"Are Our Words Really Real?
Rabbits, Cats* and Inscrutability of Reference"
Presented by Nick Schwarzenberger

Quine's Example:

- Aliens arrive; we attempt to translate their term "gavagai" by using evidence that is observationally available.
- We determine the instances in which they utter "gavagai" coincide with those in which we would utter "rabbit."
- However, this is not enough information to determine the reference of their word; we do not know what ontology they believe in. The word could be translated as "undetached rabbit parts," "time slices of rabbits" or even "lo! rabbithood again!"
- Conclusion: Reference is underdetermined.

Helpful definitions:

-Predication: "*x* is a *y*."
-General Term: A term that applies to multiple things, "from none up."
-Singular Term: A term which applies to only one thing.
-Principle of homophony: Put crudely, if we say the same thing we must mean the same thing.
-Principle of charity: If we need to interpret a speaker's words in an irregular way to make them make sense, we will.

Putnam's Example:

- Take the sentence "A cat is on a mat." Let's assume "is on" is tenselss, so it means "is, was, or will be on."
- Typically the sentence "A cat is on a mat" will be true in all worlds in which a cat is on a mat and false in all worlds in which no cats are on any mats.
- We create two artificial and contrived predicates that maintains the same truth conditions as the sentence "A cat is on a mat," but refer to different objects in different circumstances.
- Our terms use a different intension than cat.
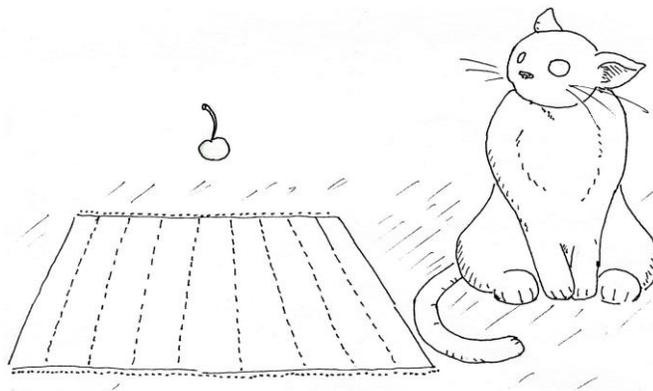- Our terms rely on three different possible worlds or possible circumstances:

Case (a) A cat is on a mat and a cherry is on a tree.
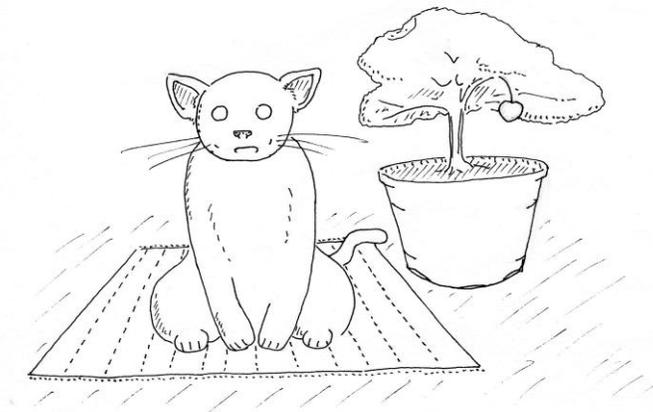
Case (b) A cat is on a mat and no cherry is on a tree.
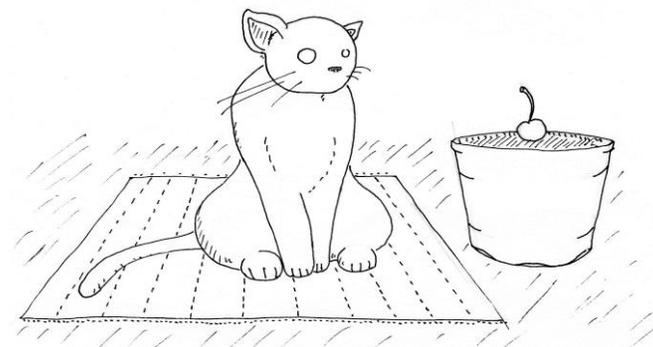
Case (c) Neither of the above.

- Our irregular predicates are cat* and mat*. They are defined as follows:
  - We define x as a cat* if and only if case (a) holds and x is a cherry OR
  - We define x as a cat* if and only if case (b) holds and x is cat OR
  - We define x as a cat* if and only if case (c) holds and x is a cherry.

Also

  - We define x as a mat* if and only if case (a) holds and x is a tree OR
  - We define x as a mat* if and only if case (b) holds and x is a mat OR
  - We define x as a mat* if and only if case (c) holds and x is a quark.

- Conclusion: Operational and theoretical constraints guarantee the truth value of the sentence, but not the reference (intension and extension) of the terms.

Helpful Definitions:
-Extension: The set of all objects a word refers to.
-Intension: The set of all the extensions a word would have in all different possible worlds.

Goodman's Example:

- A psychologist conducts a study of real vs. apparent motion.
- The participant utters the sentence "I see two distinct flashes."
- What he means by "see" is unclear without resort to a frame of reference that collapses the distinction between "real" and "apparent."
- Conclusion: The "meaning" of his utterance is underdetermined without a frame of reference.

A special thanks to James Gaines for the illustrations.