Critical Thinking Lecture 4:

Definitions and Philosophical Analysis

4.1 Meaning

We have been exploring conditionals and deductive arguments. As we have seen, conditional statements consist of a sufficient condition and a necessary condition. In this lecture we will shift our focus to the importance of definition in understanding claims and arguments. As we shall see, necessary and sufficient conditions play an important role in the project of constructing definitions.

Arguments are constructed with language and language consists of words that have meanings. In order to understand and assess an argument or a dispute, we often have to ask prior questions about the meaning of terms being used in the argument.

What is the meaning of a word? How can we get at such a meaning? Philosophers have argued about this issue in detail, especially since the late 19th century. As with most difficult and interesting philosophical issues, there is no agreement amongst philosophers on the correct theory of meaning. However, some of the theories and concepts that have been developed in this dispute are very useful in our assessment of everyday questions concerning the meaning of terms.

The Reference Theory of Meaning: It seems plausible that words stand for things or classes of things. e.g. The word "Sydney" stands for the particular city we are in right now, the word "peanuts" stands for all of those particular nuts, the word "red" stands for the property that is possessed by all red things, etc. We could say that each of these words points to or **refers** to these things. According to the reference theory of meaning, the meaning of a word is the object, property, event or state of affairs to which it refers.

There are some powerful **objections to the reference theory of meaning**:

Firstly, there seem to be many words and phrases that have meaning, but do not refer to anything. e.g. "unicorn", "ether". We might be tempted in these cases to say that these words refer to non-existent objects, although that is a strange claim. In any case, it is not clear what would have to exist for them to refer to actual objects.

Secondly, there are other words that have meaning but do not refer to anything. e.g. "and", "not", "maybe", "how", "if". These words are essential for everyday life (unlike "unicorn"), but they do not stand for anything. We might be tempted to say that they refer to concepts, but this is not very helpful because those concepts also have meaning. What is the meaning of the concept "or"? It is hard to see how we could account for this with a reference theory of meaning.

Thirdly, there are phrases whose meanings are very clearly known to us even though we do not know what they actually refer to. e.g. The biggest star in the universe, the loudest whale song ever, etc. If the reference theory of meaning were true, then we should not know what these phrases mean, since we do not know what they point to or refer to.

Fourthly, there are some interesting features of language use that suggest that the meaning of a word is not simply what that word refers to.

e.g. Suppose someone tells Lois Lane "Superman will save the day". She understands the meaning of this claim, and believes it is true. Then someone else tells Lois "Clark Kent will save the day". Lois understands this claim, too, and believes it is false. After all, she does not know that Clark Kent is Superman, and she thinks of Clark only as the annoying and bookish reporter from the Daily Planet, whom she believes has no super powers. But if the reference theory of meaning is correct, then "Superman will save the day" means exactly the same thing as "Clark Kent will save the day". How could Lois understand two sentences with identical meanings yet believe one and not the other?

e.g. "The number of planets in our solar system" refers to the number 8. "5 + 3" also refers to the number 8. According to the reference theory of meaning, "The number of planets in our solar system" and "5 + 3" have exactly the same meaning.

But the sentence "5 + 3 could not possibly have been greater than 10" is true, and the sentence " The number of planets in our solar system could not possibly have been greater than 10" is false. How could these phrases mean the same thing?

Descriptive theory of meaning: Words and phrases refer to things by containing implicit or explicit descriptions of those things. e.g. "Superman" means something like "Man of steel who can leap tall buildings in a single bound and wears underpants outside of his tights, etc." whereas "Clark Kent" means "mild-mannered reporter from the Daily Planet who wears glasses, etc." "Unicorn" means "horse-like animal with a horn growing out of its forehead, etc.". Philosophers call this the **sense** of a term, as opposed to the **reference** of a term. (This is equivalent to the distinction between the **intension** of a concept and the **extension** of a concept. The extension is the thing or things the concept points to, and the intension is the implicit description by which it points to its extension.) According to the descriptive theory of meaning, words refer to objects via their senses, and the meaning of a word is the sense of the word.

The descriptive theory of meaning avoids many of the problems faced by the reference theory of meaning. But it has problems of its own. Descriptions themselves consist of words, and the meaning of those words has to be explained in some way. It seems we will get an endless regress of descriptions with this theory, which would not explain anything. Rather, it seems that some terms are basic in their meaning, e.g. red. A residual problem is that terms like "maybe" and "not" do not seem to have a sense by which they refer to things.

