claimed for consciousness: ties with rationality, intentional action, and executive control.
- Indeed, I'll argue that *consciousness has very little function*, and that we must explain its occurrence *not* by appeal to its being beneficial, but in some other way.
- I'll rely on: (1) *folk-psychological* observations, (2) *theoretical* considerations, and (3) *experimental* findings. And I'll argue that the utility even of states that *are* conscious is due to *other factors*.
- *A first caveat: Having little or no utility does not mean having no causal efficacy. So the view I'll develop does not imply, or even suggest, epiphenomenalism.*

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§I: Preliminaries and Caveats

9

- A second preliminary: I'm concerned only with the utility of *mental states' being conscious*—
what utility might be *added* by a state's being conscious.
- So my concern is not with the utility of *an individual's being conscious*, as against the individual's being asleep, e.g., nor with the utility of an individual's being conscious *of* something—
which I'll call *transitive* consciousness.
- These are plainly three distinct properties, since the *contrary predicates*—
'unconscious' or 'not conscious'—have *different application conditions* in the three cases.

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§I: Preliminaries and Caveats

11

- Plainly *an individual's* being conscious—being *awake and responsive to stimuli*—is crucial for its functioning and survival.
- And being in *states in virtue of which one is conscious of various things* is also vital to successful functioning (e.g., Merker 2005).
- These benefits are sometimes seen as due to the *mental states' being conscious*.
- But the utility of *individuals'* being conscious and of their being conscious *of things does not automatically carry over to* utility for mental states' being conscious.
- And my focus here is *solely whether there is a benefit for states to be conscious*.

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§I: Preliminaries and Caveats

12

- A third preliminary: I'll be concerned here only with one *special case* of conscious states—that of conscious *intentional states, such as thoughts and volitions*.
- So I won't talk today about the consciousness of *qualitative* states, such as sensations and perceptions (or at least not about their being conscious *as qualitative*).
- I've argued elsewhere that qualitative states do occur *without being conscious*—and also that their being conscious adds *little if any functionality* (insofar as they are conscious *as* qualitative states).
But that's a topic for another occasion.

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§I: Preliminaries and Caveats

13

- A fourth preliminary—about how my argument today relates to my higher-order-thought theory of consciousness.
- On that theory, as Dretske (1993, 1995) and others have noted, a mental state's being conscious may well have little function.
- I'll briefly mention my theory in §IV.
- But my argument that consciousness has no significant function in no way relies on that theory.
- So if my argument is right, it provides an independent, if indirect, substantiation that the higher-order-thought hypothesis is on the right track.

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§I: Preliminaries and Caveats

17

- Final preliminaries: It might seem that consciousness has some utility because of its subjective centrality in our lives. But subjective centrality is not function.
- Positing a function is also inviting since we understand things only insofar as we can locate them within an explanatory net—and doing that may seem to require those things to have some significant function.
- But we can explain consciousness by appeal not to functionality, but rather to the causal factors that give rise to some mental states' being conscious.
- Appeal to function is common in biology, and hence neuroscience—but it's a lot less helpful at a psychological level of study.

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§I: Preliminaries and Caveats

18

- The appeal to explanation is often due to *a desire to sustain naturalism*—specifically naturalism about what it is for mental states to be conscious.
- And when a phenomenon seems otherwise intractable to naturalization, many seek to defeat the charge that it can't be naturalized by invoking an adaptationist *causal story* (not always an *explanation*) of how the phenomenon arose.
- But *exclusively* selectionist stories are dubious:
Endogenous tendencies for genetic material to mutate in particular ways likely account for a lot,
and many traits emerge by *accident*.

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§I: Preliminaries and Caveats

19

- That aside, any appeal to selection here requires that the *consciousness of mental states* has some *adaptive advantage*—i.e., utility—which I'll argue against.
- And independent of adaptationism, the higher-order-thought theory (along with my *quality space theory* of mental qualities) helps sustain naturalism, since it explains conscious states *just* by appeal to nonconscious mentality, and *mentality is easier to naturalize when it isn't conscious*.
- Also, as I've argued elsewhere, the theory points to *an alternative, less questionable explanation of how mental states do come to be conscious*.

