John Locke

1632-1704

No innate ideas or innate knowledge

- Locke:
  - read and enjoyed Descartes (though he had many disagreements with him).
  - Worked as a doctor (physician), and a government official.
  - Fellow of the Royal Society (1668), and friend of Isaac Newton.
  - Wrote *Two Treatises of Government* (1689) and ***An Essay Concerning Human Understanding*** (1689)

Locke's *Essay*

- Locke wrote the Essay in order to explore both the powers and the *limits* of human understanding:

"If I succeed, that may have the effect of persuading the busy mind of man to be more cautious in meddling with things that are beyond its powers to understand; to stop when it is at the extreme end of its tether; and to be peacefully reconciled to ignorance of things that turn out to be beyond the reach of our capacities." (Book I, Ch. 1)

Locke has a high view of reason

§4. *Reason* is natural *Revelation*, whereby the eternal Father of Light, and Fountain of all Knowledge communicates to Mankind that portion of Truth, which he has laid within reach of their natural faculties…

Book IV, Ch. XIX, Sec. 4. (N.B. Locke rejects the claims of religious fanatics to know things apart from reason and revelation.)

Definition of *Idea*

§8. … the Word *Idea* … being that Term, which, I think, serves best to stand for whatsoever is the Object of the Understanding when a Man thinks, I have used it to express whatever is meant by *Phantasm*, *Notion*, *Species*, or whatever it is, which the Mind can be employ'd about in thinking…

(Book I, Chap. I)

Chapter II, *No innate Principles in the Mind*

§1. It is an established Opinion amongst some Men, That there are in the Understanding certain *innate Principles*; some primary Notions … Characters, as it were stamped upon the Mind of Man, which the soul receives in its very first Being; and brings into the World with it.

(E.g. Descartes said this.)

Empiricism

- Note here that a ‘principle’ isn’t the same as an idea. A ‘principle’ is roughly a *belief*.
- For Locke, there are no innate beliefs or ideas. These are two separate claims, that form the core of a view called ***empiricism***.

Tabula rasa = ‘blank slate’

2. Let us then suppose the mind to have no ideas in it, to be like **white paper** with nothing written on it. How then does it come to be written on? From where does it get that vast store which the busy and boundless imagination of man has painted on it—all the materials of reason and knowledge? To this I answer, in one word, from experience.

(Book II chapter 1)

Knowledge vs. abilities

- Note that Locke is not denying the possibility of innate *abilities*, or *capacities* (know-that vs. know-how).

- A human baby is born with the capacity to walk, see, think, breathe, etc.
- A snake isn't born with the capacity to walk, and a baby doesn't have the capacity to slither (very well).

- (But is it possible to make a sharp separation between propositional knowledge and abilities?)

Which beliefs *might* be innate?

- Obviously such specific beliefs as “gold is heavier than lead” aren’t innate.

- But are there any beliefs which are (at least plausibly) innate, or ‘hard wired’?

The most plausible candidates are such things as:

- “Every event has a cause”
- “The world is 3-dimensional” (and the axioms of Euclidean geometry)
- “The world obeys simple, uniform laws”
- “If *P* is true, then the denial of *P* is false.”

The argument from universal consent

- "Some people have argued that because these principles are (they think) universally accepted, they must have been stamped onto the souls of men from the outset."

  Is this a strong argument?

- Locke: "Even if it were in fact true that all mankind agreed in accepting certain truths, that wouldn't prove them to be innate if universal agreement could be explained in some other way; and I think it can."

The argument from universal consent *backfires*

§4. "Worse still, this argument from universal consent which is used to prove that there are innate principles can be turned into a proof that there are none; because there aren't any principles to which all mankind give universal assent. … For, first 'tis evident, that all *Children* and *Ideots*, have not the least Apprehension or Thought of them …"

Objections to Locke's argument

1. Birth defects aren't relevant to normal cases

2. Knowledge/concepts may be *tacit*.

3. Knowledge/concepts may be *latent*.

1. Birth defects

- In the case of “ideots” (people with developmental disabilities) the usual innate knowledge or concepts may simply be missing.

- We know that babies are sometimes born with parts missing, or non-functioning. So presumably there can also be mental birth defects as well.

- The case of “ideots” doesn’t show that *healthy* people lack any innate knowledge.