Use theory of meaning: Words and phrases have meanings in sentences, and their meanings are determined by the proper use of those sentences. Since the use of terms in sentences is highly context-specific, so too are meanings of terms. e.g. "Take my wife, please!" is a joke that depends on the fact that we use the word "take" in different ways. According to the use theory of meaning, we can always get at the meaning of a term by seeing how it is used. e.g. You understand the meaning of "or" when you understand how someone properly uses the sentence "Dave should go or Trev should go".

The use theory of meaning seems plausible for some words. The problem with the use theory, though, is that many words do seem to stand for things, and have standard meanings that do not vary from context to context. For these words, especially names, it seems plausible that you understand the proper use of the word by grasping either what it refers to or its sense. According to some critics of the use theory, meaning determines proper use, and not *vice versa*.

Our job in this lecture is not to assess these three theories of meaning, but to understand the role of meaning and definition in argument. Each of these three theories suggests ways in which we can try to clarify the meaning of words, and ways in which we can solve disagreements over meaning.

4.2 Why Define?

The meaning of sentences usually, perhaps always, is determined by the meaning of the words from which they are built. Sometimes we cannot assess a claim or an argument until we have thought carefully about the meaning of one or more terms used to state it. e.g.

> **If you are designing an engine without fuel injection, you had better include a carburettor.**

What is a carburettor?

> **Communism sounds fair in theory, but in practice ordinary people who live under a communist regime have no political representation. For all of its flaws, democracy gives ordinary people political representation, so it is preferable to communism.**

In the above argument, what is meant by "political representation"? Is the term too vague to be useful? Or is it being used in a specific way here?

Scientist: Darwinism is the theory that gives the correct explanation for the existence of the various species of plant and animal.

Creationist: The scientist and I agree that Darwinism is a theory, and so is Creationism. In this respect are equal, so no one can claim to know that either is true. The choice between them is a matter of faith.

The above argument contains the ordinary words "theory" and "know". In many contexts, the meaning of these terms is clear, e.g. Do you know where the keys are? But in this argument, these ordinary words are being put to a special use. What is meant by "theory"? Do both disputants mean the same thing? Is the Creationist right to suggest that something which is a theory cannot be known? What is knowledge? And what does it mean to say that a choice is a matter of faith?

Dave: What you see on Big Brother is not real.

Trev: Yes it is. Everything that they show on screen really happens. None of it is faked.

Dave: Of course it is faked. As soon as someone points a camera in your face, what happens is fake.

In the above disagreement, both Trev and Dave are using the concepts of "real" and "fake". Are they really disagreeing about the facts concerning reality TV, or is their disagreement due to a difference in what they mean by the terms "real" and "fake"?

In each of these cases we need to define these key terms before we can understand and evaluate the claims. Which kinds of definition might we offer?

4.3 Kinds of Definition

Some kinds of definition rely on a pretty clear prior understanding of the concept in question.

e.g. Sometimes we define a term by giving a **synonym**, i.e. a word or term that has the same meaning as the initial term. e.g.

A bogan is a Westie.

A Tory is a conservative.

"Getting leathered" means getting drunk.

Sometimes definition by synonym is not helpful because the person who lacks understanding of the term in question also fails to understand the synonym. It is completely hopeless when the person is trying to acquire a concept.

Another kind of definition that relies heavily on prior understanding is **genus-species definition**, which defines something by describing it as a subclass of a broader class. e.g. **a Philips-head screw is a screw with a cross-shaped indent on the head. A ruby is a sapphire with red colouring. A father is a male parent.** Again, such definitions are useful only to those who have a clear understanding of the genus, and are no use to people trying to acquire both the concept of the genus and the species.

Thankfully, there are other kinds of definition available.

Ostensive definition consists of pointing out the thing referred to by the term that requires definition. In some cases, ostensive definition is the most useful form available. e.g. **What is the Charleston?** Describing it is pretty tricky, and it might not really get the idea across.

Wikipedia describes the Charleston as follows: "the basic step resembles the natural movement of walking, though it is usually performed in place. The arms swing forward and backwards, with the right arm coming forward as the left leg 'steps' forward, and then moving back as the opposite arm/leg begin their forwards movement. Toes are not pointed, but feet usually form a right angle with the leg at the ankle. Arms are usually extended from the shoulder, either with straight lines, or more frequently with bent elbows and hands at right angles from the wrist

(characteristics of many African dances). Styling varies with each Charleston type from this point, though all utilise a 'bounce'."