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§I: Preliminaries and Caveats

20

II. Rational Thinking

- Sydney Shoemaker (1996) expresses a standard idea about the function of consciousness, that *adjusting* first-order beliefs and desires to make them more rational *requires* that one have “[second-order] beliefs about what [one’s] current beliefs and desires are.
 “... [F]irst-order beliefs and desires, do not rationalize ... changes in themselves” (33).
- Also, David Armstrong’s “teleological deduction” that some mental states must be conscious holds that “any animal that solves problems mentally must” be aware of its relevant mental states (1968/1993, 163).

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§II: Rational Thinking

23

- Some theorists actually build such a tie with rationality into the very account of *what it is for a state to be conscious*—as with Ned Block’s (1995) well-known notion of *access consciousness*:
 A state is access conscious if its content is “poised for use as a premise in *reasoning*, ... [and] for [the] *rational control* of action and ... speech” (231, my emphasis; cf. 2001, 2007).
- Access consciousness is in effect *the type of consciousness that figures in rationality*:
 A state is access conscious if, but only if, it has the potential to figure in rational thought and action.

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§II: Rational Thinking

24

- The idea that consciousness has some essential tie to rationality also inspires the well-known *global-workspace theories* of consciousness (e.g., Baars 1988, 1997; Dehaene and Naccache 2001; Dehaene *et al* 2003; Van Gulick 2004), on which a state is conscious just in case it has global ties to a variety of cognitive systems—ties that subserve the *rationality* of one's thoughts and desires.
- That aside, *introspection* itself may seem to point to a tie between consciousness and rationality, since *we're introspectively aware of our own rationality only when the relevant thinking is conscious*.

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§II: Rational Thinking

27

- Similarly (and relevant to §III) introspection may seem also to sustain a tie between *consciousness and intentional action*, since when intentions are conscious, we're aware in a first-person way of our actions *as being intentional*.
- But *since introspection has access only to conscious states*, it can't reveal a tie those states have with rationality or intentional action *but which nonconscious states lack*.
- First-person access *can't compare* conscious with nonconscious states; so we can't determine *in that way* what function mental states' being conscious might *add*.

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§II: Rational Thinking

28

- And various *folk observations* suggest that consciousness adds little functionality.
- *Thinking* is often rational without its being conscious, and *behavior* is often rational—rationally keyed to goals—even when none of the thoughts and desires that lie behind it are conscious.
- We sometimes solve problems and work out plans *rationally but not consciously*—as when things “just come to us,” i.e., evidently as a result of *rational thinking that isn't conscious*.
- And we often even have a *first-person sense* that such behavior is rational.

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§II: Rational Thinking

29

- Even when we *correct or adjust* our reasoning, conscious monitoring of it seldom figures; typically *it simply seems that we come to see things more clearly*.
- Thus it's relatively unusual that we adjust reasoning by *consciously rehearsing* the steps—and when we do, that process is somewhat *awkward and slow*.
- There is confirmation of this in findings by Ap Dijksterhuis and colleagues (2006; see also Bargh 2002) that deliberating about complex consumer choices—both in and outside the lab—actually yields *better results when that deliberating is not conscious*.
- (See, however, data of Cleeremans [unpublished] that challenges the Dijksterhuis results.)

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§II: Rational Thinking

30

➤ Such experimental results aside, people sometime seem especially intuitive in their thinking—in a way that often works better than conscious ratiocination.

Such intuitive thinking often seems more perceptive, penetrating, and compelling.

➤ But the thinking we call intuitive is just thinking that isn't conscious—indeed, *isn't encumbered by conscious thinking*.

➤ Since conscious thinking can interfere with such intuitive thinking—and even prevent it altogether—this is a commonsense case in which conscious thinking not only isn't beneficial, but can actually be *deleterious*.

