

7. Using Language

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Focus

With diligent study of this guide, you will learn...

Ideas	denotation, connotation, reification, vagueness, ambiguity, doublespeak, weasel words, the meaning of meaning
Skills	understanding how words influence perception; using various definitional techniques; detecting vagueness, ambiguity, doublespeak, and weasel words; choosing words carefully in framing arguments

7.1 Dimensions of Meaning

Humans are symbol-using animals. Human languages are powerful systems of symbols that enable us to communicate and cooperate and flourish in communities.

Key Ideas/Terms	Definition
types of linguistic meaning	Linguistic expressions can have different kinds of meaning: <ul style="list-style-type: none"> • Emotive meaning: Expresses or evokes feelings • Cognitive meaning: Conveys information
emotive meaning	Statements having emotive meaning often make value claims (good, bad, right, wrong, better, worse, etc.). When such statements occur in arguments, the value claims should be disengaged from the emotive terminology and expressed as separate premises.
cognitive statements	Statements that have cognitive meaning convey information through the denotations and connotations of their terms. A term has two kinds of cognitive meaning: <ul style="list-style-type: none"> • extensional meaning (extension): The members of the class or set that the term <i>denotes</i>. • intensional meaning (intension): The qualities or attributes that a term <i>connotes</i>.
term	The basic units of ordinary language are words or terms. A term is any word or arrangement of words that can serve as the subject of a statement. A term can be a: <ul style="list-style-type: none"> • Proper name like <i>Oregon</i> or <i>Shakespeare</i> • Common name like <i>state</i> or <i>person</i> • Descriptive phrase like <i>territorial jurisdiction</i> or <i>author of Hamlet</i>
mention (of a word/term)	" <i>Wherever</i> is an eight-letter word." In this statement, it is not the word itself that is the subject but rather the <i>italicized</i> word. In this statement, "wherever" is <i>mentioned</i> .
use (of a word/term)	"I will follow you <i>wherever</i> you go." In this statement, "wherever" is <i>used</i> .

**If language be not in accordance with the truth of things,
affairs cannot be carried on to success.**

Confucius

7.2 Cognitive Meaning

A term has two kinds of cognitive meaning:

	Cognitive Meaning	Example word: <i>Inventor</i>
Denotation	The members of a class of beings (<i>extension</i> of term)	{Thomas Edison, Alexander Bell, Wright brothers, Eli Whitney, ...}
Connotation	Attributes / properties (<i>intension</i> of term)	{human being, clever, intuitive, creative, innovative, ...}

7.2.1 Denotation

Logic Definition: <i>Denotation</i>	Grammar Definition: <i>Denotation</i>
<p>The <i>extensional</i> meaning of a term is referred to as <i>denotation</i>.</p> <p>The term "cat" denotes the set of all beings that we classify as feline.</p>	<p>The direct, specific meaning of a word.</p> <p>The specific object or action that a word points to, refers to, or indicates. The dictionary meaning of a word.</p>

A rose by any other name would smell as sweet.

Shakespeare

7.2.2 Connotation

Logic Definition: <i>Connotation</i>	Grammar Definition: <i>Connotation</i>
<p>The intensional meaning of a term refers to the attributes that the term <i>connotes</i>.</p> <p>The <i>conventional connotation</i> of a term includes the attributes that the term <i>commonly</i> calls forth in the minds of competent speakers of the language.</p> <p><i>The logical connotation of a term remains more or less the same from person to person and from time to time.</i></p> <p>For example, the term “cat” connotes (consists of) the <i>attributes</i> of being furry, of having four legs, of moving in a certain way, of emitting certain sounds, etc.</p>	<p>The subtle emotional responses or nuances of a term. For example, compare the grammatical connotations of these two terms:</p> <p>Lady—passive, weak, good</p> <p>Woman— active, strong, neutral</p> <p><i>The grammatical connotation of a term is different for different individuals and groups, and can vary greatly over time.</i></p> <p>For example, the term "cat" might evoke a positive emotion for a child petting a kitten, but a very negative affective response for Grandma Scar who was attacked by a feral cat a few years back.</p>

► Slanting Through Negative Grammatical Connotation

The *grammatical connotations* of words are often employed to "slant" a listener's or reader's perceptions or emotional responses. For example:

People who say...	Can be referred to as...
Abortion is wrong.	anti-abortionist, anti-choice, pro-life
Abortion is right.	pro-abortion, anti-life, pro-choice



Sharpen Your Critical Thinking

- Think of the name of a holiday. What images are associated with that day for you?
- Are all Christmas trees holiday trees? Are all holiday trees Christmas trees?
- What is the difference between referring to someone as an *atheist* or as an *infidel*?