The Jitterbug, as described by dancer Al Minns: "The jitterbug... We called people who would just jump on the floor, without any knowledge of what they were doing, and go mad with the drumming what not and just go boodedoo boodedoo doo and shakin' their head and just jump up and down without any control ... that's what we called the jitterbug."

It is much better if you can show the person by pointing to an example of the Charleston, and contrasting it with examples of the Jitterbug, the Shing-a-Ling and the Funky Broadway.

Ostensive definition is not always appropriate. Sometimes the examples to which the definer points are not easily recognised by the person who lacks understanding of the term because they cannot be seen. e.g. Could we define "justice" or "gene" or "average" by ostension?

Use in context can also help to clarify the meaning of terms. This is often combined with ostensive definition. We train kids to speak by a combination of ostensive definition and rewards for correct use in context.

Ostensive definition and use in context can be very informative, but in many cases they are not the best means of definition. Sometimes this is because the concept is complex or abstract, and examples stand out much more clearly when the content of the concept has been described to us. e.g. Carburettor, gene. In other cases, there is significant disagreement in everyday use of the term, and over which things count as examples. e.g. Political representation, "human being" in the context of abortion debates. In cases such as these, the meaning of terms is often unclear to the audience not simply because the audience is unaware of some widely-known facts, but because the meaning of the term itself is unclear.

4.4 Descriptive Definition

Descriptive definition consists of offering a description which captures the meaning of the term. This can either be a description of the things referred to by the term, or a description which captures the sense of the term. (Usually these will be equivalent, but in some cases the sense of a term fails to get at the essential properties of the class of things referred to by the term. More on this later.) A descriptive definition often is a form of genus-species definition.

Since the description in a descriptive definition is supposed to be a definition, it is not enough for it correctly to apply to the things to which the term refers. In addition, the descriptive definition should distinguish the things to which the term applies from those to which it does not apply. A definition of F should sort the Fs from the non-Fs. Thus, **a good descriptive definition will apply to ONLY the things to which the defined term refers**. i.e. The description will be true of only the things to which the defined term refers.

e.g. **What does the word "car" mean?** We might offer a descriptive definition in response to this question: **a car is a machine on wheels whose function is to transport people**. This description is true of cars, but it is not a good descriptive definition of "car". The problem is that the description is also true of lots of things that are NOT cars, e.g. bikes, buses, passenger trains, skateboards.

Since the description is supposed to be a definition, it is also not enough for it to apply to only some of the things to which the defined term refers. **A good descriptive definition will apply to ALL of the things to which the defined term refers**.

e.g. A car is a machine on at least three wheels, that is run by a petrol engine, that does not run on tracks, whose function is to transport up to roughly 8 (?) people.

The only things this description applies to are cars, but it is not a good descriptive definition because it does not apply to ALL cars. e.g. To cars with electric motors and not petrol motors.

So, **a good descriptive definition of a term will apply to all and only the things referred to by that term**. It tells us what is necessary and what is sufficient in order for something to be the kind of thing to which the term refers. This should sound familiar from our earlier work on conditionals.

Let us suppose that F is the term we want to define and G is the descriptive definition. If the definition is a good one, then all F's are G's and only F's are G's. This is equivalent to "If a is F then a if G and if a is G then a is F". Such a claim is called a **biconditional** and is expressed as "If p then q and if q then p", or "p if and only if q", or "p iff q" (the 'iff' is read as 'if and only if').

What is a plumber? A person whose job directly involves installing or repairing piping, fixtures, and appliances in connection with the water supply, drainage systems, etc., both in and out of buildings.

One conditional: If you are a plumber then you are a person whose job directly involves installing or repairing piping, fixtures, and appliances in connection with the water supply, drainage systems, etc., both in and out of buildings.

The other conditional: If you are a a person whose job directly involves installing or repairing piping, fixtures, and appliances in connection with the water supply, drainage systems, etc., both in and out of buildings, then you are a plumber.

The biconditional definition: You are a plumber iff you are a person whose job involves installing or repairing piping, fixtures, and appliances in connection with the water supply, drainage systems, etc., both in and out of buildings.

Constructing a good descriptive definition of F requires finding the necessary and sufficient conditions for something counting as F. Often philosophers who want to understand a concept try to give an informative descriptive definition of that concept. In much 20th-21st century philosophy, this practice is known as "philosophical analysis", and the informative definition of the concept is called the "**analysis**" of that concept. This same practice goes back as far as Socrates. Classic examples of philosophical analyses include:

Knowledge = justified true belief.
Justice = the will of the stronger.
Causation = constant conjunction.