Objection 2 – Tacit knowledge

Maybe children (and even ideots) *do* have these ideas and beliefs – they're just not *aware* of them?

Locke replies: … it seeming to me a near a Contradiction, to say, that there are Truths imprinted on the Soul, which it perceives or understands not; imprinting, if it signify any thing, being nothing else, but the making certain Truths to be perceived.

Tacit knowledge?

- Is it, as Locke says, a "…Contradiction, to say, that there are Truths imprinted on the Soul, which it perceives or understands not." ?

- This is important, as most of us aren't *aware* of believing the things on the list above. It's more that we believe them *implicitly*, or *tacitly*.
- A tacit belief is one that cannot be articulated, or "put into words". But it shows itself in the person's *behaviour*.

Example – “knowing the way”

- Let’s say you’ve driven a route from A to B dozens of times, and are very confident of making no wrong turns.
- Then a friend wants to drive this route for the first time, and asks you for directions, or even to draw a map.
- Can you do it?

- Philosopher of science Michael Polanyi describes this phenomenon of tacit knowledge in science.
- Much of what a scientist knows, he claims, is tacit, and cannot be passed on through speech or writing.
- That's why grad students have to work alongside an established scientist and learn by watching and doing, like apprentices.
- (So if there are innate beliefs, then they might be tacit.)

Descartes requires tacit concepts

"If having an innate concept entails consciously entertaining it at present or in the past, then Descartes's position is open to obvious counterexamples. Young children and people from other cultures do not consciously entertain the concept of God and have not done so."

(Stanford Encyclopedia of Philosophy)

Objection 3 – Latent knowledge

- Children, like “ideots”, are low-functioning (both physically and mentally) compared to adults, but most children don’t have substantial birth *defects*.
- Healthy children have all the properties they are supposed to have, but some of them are *latent* properties.

e.g. Do male babies have an innate ability to grow a beard, or do they later learn how to do this?

Latent Knowledge

"We have noted that while one form of nativism claims (somewhat implausibly) that knowledge is innate in the sense of being present as such (or at least in propositional form) from birth, it might also be maintained that **knowledge is innate in the sense of being innately determined to make its appearance at some stage in childhood.** This latter thesis is surely the most plausible version of nativism."

Peter Carruthers (1992, p. 51)

Leibniz's modest rationalism

- Leibniz (1704) says that the mind is not a *tabula* rasa, but neither does it contain fully-formed knowledge. It is like a block of marble, the veins of which determine what sculpted figures it will accept.

"… if there were veins in the stone which marked out the figure of Hercules rather than other figures, this stone would be more determined thereto, and Hercules would be as it were in some manner innate in it, although labour would be needed to uncover the veins, and to clear them by polishing, and by cutting away what prevents them from appearing. …

…It is in this way that ideas and truths are innate in us, like natural inclinations and dispositions, natural habits or potentialities, and not like activities, …”

(1704, Preface, p. 153)

Locke's 'challenge' argument

Where do ideas come from?

- From *sensation* (e.g. ideas of yellow, white, heat, cold, soft, hard, bitter, sweet, etc.)
- From *reflection*. (e.g. the ideas of perception, thinking, doubting, believing, reasoning, knowing, willing)

Locke then challenges the reader to think of an idea that *doesn't* come from one of these sources.

"When we have taken a full survey of the ideas we get from these sources, and of their various modes, combinations, and relations, we shall find they are our whole stock of ideas; and that we have nothing in our minds that didn't come in one of these two ways." *Essay*, Book II, Chapter I, Section 5

E.g.

I think you'll agree that if a child were kept in a place where he never saw any colour but black and white till he was a man, he would have no ideas of scarlet or green—any more than a person has an idea of the taste of oysters or of pineapples if he has never actually tasted either.

(Locke, *Essay*, Book II, Chapter I, Section 6.)

Primary and Secondary Qualities

- Primary quality = literal representation
- Secondary quality = non-literal representation

- In other words, objects have some powers to produce sensory ideas in us with features (e.g. colour) that aren't similar to anything in the real object.