7.3 Common Problems with Language

The cognitive meanings of terms can be defective or damaged in several ways:

- Vagueness
- Ambiguity
- Language Abuse
- Reification

Ambiguity and vagueness are important in logic because there are countless occasions in which the evaluation of an argument leads to the observation, “Well, that depends on what you mean by ...” *If phraseology in an argument is vague or ambiguous, its meaning must be clarified before any evaluation can proceed.*

Key Ideas/Terms	Definition
vague expression	An expression that allows for borderline cases in which it is impossible to tell if the expression applies or does not apply. Vague expressions often allow for a continuous range of interpretations. The meaning is hazy, obscure, and imprecise. How fresh does something have to be in order to be called “fresh”?
ambiguous expression	An expression that can be interpreted as having more than one clearly distinct meaning in a given context. For example, if one were to describe a beer as a <i>light</i> pilsner, does this mean that the beer is light in color, light in calories, or light in taste?

7.3.1 Vagueness

An vague expression **allows for borderline cases** in which it is impossible to tell if the expression applies or does not apply...A blur of meaning.

Vagueness	
Manifestation	Vague expressions often allow for a continuous range of interpretations. The meaning is hazy, obscure, and imprecise. Trouble arises only when the language is not sufficiently precise for what the situation demands.
Typical Words	“love,” “happiness,” “peace,” “excessive,” “fresh,” “rich,” “poor,” “normal,” “conservative,” and “polluted”
Key Question	Can I tell with any precision whether a word or statement applies to a given situation? For example: How fresh does something have to be in order to be called “fresh”? What does it mean to say: “Get clothes whiter than white” or “It’s the real thing”?
Clarification Strategy	Use more precision in definition or description.
Contextual Assessment	Many forms of expression are ambiguous in one context and vague in another. For example, the word “slow” in one context could mean either mentally challenged or physically slow, but when the word refers to physical slowness, it could be vague. How slow is slow?

7.3.2 Ambiguity

An ambiguous expression **can be interpreted as having more than one clearly distinct meaning** in a given context...Uncertainty about the intended meaning, equivocation

Ambiguity	
Manifestation	Ambiguous terminology allows for multiple discrete interpretations. Trouble arises from mixing up otherwise clear meanings; when more than one interpretation is plausible . Two or more different meanings. Equivocation.
Typical Words	"light," "proper," "critical," "stress," "mad," "inflate," "chest," "bank," "sound," and "race"
Key Question	Is it obvious which interpretation or meaning is correct in this context? For example: "Professor Nobody saw the student in the corner of the lecture hall with binoculars."
Clarification Strategy	Use more clear-cut, definite, definitive, express, specific, unambiguous, unequivocal terminology.
Contextual Assessment	Ambiguous terminology allows for multiple discrete interpretations. Trouble arises from mixing up otherwise clear meanings; when more than one interpretation is plausible .

7.3.3 Language Abuse

As the geniuses of ourselves, human beings create the meanings of our individual personal worlds. And they also share their meanings through common languages, arts, and culture generally. Words only convey meaning according to usual and accepted usage.

If we want to avoid saying what we mean or meaning what we say, we abuse our power of language and truth-telling by blabbing flabby words. Most of us have been victims—if not users—of flabby words.

Floppy Words**Doublespeak**

- Lying while pretending to tell the truth
- Making the bad look good
- Denying painful realities
- Often involves contradictions presented as compatibilities

Euphemism

- Less direct but sometimes more acceptable description
- Softens harsh realities but can also conceal the truth
- "passed away" instead of "died"
- "facilities manager" instead of "basement janitor"

Spin

- Similar in method and effect as the Red Herring fallacy
- Putting things in a different light (alternative interpretation)
- Reframing the discussion/issue/facts
- Trying to put "lipstick on a pig."