These analyses are equivalent to:

a is knowledge if and only if a is a justified true belief.
a is just if and only if a is in accordance with the will of the stronger.
a causes b if and only if a is constantly conjoined with b.

4.5 Testing Definitions with Counterexamples

Once we see that descriptive definitions are biconditionals, it should be clear that we can test the truth of definitions in the same way that we can test the truth of conditionals, i.e. by seeking counterexamples. Remember, a counterexample to a conditional claim is a thing or state of affairs that meets the sufficient condition but not the necessary condition.

e.g. If you are Russian then you live in Russia.

A counterexample to this claim is someone one who meets the sufficient condition but not the necessary condition, i.e. a Russian who does not live in Russia.

Since descriptive definitions are supposed to be biconditionals, there are **two kinds of counterexample** which would undermine such a definition. "p iff q" will be false if there could be a case in which p is true but q false, OR if there could be a case in which q is true but p is false. If "p iff q" is true, then the truth of p must always go with the truth of q, and the truth of q must always go with the truth of p. Thus, **one kind of counterexample to the biconditional "p iff q" would be a possible case in which p was true but q false, and another would be a possible case in which q was true but p false**.

Trev: How would you define a fire engine?

Dave: A fire engine is a red vehicle that is housed in the fire station.

Has Dave offered a correct definition? In order to figure this out, we can phrase the definition as a biconditional and look for both kinds of counterexample.

X is a fire engine iff X is a red vehicle that is housed in the fire station.

One kind of counterexample would be something that is a fire engine but is not a red vehicle that is parked in the fire station. e.g. A blue fire engine, or a red fire engine that is kept outside rather than in the fire station.

The other kind of counterexample would be something that is a red vehicle that is housed in the fire station but is not a fire engine. e.g. A red car that is housed in the fire station.

The two kinds of counterexample reflect two kinds of error in a descriptive definition of a term.

If the term applies to things to which the description does not apply, then the definition is **too narrow**.

If the description applies to things to which the term does not apply, then the definition is **too broad**.

e.g. **A definition of "bachelor": a never-married male human.**

This definition is too broad, because it applies to things (e.g. male babies) which in fact are not bachelors.

A definition of "bachelor": a never-married, bearded male adult human.

This is too narrow, because it does not apply to people (e.g. clean-shaven never-married male adult humans) who are bachelors.

The correct definition of "bachelor" is one that is neither too broad nor too narrow: perhaps "a **never-married male adult human"** (although there is a lot of disagreement over this: e.g. Is an unmarried man who is in a long-term relationship really a bachelor?).

Note that a definition can be both too broad and too narrow at the same time.

e.g. **X is a human if and only if X is a two-legged animal.**

What kinds of counterexample can we find to this definition? We should look both for something that is a human but is not a two-legged animal (e.g. an amputee with one or no legs) and for something that is a two-legged animal but is not a human (e.g. a chicken). Since we can find both kinds of counterexample, the definition is both too broad and two narrow.

We can represent this process of testing definitions using Venn diagrams. We can use, say, a blue circle to include all of the things to which the term refers, and a red circle to include all of the things to which the description applies. Using terminology we learned earlier, we would say that the blue circle indicates the extension of the term, and the red circle indicates the extension of the definition. A good definition is one in which the circles coincide exactly. A bad definition is one in which the blue circle goes outside the red circle (in which case the definition is too narrow), or in which the red circle goes outside the blue circle (in which case the definition is too broad). We can locate counterexamples to definitions on these Venn diagrams.

4.6 Assessing Definitions

Assess these attempted definitions by looking for both kinds of counterexample, saying if each is too broad or too narrow, and then drawing your assessment as a Venn diagram:

Parent of child = primary care giver of that child

Counterexamples:

An absentee Dad who is a parent but not a primary care-giver, which shows the definition is too narrow.

A nanny who is primary care-giver but not parent, which shows the definition is too broad.

Being the primary care giver of a child is neither necessary nor sufficient for being the parent of that child.

Water = H2O

No counterexamples. Correct definition.

Whale = big fish that eats plankton

Counterexamples:

Every whale is not a fish.

Every big fish that eats plankton is not a whale.

Chimpanzee = hairy primate

Counterexamples:

If there could be a non-hairy chimpanzee, then the definition is too narrow.

A hairy gorilla is a hairy primate but not a chimpanzee, which shows that the definition is too broad.

Murderer = a person who kills another person

Counterexamples:
A person who accidentally kills another person is not a murderer, so the definition is too broad.
(Every murderer does kill another person, so the definition is not too narrow.)
Killing another person is necessary but not sufficient for being a murderer.

