

Pictorialism and the Phenomenological Fallacy

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Introductory remarks

“I think many philosophers secretly harbor the view that there is something deeply (i.e., conceptually) wrong with psychology, but that a philosopher with a little training in the techniques of linguistic analysis and a free afternoon could straighten it out.”

Jerry Fodor (1968) *Psychological Explanation* p. vii

“Cognitive science is where philosophy goes when it dies.”

Jerry Fodor 1994b p. 110.



The X Problem Problem

Diagnostic, aetiological, therapeutic stance in the spirit of Lycan's (2006) in S. Hetherington ed. Oxford.

'On the Gettier Problem problem'

Problems:

- Perceptual experience
- Consciousness, qualia
- 'Ideas' & mental representations
- The Imagery Debate



Phenomenological Fallacy (or taking pictures too seriously)

- “... the ‘phenomenological fallacy is the mistake of supposing that when the subject describes his experience, when he describes how things look, sound, smell, taste or feel to him, he is describing the literal properties of objects and events on a peculiar sort of internal cinema or television screen ...”
- “... when we describe the after-image as green, we are not saying that there is something, the after-image, which is green.”

U.T. Place 1956, p. 38



Ideas, qualia, sense-data

“The majority of modern philosophers – that is, the majority of philosophers writing since the seventeenth century – have believed that in perception one is aware of some item other than the physical object one takes oneself to be perceiving.

... The *ideas* of Locke and Berkeley, Hume’s *impressions* and the *qualia*, *sensa* and *sense-data* of twentieth-century philosophers are all generally supposed to be of this type.”

Howard Robinson, 1994 p. 1



The Early Modern 'idea' idea

“... ideas are the immediate objects of perception, that all knowing reduces to seeing, and that seeing (however intellectual it may be) is the sole operation of which the understanding is capable.”

McRae 1965, p. 179

- Problem is ubiquitous ...



Original sin

“If we could look into the brain and simply “see” if there were representations of this and that, as we can look in a book and see if there are representations ..., then that would of course settle the matter.”

Devitt 2006, p. 51

“The original sin of epistemology is to model knowing on seeing.”

Rorty, 1979, p. 60



Ryle

“imaging occurs, but images are not seen”

Someone imagining a scene “is not being a spectator of resemblance ... but he is resembling a spectator”

Ryle, 1949, 247



Ocular metaphor

“But it is fruitless to ask whether the Greek language, or Greek economic conditions, or the idle fancy of some nameless pre-Socratic, is responsible for viewing this sort of knowledge as looking at something (rather than, say, rubbing up against it, or crushing it underfoot, or having sexual intercourse with it).”

Richard Rorty 1980, p. 38

- Well, perhaps we can do better ...



Austin's *Sense & Sensibilia*

“One doesn’t find it cited much in philosophy of mind anymore, even in discussions to which the argument from illusion is central. [eg. McDowell] ...”

“ ... Austin’s attitude towards philosophy in general can fairly be called insulting.”

“... [S&S] reads as if we’re all clinicians looking at some form of madness rather than patients afflicted with it.”

Mike Thau 2004, p. 196, p. 197



Curious & melancholy

- “It is a curious and in some ways rather melancholy fact that the relative positions of Price and Ayer at this point turn out to be exactly the same as the relative positions of Locke and Berkeley, or Hume and Kant.”

– J.L. Austin (1962, p. 61)



Progress?

- “It [the theory of ideas] seems to have made some modest progress ... Whereas the alternative ... appears to be what I’m told one calls a ‘stagnant’ research program.”

– Jerry Fodor 2003, p. 157

But ...

- Fodor (2003) defends Hume against Putnam (2000)
- Putnam (2000) defends Austin (vs Ayer) & Reid (vs Hume)
- Reid defends Arnauld (vs Malebranche)
- Arnauld is defending Okham (vs Aquinas)



Fodor on Stroud on Hume

“The Theory of Ideas restricts [Hume] because it represents thinking or having an idea as fundamentally a matter of contemplating or viewing an ‘object’ – a mental atom that can come and go in the mind ...”

Stroud 1977, 225,6; quoted in Fodor 2003, 11 and again 21.

- Fodor *fails* to comment upon Stroud’s concern with having an idea as *contemplating or viewing* an object.
- Fodor’s neglect of this point is especially surprising because it has been central to the long tradition of criticism of the ‘idea’ idea.



Fodor's Granny

Is thinking about Granny also not a representational state but a direct connection that reaches all the way out to the Old Dear? But how could it be, since I can think of her when I'm here in New York and she is in Ohio? ... How can I be in an unmediated relation to Ebbets Field (alas long since demolished); or to my erstwhile dentist, who passed away a year ago in August?

Fodor 2000.



Golden Mountain

... it often happens that we perceive things that do not exist, and that even have never existed - thus our mind often has real ideas of things that have never existed. When, for example, a man imagines a golden mountain, it is absolutely necessary that the idea of this mountain really be present to his mind.

Malebranche 1712, p. 217



Stroll about the heavens?

I think everyone agrees that we do not perceive objects external to us by themselves. We see the sun, the stars and an infinity of objects external to us; and it is not likely that the soul should leave the body to stroll about the heavens, as it were, in order to behold all these objects.

Malebranche 1712/1997, p.217



In here & out there

It is, to repeat, puzzling how thought could mediate between behavior and the world. ... The trouble [is] ... that thoughts need to be in more places than seems possible if they're to do the job that they're assigned to. They have to be, as it were, 'out there' so that things in the world can interact with them, but they also have to be, as it were, 'in here' so that they can proximally cause behavior. ... it's hard to see how anything could be both.

Fodor 1994a, p.83



Misrepresentation

- Fodor, Dretske

Cause/correlation → No illusion (misrepresentation)

- Malebranche/Locke

Illusion → No cause/correlation



Symptoms of malaise

- “Much contemporary discussion of perceptual experience can be traced to two observations. The first is that perception seems to put us in direct contact with the world around us ...

The second is that perceptual experience may fail to provide such knowledge when we fall prey to illusion or hallucination. ...

For much of the twentieth century, many of the most important discussions of perceptual experience could be fruitfully understood as responses to this pair of observations.”

Tamar Szabó Gendler & John Hawthorne eds., 2006



Relationality

“I will argue that there is a large chasm in the philosophy of perception [... not the existence of qualia]...

Tim Crane 2006, p. 128

“The essence of this problem [of transparency] ... is how to account for the apparent relationality of perception, **given the possibility of illusion and hallucination**. In other words, is there really a perceptual *relation*, as there seems to be?

Tim Crane 2006, p. 134



Disjunctivism & illusion

- M.G.F. Martin (2006) in Gendler & Hawthorne eds., p. 354.
- See also on argument from illusion:
Mike Thau (2004), What is Disjunctivism?, *Philosophical Studies*, Vol. 120, 193-253.

David Hilbert (2004), Hallucination, Sense-Data and Direct Realism, *Philosophical Studies*, Vol. 120, 185-191.



Aquinas' relationality

“... despite Aquinas's frequent insistence that it is the external world that we perceive, later Scholastics were not convinced that he could maintain his species account without falling into representationalism. ...even the most sophisticated proponent of the species theory, Aquinas, could not help but treat such species as internal objects – as the things we *apprehend* in order to have knowledge of the external world.”

Pasnau 1997, 220).



Arnauld's diagnosis circa 17th C

“... what has thrown the question of ideas into confusion is the attempt to explain the way in which objects are represented by our ideas by analogy with corporeal things, but there can be no real comparison between bodies and minds on this question.”

Antoine Arnauld, 1683



Edleman's diagnosis circa 20th C

- “Advanced perceptual systems are faced with the problem of securing a principled (ideally, veridical) relationship between the world and its internal representation.”
- “... a call for the representation of similarity instead of representation by similarity.”
- “Clearly no one these days believes that a representation of a cat in an observer's brain is cat-shaped (or striped, or fluffy).”

Shimon Edelman 1998 *Behavioral & Brain Sciences*, p. 449

Yes they do ...



“Déjà vu all over again”

- “Now although this picture, in being so transmitted into our head, always retains some resemblance to the objects from which it proceeds, nevertheless ... we must not hold that it is by means of this resemblance that the picture causes us to perceive the objects, as if there were yet other eyes in our brain with which we could apprehend it;
- but rather, that it is the movements of which the picture is composed which, acting immediately on our mind inasmuch as it is united to our body, are so established by nature as to make it have such perceptions.”

– Descartes, *Dioptrics*, 6, Olscamp trans. P.



