

# Think Again: How to Understand Arguments

Zubin

February 2, 2026

## Contents

<b>1</b>	<b>Introduction</b>	<b>4</b>
1.1	Why Arguments Matter . . . . .	4
1.2	Course Structure . . . . .	4
1.3	Logistics . . . . .	4
1.4	Recommended Reading . . . . .	5
<b>2</b>	<b>What Is an Argument?</b>	<b>5</b>
2.1	What Arguments Are Not . . . . .	5
2.2	Defining an Argument . . . . .	5
<b>3</b>	<b>Quiz – What is Argument</b>	<b>6</b>
3.1	1. Arguments are verbal fights. . . . .	6
3.2	2. Every argument includes a conclusion. . . . .	6
3.3	3. All arguments are made up of (or expressed in) language. . . . .	6
3.4	4. Every argument is intended to establish a conclusion that the audience did not believe before. . . . .	6
3.5	5. Every argument succeeds in giving good reasons for its conclusion. . . . .	6
3.6	6. Megafauna: n. very large animals. . . . .	7
3.7	7. Reptiles include turtles, alligators, crocodiles, snakes, lizards, and the tuatara. . . . .	7
3.8	8. World War II occurred after World War I occurred. . . . .	7
3.9	9. World War II occurred because World War I occurred. . . . .	7
3.10	10. The sides of this right triangle are 1 meter long, so its hypotenuse is 2 meters long. . . . .	8
<b>4</b>	<b>What Are Arguments Used For?</b>	<b>8</b>
4.1	Persuasion . . . . .	8
4.2	Justification . . . . .	8
<b>5</b>	<b>Strong Arguments Don't Always Persuade Everyone</b>	<b>9</b>
5.1	The Limits of Persuasion . . . . .	9

5.2	Understanding as a Goal . . . . .	10
5.3	Conclusion on Purposes . . . . .	10
<b>6</b>	<b>Quiz – Strong Arguments Don’t Always Persuade Everyone</b>	<b>10</b>
6.1	1. If your argument does not persuade your audience, it is no good. . . . .	10
6.2	2. An argument that does not give any good reason to believe its conclusion can still persuade someone to believe its conclusion. . . . .	10
6.3	3. Sometimes people cannot be persuaded by very strong arguments be- cause they refuse to give up their beliefs. . . . .	11
6.4	4. When people use arguments, they always intend to have some effect on other people. . . . .	11
6.5	5. Can any argument persuade every person in the world? . . . . .	11
<b>7</b>	<b>What Else are Arguments Used For? Explanation</b>	<b>11</b>
7.1	The Goal of Explanation . . . . .	11
7.2	Aristotle’s Four Types of Explanation . . . . .	12
7.3	Explanation as an Argument . . . . .	12
7.4	Important Distinctions . . . . .	12
<b>8</b>	<b>Quiz – What Else are Arguments Used For? Explanation</b>	<b>13</b>
8.1	1. The goal of explanation is understanding. . . . .	13
8.2	2. All explanations are given in the form of arguments. . . . .	13
8.3	3. Whenever you predict that something will happen, you explain why it happens. . . . .	13
8.4	4. The population of India explains why it won more medals than the United States in the 2012 Olympics. . . . .	13
8.5	5. Why did he add more sugar? To make the cake sweeter. . . . .	14
8.6	6. Why is the pillow so soft? Because it is filled with duck feathers. . . . .	14
8.7	7. Why doesn’t the screwdriver work with the slotted screw? Because it is a Phillips screwdriver (with a cross-shaped end). . . . .	14
8.8	8. Why did the tire on her car go flat? Because it was punctured by a nail. . . . .	15
<b>9</b>	<b>What are Arguments Made Of? Language</b>	<b>15</b>
9.1	Humans as Rational Animals . . . . .	15
9.2	Four Basic Points about Language . . . . .	15
9.3	Levels of Language Rules . . . . .	16
9.4	Implicit Rules . . . . .	16
9.5	Quiz – What are Arguments Made Of? Language . . . . .	16
<b>10</b>	<b>Meaning</b>	<b>17</b>
10.1	The Referential Theory . . . . .	18
10.2	Meaning as Use . . . . .	18
10.3	Three Levels of Language Use . . . . .	18
10.4	Quiz – Meaning . . . . .	19
10.4.1	1. Arguments are fallacious when they are spoken in heavy accents. . . . .	19

