Language and Thought

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Philosophy of Language » Lecture 11

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Words for Snow

‘Eskimo’ Words for Snow

- It is often claimed that Inuit languages have many words for snow, many more than English.

> We have the same word for falling snow, snow on the ground, snow packed hard like ice, slushy snow, wind-driven flying snow – whatever the situation may be. To an Eskimo, this all-inclusive word would be almost unthinkable; he would say that falling snow, slushy snow, and so on, are sensuously and operationally different, different things to contend with; he uses different words for them and for other kinds of snow. (Whorf 1940: 216)

Actually, They Don't (Martin 1986)

- All the available evidence about Inuit languages, however, suggests that those languages have 'about a dozen words (even a couple of dozen if you are fairly liberal about what you count) for referring to snow and to related natural phenomena, events, or behavior' (Pullum 1991: 171).
- Moreover this collection is

> not remarkably different in size from the list in English (which, remember, boasts not just *snow*, *slush*, and *sleet* and their derivatives, but also count nouns like *avalanche* and *blizzard*, technical terms like *hardpack* and *powder*, expressive meteorological descriptive phrases like *flurry* and *dusting*, compounds with idiosyncratic meanings like *snow cornice*, and so on…). (Pullum 1991: 170)

Actually, Wouldn't Be Even More Puzzling If They **Did**?

> when you come to think of it, Eskimos aren't really that likely to be interested in snow. Snow in the traditional Eskimo hunter's life must be a kind of constantly assumed background, like sand on the beach. And even beach bums have only one word for sand. But there you are: the more you think about the Eskimo vocabulary hoax, the more stupid it gets. (Pullum 1991: 166)

Language and Evolution

- In fact, if there were a lot of survival advantage for Eskimos in talking about snow, we would expect **fewer** words for snow – on **evolutionary** grounds.
  - Languages evolve and diverge over time just as biological species do; the selective pressures may be about use in communication, rather than reproductive advantage, but both are susceptible to evolutionary explanation.
- Commonly used 'workhorse' words face lots of pressure **not** to change (Thanukos 2008: 283–84) – so we'd expect few words for snow in a place where there is lots of discussion of it – people want to coordinate, generally, in order to communicate.

Diversity and Selective Pressure

- Random 'mutations' – inventions of new words – might explain the origins of linguistic diversity within a language (Hartl 2000: 59–66).
  - Perhaps there are lots of opportunities for such innovation in the presence of lots of snow.
- But how might a diversity of words for one thing **persist** in a language over time? The standard evolutionary answer for variation in a population is: **when the differences are selectively neutral** (Hartl 2000: 88–98).
  - So for example think of the diversity of human blood groups: differences in blood type persist **because** they have almost no consequences on our survival – so no selective pressure driving any variant to extinction.
- If we consider language use evolutionarily, then we should expect more words for *X* in populations where (i) encounters with *X* are common enough for people to need words for *X*, but (ii) coordinated talking about *X* is not particularly important for survival.
  - For example, consider words for fish species: the mulloway has also been called *butterfish*, *jewfish*, *kingfish*, *river kingfish*, *silver kingfish*,… (Entry for Mulloway, *The Australian Fish Names Standard*).

Why Does This Zombie Idea Persist?

- So if the idea is both false and antecedently implausible, **why does it persist**?
- Many people appear to think it illustrates a fundamental thesis about the relationship of language and thought:

  Sapir-Whorf ‘The only conceptual distinctions we can make are those encoded in our language; and that the reason for this is that our language imposes those distinctions on the sense data we take in from the world’ (Elbourne 2011: 141).

- So the idea is, Inuit languages allow Inuit people to distinguish many kinds of snow that we cannot, because we cannot think the relevant thoughts.
  - This is not the **banal** claim that we can only say things using our own language. It is the claim that the language we speak constrains the propositions we could entertain. (Or maybe that the language we speak requires that we have certain non-linguistic beliefs.)

Wait … what?

- This should seem **bizarre**. How is the Inuit snow word myth, even were it true, supposed to illustrate this thesis?
- The natural story is this: there are lots of different kinds of snow, and people who care about distinguishing them will tend to have a language which has words for each kind. I.e., they can already represent different kinds of snow, and they are prompted to linguistic innovation by their need to express those representations. This would explain why those languages have many snow words (if it were in fact true).
  - That is: the direction of explanation runs from what we need/want to think about, to the development of a language facilitating that. 'Why would we have a word for something about which we had no idea?' (Elbourne 2011: 146).
- The Sapir-Whorf story, by contrast, says basically that Inuit people are incredibly **lucky**: that if they had, through historical accident, spoken English instead, then they wouldn't have been able to distinguish different kinds of snow.