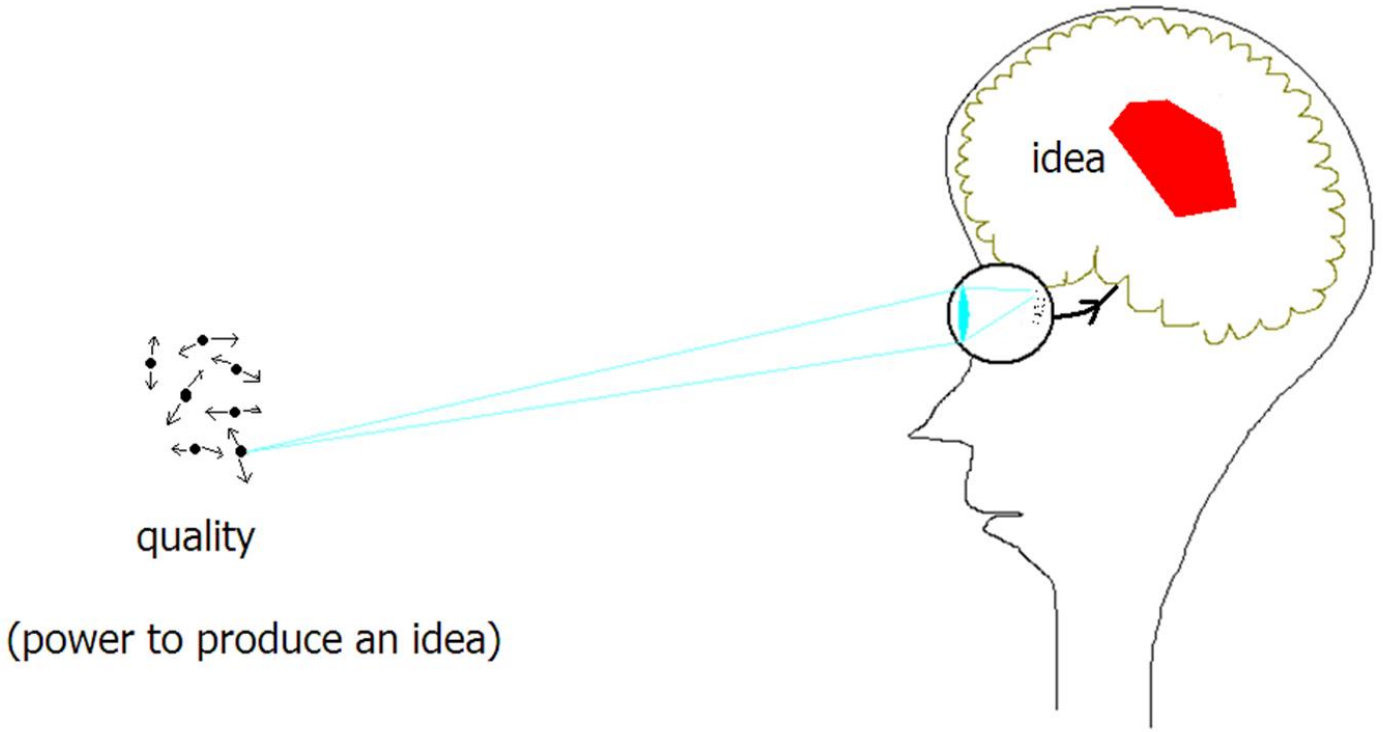
- Primary qualities (literal)
  - Shape
  - Size
  - Motion

- Secondary qualities (non-literal)
  - Colours
  - Tastes
  - Smells
  - Feeling of warmth, etc.