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§II: Rational Thinking

32

➤ Armstrong argues that “if our mind is to work purposively ... we must have awareness of our minds” (1968/1993, 163):

Only by being aware of our “current mental state ... can we adjust mental behaviour to mental circumstance”; “[o]nly if we do become so aware will we know what to do [i.e., think] next” (327).

➤ This reflects his *perceptual model of consciousness*: We *survey* our mental states somewhat as we do with physical objects.

➤ But we seldom if ever do that; our mental processing typically relies solely on *causal interactions among the first-order states*.

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§II: Rational Thinking

33

- All this points to an important theoretical reason to expect that thinking and planning would often be rational—indeed that it would typically be—wholly independently of being conscious.
- The rationality of thoughts and desires is solely a matter of connections among the intentional contents of the relevant states.
Nothing else figures in whether thinking and planning are rational.
- And intentional states, such as thoughts and desires, interact causally in ways that reflect their intentional content.

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§II: Rational Thinking

34

- Indeed, on many (though not all) theories of intentional content, a state's content is at least partly a matter of that state's causal connections—actual and potential—with other relevant mental states (and with relevant stimuli and behavior).
- (And all we need here is a partial dependence.)
- So a state will have the content that it's raining, e.g., only if it has suitable causal connections—actual and potential—with other relevant thoughts and desires.
- Even “atomic” theories (e.g., Fodor 1987) agree that content must in some way track causal potential (see, e.g., Fodor 1980).

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§II: Rational Thinking

35

- Given this tie between content and causal potential, thoughts and desires will *tend* to cause and be caused by other thoughts and desires *with which they have rational ties*—since rational ties pertain to content and to useful empirical knowledge.
- And that's all *independent of whether those thoughts and desires are conscious*.
- Indeed, even when thinking *is* conscious, its being conscious will contribute little if anything to its rationality, since rationality depends *not its being conscious*, but on the *intentional content* of the constituent states—and hence their *causal potential*.

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§II: Rational Thinking

36

- Much the same emerges from noting that we *taxonomize* intentional states in terms of their content and mental attitude.
- And since intentional states can all occur without being conscious, *the property of being conscious, when it does occur, is independent of the states' other mental properties*.
- But the rationality—indeed, all the utility—of intentional states is due just to the *properties by reference to which we taxonomize those states*.
- So rationality and utility are independent of intentional states' being conscious.

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§II: Rational Thinking

37

- One can (noninferentially) report a state only if it's conscious; so might that *ability to report* be a function of consciousness (Chris Gauker, personal communication, April 2007)?
- No: *Reporting* one's thought or intention does little or nothing that one can't do by simply *expressing* those states—by saying that p, or saying that one will do a.
- Just as *semantic ascent* (e.g., going from $\lceil p \rceil$ to $\lceil \text{It's true that } p \rceil$ [Quine 1960]) buys little in communicative value, so *psychological ascent* (going from asserting $\lceil p \rceil$ to the indirect-discourse report, $\lceil \text{I think that } p \rceil$) also adds little utility.

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§II: Rational Thinking

40

- Verbally expressed thoughts are, *in the human case*, always conscious (except not HOTs). But this doesn't signal some utility for verbally expressing one's thoughts—as against reporting them.
- Rather, it's due to *a special feature of human language*: (1) The ability to talk about one's thoughts and the pragmatic equivalence of saying $\lceil p \rceil$ with saying $\lceil \text{I think that } p \rceil$, *together with* (2) that equivalence's being *second nature for one*.
- Whenever one says $\lceil p \rceil$, one might as easily have said $\lceil \text{I think that } p \rceil$; so saying $\lceil p \rceil$ disposes one to say, and thus to think, that one thinks that p, thereby making conscious one's thoughts that p.