Weasel words

- Excessive use of words (or acronyms)
- Logorrhea (pathologically excessive and often incoherent talkativeness or wordiness that is characteristic especially of the manic phase of bipolar disorder)
- Attempts to evade the clarity and brevity of direct statements
- Often infest thickets of advertising claims and political speeches

Reification

This language problem involves treating words—which are simply abstract symbols composed of sounds and characters—as if they were concrete realities. Words become the realities they purport to symbolize. For example:

- Brand name that becomes synonymous with a class of products
- Designer labels used to describe differences in clothing
- An abstract concept treated as if it were a thing (being)
- Both words and images can be reified:

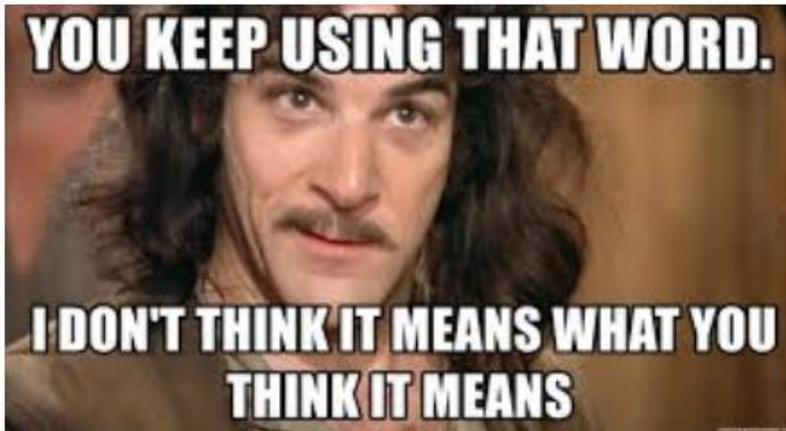


The Treachery of Images (French: *La Trahison des images*), by René Magritte (1929). Also known as *This is Not a Pipe*.



Sharpen Your Critical Thinking

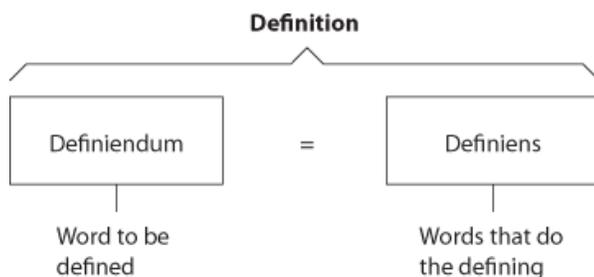
- Practice recognizing when words are used to deceive and confuse readers and listeners.
- Professor Nobody says we should not take the American experiment for granted. What do you mean by the term "American Experiment?"



7.4 Definitions

A word or group of words that assigns a meaning to a word or group of words:

- *Definiendum*: The word or group of words being defined
- *Definiens*: The word or group of words that does the defining



Definitions can serve different purposes, so there are different kinds of definitions:

- **Stipulative**
- **Lexical**
- **Precising**
- **Theoretical**
- **Persuasive**

7.4.1 Types of Definitions

Key Ideas/Terms	Definition
Stipulative	Assign a meaning to a word when it first comes into use. This may involve either coining a new word or giving a new meaning to an old word. The purpose of a stipulative definition is usually to replace a more complex expression with a simpler one. Because a stipulative definition is a completely arbitrary assignment of a meaning to a word for the first time, there can be no such thing as a “true” or “false” stipulative definition.
Lexical	Report the meaning a word has within a community of users. Dictionary definitions are all instances of lexical definitions. In contrast with a stipulative definition, which assigns a meaning to a word for the first time, a lexical definition may be true or false depending on whether it does or does not report the way a word is actually used. Also, lexical definitions are useful for eliminating ambiguity.
Precising	Reduce the vagueness of a word. The definition “‘Poor’ means having an annual income of less than \$10,000 and a net worth of less than \$20,000” is an example of a precising definition. Whenever words are taken from ordinary usage and used in a highly systematic context such as science, mathematics, medicine, or law, they must always be clarified by means of a precising definition.
Theoretical	Appeal to a theory to characterize whatever the term denotes. Such a definition provides a way of viewing or conceiving these entities that suggests deductive consequences, further investigation (experimental or otherwise), and whatever else would be entailed by the acceptance of a theory governing these entities. The definition of the term “heat” found in texts dealing with the kinetic theory of heat is a good example: “‘Heat’ means the energy associated with the random motion of the molecules of a substance.” Many terms in philosophy, such as “substance,” “form,” “cause,” “change,” “idea,” “good,” “mind,” and “God,” have been given theoretical definitions.
Persuasive	Influence the attitudes of the community of users regarding whatever the word denotes. Persuasive definitions amount to a certain synthesis of stipulative, lexical, and, possibly, theoretical definitions backed by the rhetorical motive to engender a certain attitude. As a result of this synthesis, a persuasive definition masquerades as an honest assignment of meaning to a term while condemning or blessing with approval the subject matter of the <i>definiendum</i> . For example: “Abortion” means the ruthless murdering of innocent children. “Abortion” means a safe and established surgical procedure whereby a woman is relieved of an unwanted burden.