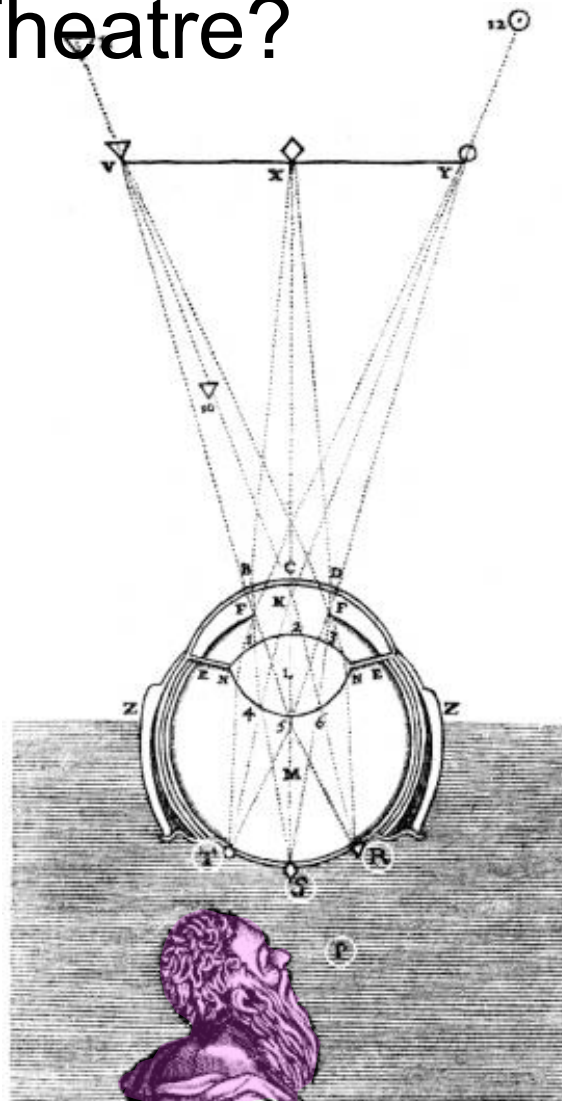
“Cartesian Theatre?”

- “it is only a question of knowing how [images] ... can enable the mind to perceive all the diverse qualities of the objects to which they refer; not of [knowing] how the images themselves resemble their objects;

– Descartes, *Dioptrics*, 4, Olscamp trans. p. 90



Cartesian Theatre?

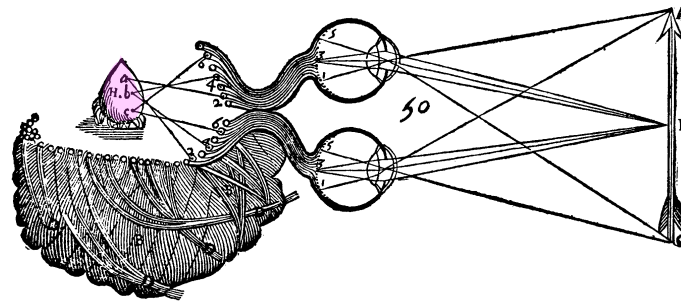


Cartesian Theatre?

DE RENE' DESCARTES.

71
aussi de voir clairement, comment cela sert à former les idées des objets qui frappent les sens, regardez en la figure cy-jointe les petits filets 12, 34, 56, & semblables, qui composent le nerf optique, & sont étendus depuis le fond de l'œil 1, 3, 5, iusques à la superficie intérieure du cerueau 2, 4, 6; Et pensez que ces filets sont tellement disposez, que si les rayons qui viennent par exemple du point A de l'objet vont presser le fond de l'œil,

Que les figures des objets se tracent aussi en la superficie intérieure du cerueau.



au point 1. ils tirent par ce moyen tout le filet 12, & augmentent l'ouuerture du petit tuyau marqué 2; Et tout de mesme, que les rayons qui viennent du point B, augmentent l'ouuerture du petit tuyau 4, & ainsi des autres. En sorte que, comme les diuerſes façons dont les points, 1, 3, 5, sont pressez par ces rayons, tracent dans le fond de l'œil vne figure qui se rapporte à celle de l'objet A B C, ainsi qu'il a esté dit cy-dessus, il est euident que les diuerſes façons, dont les petits tuyaux 2, 4, 6, sont ouuerts, par les filets 12, 34, 56, &c. la doiuent aussi

Cette fig. sera cy-apres dite fig. 50.



Uncontrolled speculations?

“often quite uncontrolled” and “Particularly uncontrolled are ... [Descartes'] speculations about neuromechanics”

– Ann Wilbur MacKenzie 1987, 136.



Downfall of Cartesianism

“if ‘to represent’ does not mean ‘to resemble’ it is unintelligible.”

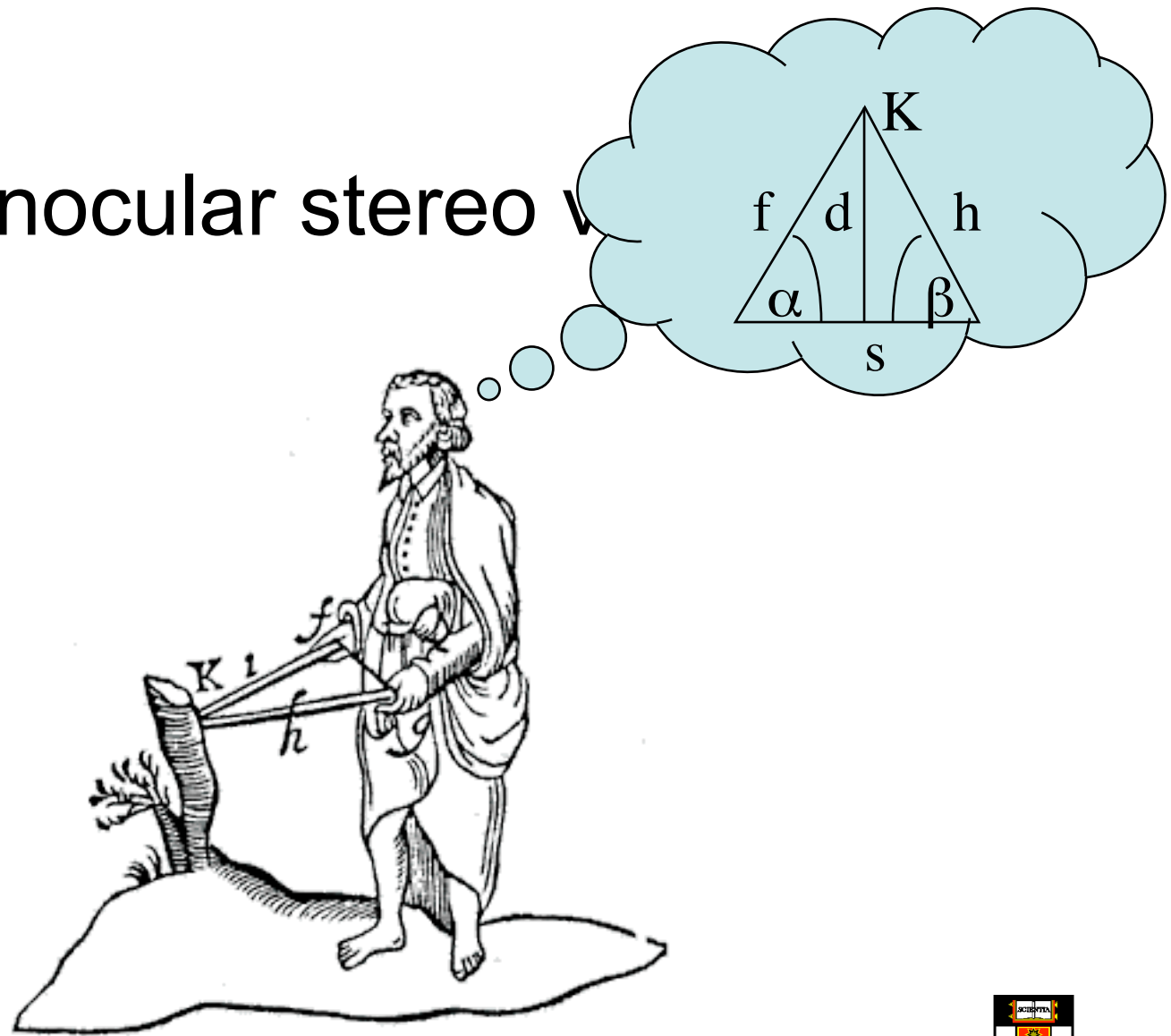
R.A. Watson 1987, p. 69

“... Descartes provides no explanation of how a pure concept conveys any information to our understanding.”

R.A. Watson 1995, p. 35



Binocular stereo vision



Descartes, *Dioptrics*



Homunculus?

In the *Dioptrics*

- “The homunculus model is most prominent”
- “Descartes begins to drift in the direction of an inner homunculus.”

– C. Wolf-Devine 2000, 511



Making it intelligible

“... there is something unsatisfying about invoking these [mechanical] sorts of things as explanations of our visual capacities. This happens, and then that happens, ... [sic] and then we see.

There is an abrupt jump from some sort of complex description of the condition of our nerves and brain to our conscious experience.

An explanation should, after all, make the phenomenon explained **more intelligible**.”

C. Wolf-Devine 2000, p. 520



Too bad for you!

- Arnauld suggested that we must distinguish the properties of things from properties of their representations, that is properties *in essendo* from properties *in repraesentando*
 - Schmaltz 2000, p. 73, Nadler ed.
- “You [Malebranche] are not happy with this distinction. Too bad for you.”
 - Quoted in Schmaltz 2000, p. 73, Nadler ed.



Most ubiquitous and damaging confusion

- “probably the most ubiquitous and damaging conceptual confusion in the whole imagery literature.”

Pylyshyn (1981, 153)

- – confusing the properties of the world with the properties of their representations
- – Place’s **Phenomenological Fallacy**



Technicolour brain?

“You even make a fool of yourself before certain Cartesians if you say that the soul actually becomes blue, red, or yellow, and that the soul is painted with the colors of the rainbow when looking at it.”

- Malebranche, *Search* LO 634.



This feeling ...

“We focus on a certain state presented to us in one of these ways and think of it as “that brain state.” So we think, “this feeling is that brain state.” And this strikes us ... as perfectly absurd. ...To say *this*, the feeling I am aware of when I, so to speak, look inward, is *that*, the thing I read about, just seems crazy. ...*this* could not be a *brain state* ...”