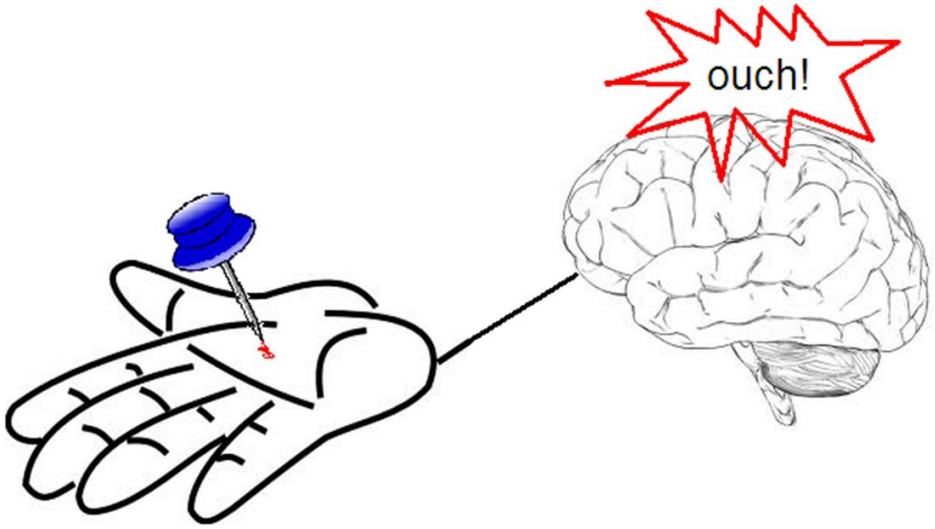
"From this we can easily infer that the ideas of the primary qualities of bodies resemble them, and their patterns really do exist in the bodies themselves; but the ideas produced in us by secondary qualities don't resemble them at all. There is nothing like our ideas of secondary qualities existing in the bodies themselves. All they are in the bodies is a power to produce those sensations in us."

(Locke, *Essay*, Book II, Chapter VIII, Section 15.)

"What is sweet, blue, or warm in idea is nothing but the particular size, shape, and motion of the imperceptible parts in the bodies that we call 'sweet', 'blue', or 'warm'."



"It is no more impossible to conceive that God should attach such ideas [such as colours] to motions that in no way resemble them than it is that he should attach the idea of pain to the motion of a piece of steel dividing our flesh, which in no way resembles the pain."



"What I have said about colours and smells applies equally to tastes and sounds, and other such sensible qualities. Whatever reality we **mistakenly** attribute to them, they are really nothing in the objects themselves but powers to produce various sensations in us. These powers depend, as I have said, on those primary qualities, namely size, shape, texture, and motion of parts."

The role of the “mechanical philosophy”

- Locke is writing at a time when all his scientist friends in the Royal Society accept the “mechanical philosophy” developed by scientists like Robert Boyle and René Descartes.
- This says that *material* objects are composed of particles having only geometrical properties such as shape, size and motion.
- *It is impossible to understand colour in such terms*. So colours exist only in the (non-material) mind.

(Later: The problem of ‘qualia’)

- Later, when philosophers like La Mettrie (author of *L’Homme Machine*, 1748) propose that the human mind is just the brain, a material object, and hence also mechanical, a problem arises.
  - For now colours (i.e. colour experiences, an example of “qualia”) must be understandable in mechanical terms.

- But they *can’t* be so understood. (Can they?)

Arguments that some ideas are not really in the material object.

1. Almonds

Pound an almond, and the clear white colour will be altered into a dirty one, and the sweet taste into an oily one. What real alteration can the beating of the pestle make in any body other than an alteration of the texture of it?

2. Heat and Pain

Flame is called ‘hot’ and ‘light’ … all from the ideas they produce in us. Those qualities are commonly thought to be the same in those bodies as those ideas are in us, the one perfectly resembling the other; and most people would think it weird to deny this. But think about this: a fire at one distance produces in us the sensation of warmth, and when we come closer it produces in us the very different sensation of pain; what reason can you give for saying that the idea of warmth that was produced in you by the fire is actually in the fire, without also saying that the idea of pain that the same fire produced in you in the same way is in the fire?

3. Those buckets of water

We are now in a position to explain how it can happen that the same water, at the same time, produces the idea of cold by one hand and of heat by the other; whereas the same water couldn't possibly be at once hot and cold if those ideas were really in it. If we imagine warmth in our hands to be nothing but a certain sort and degree of motion in the minute particles of our nerves … If the sensation of heat and cold is nothing but the increase or lessening of the motion of the minute parts of our bodies, caused by the corpuscles of some other body …

BOOK IV
Chapter XI: knowledge of the existence of other things

Do I know that I exist?

If anyone claims to be so sceptical as to deny his own existence … I am willing to let him luxuriate in his beloved state of being nothing, until hunger or some other pain convinces him of the contrary!

Does God exist?

Though God has given us no innate ideas of himself—has not stamped onto our minds from the outset words in which we can read his existence—yet having equipped us with the mental faculties that we have, he hasn't left himself without witness to his existence.