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§II: Rational Thinking

41

- Rationality often is a matter of having reasons; thinking something isn't rational if I have no reason for thinking that thing.
- A reason is some thought or belief one has (or could have) that rationalizes another thought or desire (e.g., Davidson 1963).
- It's my reason if I have the thought or belief; it's just a reason if it's merely a thought or belief I could have.
- But a thought can be one's reason—one can have that thought or belief and it can rationalize other states and processes—without that thought's being conscious.

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§II: Rational Thinking

49

III. Intentional Action

- The foregoing considerations apply also to the tie often claimed to hold between consciousness and intentional actions—i.e., actions that result from one's own prior volitions.
- The potential of a volition to issue in action tracks the content of that volition. So utility is a matter of whatever causal potential goes with that content—independently of whether those volitions are conscious.

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§III: Intentional Action

63

- Volitions, like other mental states, need not be conscious: An action is intentional if it's *initiated* by a volition—and is in that way under one's control—even if the volition itself is not conscious. (One might even still regard one's own action *as* intentional.)
- Acting intentionally does require that one *perceive* one's environment—but the *volitions* need not be conscious.
- And even the perceiving itself might be *subliminal*—and so also not conscious.
- All that aside, even when an intention *is* conscious, its being conscious may play no role in the producing of action.

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§III: Intentional Action

64

- This is shown by well-known experimental work by Benjamin Libet (1985; Libet, Gleason, and Wright 1983), replicated and refined by Patrick Haggard (and recently extended by Chun Siong Soon) (1999; Haggard and Eimer 1999; Haggard, Newman, and Magno 1999; Soon, Brass, Heinze, and Haynes, 2008; Haynes *et al* 2007; see Kornhuber and Deecke 1975, and Deecke, Grözinger, and Kornhuber 1976).
- Those results show that when subjects consciously decide to perform a simple action, the neural event (readiness potential) that initiates the action occurs prior to any conscious volition.
- The best interpretation of these results requires distinguishing each volition from that volition's being conscious.

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§III: Intentional Action

65

- Subjects are conscious of volitions only after the relevant readiness potential.
- So we can identify that readiness potential with the volition in a nonconscious condition—and see the Libet-Haggard(-Soon-Haynes) results as indicating a lag between the initial onset of the volition itself and that volition's becoming conscious.
- It's likely that this holds for all intentional states—though others are harder to test.
- If so, thoughts in rational thinking and executive function also occur prior to—and independently of—their being conscious.

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§III: Intentional Action

66

- These results show that volitions cause behavior without being conscious.
- Both behavior and one's awareness of the volition itself are jointly caused by the volition while in a nonconscious condition.
- So, even though there may be types of behavior that occur (in humans or even in general) only when the relevant volitions or desires are conscious, that does not show that such volitions' being conscious has any function in enabling those behaviors.
- Rather, nonconscious volitions cause both the volitions to be conscious and the behavior associated with the volitions.

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§III: Intentional Action

67

- Libet argued that the conscious ability to call off an action provided a role for conscious volition.
- But there's no reason to think that the conscious calling off ("veto") is any less likely to occur first in nonconscious form—though the time scale makes that far harder to test.
- Haggard (2008) claim that the ability to call off the action provides a predictive check on whether one really want to go through with the action.
But this isn't a function of consciousness unless that predictive check cannot occur without being conscious, and Haggard gives us no reason to think that.

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§III: Intentional Action

68

- The same considerations apply to another recent proposal about the *function of volitions' being conscious*.
- Daniel Wegner (2003) urges that the occurrence of a conscious volition gives one information (albeit fallible) *that one is the author of some piece of behavior*.
- He concludes that conscious volitions have the *function* of providing that information.
- Wegner assumes that both the conscious volition and the action share a common subpersonal cause—*not itself a volition*.
- So, he urges, (conscious) volitions are the *"mind's trick"* to mark agency of actions.