10.4.2	2. The meaning of the phrase “my car” is the same as the object that is my car. . . . .	19
10.4.3	3. We can describe the meaning of a word or sentence by specifying how it is used. . . . .	20
10.4.4	4. To say “I am sorry” is to apologize to someone even if that person does not forgive you, so apologizing is . . . . .	20
10.4.5	5. To utter a series of words that are meaningful together is to perform	20
10.4.6	6. To alert someone to a danger is to make that person aware of that danger, so alerting is . . . . .	20
<b>11</b>	<b>Linguistic Acts</b>	<b>21</b>
11.1	Definition of a Linguistic Act . . . . .	21
11.2	Components of a Linguistic Act . . . . .	21
11.3	Complex Cases and Ambiguity . . . . .	21
11.3.1	Garden Path Sentences . . . . .	22
11.3.2	The "Buffalo" Example . . . . .	22
11.4	Conclusion . . . . .	22
<b>12</b>	<b>Quiz – Linguistic Acts</b>	<b>22</b>
12.1	Question 1 . . . . .	22
12.2	Question 2 . . . . .	23
12.3	Question 3 . . . . .	23
12.4	Question 4 . . . . .	23
<b>13</b>	<b>Speech Acts</b>	<b>23</b>
13.1	Definition . . . . .	23
13.2	Examples . . . . .	24
13.3	The Thereby Test . . . . .	24
13.4	Appropriate Circumstances . . . . .	25
13.5	Argumentation as a Speech Act . . . . .	25
<b>14</b>	<b>Questions and Answers: The Thereby Test</b>	<b>26</b>
<b>15</b>	<b>Conversational Acts</b>	<b>28</b>
15.1	Definition . . . . .	29
15.2	Grice’s Conversational Maxims . . . . .	29
15.3	Conversational Implication . . . . .	29
15.3.1	Canceling Implications vs. Logical Entailment . . . . .	30

---

# 1 Introduction

**Course:** Think Again: How to Reason and Argue

**Instructors:** Walter Sinnott-Armstrong (Duke University) and Ram Neta (UNC Chapel Hill).

## 1.1 Why Arguments Matter

Arguments are important for two main reasons:

1. **To have reasons for beliefs and actions:** Arguments express reasons. Understanding them helps avoid arbitrary beliefs and provides justification for thoughts and behaviors.
2. **To avoid mistakes:** It helps in spotting bad arguments from others (e.g., salespeople, lawyers, evangelists) and prevents being misled. It also aids in making well-thought-out personal decisions.

## 1.2 Course Structure

The course is divided into four parts:

### Part 1: Analyzing Arguments

Distinguishing arguments from non-arguments, identifying argument parts, using standard form, and finding suppressed premises.

### Part 2: Deductive Arguments

Focuses on valid, formal structures including propositional logic and categorical logic.

### Part 3: Inductive Arguments

Includes statistical generalizations, inference to the best explanation, arguments from analogy, causal reasoning, probability, and decision making.

### Part 4: Fallacies

Covers common mistakes like vagueness, ambiguity, irrelevance (ad hominem, appeals to ignorance), and begging the question.

## 1.3 Logistics

- **Communication:** Use discussion forums for questions and interaction. Do not email instructors individually.

## 1.4 Recommended Reading

For those who want more detail or are having trouble understanding:

- **Textbook:** *Understanding Arguments*
  - **Authors:** Walter Sinnott-Armstrong and Robert Fogelin
- 

## 2 What Is an Argument?

To understand arguments, we must first distinguish them from what they are not.