Perry 2001, 4



This feeling ...

“The feeling of an unbridgeable gulf between consciousness and brain-process: how does it come about that this does not come into the considerations of our ordinary life? This idea of a difference in kind is accompanied by slight giddiness, – which occurs when we are performing a piece of logical sleight-of-hand. (The same giddiness attacks us when we think of certain theorems in set theory.) When does this feeling occur in the present case? It is when, I, for example, turn my attention in a particular way on to my own consciousness, and, astonished, say to myself: THIS is supposed to be produced by a process in the brain! – as it were clutching my forehead. – But what can it mean to speak of “turning my attention on to my own consciousness”? This is surely the queerest thing there could be!”

Wittgenstein 1953, #



For the birds?

“Presumably those who say that the phenomenal is nonphysical are not complaining that being told how the atoms of the bat's brain are laid out will not *help one feel like a bat.*”

Rorty 1979, p. 29

Yes, they are!



What is it like?

David Chalmers plays Bach!

“Should I pinch ... adherents [of materialism] to remind them that they are conscious? Should I pinch myself and report the results in the *Journal of Philosophy*?”

Searle 1992, p. 8



The First Person

“No one ever considered his own terrible pain or his deepest worry and concluded that they were just Turing machine states or that they could be entirely defined in terms of their causes and effects.”

Searle, 1983, p. 263



For the birds

“Understanding about the physiology of pain does not help us feel pain either, but why should we expect it to, any more than understanding aerodynamics will help us fly?”

Rorty 1979, p. 29;



Medical Diagnosis Report

- Patient, 70 years old, in good general health, presented with ringing in the ears.
- Upon examination, no ringing heard.



The Solution!

“I try never to think about consciousness.”

Jerry Fodor

In Critical Condition, 1998, p. 73

Only philosophers are conscious (in this sense)



Higher Order Theories (HOT)

- David Rosenthal's (2005) HO theory
- a state is conscious by virtue of itself being the intentional object of a thought or experience.
- Its goal is precisely to show “why intuitions that seem compelling are nonetheless erroneous” (2005, vii)
- See also Papineau 2002, Stoljar 2006



Intuitive Implausibility

“One thing which would greatly strengthen the Materialist case here would be the production of an *independently plausible* explanation of why Materialism is introspectively *implausible*.”

David Armstrong 1973, p. 190

“To make progress with consciousness, we need therapy, not theories”

Papineau 2002, p. 4.

- Gunderson (1970)
- Slezak (1983)
- Dennett (1991)
- Tye (2000)



Systematic elusiveness

- Ismael (2007, 131) succinctly describes the Cantorean diagonal argument as having the form – “give me a list, and I’ll demonstrate that it is incomplete.”
- Recall’s Ryle’s ‘systematic elusiveness of the self’



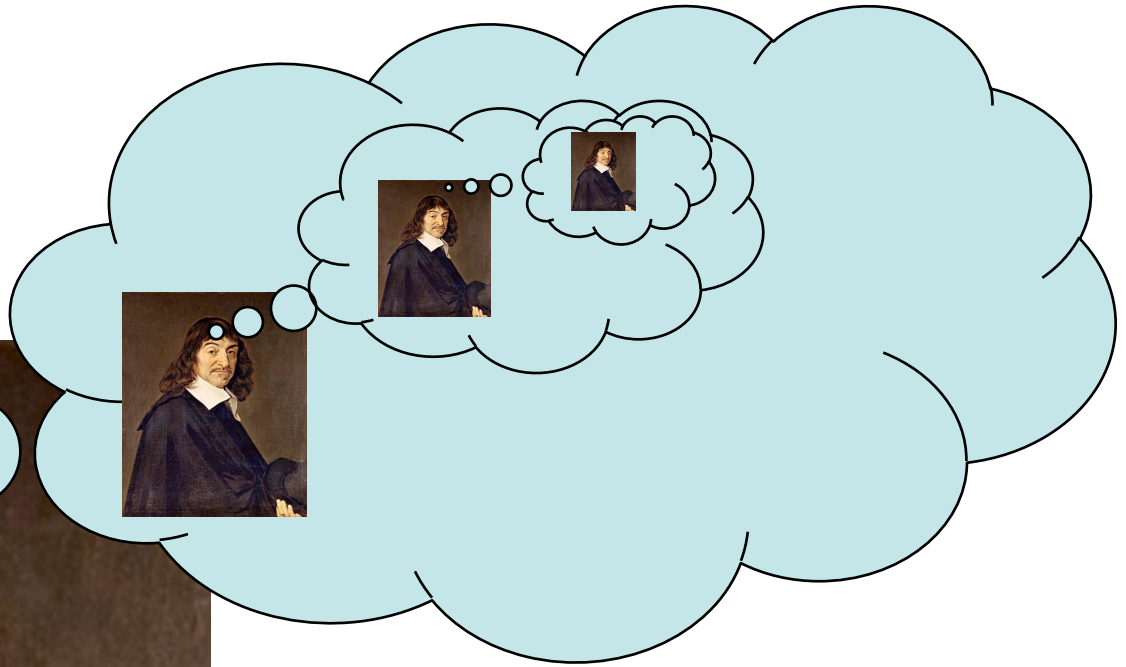
Systematic elusiveness

- Diagonal argument may be precisely and literally applied to the puzzles of consciousness – the item that seems to be left out of even a complete list of the world's constituents.
- Josiah Royce on maps and self-embedding ...
- Not coincidentally, the anti-materialist intuition is the same as the argument for dualism: the analysis has precisely the logical form of Descartes' Cogito

Slezak (1983), Descartes's Diagonal Deduction, *British Journal for Philosophy of Science* Vol. 34, 13-36.



Williford (2006) "instantiated-in-the-world nonwellfoundedness"



Intuitions, conceivability

- Ironically, the strongest evidence FOR materialism may be its very implausibility because it can be shown to follow as predictable from certain specific, information-processing mechanisms for perception and representation.
- A sufficiently sophisticated computer would be a dualist.
- Intuition or conceivability of dualism is evidence against it.



“Method of Conceivability”?

- “The conceivability of zombies is ... the principal manifestation of the explanatory gap.”

Levine (2001, 79)

- Gendler and Hawthorne (2002, 7) candidly recognize the difficulties facing any reliance on conceivability.



Conceivability

- Token acknowledgments : Chalmers 2002, van Gulick 2004, 367, Kirk 2005, 27, Alter & Walter 2007 ...
- Descartes' argument “is, or ought to be, regarded as one of the most notorious nonsequiturs in the history of philosophy”

Cottingham 1992, 242.



Conceivability?

- “the case for physicalism is sufficiently strong that we can be confident that the arguments from the intuitions go wrong somewhere – but where is somewhere?”

Jackson 2004, 421.



Headache or neuroscience?

“At the root of almost all weird positions in the philosophy of mind lies this rather elementary and unremarkable conceptual fact, blown up into a metaphysical problem that appears to require an extreme solution”

Loar 1997, p. 609

Why should the subjective contents of experience themselves reveal anything of their physical basis or causal origins?

A headache is not a lesson in neuroscience.



Crick's “Astonishing Hypothesis”?

“I hope some animal never bores a hole in my head and lays its eggs in my brain, because later you might think you’re having a good idea but it’s just eggs hatching.”

Jack Handey in Brook & Stainton 2000, p. 90



Qualia sickness

- Lycan (1987, 1990) blames the slip on his ‘banana peel’ – qualia sickness - on an “inadvertent act-object” model in which perspectival sensations are construed as *things* which appear to us as if encountered externally.
- Jackson (2007, 55) now confesses that this was his own error when he believed in his famous Knowledge Argument.



What Mind - Body Problem?

- Body-Body Problem
 - Noam Chomsky
- Reduction or Unification?
- Beside the point of the Mind-Body Problem?



Unitary awareness?