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§III: Intentional Action

69

- Wegner thinks the *joint cause* of behavior and conscious volitions cannot be a *nonconscious volition* because he *assumes that volitions are always conscious*.
- But volitions needn't always be conscious. So it's better to see *a nonconscious volition* as itself causing *both* an action and the volition's coming to be conscious.
- Also, even *nonconscious volitions* provide information about the authorship of behavior. Though it isn't conscious, *it still is psychological information*.
- And it's unclear what function is *added* by that information's being conscious.

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§III: Intentional Action

70

- Recent work in moral psychology and "moral neuropsychology" point to a similar result for moral reasoning and judgment.
- Jonathan Haidt (2001) and Joshua Greene (2001; see their joint 2002) have argued that "[conscious] moral reasoning is usually a post hoc construction, generated after a judgment has been reached" (Haidt, p. 814).
- They posit nonconscious determinants that *yield moral judgments independently of conscious moral reasoning*, including in cases in which subjects are "dumbfounded" as to what reasons *could* possibly explain their moral reactions.

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§III: Intentional Action

71

- Larry Jacoby's (1991; Debner and Jacoby 1994; Jacoby *et al* 1993, 1994) *exclusion task* is sometimes held to support a tie between consciousness and intentional action.
- Subjects are visually presented with a word, say, 'reason', and asked to complete a word stem, say 'rea--', with any word *other than* the presented word.
- When a word is presented for 500 ms, subjects see it consciously and mainly succeed in following the instruction; when it's presented for only 50 ms, they report seeing no word—but *tend to complete the stem with the word that was presented*.

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§III: Intentional Action

72

- So subjects *intentionally exclude* a word only when they *consciously see it*.
- But that's *not because intentional action requires consciousness*:
Subjects are instructed *not* to complete the stem with a word they see. But when they're conscious of seeing a blank screen (which has greater neural signal strength than the nonconscious sensation of the word), they're not *aware of* seeing the word—so *they think they don't see it*.
- It's not that consciousness is needed for intentional action. Rather, in the 50-ms case, subjects following the instructions *think that they don't see the word* (though it does still prime their response).

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§III: Intentional Action

73

- John Searle (1990) has argued that *thoughts are all conscious*. States that *seem* to be nonconscious thoughts are simply states “capable of causing ... conscious thoughts.”
- If so, the function of a thought’s being conscious just is that of the thought itself.
- All thoughts have “aspectual shape,” which must be understood by appeal to “the agent’s point of view,” which Searle insists requires thoughts to be conscious.
- But *points of view need not be conscious*; nonconscious thoughts and desires also help define an individual’s point of view.
- Aspect and thoughts needn’t be conscious.

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- Relying on phenomenological appearances encourages assimilating thoughts and volitions to *one’s consciousness of* them.
- And since thoughts and volitions *do* have significant utility, one’s consciousness of them would then as well.
- But the two are distinct, as we see from the Libet-Haggard findings, among others.
- So we must *distinguish a state from our consciousness of it*—and its *utility* from the utility of our consciousness of it.
- Also, the *content* of an appearance is not its *nature*: *An appearance of utility is not that appearance’s having some utility.*

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- In particular, since some mental states fail to be conscious, the appearance a state presents does not exhaust its reality.
- So we can't export from an appearance of Fness to the appearance's being F itself— e.g., from its seeming subjectively that a state has a function to its actually having that function (or being authoritative, or intrinsic).
- Appearance and reality seem to coincide if one assumes we have access to mental properties only by way of consciousness.
- But the occurrence of nonconscious intentional states and of subliminal perceptions undermines that independently unfounded assumption.

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§III: Intentional Action

96

IV. Executive Control and Higher-Order States

- The Libet-Haggard findings— which show that a state's being conscious occurs later than, and so independently of, the state itself— provide evidence for an increasingly prevalent type of theory about what it is for a mental state to be conscious.
- On these "higher-order" theories, a state's being conscious consists in one's being conscious of it in some suitable way.