### 2.1 What Arguments Are Not

Arguments are distinct from:

- **Physical Fights:** Hitting someone is not arguing.
- **Verbal Fights:** Yelling is not arguing.
- **Abuse:** Name-calling (e.g., “stupid git”) is not arguing.
- **Complaining:** Expressing emotion is not arguing.
- **Contradiction:** Simply denying a statement is not arguing.

### 2.2 Defining an Argument

Monty Python defines an argument as “a connected series of statements to establish a proposition.” However, this is too narrow because arguments can also explain propositions we already accept (e.g., mathematical proofs).

**Broader Definition:** An argument is a connected series of sentences, statements, or propositions, where some are premises and one is the conclusion, and the premises are intended to provide some kind of reason for the conclusion.

This definition highlights:

1. **Parts:** Premises and Conclusion.
  2. **Medium:** Language.
  3. **Purpose:** To give a reason for the conclusion.
  4. **Flexibility:** Covers different kinds of reasons (justification and explanation).
-

### 3 Quiz – What is Argument

#### 3.1 1. Arguments are verbal fights.

☐ True

☒ False

**Correct.**

**Answer: False.** People in fights are trying to hurt each other, but people who give arguments are often trying to help each other.

#### 3.2 2. Every argument includes a conclusion.

☒ True

☐ False

**Correct.**

**Answer: True.** Arguments are defined so that they must always have a conclusion.

#### 3.3 3. All arguments are made up of (or expressed in) language.

☒ True

☐ False

**Correct.**

**Answer: True.** Premises are sentences, statements, or propositions. Sentences and statements are made up of language, and propositions are expressed by language. Notice that no particular language is required, so it would be false to say that all arguments are in English.

#### 3.4 4. Every argument is intended to establish a conclusion that the audience did not believe before.

☐ True

☒ False

**Correct.**

**Answer: False.** Sometimes the conclusion is already both believed and established as true, and the point of the argument is only to explain *why* it is true. Hence, Monty Python is not always right.

#### 3.5 5. Every argument succeeds in giving good reasons for its conclusion.

☐ True

☒ False

**Correct.**

**Answer: False.** Although people who give arguments always intend to give some kind of reason, they often fail to fulfill that intention. Bad arguments fail to give good reasons.

### 3.6 6. Megafauna: n. very large animals.

☐ Yes, this is an argument.

☒ No, this is not an argument.

**Correct.**

**Answer: No.** The defined term is not a full sentence, statement, or proposition, so it cannot be a conclusion. The definition is not a reason for the term that is defined.

### 3.7 7. Reptiles include turtles, alligators, crocodiles, snakes, lizards, and the tuatara.

☐ Yes, this is an argument.

☒ No, this is not an argument.

**Correct.**

**Answer: No.** One word in a list does not give a reason for the other words. One could argue, "This is a turtle, so it is a reptile," but the list by itself does not explicitly state that argument or any argument.

### 3.8 8. World War II occurred after World War I occurred.

☐ Yes, this is an argument.

☒ No, this is not an argument.

**Correct.**

**Answer: No.** This sentence is about historical or chronological order rather than rational order. It does not explicitly claim that World War I gives a reason for World War II.

### 3.9 9. World War II occurred because World War I occurred.

☒ Yes, this is an argument.

☐ No, this is not an argument.

**Correct.**

**Answer: Yes.** The word "because" makes this sentence claim that World War I gives a reason why World War II occurred. The premise is "World War I occurred," and the conclusion is "World War II occurred."

### 3.10 10. The sides of this right triangle are 1 meter long, so its hypotenuse is 2 meters long.

- ☒ Yes, this is an argument.
- ☐ No, this is not an argument.

**Correct.**

**Answer: Yes.** The word “so” indicates that the first sentence is supposed to be a reason for the second sentence. This argument is very bad, since the hypotenuse must be  $\sqrt{2}$  meters long instead of 2 meters long. But bad arguments are still arguments.

---

## 4 What Are Arguments Used For?

To understand arguments, we need to understand their purposes. The purpose is crucial in determining what an object is (e.g., distinguishing a screwdriver from a spatula based on intent).