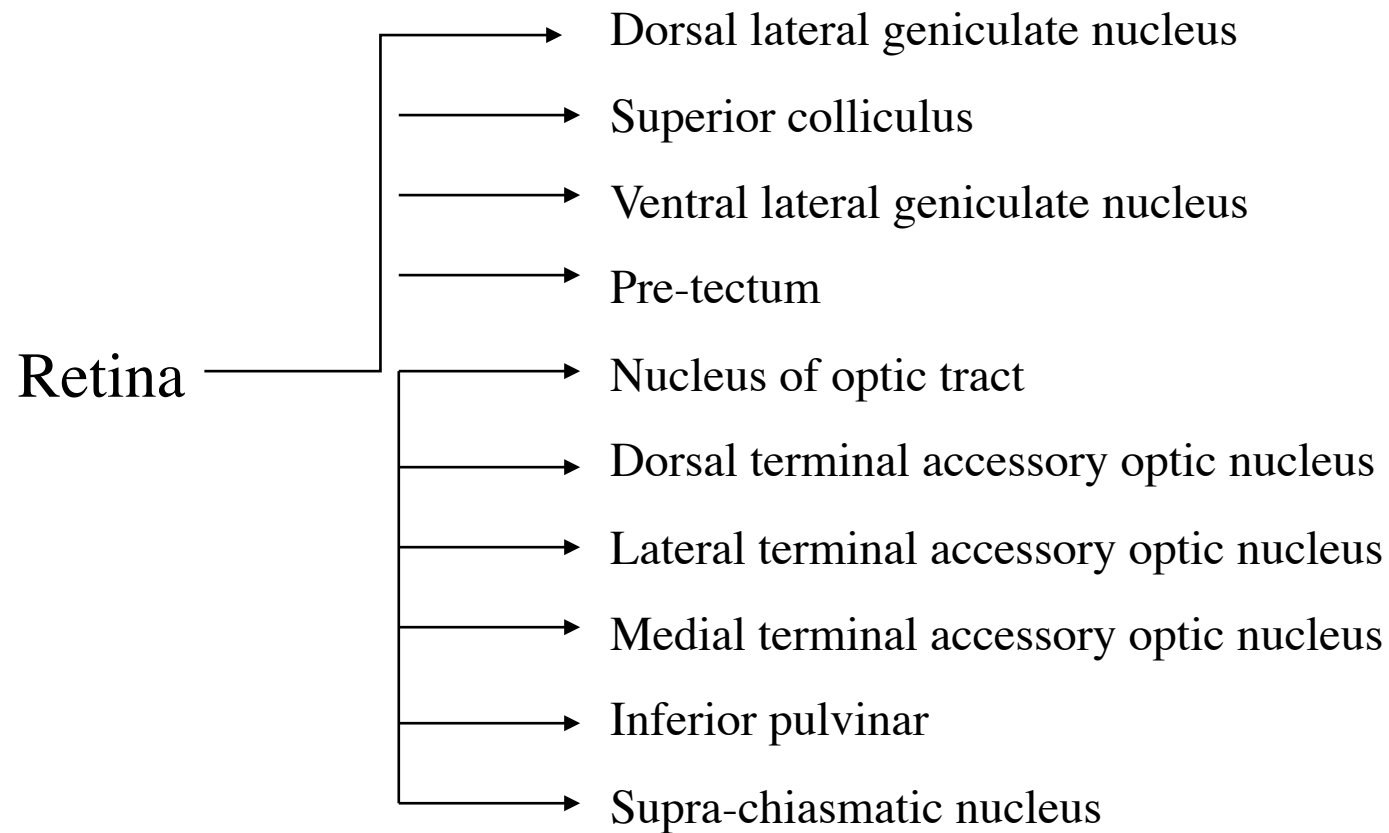
“Where does it all come together?”

Dennett (1991) *Consciousness Explained*, p. 135

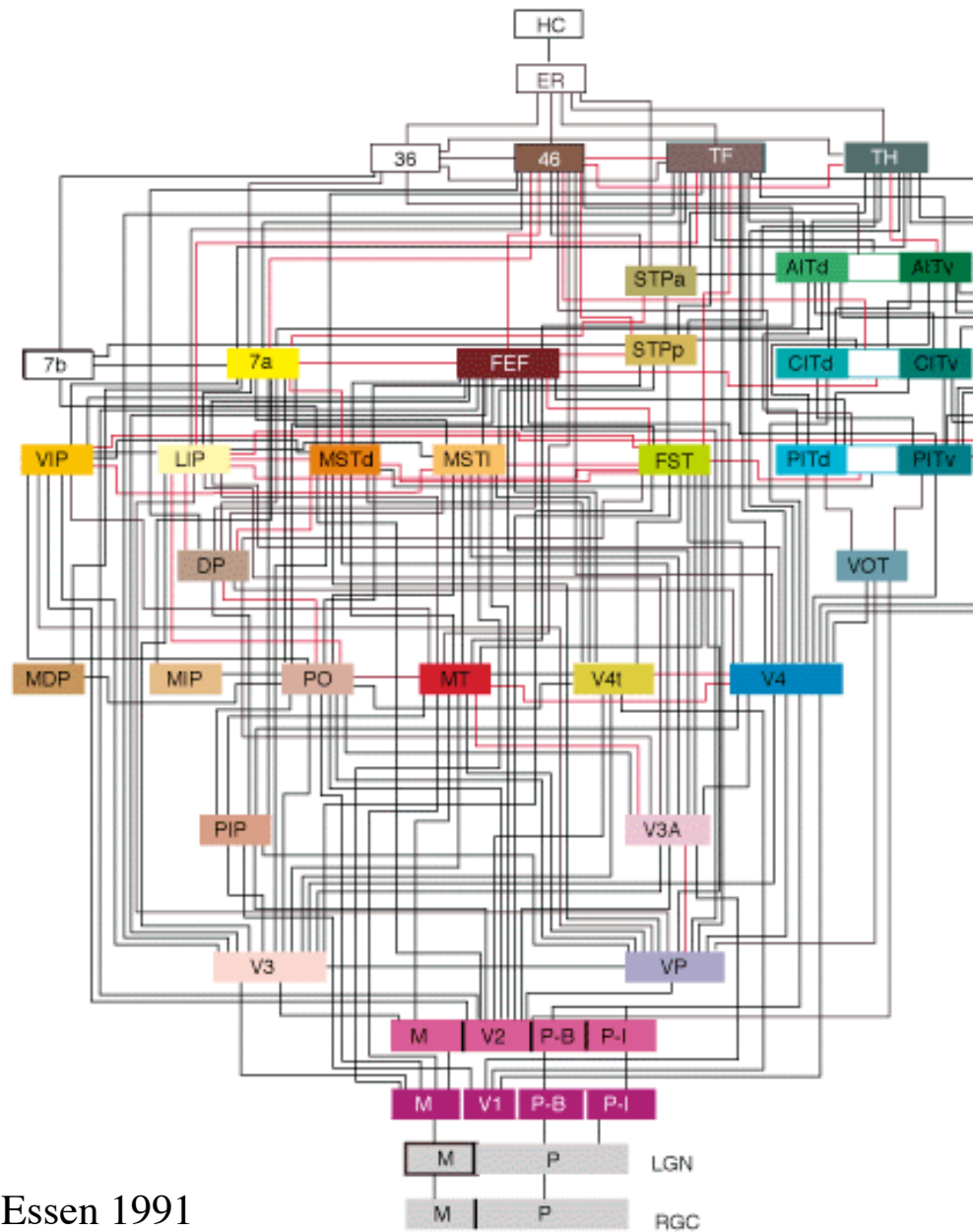


Where does it come together?

Dennett 1991, p. 135



Lawrence Weiskrantz 1996



Felleman & van Essen 1991



“ ... no longer need one spend time ... [enduring] the tedium of philosophers perpetually disagreeing with each other. Consciousness is now largely a scientific problem.”

Crick, quoted in Ned Block, 2007, p. 308



Neural correlate of consciousness?

“A convenient way to think of the overall behavior of the cerebral cortex is that the front of the cortex is looking at the back. ...This view is in accordance with the way most people think of themselves ...”

Koch 2004, p. 304



Tripartite Model

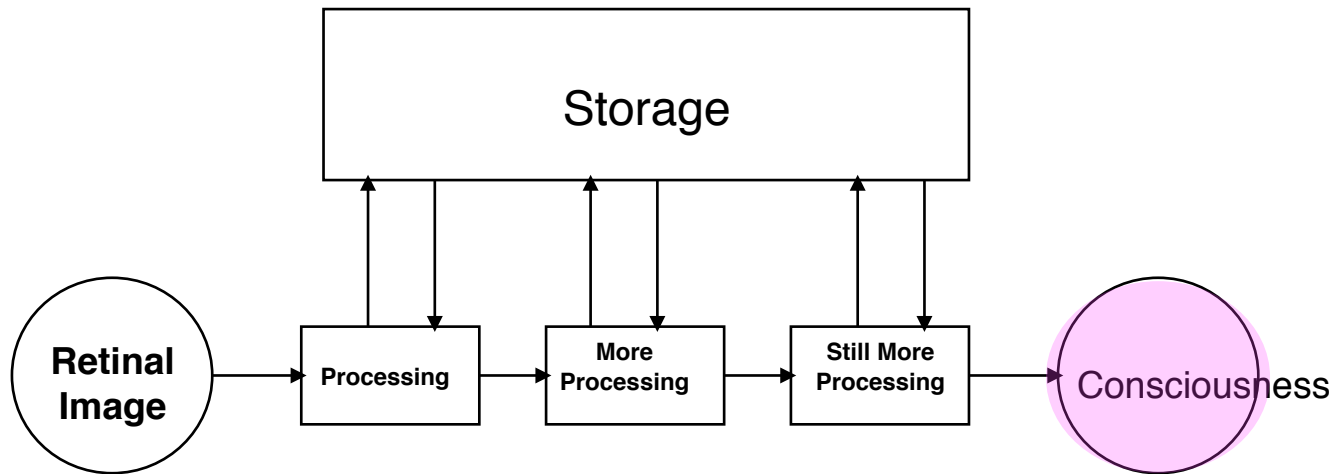
world → representation → mind

- See von Eckhardt 1993 on Peirce

Slezak, P. (2002) The Tripartite Model of Representation,
Philosophical Psychology ...