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§IV: Executive Control

99

- This core idea is compelling, since a state of which one is in no way conscious does not intuitively count as a conscious state.
- I'll call this the Transitivity Principle (TP), since it holds that one is (transitively) conscious of all one's conscious states.
- Higher-order theories all endorse TP, but differ about how TP is implemented.
- I've argued elsewhere (e.g., 2005) that TP is implemented by distinct higher-order thoughts (HOTs) about one's own mental states—
thoughts to the effect that one is in the state in question.

Berlin School of Mind and Brain, 11 June 2009 §IV: Executive Control 101

- This fits well with the foregoing empirical findings and conclusions:
States occur independently of the HOTs in virtue of which they may be conscious.
- And it suggests a natural way to explain volitions' coming to be conscious after they first occur: Their being conscious is due to a distinct HOT, which is usually caused by the volition it's about—and so occurs slightly later.
- Similarly, exclusion-task subjects exclude only words they see consciously because it's only those words that they think they've seen:
If subjects had a thought that they'd seen the words, the seeing would be conscious.

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- TP also predicts the important *tie between a state's being conscious and its being reportable*, since one can report something if, but only if, one is *conscious of it*.
- Moreover, the reportability test for a state's being conscious points to *distinct HOTs* as the way TP is *implemented*:
Reporting one's mental state expresses a thought that one is in that state.
 So *just being able* to report a state signals the occurrence of the (higher-order) thought that one *would* express if one *did* report that state. (Cf. Weiskrantz 1997, 76: "[I]t is the very ... ability to make a commentary of any particular event that gives rise to awareness.")

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§IV: Executive Control

103

- *Executive function* is the adjusting and fine tuning of one's behavior, and hence the *adjusting of one's first-order volitions*.
- Because of that, executive function is often associated with *higher-order processing* (e.g., Norman and Shallice 1986, Shallice 1988)— which, on higher-order theories, suggests a possible tie with consciousness.
- But such adjusting is often just a matter of *ironing out conflicts* among competing or dissonant first-order desires and beliefs.
- And that can result *simply from causal interactions among the first-order states*:
 All thoughts and desires have causal ties with other first-order states, ties that track content; *those with stronger ties win out*.

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§IV: Executive Control

107

- Moreover, even if higher-order states *do* occur in executive processing, they may well *not be the kind needed* for the first-order states to be conscious.
- A state's being conscious requires that one be *conscious of oneself as being in that state* (TP).
- And the higher-order states that may sometimes occur in executive processing *may not have the right content for that*.
- Such processing might just register conflict among particular contents and point to possible adjustments—*without thereby representing oneself as being in any state*.

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§IV: Executive Control

108

- Thus a higher-order executive state might occur in response to some first-order state in a chain of reasoning, and it could refer to that state simply by appeal to that state's content—*without thereby representing the individual in question as being in that state*.
- The executive state might simply have the higher-order content that a particular first-order state with such-and-such content conflicts with various (dispositional) beliefs—
and that a state with some other specified content would not so conflict.

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§IV: Executive Control

109

- The British neuropsychologist Edmund Rolls (2004, 2005) has championed a type of HOT theory on which the HOTs enable one to correct errors in multistep chains of reasoning.
- A mistaken step in such a chain, Rolls argues, can be located only by means of HOTs about the steps in that chain.
- If so, HOTs—and hence the consciousness of mental states—have a correcting function that ties them to rationality.
- Such correcting would, Rolls argues, require HOTs to represent the syntactic ties among steps in such chains.

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§IV: Executive Control

110

- But if some step in a chain of reasoning is erroneous, it will likely result in significant first-order cognitive dissonance.
- And that dissonance by itself will likely serve to locate the error, and so make possible the adjusting of the chain of reasoning at the right point.
- Again, interactions just among first-order states can iron out errors independently of any higher-order monitoring, and so independently of consciousness.
- The Dijksterhuis finding—that multistep deliberating is better nonconscious than conscious—adds weight to this conclusion.