### 4.1 Persuasion

One purpose of an argument is to convince someone to do or believe something they wouldn't otherwise.

- **Goal:** To change mental states (beliefs) or behaviors. It aims to bring about an effect in the world.
- **Example:** A used car salesman listing features (cool look, fast speed) to convince you to buy a Mustang.
- **Criteria:** Success is measured by whether the person is convinced, regardless of whether the reasons are good or bad.

### 4.2 Justification

Justification involves giving a reason for a belief or action, not necessarily to convince or persuade.

- **Goal:** To provide good reasons for a belief or decision.
- **Example:** A friend discussing the pros and cons of a car to help you make your own decision.
- **Criteria:** Success depends on whether the reasons provided are *good* reasons.

**Key Distinction:**

- **Persuasion:** Focuses on the *effect* on the audience. Bad arguments can be persuasive.



- **Justification:** Focuses on the *rational support* for the conclusion. Requires good arguments.
- 

## 5 Strong Arguments Don't Always Persuade Everyone

### Strong arguments don't always persuade everyone

*by Jessica Hyde from the United Kingdom*

It's not enough for an argument to be strong, valid and sound to be persuasive. You can have an argument for which every premise is genuinely true, and where every conceivable flaw in the argument is negated and still, not have it be persuasive.

There will almost always be someone who either misunderstands the argument, or blindly believes the opposite of a premise, in face of facts. Human beings aren't always logical and don't always believe scientifically proven cause and effect. Religious and cultural beliefs can be too hard to overcome. So even the best arguments can have disbelievers.

### The Benchmark of Success: Understanding

*by Judith*

I think Jessica has opened a very interesting discussion with her argument. Thank you Jessica, I appreciate that, we do too. When I'm learning, is the purpose of an argument is to state with clarity, and some degree of certainty, an opinion or point of view; a valid, strong and sound argument in it of itself may never persuade or convert anyone to adopt a different way of thinking. So what. What a strong argument does is communicate clearly what one thinks and why they think it.

So I guess the benchmark of success for many arguments is not complete persuasion, but is how clearly one is understood. If someone's intent is to blindly refute everything, that's not an intellectually honest engagement. I've found that in construction better, more thoughtful arguments people may not agree with me, but they're far more considerate of what I have to say. And by using much of what we're learning, I'm listening much more intently to other views. Yes, Jessica, many things do defy logic. We just keep trying to do our best.

### 5.1 The Limits of Persuasion

As student Jessica Hyde argued, a strong, valid, and sound argument may not be persuasive.

- **Obstacles:** People may misunderstand the argument, blindly believe the opposite, or be influenced by religious/cultural beliefs that override logic.

- **Implication:** You can succeed in *justifying* your conclusion (giving good reasons) while failing to *persuade* the audience.

## 5.2 Understanding as a Goal

Student Judith highlighted a third purpose of argument: **Understanding**.

- **Goal:** To state clearly what one thinks and why, even if the audience is not converted.
- **Benefit:** It fosters respect and consideration. If we understand why we disagree, we can get along better and seek compromise (unlike the yelling often seen in politics).

## 5.3 Conclusion on Purposes

If your goal is to persuade everyone, you will be frustrated. Instead, reasonable goals include:

- **Justification:** Giving good reasons.
  - **Understanding:** Helping others understand your position.
- 

# 6 Quiz – Strong Arguments Don’t Always Persuade Everyone

## 6.1 1. If your argument does not persuade your audience, it is no good.

☐ True

☒ False

**Correct.**

**Answer: False.** An argument can still be good for the purposes of justification and explanation even if nobody is persuaded by it. It can also help one’s audience understand one’s position, even if they are not persuaded, as Judith said in the lecture.

## 6.2 2. An argument that does not give any good reason to believe its conclusion can still persuade someone to believe its conclusion.