Ulric Neisser's Model 1976



Bechtel's schema

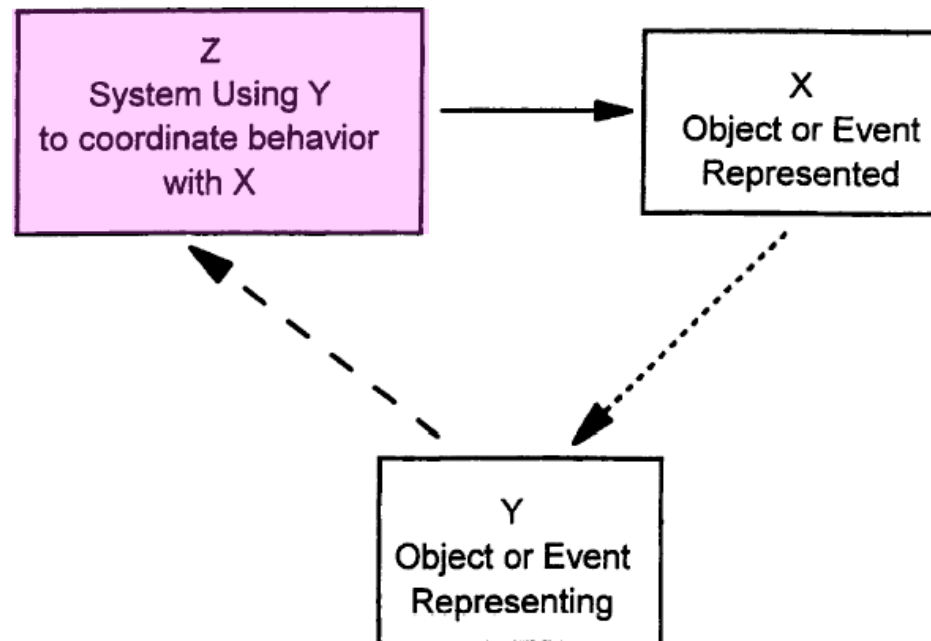


Figure 1. Three components in an analysis of representation: the representation Y carries information about X for Z, which uses Y in order to act or think about X.



Unify the variety

- It will not do to divide and conquer here - by saying that these various things do not represent in the same sense. Of course that it true, but what is important is that there is something that binds them all together, and **we need a theory that can unify the variety.**

– Dennett, 1978



Diagnosis of error

“ *Paired with an intelligent and comprehending reader,*
a good traditional grammar often achieves a high
degree of success in this attempt [to describe a
language].”

Chomsky (1962)



Implicit nontrivial theory

“The understanding reader contributes not new facts but a technique for organizing and arranging facts. What he accomplishes can fairly be described as theory construction of quite a nontrivial kind. The abilities that he develops constitute an implicit theory of the language he has mastered, ... The reader is, of course, not at all aware of what he has done or how he has done it.”

Chomsky, 1962.



The Imagery Debate

“... with the emergence of a truly spectacular body of experiments, imagery is one of the hottest topics in cognitive science.”

Ned Block 1981, p. 1



Debate settled?

“... the ‘imagery debates’ are for all intents and purposes settled.”

– Kosslyn 1994, p. 377

... “to the satisfaction of most people”

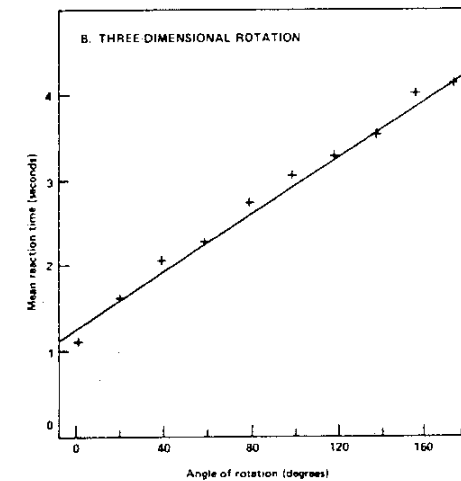
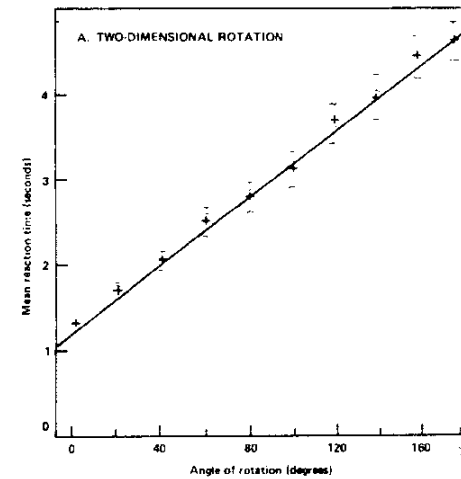
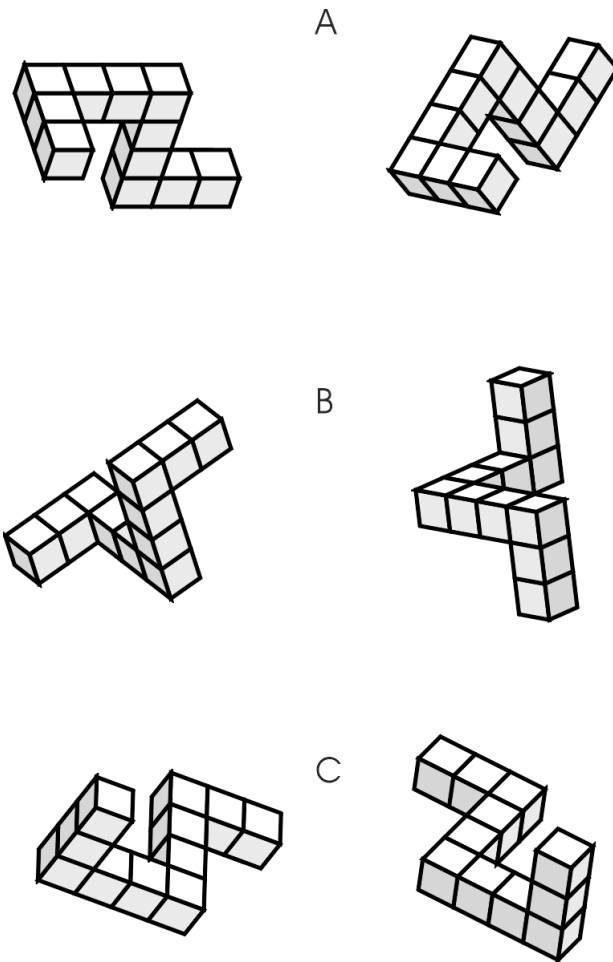
Kosslyn 1994, p.vii

“Let me qualify this: I fully expect philosophers to continue to debate the matter; after all that is their business.”

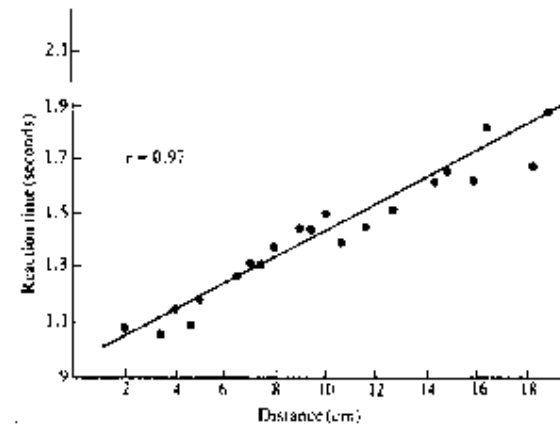
– Kosslyn 1994, p. 409



Shepard: Mental Rotation



Kosslyn: Mental Scanning



Kosslyn's Cathode Ray Tube

“Visual Buffer” as depictive, pictorial representation by means of resemblance

Hypothesis about architecture of visual cortex.



Surrogate percept

- A mental image is conceived to be a “surrogate percept”
Pinker and Finke, 1980.
- An image may be “reprocessed as if it were perceptual input ...
thereby accomplishing the purposes of imagery that parallel
those of perception”

Kosslyn 1987, 155



Pylyshyn's “Philosophical” theory

- Imagery is deploying ‘tacit knowledge’ - of the (visual) world
- Not “looking” with “the mind’s eye”
- Predicts re-interpretation will be difficult

Slezak, P. (1992). When can images be reinterpreted: Non-chronometric tests of pictorialism. *Proceedings of the 14th Conference of the Cognitive Science Society*, Mahwah, N.J.: Lawrence Erlbaum, pp. 124-129.



Tacit knowledge?

Misconceptions

- No imagery account
- Knowledge of laboratory experiments
- Irrelevant controls
- Non-visual knowledge
- Knowledge of visual system in brain



Not a problem?

“Once and for all, the ‘homunculus problem’ is simply not a problem.”

“We thought this would be obvious given that the theory is realized in a computer program, but it seems necessary to address this complaint again.”

- Kosslyn, Pinker, Smith & Schwartz, 1979, p. 574



The Mind's Eye

12 KOSSLYN, SOKOLOV, CHEN

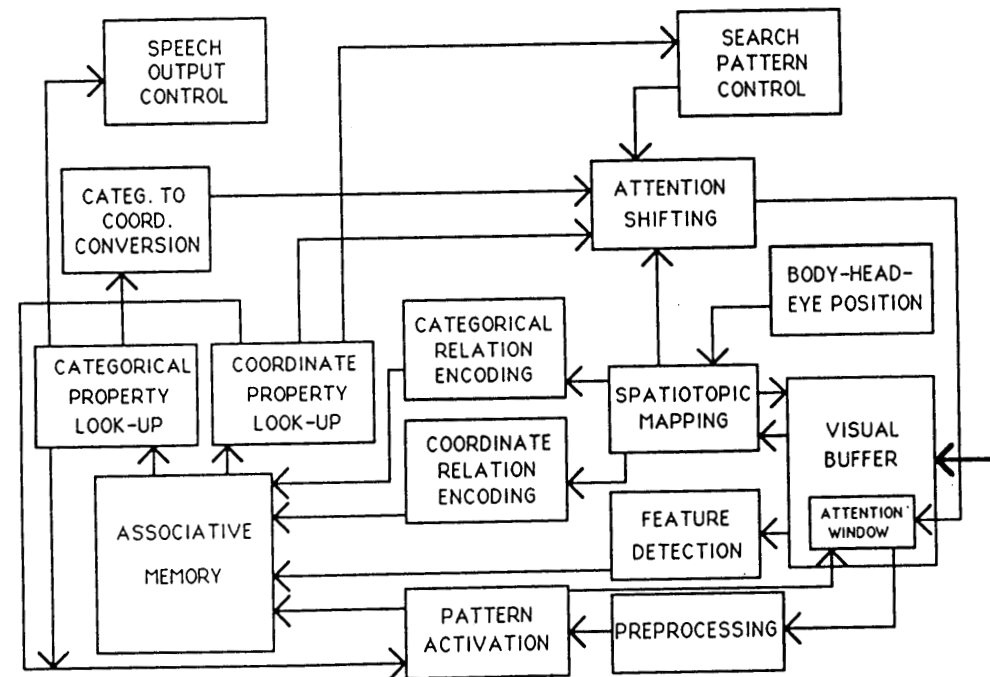


FIG. 1.2. The subsystems hypothesized by the Kosslyn et al. theory.