The mundane reality

> Horsebreeders have various names for breeds, sizes, and ages of horses; botanists have names for leaf shapes; … printers have many different names for different fonts…, naturally enough. If these obvious truths of specialization are supposed to be interesting facts about language, thought, and culture, then I'm sorry, but include me out.
>
> Would anyone think of writing about printers the same kind of slop we find written about Eskimos in bad linguistics textbooks? … Imagine reading: 'It is quite obvious that in the culture of printers … fonts are of great enough importance to split up the conceptual sphere that corresponds to one word and one thought among non-printers into several distinct classes….' Utterly boring, even if true. Only the link to those legendary, promiscuous, blubber-gnawing hunters of the ice-packs could permit something this trite to be presented to us for contemplation. (Pullum 1991: 165–66)

Constructivism and Relativism

OK, But What About the Sapir-Whorf Hypothesis?

- So there aren't remarkably many snow words in Inuit languages, and even if there were, that wouldn't be a particularly plausible instance of the Sapir-Whorf idea (S-W).
- Still, what of the general idea that language constrains our 'world view'?
- One way this might be true is if **language makes the world** – that the languge we speak, the linguistic conventions we adopt, determine what the world is like.
  - If so, obviously the judgements we end up making will depend on our language in a very strong way.
- Is there any reason to accept this **linguistic constructivism**?

The Description-Dependence of Reality and Perception

> Take dinosaurs. Once you describe something as a dinosaur, its skin color and sex life are causally independent of your having so described it. But before you describe [something] as a dinosaur, or as anything else, there is no sense to the claim that it is 'out there' having properties…
>
> people like Goodman, Putnam and myself … think that there is no description-independent way the world is, no way it is under no description. (Rorty 1998: 87–90)

- If this radical claim is true, then we can see why perception would be description-dependent: there is **nothing to be perceived**, independently of description.
- Can we give an **argument** for Rorty's claim that nothing is 'out there' independent of our linguistic descriptions?

Constructivism

- Constructivism says that what the world is really like – not just how we describe it – depends on the language we speak.

> Once we adopt a particular scheme for describing the world, there then come to be facts about the world. (Boghossian 2006: 28)

- Some things are socially constructed – nothing could be money unless some people collectively decided to treat it as a means of exchange. (Even so, is this **linguistically constructed**?)
- But that **everything** is linguistically constructed? Why believe this?

Reality as an Amorphous Blob

- The standard approaches have this sort of structure. There is, out there, an undifferentiated 'blob' of stuff. There come to be giraffes, mountains, etc., after we decide to classify certain parts of this stuff *giraffe*, *mountain*, etc.
- Before we did the classifying/naming, there were no giraffes; there were, at best, potential divisions that could become giraffes. And some things we didn't decide to name (like trout-turkeys, neither fish nor fowl) didn't come into being.
- What constrains our naming process? **Nothing**, is the answer – we could have decided to name arbitrary divisions of the blob.
- But of course this very example undermines constructivism, for it presupposes that there are some pre-construction facts about **what divisions in the reality exist** (Boghossian 2006: 37).

Counting (Boghossian 2006: 36–37)

- Suppose there is a situation in which there are 2 disjoint objects, x and y. The 'man on the street' (MOTS) says, true enough, that there are two things.
- Classical mereologists accept the principle of 'unrestricted composition' (Lewis 1991: 72–87): **whenever there are some things, there is something which has them both as parts**. If this is true, there is also a third thing, the **fusion** $x + y$. A mereologist accordingly says that, in this situation, **there are three things**.
- Does the MOTS disagree with the mereologist? Plausibly, no – in the ordinary sense, there are two things, and in the mereological sense, there are three. It is our choice which linguistic convention about how to use the word *thing* to adopt.
- Putnam uses this example as an argument for **fact constructivism** – that the world depends on which linguistic convention we adopt (Putnam 1990: 96)!
- But note that doesn't follow at all – that would require genuine **disagreement**, and the plausibility of the linguistic conventionalist claim depends on the idea that the mereologist and the MOTS are simply talking past one another.
  - The MOTS doesn't **deny** the existence of the fusion – it's unlikely to have an opinion about at all.