Fire extinguisher = red cylinder filled with sprayable foam

Counterexamples:
A blue fire extinguisher, which shows the definition is too narrow.

A red can of shaving cream is a red cylinder filled with sprayable foam but not a fire extinguisher, which shows that the definition is too broad.

Recall that philosophers have offered definitions of some important concepts. e.g. **A causes B if and only if A is constantly conjoined with B.** We can test these philosophical analyses in the same way, i.e. by looking for both kinds of counterexample.
Counterexamples: Night and day (night always comes before day but does not cause day), so the definition is too broad. Being constantly conjoined is not sufficient for being causally linked.
Singular events, such as the Russian Revolution. It had many causes, but it only happened and can only happen once. Thus, there is causation, but not constant conjunction between those causes and the effect. The definition is too narrow. Being constantly conjoined is not necessary for being causally linked.

4.7 Same Term, Different Concepts

When assessing definitions we should be aware that some words or phrases are ambiguous, i.e. they have more than one meaning. E.g. The word "**hand**" can mean the appendage at the end of an arm, or the act of giving someone an object, or the act of applause. In this case, the meanings are connected in some way. In other cases, the meanings are not connected, e.g. "**bank**" can mean the side of a river or a financial institution.

In some cases, the ambiguity of a word is subtle, and the various different meanings might all be judged to be variants of the same concept. e.g. the concept of stability in ecosystems:

Stable = hard to perturb from natural cycle

Stable = will return to natural cycle if perturbed

Stable = will return quickly to natural cycle if perturbed

In cases such as these we might claim that only one of the definitions could be correct, or we might claim that the various definitions capture **distinct conceptions of the same concept**.

In other cases, though, it is obvious that the same word is being used to express different concepts. In such cases we need to find a definition for each concept. It would be a mistake to suppose that there is just one target of the various definitions. e.g.

Key = object designed to be inserted into a lock in order to open or close the lock

It would be a mistake to suppose that "a piano key" or "the key of Eb" are counterexamples to the above definition. Rather, they show that the term "key" is ambiguous, and is used to express more than one concept.

4.8 Disagreements in Meaning v. Disagreements over the Facts

What can lead to disagreement over the meaning of a word or term, and what kind of disagreements can people have over the meaning of terms?

It is important to distinguish two different kinds of disagreement. **Sometimes people disagree over the proper definition of a word or term**. e.g. Some people might think that "bachelor" means "unmarried male human", whereas others think that it means "never-married male human" (in which case a widower could not be a bachelor), and yet others think it means "never-married adult male human" (since boys are not bachelors). These differences in descriptive definition will lead to disagreements over the extension of the concept, i.e. over which things in the world the concept really refers to.

In other cases, people agree on the descriptive definition of a term, but disagree about which things in the world fall under that description. i.e. They disagree about which things the term refers to. e.g. Two people might agree that "bachelor" means "never-married adult human male", but they might disagree over whether Tom is a bachelor or not, because they disagree over whether Tom was once married.

Often when we discover that a disagreement is due to the disputants using the one term in different ways, we think that there is no real disagreement after all. i.e. We discover that the disputants agree in their views about the world. In such a case we might say that there was merely a disagreement about meaning, and no disagreement about the facts. When we have this kind of disagreement, we would say "If that is what you mean by x, then I agree with everything you say." **By noticing differing meanings of words, we can dissolve some disagreements**. In some cases, though, we discover that people who are using words in different ways (and hence disagree about meaning) also disagree about the facts. They disagree about the way the world is, or they disagree about what should be done.

e.g.

Dave: What you see on Big Brother is not real.

Trev: Yes it is. Everything that they show on screen really happens. None of it is faked.

Dave: Of course it is faked. As soon as someone points a camera in your face, what happens is fake.

Trev: The camera influences their behaviour, but they are not acting and there are no special effects, so what you see is not fake.

Are Dave and Trev disagreeing over the facts in this case, or are they just disagreeing over meaning? It seems likely that they are not disagreeing over the facts. Both Dave and Trev agree that in reality TV shows feature real people doing things (not animated figures, and not actors playing roles), and both of them agree that the people on reality TV shows are aware that they are being filmed, and that this influences their behaviour. It seems that Trev and Dave are using the words "real" and "fake" in different ways. Dave is contrasting reality with fiction, whereas Trev is contrasting reality with behaviour that is influenced by observation.

cf. What is a fake smile? Our answer to this depends on what we mean by "fake". Do we mean "something that is not even a smile, but was created to look like one, such as the curved line on a smiley stamp that represents a smiling mouth"? Or do we mean "something that is a smile, but is insincere"?