Little Man in the Head

It's no progress to replace the little man in the head with a little machine in the head.

Rorty 1979, p. 235



Rebuttal

“... according to Slezak (2002), having a running computer simulation of a theory does not allow one to reject the possibility that the theory relies on a homunculus.”

“This is an interesting claim, but we would love to see where the little man actually sits in the computer simulations of imagery (e.g., those of Kosslyn 1980, 1994...)”

Kosslyn, Thompson & Giannis 2006, p. 40



The Mind's Eye

12 KOSSLYN, SOKOLOV, CHEN

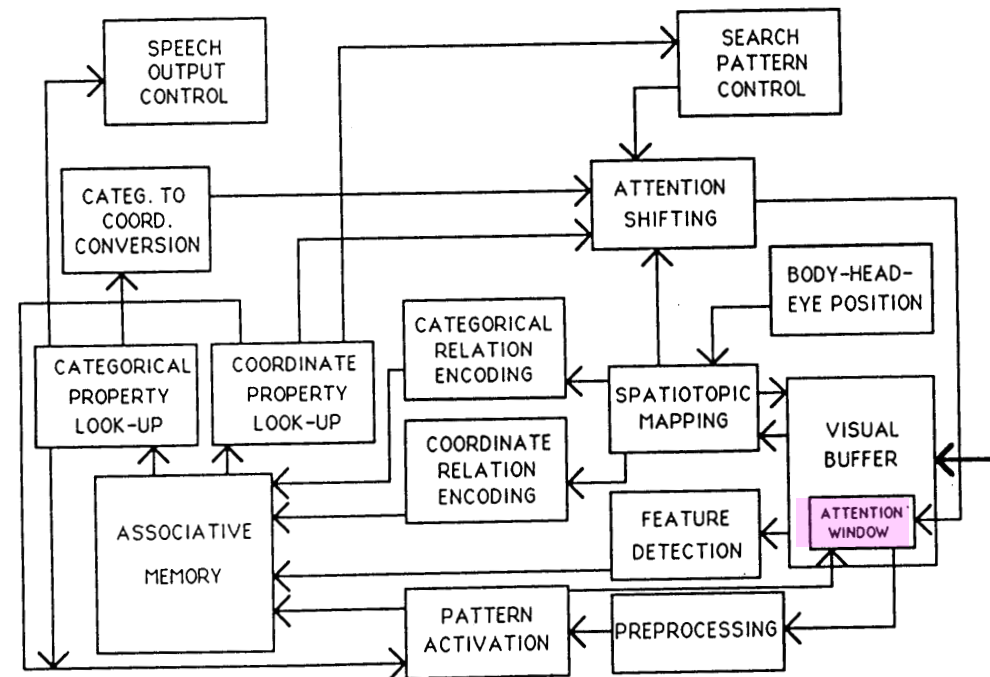


FIG. 1.2. The subsystems hypothesized by the Kosslyn et al. theory.

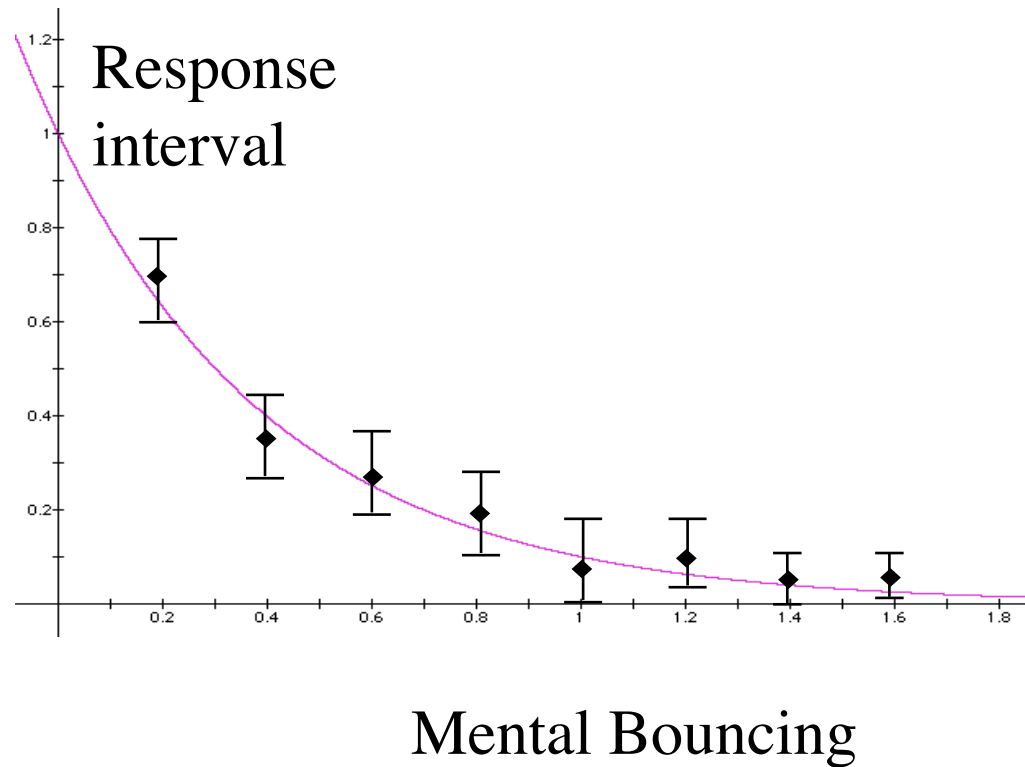


Crucial experiment

- Problem of chronometric (reaction-time) data



Reaction times and tacit Knowledge



Reinterpreting images

The image ... can be reprocessed as if it were perceptual input (e.g. the shape could be recategorized), thereby accomplishing the purposes of imagery that parallel those of perception.

Kosslyn 1987, p. 155

... the same [higher] processes could access such data structures [in the visual buffer] generated from memory rather than from the eyes.

Pinker 1984, p. 38



Reinterpreting images

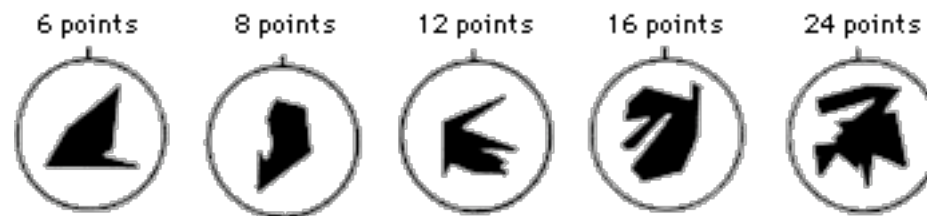
- One purpose of imagery relies on the use of recognition processes to make explicit information stored implicitly in memory. That is, people encode patterns without classifying them in all possible ways.
- ... In order to make explicit a particular aspect of a remembered pattern, one may form an image and 'internally recognize' that aspect of it. That is, one may 'recognize' parts and properties of imaged objects that had not been previously considered.