Relativism

- One way around this issue is to go **relativist**: to say that not only are facts about the number of things linguistically constructed once we adopt a convention about how to use the expression *thing*, but **also** each constructed fact is true **relative to** its own language.
  - The relativist can say that there is genuine disagreement about the number of things, but that it is **irreconcilable**: it is true relative to one linguistic convention that there are two objects, and true relative to the other that there are three objects.
- This is to do away entirely with the idea that there is some pre-existing blob that we interpret and categorise; it is more accurate to characterise this as the view that there is **nothing but** our linguistic conventions. (Boghossian 2006: 44)
- Note, however, that this relativism seems self-undermining – for there would seem to have to be absolute facts of the form *it is true relative to T that p* (Boghossian 2006: 54–56).

Sapir-Whorf and Sense Data

Perception and the Sapir-Whorf Hypothesis

- The constructivist and relativist say that thought depends on language because language **makes** the world we think about.
- But that is not the only route to the Sapir-Whorf hypothesis. The formulation earlier talked of how language 'imposes distinctions' on our experience. So perhaps language doesn't make the world what it is – but it could still be the case that **language makes our experiences what they are**.
- There are two components to this kind of view:
  1. **Perception** is not passive observation, but requires the active intervention of the perceiver to structure and divide up the undifferentiated 'stream of consciousness' into concrete objects and properties.
  2. We structure perceptual content by means of our language; we **describe** what we experience, and that determines what we see.

Sense-Datum Theories of Perception

- The S-W hypothesis needn't assert that there is no objective reality; it need only assert that our perception of that reality is always **mediated** by description.
  - That is, to perceive is **to describe the flux of experience**.
- This is closely aligned with the old **sense datum** theory of perception (Crane and French 2021: §3.1), that perception is directly of internal mental objects, called sense data, and only indirectly accesses the external world (Hatfield 2021).
- The version of this view relevant to the S-W hypothesis is one that makes the construction of sense data dependent on the linguistic resources available.
  - So I causally interact with a thing *t*; this causes a certain mental object *m* to be created in my mind; and what sort of thing *m* is depends on which linguistic capacities I already have. If my language contains *granite* and that applies to the experience of *t*, then *m* is a sense datum of a granite boulder, we perceive that *t* is made of granite; if my language contains only *rock* that applies to that experience, then *m* would be some other sense datum, and we would perceive *t* only as a rock.

Direct ('Naïve') Realism (Crane and French 2021: §3.4)

- Compare this sense datum theory to one alternative, **direct realism**: the view that when one perceives or sees a tree, the **content** of your perceptual experience is that tree (and not some internal mental effect of the tree).
  - It is 'direct' because one has **unmediated** or direct access to the external world as the objects of perception.
- You can of course make **mistakes** in your perceptually justified judgments, but those mistakes are to be described like this: *I mistakenly thought that mobile phone tower was a tree* – there is no tree presented in the contents of your experience, on this view.
  - There is no common content between seeing that p and hallucinating as if p – **disjunctivism**.
- Direct realism makes the **transparency** of experience (that we cannot attend to sense data even though they are supposedly what we see) explicable.

The Sapir-Whorf Hypothesis Reformulated

- Sense data are relatively unpopular as theories of perception; and other representationalist theories of perception tend to shy away from the idea that language is directly involved in the formation of perceptual representations.
- Can we reformulate the S-W hypothesis without talk of sense data?

  Conceptual Sapir-Whorf

  1. Our perceptual judgments are constrained by the concepts we are able to make use of in describing our experiences; and
  2. The concepts we have are constrained by our language.
- Given experimental support for the existence of **categorical perception**, 'the phenomenon by which the categories possessed by an observer influences the observers' perception' (Goldstone and Hendrickson 2009: 69) the viability of this thesis depends on the second conjunct, that our language furnishes our stock of concepts.
- **Why should we think that the concepts we can acquire are constrained by language?**

Concepts Without Words

> Simple introspection can often tell people that they do have concepts of things they do not have words for. The American psychologist Greg Murphy relates that he regularly asks students in his courses which of them have a name for those clumps of dust that accumulate under beds on wooden floors. He typically finds that about half the class does (with *dust bunnies* and *dust monsters* being popular choices) while half the class does not. But the ones who do not have names for these things do recognise what Murphy is talking about, and so they presumably have DUST BUNNY concepts without corresponding words. (Elbourne 2011: 143)

Compare: *lintel*, *riparian*, *tactile paving*, *subitising*….