In some cases it is very difficult to figure out whether a disagreement is over the facts or whether it is merely over the meaning of words. Usually, we have to ask the disputants what they mean by the term in question, and whether they agree on the facts when they are described using different terms.

Scientist: Darwinism is the theory that gives the correct explanation for the existence of the various species of plant and animal.

Creationist: The scientist and I agree that Darwinism is a theory, and so is Creationism. In this respect they are equal, so no one can claim to know that either is true. The choice between them is a matter of faith.

In this case it is plausible that the scientist and the creationist disagree over certain facts *and* over the meaning of certain words. The creationist's argument implies that if something is a theory, then it cannot be known to be true. This suggests that "theory" means something like "unproven hypothesis". When scientists talk about theories, though, they mean something quite different. By "theory" the scientist means something like "systematic explanation of the phenomena" or "systematic set of beliefs". Scientists think that some theories are highly speculative (e.g. that alien life exists), while others are clearly proven (e.g. that the Earth goes around the Sun, that a large lump of uranium will explode, etc.) To say that something is a theory, in the scientist's sense of the word, does not mean that it is unproven, let alone incapable of being known.

Thus, in the above example the Creationist is wrong to claim that she and the scientist agree that Darwinism is a theory. Once we see their disagreement over meaning, their disagreement over the facts about what we should believe becomes clear.

Trev: Homosexuality is unnatural, so it is wrong.

Dave: Homosexuality is natural. It occurs in many non-human species, and some people have a genetic predisposition to it. Since it is natural, homosexuality is not morally wrong.

In this case there is very likely to be some disagreement over what is meant by the word "natural". What does Trev mean by the term? What does Dave mean? Arguments like this are very common, and often when people are pressed on what they mean by particular terms, they cannot give a clear answer. e.g. Trev might say that, by the term "unnatural", he means "wrong". But that would turn his apparent argument into a tautology.

The above argument might continue in different ways. Perhaps Trev will agree with Dave that "natural" means something like "common in many species" or "innate" or "genetically determined", and then will argue that homosexuality is not common in many species or innate or genetically determined. In this case, Trev and Dave agree about the descriptive meaning of the term "natural" and disagree about

the facts. In contrast, Trev might agree that homosexuality is common amongst many species and that people have genetic predisposition to it, but still claim that homosexuality is unnatural. In this case, Trev and Dave disagree over the meaning of the word "natural". (Note that Trev and Dave disagree about whether homosexuality is wrong, and this disagreement might remain even if they come to agree on the question of whether homosexuality is natural.)

4.9 Common Meaning, Technical Meaning and Stipulated Meaning

We have seen that various people can take the same term to mean very different things. Sometimes seeing that people are using a term differently can dissolve apparent disagreements. But can people use terms to mean whatever they want them to mean, or are there correct meanings of terms independent of the speakers' intentions?

In *Through the Looking Glass*, **Lewis Carroll** sets out a conversation between Alice and Humpty Dumpty:

> "... there are three hundred and sixty-four days when you might get un-birthday presents -"
>
> "Certainly," said Alice.
>
> "And only one for birthday presents, you know. There's glory for you!"
>
> "I don't know what you mean by 'glory,'" Alice said.
>
> Humpty Dumpty smiled contemptuously. "Of course you don't - till I tell you. I meant 'there's a nice knock down argument for you!'"
>
> "But 'glory' doesn't mean 'a nice knock-down argument,'" Alice objected.
>
> "When I use a word," Humpty Dumpty said in a rather scornful tone, "it means just what I choose it to mean - neither more nor less."
>
> "The question is," said Alice, "whether you *can* make words mean so many different things."
>
> "The question is," said Humpty Dumpty, "which is to be master - that's all."

Is Humpty Dumpty right? Most philosophers think that he is right about something, but not everything. It is helpful to describe what Humpty is talking about as the **speaker meaning** of a word or sentence, but communication between speakers relies on there being **common meanings** (also known as "public meanings") to words and sentences. Common meanings rely on a shared practice of use of the word, and shared standards of correct and incorrect usage. In real life we try to constrain both our own and other peoples' usage of words to a shared common meaning. People can make mistakes in their choices of words. We can say things that we never intended to say (especially when we are speaking a foreign language). This shows that speaker meaning is distinct from common meaning.