Kosslyn 1984, p. 149



Mental Rotation

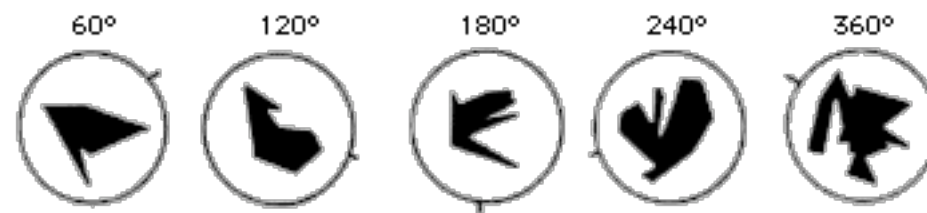
Standard Forms



Reflected Forms



Example Rotated Test Stimuli



Distractors



Memorise



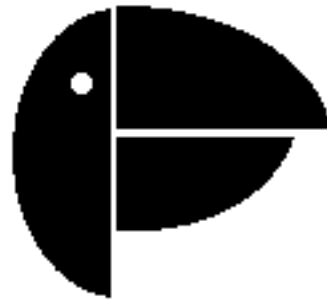
Rotate image 90 degrees clockwise



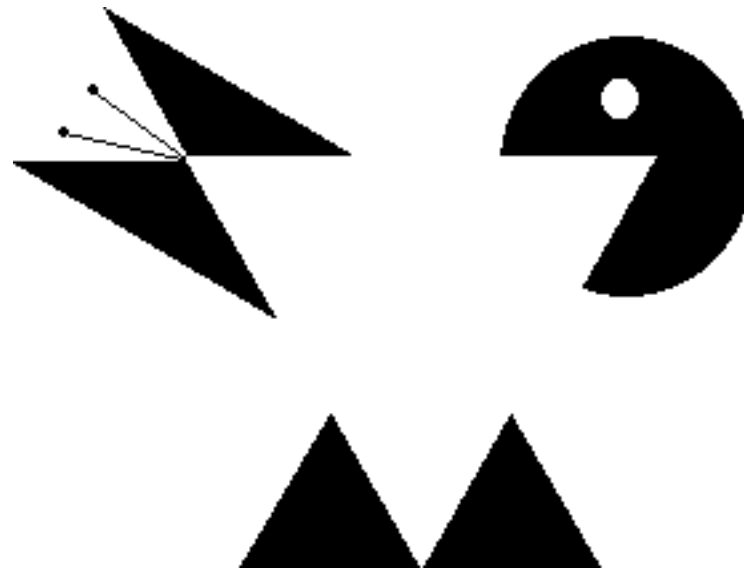
Aha! Gotcha!



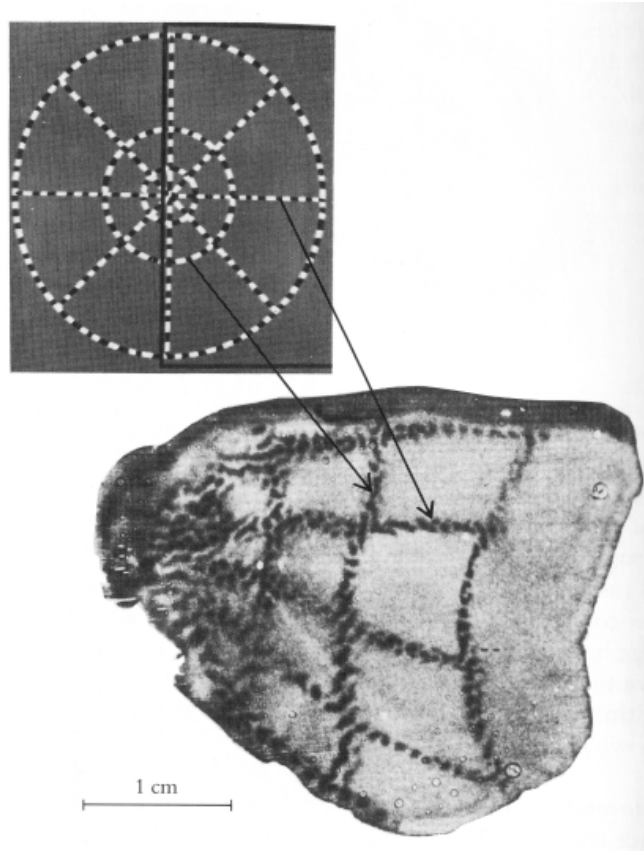








Resort to neuroscience



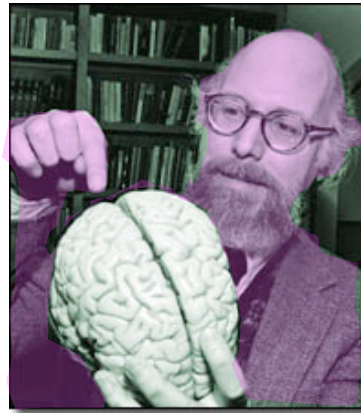
Disastrous

“At some point the organism must do more than create duplicates ... The need for something beyond and quite different from copying is not widely understood. Suppose someone were to coat the occipital lobes of the brain with a special photographic emulsion which, when developed, yielded a reasonable copy of a current visual stimulus. In many quarters this would be regarded as a triumph in the physiology of vision. Yet nothing could be more disastrous.”

B.F. Skinner 1963, p. 285



The Mind's Eye?

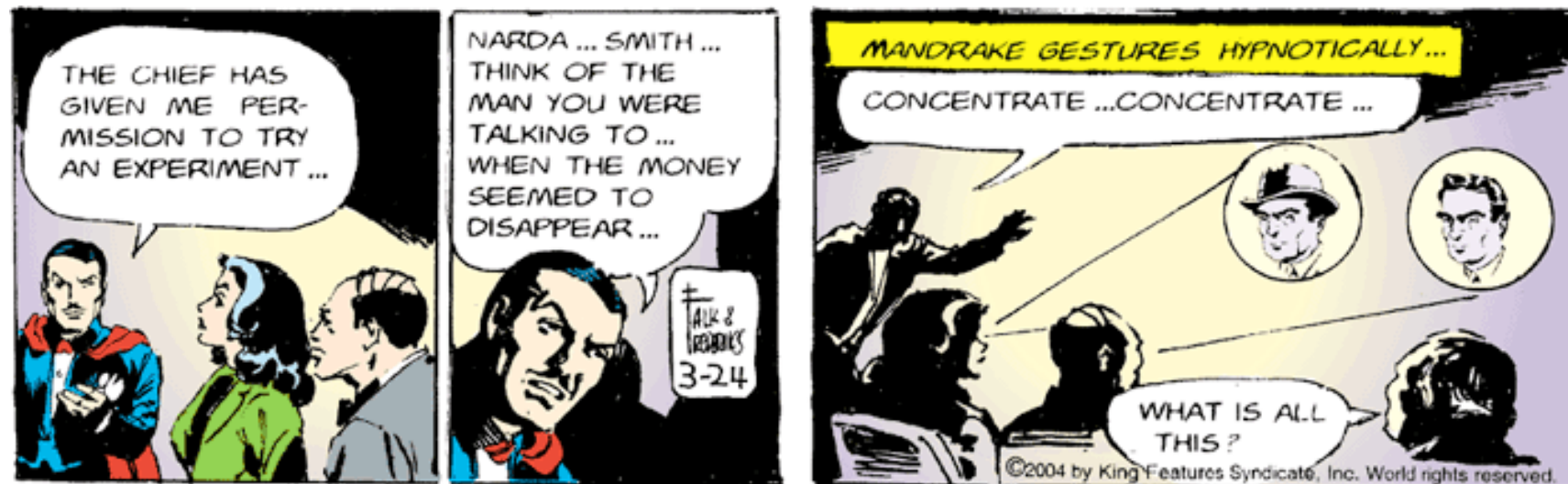


- *Harvard University Gazette*, Jan 11 1996, Vol XCI
- *Harvard University Gazette*, April 15, 1999, Vol XCIV

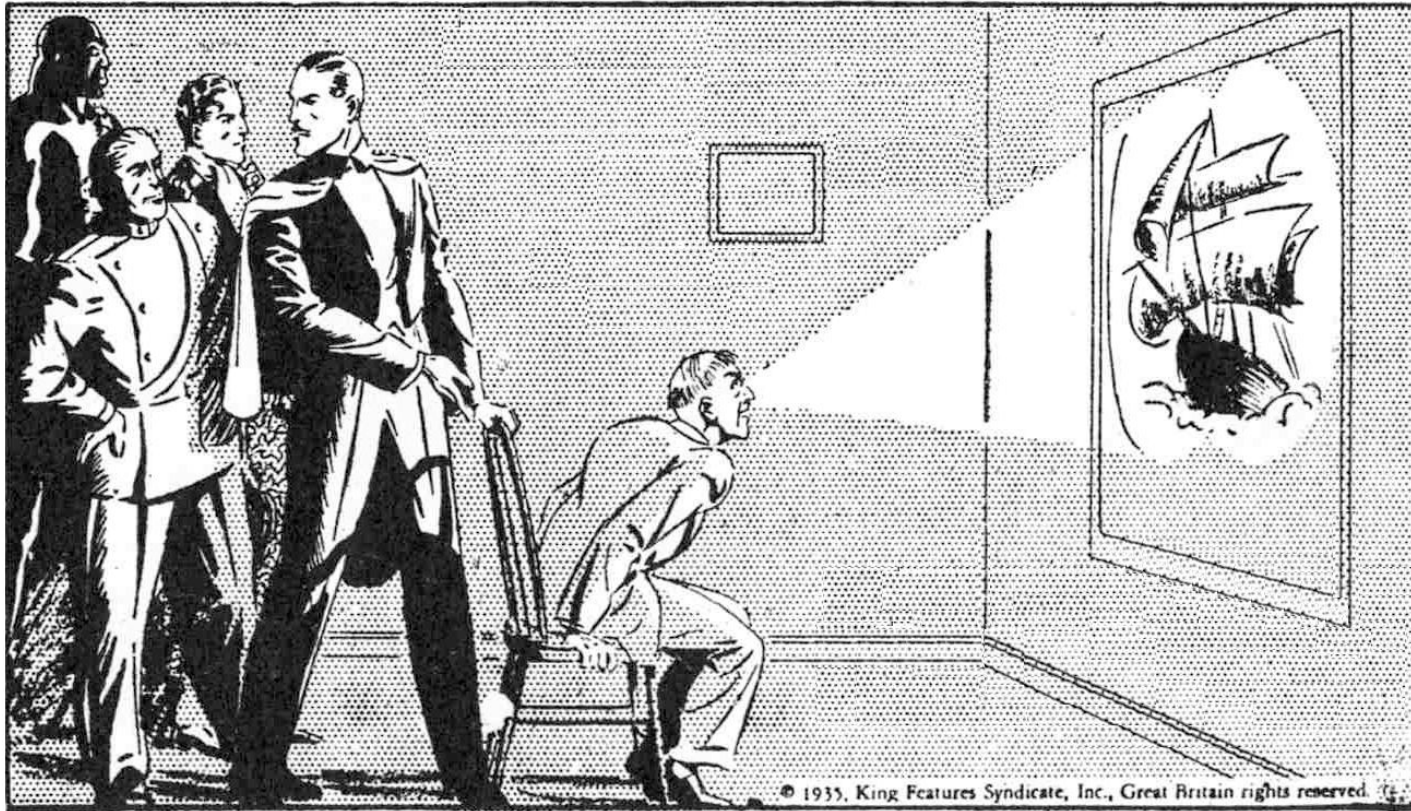
Stephen Kosslyn point to the “mind’s eye” at the back of the brain where visual memories are replayed into consciousness.



