Meaning, bounds, social kinds

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Introduction

Positions and bounds

Social kinds

Introduction

The big picture

Paradoxes are often studied in formal languages,
but they arise in natural languages as well.

'This sentence is not true.'
'That thing is a heap.'

One of the puzzles posed by these paradoxes:

The meaning question:

How can it be that ‘true’, ‘not’, and ‘heap’ all mean what they do, and yet language still works?

To rig up some other meaning for these words
smells ad hoc, and
invites global skepticism.

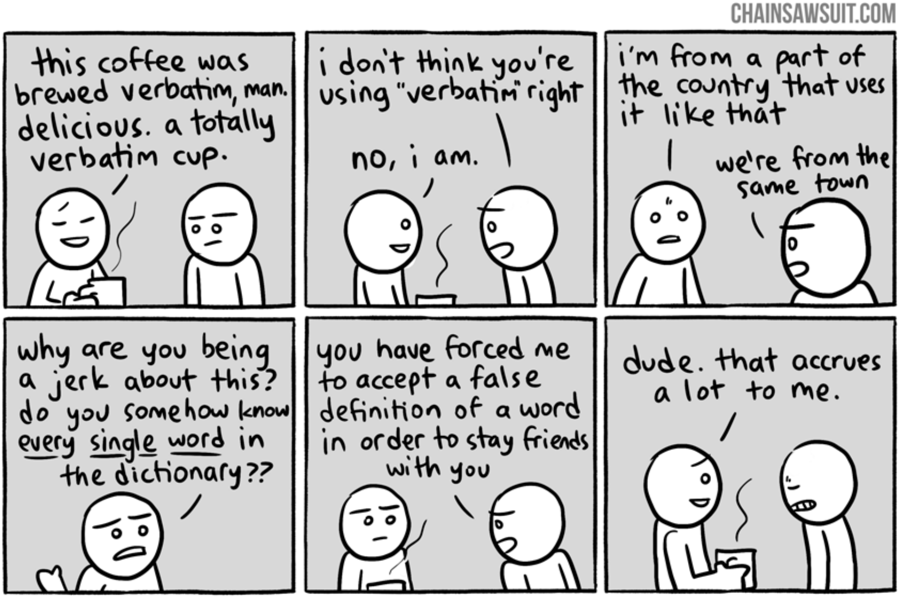
We should look to the metasemantics instead.

Introduction

Meaning and use

How do our words come to mean what they do?

Because of how we use them, of course.


CHAINSAWSUIT.COM
this coffee was brewed verbatim, man. delicious. a totally verbatim cup.
i don't think you're using "verbatim" right
no, i am.
i'm from a part of the country that uses it like that
we're from the same town
why are you being a jerk about this? do you somehow know every single word in the dictionary??
you have forced me to accept a false definition of a word in order to stay friends with you
dude. that accrues a lot to me.

Which aspects of use matter, and how?

Positions and bounds

Logical constants

There is a parallel question in a different literature:
How do the logical constants (eg $\neg$, $\wedge$, $\vee$, etc) get their meanings?

One answer comes from Greg Restall;
it is based on the notions of positions and bounds.

A position is [$\Gamma : \Delta$], where Γ and Δ are sets of sentences.

It represents:

speech acts:	someone who's asserted the Γes and denied the Δs
attitudes:	someone who accepts the Γes and rejects the Δs

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Some positions are in bounds, and others are not.

$\Gamma \vdash \Delta$ means: $[\,\Gamma : \Delta\,]$ is out of bounds.

Certain conditions on the bounds make $\vdash$ act consequenceish:

Consequenceish behaviour:

- $\Gamma, A \vdash A, \Delta$ iff:
  any position that both asserts and denies A is out of bounds.
- $\Gamma \vdash \Delta$ implies $\Gamma, \Sigma \vdash \Delta, \Theta$ iff:
  whenever a position is out of bounds, all positions that contain it are also out of bounds.
- $\Gamma \vdash \Delta, A$ and $A, \Gamma \vdash \Delta$ together imply $\Gamma \vdash \Delta$ iff:
  whenever a position is in bounds, either adding an assertion of A or adding a denial of A is also in bounds.

Certain conditions on the bounds can give usual behaviour to the logical constants:

Eg classical logic:

- $\Gamma \vdash \Delta, A$ iff $\neg A, \Gamma \vdash \Delta$ iff:
  asserting $\neg A$ is in bounds iff denying A is.
- $A, \Gamma \vdash \Delta$ iff $\Gamma \vdash \Delta, \neg A$ iff:
  denying $\neg A$ is in bounds iff asserting A is.
- $\Gamma, A \vee B \vdash \Delta$ iff either $\Gamma, A \vdash \Delta$ or $\Gamma, B \vdash \Delta$ iff:
  asserting $A \vee B$ is in bounds iff asserting A is or asserting B is.
- $\Gamma \vdash A \vee B, \Delta$ iff $\Gamma \vdash A, B, \Delta$ iff:
  denying $A \vee B$ is in bounds iff denying both A and B is.

Positions and bounds

Globalizing the account

We don't need to restrict this story to logical constants.