7.4.2 Extensional Definitions

A definition that assigns a meaning to a term by indicating the members of the class that the *definiendum* denotes. There are at least three ways of indicating the members of a class: pointing to them, naming them individually, and naming them in groups. The three kinds of definitions that result:

- *Demonstrative definitions* “point” to these things.
- Enumerative definitions name individuals that the word denotes.
- Definitions by subclass identify subclasses of these things.

Key Ideas/Terms	Definition
Demonstrative	Probably the most primitive form of definition. All one need know to understand such a definition is the meaning of pointing. Such definitions may be either partial or complete, depending on whether all or only some of the members of the class denoted by the <i>definiendum</i> are pointed to. For example, someone points to all the chairs in the room to indicate the meaning of "chair."
Enumerative	Assigns a meaning to a term by naming the members of the class the term denotes. Like demonstrative definitions, they may also be either partial or complete. For example: <p>“Actress” means a person such as Nicole Kidman, Emma Thompson, or Natalie Portman.</p> <p>“Baltic state” means Estonia, Latvia, or Lithuania.</p>
Subclass	Assigns a meaning to a term by naming subclasses of the class denoted by the term. Such a definition, too, may be either partial or complete, depending on whether the subclasses named, when taken together, include all the members of the class or only some of them. For example: <p>“Tree” means an oak, pine, elm, spruce, maple, and the like.</p>

The principle that *intension determines extension* underlies the fact that all extensional definitions suffer serious deficiencies. For example, in the case of the *demonstrative definition* of the word “chair,” if all the chairs pointed to are made of wood, observers might get the idea that “chair” means “wood” instead of something to sit on.

7.4.3 Intensional Definitions

A definition assigns a meaning to a word by indicating the qualities or attributes that the word connotes. Because at least four strategies may be used to indicate the attributes a word connotes, there are at least four kinds of intensional definitions:

- *Synonymous* definitions use synonyms.
- *Etymological* definitions disclose the word’s ancestry.
- *Operational* definitions specify experimental procedures.
- Definitions by *genus and difference* identify a difference within a genus (set).

Key Ideas/Terms	Definition
Synonymous	A definition in which the <i>definiens</i> is a single word that connotes the same attributes as the <i>definiendum</i> . In other words, the <i>definiens</i> is a synonym of the word being defined. For example: “Physician” means doctor.
Etymological	Assigns a meaning to a word by disclosing the word’s ancestry in both its own language and other languages. Most ordinary English words have linguistic ancestors in Old or Middle English, Greek, Latin, etc. For example, the English word “captain” derives from the Latin noun <i>caput</i> , which means head.
Operational	Assigns a meaning to a word by specifying certain experimental procedures that determine whether or not the word applies to a certain thing. For example: One substance is “harder than” another if and only if one scratches the other when the two are rubbed together.
Genus and Difference	A assigns a meaning to a term by identifying a genus term and one or more difference words that, when combined, convey the meaning of the term being defined. <i>Definition by genus and difference is more generally applicable and achieves more adequate results than any of the other kinds of intensional definition.</i>