Words Without Concepts

- Suppose I ask, *What things are the same kind as that?* while pointing to an unfamiliar object.
- The **content** of my question could be something like this: *What things are the same kind as dachshunds?*, if what I am pointing at is a dachshund. (The answer of course being *dachshunds*!)
- But I needn't have a **concept** DACHSHUND; I may not even have a concept DOG.
- So I can utter a sentence with a certain meaning even though I lack concepts to **think** that meaning – in this case I had better lack them, since what I'm hoping to acquire by asking my question is a concept of a certain kind of thing.

Perception and Thought

- Sapir and Whorf seem to think that we acquire concepts by describing our experience in words.
- But we can have an inarticulate experience, that we cannot describe, and nevertheless be able to think about it conceptually (as in the case of DUST BUNNIES without *dust bunnies*), or acquire a concept from it (as in the case of learning that there is a kind of things like *that*, when one doesn't know any word for the thing pointed at).
- This is even more clear if perceptual experience is direct, having the external objects of experience as its content; then the content of experience might well outrun language, if the reality experienced outruns language.
  - To say this requires accepting only the sort of externalism about content we've seen repeatedly through this course – that meaning doesn't depend on what's in the head can be extended to the claim that what we experience doesn't depend on what's in the head.

Language and Habits of Thought

Even Weaker S-W

- The above examples indicate that the strong claim that the limits of our thought are the limits of our language looks overblown.
- But a weaker claim looks more plausible:

  Weak Sapir-Whorf ‘There are some topics such that the way we habitually or stereotypically think about them is influenced by the language we speak’ (Elbourne 2011: 142)
- There is considerable evidence that some aspects of language influence what we think.
- Elbourne (2011: 148–53) reviews some of very interesting recent work by the psychologist Lera Boroditsky on spatial thought, grammatical gender, and gender stereotyped thought.
  - Another rich area of research on the influence of language on categorisation and classification concerns **colour terms** (Dedrick 2021, esp. §6), though .

Spatial Thought

> Dramatic cross-linguistic differences have also been noted in the way languages describe spatial locations…. Whereas most languages (e.g. English, Dutch) rely heavily on relative spatial terms to describe the relative locations of objects (e.g., left/right, front/back), Tzeltal (a Mayan language) relies primarily on absolute reference (a system similar to the English north/south direction system). [boroditsky-2003a, p. 918]

- Absolute spatial reference is also required in some Australian Aboriginal languages – e.g., the FNQ language Guugu Yimithirr (Haviland 1998).

Spatial Thought II

> To test whether this difference between the two languages has cognitive consequences, Levinson … tested … a number of spatial tasks. In one study, participants were seated at a table and an arrow lay in front of them pointing either to the right (north) or to the left (south). They were then rotated 180 degrees to a second table which had two arrows (one pointing to the left (north) and one to the right (south)), and were asked to identify the arrow 'like the one they saw before'. Dutch speakers overwhelmingly chose the 'relative' solution. If the stimulus arrow pointed to the right (and north), Dutch speakers chose the arrow that still pointed to the right (though it now pointed south instead of the original north). Tzeltal speakers did exactly the opposite, overwhelmingly choosing the 'absolute' solution. If the stimulus arrow pointed to the right (and north), Tzeltal speakers chose the arrow that still pointed north (though it now pointed left instead of right). [boroditsky-2003a, p. 918]

Gender

- In Ann Leckie's *Ancillary Justice* (2013), the main character speaks a language in which personal pronouns are not marked for gender – like English singular *they*, or some novel non-gendered pronouns like *ze*/*per*.
  - Accordingly, she is shown throughout the book as being hopeless at figuring out gender – presumably through lack of practice.
- English lost **gender marking** of nouns in the 14th century, but other languages retain it – and there are interactions between preople's preconceptions about gender, on the one hand, and how people are prone to describe things falling under a certain common noun on the other:

> The word for 'key' is masculine in German (*der Schlüssel*) and feminine in Spanish (*la llave*). German speakers used adjectives like *hard*, *heavy*, *jagged*, *metal*… Spanish speakers used adjectives like *golden*, *intricate*, *little*, *lovely*, *shiny*, and *tiny*. (Elbourne 2011: 151)