Example:

Asserting	'Melbourne is bigger than Canberra'
and	'Canberra is bigger than Wagga Wagga'
while denying	'Melbourne is bigger than Wagga Wagga'

is out of bounds.

This is what it is for transitivity to be part of the meaning of 'bigger'.

This connects to the tolerance of vague predicates:

Vagueness example:

If it's in bounds to assert	'Alice is tall'
while denying	'Zebra is tall',
it's in bounds to deny	'Alice and Zebra are very close in height'.

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$$\frac{\Gamma \vdash \Delta, a \sim_T z}{\Gamma, Ta \vdash Tz, \Delta}$$

And to the naivety of truth:

Truth example:

If it's in bounds to assert both 'Sentence *x* is true' and 'Sentence *x* means that buffalo buffalo buffalo', it's in bounds to assert 'Buffalo buffalo buffalo'.

If it's in bounds to deny 'Sentence *x* is true' while asserting 'Sentence *x* means that buffalo buffalo buffalo', it's in bounds to deny 'Buffalo buffalo buffalo'.

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$$\frac{\Gamma, B \vdash \Delta}{\Gamma, x\mathbb{M}B, Tx \vdash \Delta} \qquad \frac{\Gamma \vdash B, \Delta}{\Gamma, x\mathbb{M}B \vdash Tx, \Delta}$$

Positions and bounds

What are the bounds?

Other terms:
'coherent', 'fit'
'clash', 'self-undermine'

Restall (2009):

"…the failure in [an out-of-bounds position] is of the same kind as the simplest failure of them all, the joint *assertion* and *denial* of the one statement."

Non-circularity:

If we want to use the bounds to give the constants meaning,
the bounds can't depend on what the constants mean.

What is available?

Social kinds

Treating as

What makes these people royalty?

What makes these people white?

Royalty and whiteness are examples of social kinds.

A key feature:
who really has these statuses depends
on who we treat as having them.

Other examples:
what's money, what's illegal, what's polite, etc

Out of bounds is also a social kind.

Which positions are actually out of bounds depends on which ones we treat as being out of bounds.

How do we treat positions as out of bounds?

- dismiss those who take them up,
- ask for clarification or reinterpret,
- build reductio arguments,
- etc.

This is how we institute and maintain the bounds:
by ruling out certain positions.

Social kinds

Fallibility

This dependence doesn't mean we're infallible.

But it rules out certain kinds of mistakes.

A whole society can't be mistaken about what it takes to be royalty in that society.

This kind of mistake is ruled out for linguistic meaning as well.

Eg ‘livid’.

The first speakers who thought it meant ‘angry’ were mistaken.
We’re not, when we think the same.

Their mistake caught on, and is no longer a mistake.

(Also ‘Madagascar’.)

Social kinds

Messiness

Social kinds can be messy, and the bounds sure seem to be.

Contested, underspecified, overspecified, indescribable, context-sensitive, etc.

More like whiteness than royalty.

Speakers can play on this messiness.

Eg ‘nasty’ among funk musicians.

- Paradoxes pose a problem for theories of meaning.
- A bounds-based approach to logical constants can be generalized to a full-blown theory of meaning.
- The bounds are a social kind of the usual sort.
- This avoids circularity, and fits well with the kinds of complexity we see in natural language meanings.

What about paradoxes again?

Against extensibility

The key to answering the paradoxes is this:

Recall:

$\Gamma \vdash \Delta, A$ and $A, \Gamma \vdash \Delta$ together imply $\Gamma \vdash \Delta$ iff:
whenever a position is in bounds, either adding an assertion of A or adding a denial of A is also in bounds.

Call this property of the bounds ‘extensibility’.

Extensibility rules out double binds:
cases where we haven't yet violated the bounds,
but cannot either assert or deny *A* without violating them.

Paradoxes face us with precisely these cases;
they give counterexamples to extensibility.

Insisting on extensibility is what creates the trouble.

We might want the bounds to be that well-organized,
but they are not.

What about paradoxes again?

Paradoxical derivations

Together with the meanings already supposed, extensibility is just what it takes to make trouble.

This goes for both the sorites and the liar.

Let S be the similarity facts making up a sorites sequence $a, b, c, \ldots$.

$$\dfrac{\dfrac{\dfrac{\dfrac{S \vdash a \sim_P b}{S, Pa \vdash Pb} \qquad \dfrac{S \vdash b \sim_P c}{S, Pb \vdash Pc}}{S, Pa \vdash Pc} \qquad \dfrac{S \vdash c \sim_P d}{S, Pc \vdash Pd}}{S, Pa \vdash Pd} \qquad \dfrac{S \vdash d \sim_P e}{S, Pd \vdash Pe}}{S, Pa \vdash Pe}$$

$$\ddots$$

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$$\dfrac{\dfrac{\dfrac{Te \vdash Te}{\vdash Te, \neg Te}}{e\mathbb{M}\neg Te \vdash Te} \qquad \dfrac{\dfrac{Te \vdash Te}{\neg Te, Te \vdash}}{e\mathbb{M}\neg Te, Te \vdash}}{e\mathbb{M}\neg Te \vdash}$$

No matter what *e* is, it's out of bounds to assert that it means that it itself isn't true.

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