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§IV: Executive Control

111

- It's often noted that learning to play tennis or a musical instrument initially involves the careful, attentive, deliberate rehearsing of specific actions that later come to be executed in a routine way, and without deliberate attention.
- Some have concluded that, since the earlier, nonautomatic actions must be deliberately and attentively executed, they must stem from conscious intentions.
- It's also sometimes held that deliberate, attentive actions require executive control, whereas routine actions don't (Norman and Shallice 1986; though see Monsell and Driver 2000).

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§IV: Executive Control

114

- But deliberate intending need not be conscious: Deliberate intending is simply intending as a result of deliberation, and deliberation itself need not be conscious.
- Nor is attention itself always conscious (pace Prinz 2000, 2007; see, e.g., Koch et al 2007; Tsuchiya et al 2007; Kentridge, Heywood, and Weiskrantz 2004; Lamme 2003; Schurger et al, 2008).
- And even if the attentive deliberation characteristic of the nonroutine actions in learning complex activities is typically conscious, it may well be, as noted in §II, that its being conscious itself does nothing to enhance that learning, but is simply a byproduct of the deliberate attending.

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§IV: Executive Control

115

- An example of executive function that is not conscious may well occur in *hypnosis*.
- Actions performed under post-hypnotic suggestion involve no *awareness of an intention to perform them*, and no *conscious sense of their being voluntary* (Hilgard 1977; Spanos 1986; Oakley 1999).
- Subjects are unaware of *planning* these actions often require (Hilgard 1977; Sheehan and McConkey 1982; Spanos 1986; Oakley 1999).
- Zoltán Dienes and Josef Perner (2007) explain all this as executive function that occurs without suitable HOTs: *Hypnosis results in nonconscious executive function*.

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§IV: Executive Control

117

- Fred Dretske urges that, on higher-order theories, consciousness “has no function” (1995, 117)—or very little at most.
- He concedes (182, n. 15) that higher-order states would have *some* function, but disparages the slight function they’d have.
- Dretske sees this as a shortcoming of higher-order theories, and offers in their place an alternative:
A state is conscious if one is conscious of something in virtue of being in that state.
- On this “first-order” theory, a state’s being conscious does have utility, since its being conscious simply consists of one’s being *conscious of* things.

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§IV: Executive Control

122

- But *perceiving always results in one's being conscious of things*. So if a state's being conscious were its making one conscious *of* things, no perceiving could be subliminal.
- Dretske (2006) therefore adds the condition that a perception is conscious *only if one can cite its content* as a justifying reason for doing something. But *one will be aware of any perception whose content one can cite* (at least among adult humans), and that's what *higher-order theories* say results in a state's being conscious.
- First-order theories predict—wrongly on the foregoing argument—that a state's being conscious has substantial utility. Higher-order theories get that right.

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§IV: Executive Control

123

- There is a kind of higher-order theory, derived from Aristotle (DA Γ2; see Caston 2002) by way of Brentano (1874/1973), on which *the higher-order awareness in virtue of which a state is conscious is intrinsic to that state*.
- And if a state's being conscious is intrinsic to the state, perhaps the utility the state has goes with its being conscious.
- But whether intrinsic or not, *a state's being conscious is a distinct property from its content*, which is what's relevant to utility.
- Also, it's unclear how the hypothesis that being conscious is intrinsic squares with the delays in consciousness revealed by the Libet-Haggard experiments.

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§IV: Executive Control

132

- A final *methodological* point: HOTs figured in this § only to undermine the idea that executive function must have some beneficial tie with consciousness by way of higher-order states. So *my argument against functionality is still independent of the HOT theory.*
- My arguments against functionality do often appeal to considerations that I have also used in support of the HOT theory.
- But those considerations support both HOTs and the absence of significant functionality *independently of one another.*

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§IV: Executive Control

133

Summary

- Even when intentional states are conscious, their being conscious *does little if anything to facilitate* rational thinking, intentional action, executive function, or the correcting of chains of reasoning.
- Elsewhere I have argued that we can—*independently of any such functionality and of evolutionary selection pressures*—explain why those higher-order states do very often occur.

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Summary

135