Caution

- If your language requires you to keep track of absolute direction, is it really that surprising that you are better at it?
- Moreover

> although the results from Boroditsky's experiments are fascinating and impressive as far as they go, … we are in general talking about exceedingly small difference that would not be noticed if they were not probed experimentally.…
>
> the language we speak influences the way we think only with respect to scarcely perceptible cognitive biases that can be measured only in milliseconds and subtle stereotypes that vanish instantly upon reflection. (Elbourne 2011: 154–55)

Linguistic Resources and Hermeneutic Injustice

Concept Acquisition and Language

- We've seen not much evidence for a strongly constructivist Sapir-Whorf effect.
- But intuitively it seems right that sometimes we acquire a concept from acquiring a word – because sometimes finding out the extension of an expression can be a way of **learning** that there is a viable category in the vicinity.
- This is especially important for **abstract concepts**, about which it is difficult to give an account of how they might be acquired perceptually:

> Different justice situations are far more heterogeneous than different cups, and using a common label helps us assemble them in a category. Furthermore, explanations of the conceptual meaning can be more crucial to form the concept of 'justice', for instance, than that of 'cup'. In order to learn [abstract concepts] we might also need to actively ask for definitions/contributions from competent community members … or to resort to recognized information sources (e.g. Wikipedia). (Borghi, Barca, *et al.* 2018: §2)

The Invention of *Sexual Harassment*

> As Wood told the story, the eminent man would jiggle his crotch when he stood near her desk and looked at his mail, or he'd deliberately brush against her breasts while reaching for some papers. One night as the lab workers were leaving their annual Christmas party, he cornered her in the elevator and planted some unwanted kisses on her mouth. … She requested a transfer to another department, and when it didn't come through, she quit. … When the claims investigator asked why she had left her job after eight years, Wood was at a loss to describe the hateful episodes. … Under prodding—the blank on the form needed to be filled in—she answered that her reasons had been personal. Her claim for unemployment benefits was denied. …
>
> 'Lin's students had been talking … about the unwanted sexual advances they'd encountered on their summer jobs,' Sauvigne relates. 'And then Carmita Wood comes in and tells Lin her story. We realized that to a person, every one of us—the women on staff, Carmita, the students—had had an experience like this at some point, you know? … we decided that we also had to hold a speak-out in order to break the silence about this. … We were referring to it as "sexual intimidation," "sexual coercion," "sexual exploitation on the job." None of those names seemed quite right. We wanted something that embraced a whole range of subtle and unsubtle persistent behaviors. Somebody came up with "harassment." *Sexual harassment!* Instantly we agreed. That's what it was.' (Brownmiller 1990: 280–81; quoted in Fricker 2007: 149–50)

Language and Hermeneutic Injustice

- The story is supposed to be one where the invention of a term, *sexual harassment*, enables women to **describe** their experience, **communicate** with others who share that experience, and **facilitate** resistance and access to recompense.
- In this case, the lack of **linguistic resource** – the convenient term unifying a wide range of problematic behaviours – hampered the organisation of an effective collective response.
- Fricker argues that this is not a mere accident: that this lack of resource comprises **hermenutical injustice**:

> the injustice of having some significant area of one's social experience obscured from collective understanding owing to a structural identity prejudice in the collective hermeneutical resource. (Fricker 2007: 155)

Linguistic Marginalisation

- Fricker emphasises the conceptual dimension rather than the linguistic; but we should expect this sort of injustice if (i) the acquisition of abstract concepts is linguistically mediated (as noted above), and (ii) 'structural identity prejudice' is active in who gets to contribute to the lexicon.
- To be be excluded from having the way one speaks about 'some significant area(s) of social experience' (Fricker 2007: 153) be influential in the form and content of one's language we might call **linguistic marginalisation**.
  - Given that meaning follows use, it is not surprising that powerful groups who get to speak more get to have their terms and the interests those terms reflect represented in the lexicon.
- The hermeneutical injustice faced by Carmita Wood and the others Brownmiller discusses is the product, it seems, of linguistic marginalisation (no one talks about it, there is no standard term, no easy expression of this common experience). So here too, language influences thought: not by constructing the world, but through the way that power guides the construction of language itself.

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