Common meanings can be vague. Sometimes there are various distinct **senses** of a word, i.e. various different but roughly overlapping implicit descriptions that capture its meaning. e.g. 'Parent' has a clear biological sense and a clear socio-legal sense, and we can switch between them depending on context. The word "natural" has a set of distinct senses. It could mean not artificial, or not supernatural, or not deliberate, or innate, or not learned.

Different communities of language users can vary in their use of a word. Communities in which an everyday word is used in a very particular way give rise to what we might call **technical meanings** of words. As we have seen in this course, technical meanings of words in philosophy differ to the common meanings of those same words when used in everyday language, e.g. logical, valid, sound, begging the question. Often we need to be careful to identify the context in which an utterance occurs, as this can alert us to technical meanings of the term in that context. Even within a fairly limited context, technical meanings of the same word can differ. e.g.

> **You share 50% of your genes with your sister.**
>
> **You share 98% of your genes with a chimpanzee.**
>
> **Therefore you are much more closely related to a chimpanzee than to your sister.**

The above example makes it clear that biologists have different technical senses of the word gene (roughly, the first is the Mendelian gene and the second is the molecular gene).

In some cases the vagueness of the common meaning of a term is not a problem, but sometimes we have reason to demand clarity and specificity in the meanings of certain terms.

e.g. In **technical contexts**, where we are building complicated machines.

In **legal contexts**, when we have to apply a law and citizens have to know exactly what is legal and what is illegal.

In **philosophical contexts** when we are considering subtle variations between theories.

In such contexts, there is not always an agreed meaning of the word in question. Thus, it is common for people to **stipulate** what they will mean by a word. i.e. They give a specific descriptive definition of what they will mean by a word in what they are saying or writing. Such a **stipulative definition** is not intended to match exactly the everyday meaning of the word or the broader technical meaning of a word. Rather it lets a speaker fix the meaning of the word within a specific, limited domain.

e.g. A law might include a stipulative definition: "Asylum seeker" means a person who is not an Australian citizen who comes to Australia with or without having followed the proper immigration procedures and who seeks permanent residency in Australia on the grounds of her or his likely persecution in the nation of which he or she is a citizen.

Stipulative definitions are often but not always marked by phrases such as "By X I shall mean ...", "X shall be understood to mean...".

Stipulative definitions are very useful for preventing confusion over whether a disagreement is over meaning or over the facts. e.g. Is x an asylum seeker or not? For legal purposes, we need to be clear about this, and a stipulative definition allows us to be clear in any disagreements that arise over whether someone qualifies as an asylum seeker in the stipulated sense.

4.10 Abuse of Stipulative Definition

Stipulative definitions can be abused, though. Often the common meaning of a word licences many inferences. i.e. If a is F then many other propositions about a are likely to be true. Thus, we could say that the fact that a is F licences inferences to those other propositions. e.g. The fact that a is made of gold licences inferences to the claims that a is heavy for its size, that a is valuable, that a is yellowish in colour etc. The fact that a is a teacher licenses inferences to the beliefs that a has students, that a possesses knowledge, that a is in a position of authority, etc. (Obviously, these inferences are defeasible, i.e. they are not deductively valid inferences, and conflicting evidence can override them.)

If we are not careful, we can fail to notice when people move from a stipulated definition to the ordinary meaning of a term. e.g.

> **By "child abuser" I mean anyone who causes a child to suffer unnecessary physical or emotional pain. Trev smacked his daughter when she would not put the lollies back on the supermarket shelf, hence causing her unnecessary physical pain. Thus, Trev is a child abuser and should be kept away from his daughter.**

In the above argument the arguer begins by stipulating a definition of "child abuser", but in the final sentence the arguer draws on the common meaning of "child abuser" to licence an inference to the conclusion that Trev should be kept away from his daughter. This move from stipulated definition to common meaning undermines the strength of the argument. It is true that Trev counts as a child abuser on the arguer's definition, but should anyone who smacks her or his child count as a child abuser according to the common meaning of that term?

Thus, when people offer stipulative definitions it is best if they can match their definition closely to the common or everyday meaning of the term (or, at least,

to one of the distinct senses that make up the common meaning). Moreover, when we encounter stipulative definitions, we should be careful not to rely subsequently on every common inference that would be licensed by the everyday term.

One way to guard against wayward stipulative definitions is to test the definition against the common views about the extension of the term, i.e. common views about which things the term applies to.