Mandrake the Magician



Mandrake the Magician



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Implicit nontrivial theory

“The understanding reader ... accomplishes ...
theory construction of quite a nontrivial kind.

The abilities that he develops constitute an implicit theory ... he has mastered, ... The reader is, of course, not at all aware of what he has done or how he has done it.”

Chomsky, 1962.



Semantics of natural language

In Quine/Davidsonian approaches,

“we are choosing to content ourselves with informal talk that would not answer the questions of the Martian scientist or ourselves as scientists, **though as subjects of inquiry we understand this talk very well**, just as bees understand the waggle dance; no help to von Frisch.

Chomsky 2003, p. 293 emphasis added.



The circle of language?

Formal, Chomskyan theories are guilty of the fallacy of “trying impossibly to get outside the circle of language.”

“Of course, we cannot express meanings other than with words.”

Evans and McDowell 1976, p. ix

- Huh?



Leaving out what's important?

“The whole [Chomskyan] conception is objectionable.”

The objection that “devastates” formal, internalist semantics is that “someone could know it without understanding the language of which it is a theory ... and yet not know what a single sentence of the language meant.”

“It has widely been felt that such theories would leave what is really important out of account.”

Evans and McDowell 1976, p. 11



Symbol System Hypothesis

The idea is that there is a class of systems which manipulate symbols, and the definition of these systems is what's behind the programs in AI. The argument is very simple. We see humans using symbols all the time. They use **symbols like books**, they use **fish as a symbol** for Christianity, so there is a whole range of **symbolic activity**, and that clearly appears to be essential to the exercise of mind.

– A. Newell, 1986, p. 33



Dead or alive?

“Every sign by itself seems dead. What gives it life?”

Wittgenstein 1953, I 432

“We imagine meanings as weird entities somehow attached to what would otherwise be ‘dead’ noises.”

“How is it possible for those intrinsically inert ink-marks (or some associated state of the brain) [sic!] to reach out into the world and latch on to a definite portion of reality?”

Horwich 1998, p. 1



Dead?

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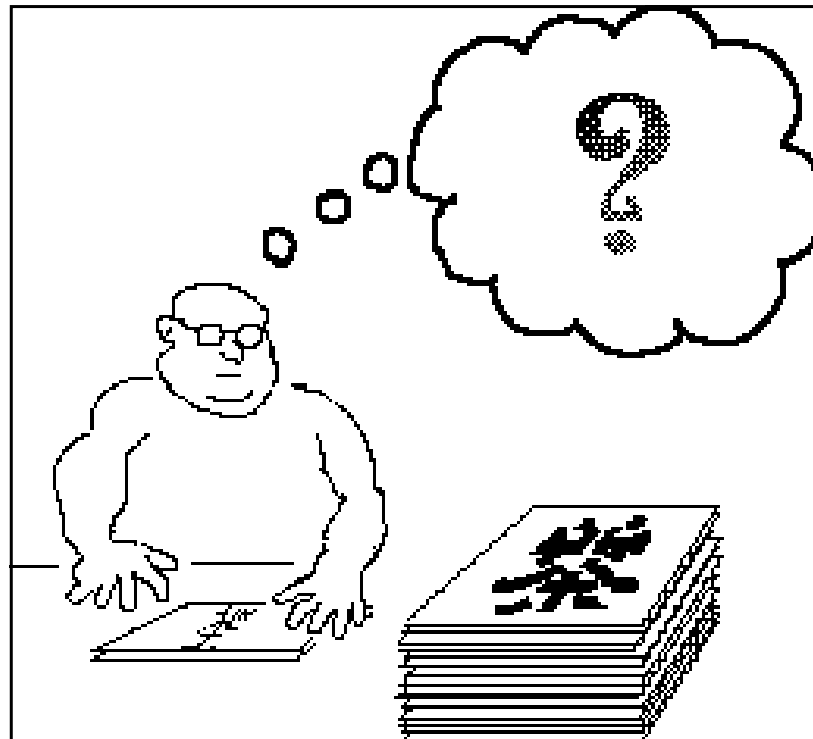


Dead?

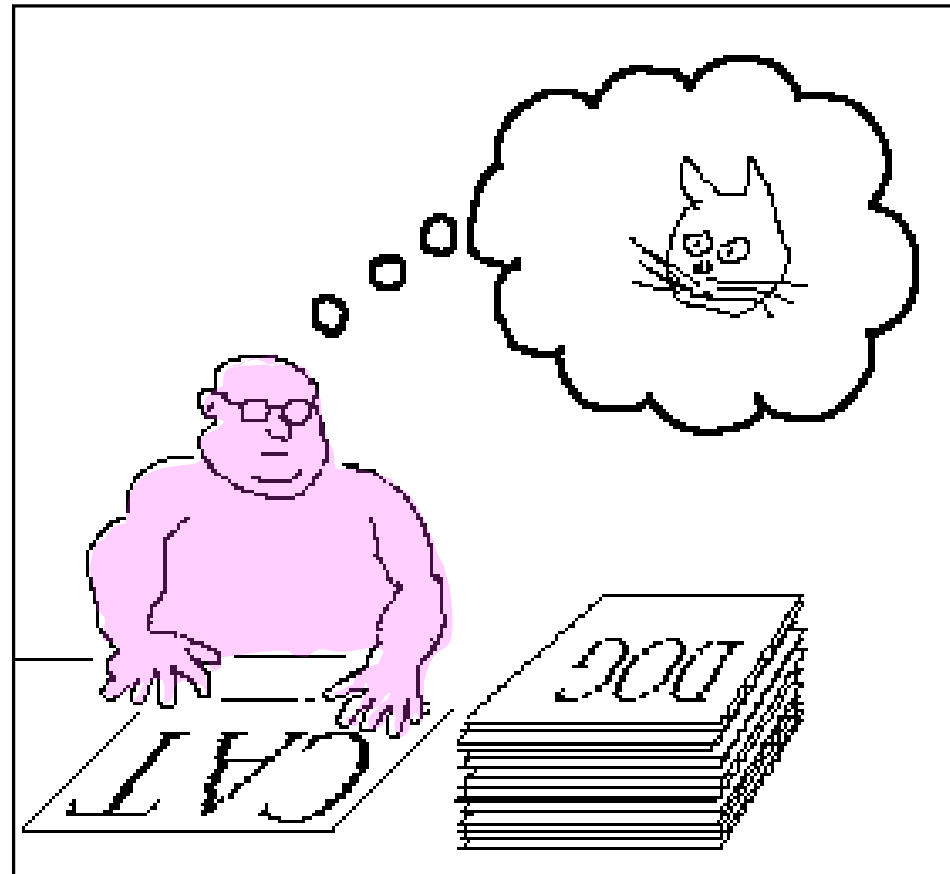
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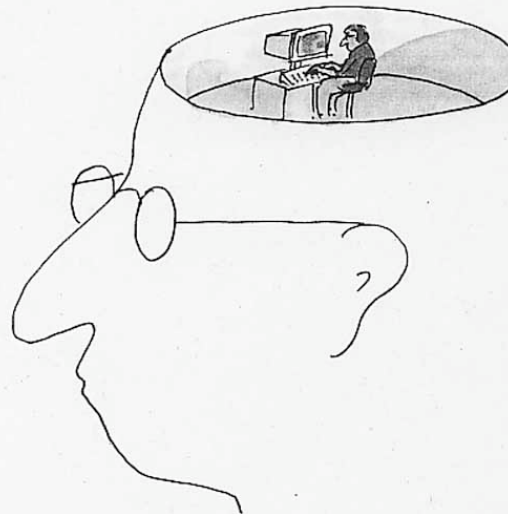
Inside the Chinese Room



Paired with an intelligent user



Artificial Intelligence: A Debate



Attempts to produce thinking machines have met during the past 35 years with a curious mix of progress and failure. Computers have mastered intellectual tasks such as chess and integral calculus, but they have yet to attain the skills of a lobster in dealing with the real world. Some outside the AI field have argued that the quest is bound to fail: computers by their nature are incapable of true cognition. In the following pages, John R. Searle of the University of California at Berkeley maintains that computer programs can never give rise to minds. On the other side, Paul M. Churchland and Patricia Smith Churchland of the University of California at San Diego claim that circuits modeled on the brain might well achieve intelligence. Behind this debate lies the question, What does it mean to think? The issue has intrigued people (the only entities known to think) for millennia. Computers that so far do not think have given the question a new slant and struck down many candidate answers. A definitive one remains to be found.



Thank you!