7.4.4 Constructing Definitions

► Correlating Definitional Techniques with Types of Definitions

Technique	Produce This Type of Definition				
	Stipulative	Lexical	Precising	Theoretical	Persuasive
Demonstrative	yes	yes	no	(unusual)	(unusual)
Enumerative	yes	yes	no	(unusual)	(unusual)
Subclass	yes	yes	no	(unusual)	(unusual)
Synonymous	no	yes	no	no	no
Etymological	yes	yes	no	no	no
Operational	(limited)	yes	yes	(unusual)	(unusual)
Genus and Difference	yes	yes	yes	yes	yes

► Procedure for Constructing Definitions by Genus and Difference

1. Select a term that is more general than the term to be defined (the genus).
2. Identify a difference or subset within the genus that specifies the meaning of the term being defined.
For example:

Species	=	Difference	Genus
“daughter”	<i>means</i>	female	offspring
“husband”	<i>means</i>	married	man
“doe”	<i>means</i>	female	deer
“fawn”	<i>means</i>	very young	deer
“skyscraper”	<i>means</i>	very tall	building

► Rules for Lexical Definitions

In reporting the meaning a word has within a community of users, a good lexical definition should:

- Conform to the standards of proper grammar.
- Convey the essential meaning of the word being defined.
- Be neither too broad nor too narrow.
- Avoid circularity.
- Not be negative when it can be affirmative.
- Avoid figurative, obscure, vague, or ambiguous language.
- Avoid affective terminology.
- Indicate the context to which the *definiens* pertains.

7.5 Assessing My Critical Thinking

Exercise 7	
<p>If a friend or fellow student is not available to help you with this exercise, simply imagine someone asking you to explain these ideas and answer these questions.</p> <p>▶ If you are confident in the clarity, accuracy, and completeness of your explanations, continue forward on the path. <i>Otherwise, go back and study the areas where you have stumbled, and then return to this exercise.</i></p>	<ul style="list-style-type: none"> ▪ What is the <i>logical</i> denotation and connotation of the term "pirate"? ▪ What is the <i>grammatical</i> denotation and connotation of the term "pirate"? ▪ What is the name for a less direct but more socially acceptable term? ▪ How do vague expressions manifest? ▪ How do ambiguous expressions manifest? ▪ What is reification?

Quiet Reflection 7	
<p>Self-reflection requires mental focus and personal honesty. At steps 2 and 3 especially, silence is very important. You must be able to hear your inner voice. Find a place that is quiet and comfortable. Turn off your phone and eliminate other distractions if possible.</p>	
<p>1. Observe/Study</p>	<ul style="list-style-type: none"> ▪ Find examples of one or more terms that should be carefully defined for the issue discussed in your ICT Letter.
<p>2. Judge/Evaluate</p>	<ul style="list-style-type: none"> ▪ Evaluate the definitions that are explicit or implicit in your research for the issue discussed in your ICT Letter.
<p>3. Act/Decide</p>	<ul style="list-style-type: none"> ▪ Define the critical terms for your arguments for your ICT Letter. If necessary, argue for a new or revised definition of a key ter. ▪ Continue to reflect on how your commitment to always seek the truth affects your family, neighborhood, community, and the whole planet.



References

Some material in the Integrative Critical Thinking Toolkit is based on, or adapted from material originally published elsewhere. Extended quotes are noted in quotation marks or as indented or highlighted text.

Carey, Stephen. *A Beginner's Guide to Scientific Method*. 4th ed., Wadsworth-Cengage Learning (2012)

Conway, David A. and Ronald Munson. *The Elements of Reasoning*, 3rd ed., Wadsworth/Thomson Learning (2000)

Diestler, Sherry. *Becoming a Critical Thinker: A User Friendly Manual*; 6 th ed., Pearson/Prentice-Hall (2012)

Hurley, Patrick and Lori Watson. *A Concise Introduction to Logic*, 13th ed., Wadsworth-Cengage Learning (2018)

Kahane, Howard. *Logic and Philosophy*, Wadsworth Publishing Company, Belmont, CA (1969).

Moore, Brooke N. and Richard Parker. *Critical Thinking*, 4th ed., Mayfield Publishing Company, Mountain View, CA (1995)

Schick, Theodore Jr. and Lewis Vaughn. *How to Think About Weird Things*, Mayfield Publishing Company, Mountain View, CA (1995)