N.B. Locke doesn't *need* God, for his epistemology, in the way Descartes does.

- Locke uses something like Descartes' causal adequacy principle to argue that God exists.

Just as it is evident that something must exist from eternity, it is equally evident that this 'something' must be a cogitative being. For it is as impossible that incogitative matter should produce a cogitative being as that nothing, or the negation of all being, should produce a positive being or matter.

(Cause ≥ Effect)

Do material objects exist?

Can we trust our senses?

Does Locke, like Descartes, try to *give a logical proof* that we can trust our senses?

- As for myself, I think God has given me assurance enough of the existence of things outside me: I know which ways of relating to them will bring me pleasure and which will bring me pain, and that is a matter of great concern to me here on earth.
- We certainly can't have better evidence than we do that our faculties don't deceive us about the existence of material beings, for we can't do anything except through our faculties—indeed, we can't even talk of knowledge except with the help of those faculties that enable us to understand what knowledge is.

- "The certainty of our senses and of the ideas we receive through them is not lessened by our not knowing how the ideas are produced. …

  … The best assurance I can have, the best my faculties are capable of, is the testimony of my eyes; they are the proper and sole judges of this thing …"

- Note the theme that our mental capacities are *limited*.
- It also sounds a bit externalist to me. He seems to be moving away from the idea that we need to verify and control our cognitive mechanisms, and toward the view that we can just trust them.

E.g. Locke says, concerning his eyes:

"I have reason to rely on their testimony as being so certain that I can no more doubt that while I write this I see white and black and something really exists that causes that sensation in me, than I can doubt that I write or that I move my hand. **This is a certainty as great as human nature is capable of** concerning the existence of anything except oneself and God.".

Other arguments for external objects

1. people who lack the organs of one of the senses can never have the ideas belonging to that sense produced in their minds

2. . … sometimes I find that I can't avoid having those ideas produced in my mind. … if at noon I turn my eyes towards the sun, I can't avoid the ideas that the light or sun then produces in me.

3. everybody can see the difference in himself between having a memory of how the sun looks and actually looking at it.

4. …our senses often confirm each other's reports concerning the existence of perceptible things outside us.

Locke's last word …

The testimony of our senses that there are things existing in nature gives us as much assurance of this as we are **capable of,** and as much as we **need**. For our faculties are not suited to the entire range of what is the case, or to a perfect, clear, comprehensive knowledge of things, free from all doubts and worries. But they are suited to the preservation of us whose faculties they are; they are serviceable enough for everyday purposes, because they let us know for sure which things can help and which can hurt us.

(Compare to Thomas Reid, IHM 6.20, 168-169, publ. 1764)

"The sceptic asks me, Why do you believe the existence of the external object which you perceive? This belief, sir, is none of my manufacture; it came from the mint of Nature; it bears her image and superscription; and, if it is not right, the fault is not mine: I even took it upon trust, and without suspicion. ...

(c.f. externalism, and *trusting* the manufacturer of a calculator.)

... Reason, says the sceptic, is the only judge of truth, and you ought to throw off every opinion and every belief that is not grounded on reason. ...

... Why, sir, should I believe the faculty of reason more than that of perception?—they came both out of the same shop, and were made by the same artist; and if he puts one piece of false ware into my hands, what should hinder him from putting another?"

Locke on substance

4. So when we talk or think of any particular sort of corporeal substances—e.g. horse, stone, etc.—although our idea of it is nothing but the collection of simple ideas of qualities that we usually find united in the thing called 'horse' or 'stone', still we think of these qualities as existing in and supported by some common subject; and we give this support the name 'substance', though we have no clear or distinct idea of what it is. We are led to think in this way because we can't conceive how qualities could exist unsupported or with only one another for support.

Book II, Chapter XXIII

Locke on substance

Our obscure idea of substance in general. So that if any one will examine himself concerning his notion of pure substance in general, he will find he has no other idea of it at all, but only a supposition of he knows not what support of such qualities which are capable of producing simple ideas in us; … he would not be in a much better case than the Indian before mentioned who, saying that the world was supported by a great elephant, was asked what the elephant rested on; to which his answer was- a great tortoise: but being again pressed to know what gave support to the broad-backed tortoise, replied- **something, he knew not what**.