> e.g. **"Solid" means "contains no empty space". Scientists have discovered that atoms consist of mostly empty space (between the nucleus and the orbiting electrons). Since everything is made up of atoms, it turns out that tables, chairs and even bank vaults are not solid.**

According to the stipulated definition of solid, none of the things that we ordinarily take to be solid really do count as solid. This definition defines solidity out of existence. Is this plausible? Clearly, it is not. The arguer offers no reason for thinking that everyday objects are not really solid. Tables and chairs and bank vaults are solid according to the ordinary meaning of the word, and this licences inferences to the beliefs that you can't put your hand through a bank vault, that you can rest a plate on a table, etc. Even someone who agrees with the above argument about atoms still thinks that you can't put your hand through the wall of a bank vault and that you can rest things on tables. The discovery about the space inside of atoms does not change the way we ordinarily use the word "solid", and does not lead us to revise the inferences we draw from the fact that something is solid. This suggests that the stipulative definition in the above argument is deeply misleading.

But compare that example to a similar case:

> **"Wizard" means a man who has magical powers and can cast spells that magically control events. Since no one has magical powers, there are no wizards.**

The above is a good argument that relies on a definition and concludes that the term in question does not refer to any actual things. What is the difference between these two arguments about solidity and wizards? People who believe in wizards really do believe that there are people who fall under that description, i.e. people who have magical powers. This is the common definition of wizard. Any disagreement over this argument is likely to be a factual disagreement over the way the world is (i.e. over whether the world does contain men with these properties), rather than a disagreement over what we mean by "wizard".

What about this example of a dispute about the existence of an organisation?:

> **Al Quaeda is supposed to be a terrorist organisation that carries out terrorist attacks on a range of targets in different areas of the world. But really the people who commit these attacks do not meet with each other, and do not follow the commands of a single leader. Therefore, the supposed organisation Al Quaeda does not exist.**

Is this a convincing argument? It depends what we mean by "organisation". Some people agree with this argument because they think that the members of an organisation must be closely connected, must come into contact sometimes, and must have an integrated leadership structure. Other people reject this argument because they think that an organisation can be a loose collection of people who are working towards a common goal, and have common sources of inspiration, but not necessarily a common leader.

When a dispute of the existence of something involves a disagreement about meaning, it can be much more useful to switch focus to a more detailed description of the thing. e.g. Are there people around the world carrying out terrorist attacks? What motivates these various groups? Are they closely connected? Does one leader give orders that are followed by all? Two people who disagree over whether Al Quaeda ought to be called an organisation might agree in all of their more fine-

grained judgments. Their disagreement, in this case, would turn out to be merely linguistic.

4.11 Natural Kinds and Essences

Does the everyday usage of a term always reveal its proper meaning? Since the 1970s, some philosophers have argued that it does not. They claim that some terms refer to **natural kinds,** which are classes of things that have a shared essence independent of our thinking. e.g. Elements like gold are natural kinds, biological species are natural kinds. If we agree that a term refers to a natural kind, then we ought to admit that it is possible that the common usage of that term does not necessarily capture its actual meaning. The meaning of that term will be a description of the essential properties of the class of things to which it really refers, rather than a description of the manifest (i.e. easily observable) properties of the things to which the term is actually applied by current language users, or the description of those things which would be offered by current language users.

e.g. What does the term "whale" mean? People used to define species and genera according to the manifest characteristics of the creatures, and thus used to think that the very big marine creatures with tails and fins were whales. If we allow their usage to determine what the term means, then we might define "whale" as "very big marine creature with tails and fins", and think that the extension of "whale" includes whale sharks and other big fish. But biologists discovered that there is a natural kind of whales (big marine mammals with a certain line of descent), and that not all of the things that had been called whales were really whales.

Did the meaning of "whale" change with this discovery? Or were people back then misusing the term "whale"? i.e. Were they mistaken about which things were actually whales?

In some other cases, philosophers argue that we have rough set of intuitions about the extension of a concept, but it is not clear exactly which properties all of those things have in common. One of the jobs of philosophy is to set out and test the various possible meanings of the concept that would map onto most of that rough extension. e.g. What do we mean by "evil"? One way to test this is to ask which actions and which people count as evil, and then ask what those things have in common.

As you can see, there are some interesting philosophical questions concerning the role of definition. You might be relieved to hear that they are beyond the scope of this course. For the purposes of your exam, you need to know about the various kinds of definition (ostensive, descriptive, stipulative), you need to know how to test definitions by seeking counterexamples, you need to be able to identify and assess stipulative definitions, and you need to be able to make an intelligent comment on whether a dispute involves different meanings of a word, or a disagreement over the facts, or both.