☒ True

☐ False

**Correct.**

**Answer: True.** People can get fooled by bad reasons.

**6.3 3. Sometimes people cannot be persuaded by very strong arguments because they refuse to give up their beliefs.**

☒ True

☐ False

**Correct.**

**Answer: True.** Refusing to give up a strongly held belief can prevent someone from being persuaded, as Jessica says in the lecture. Sometimes those strongly held beliefs are false or unjustified, but sometimes they are true and justified. In either case, these people are not persuaded, because persuasion requires a change in belief.

**6.4 4. When people use arguments, they always intend to have some effect on other people.**

☐ True

☒ False

**Correct.**

**Answer: False.** Sometimes we formulate arguments in private in order to figure out what to believe ourselves without telling anyone else.

**6.5 5. Can any argument persuade every person in the world?**

☐ Yes

☒ No

**Correct.**

**Answer: No.** Every argument has to be formulated in some language, but there will always be someone in the world who does not speak that language or understand that argument, so they cannot be persuaded by it. Babies are also people who cannot be persuaded by arguments, at least if they do not yet speak any language.

---

## **7 What Else are Arguments Used For? Explanation**

Persuasion and justification are not the only purposes of arguments. Arguments are also used to **explain** things.

### **7.1 The Goal of Explanation**

Unlike persuasion or justification, explanation assumes the conclusion is already true (e.g., asking “Why did Duke win?” implies they did win).

- **Goal:** To increase **understanding** of why something happened, fitting the phenomenon into a general pattern to remove bewilderment.
- **Distinction:** You don't try to convince someone *that* it happened (persuasion), but *why* it happened.

## 7.2 Aristotle's Four Types of Explanation

Aristotle identified four types of causes or explanations. We can apply all four to a single event, such as a train whistle:

1. **Causal (Efficient):** The event that brought it about (e.g., The conductor pulled the lever).
2. **Teleological (Purpose):** The goal or purpose (e.g., To warn cars at an intersection).
3. **Formal:** Based on shape or form or why it behaves in a certain way. (e.g., The whistle's shape creates the vibration).
4. **Material:** Based on the material composition (e.g., The air density creates the sound).

**Another Example (Joe jumping out of an airplane):**

- **Causal:** He jumped (the event that caused the fall).
- **Teleological:** To get excitement (the purpose of jumping).
- **Formal:** His aerodynamic shape (explains why he fell fast).
- **Material:** His density being greater than air (explains why he fell).

## 7.3 Explanation as an Argument

Explanations can be narratives, but these don't yield general principles. In this course, we focus on explanations as arguments:

- **Structure:** A general principle + Particular facts → Conclusion (The event explained).
- **Example (Helium Balloon):**
  - *Principle:* Objects less dense than the medium rise.
  - *Fact:* This balloon is less dense than air.
  - *Conclusion:* Therefore, the balloon rises.

## 7.4 Important Distinctions

- **Prediction vs. Explanation:** **Bode's Law** predicted planetary distances accurately (for known planets) but did not explain *why* they were positioned that way. It offered prediction without explanation.

- **Explanation vs. Prediction/Justification:** An HIV-positive mother explains why a child is HIV-positive. However, this doesn't *predict* it (less than 50% chance) nor *justify* the belief (a blood test is needed for that).
  - **Generalization:** Explanation is also distinct from simple generalization.
- 

## 8 Quiz – What Else are Arguments Used For? Explanation

### 8.1 1. The goal of explanation is understanding.

☒ True

☐ False

**Correct.**

**Answer: True.** A reason why something happened helps us understand why it happened.

### 8.2 2. All explanations are given in the form of arguments.

☐ True

☒ False

**Correct.**

**Answer: False.** Some explanations are given in the form of arguments, but other explanations are given in the form of narratives or stories (such as a story about why I moved to Duke).

### 8.3 3. Whenever you predict that something will happen, you explain why it happens.

☐ True

☒ False

**Correct.**

**Answer: False.** Bode's law (discussed in the lecture) was used to predict the existence of Neptune, but it did not explain why Neptune existed or why Neptune was at a certain distance from the Sun.

### 8.4 4. The population of India explains why it won more medals than the United States in the 2012 Olympics.

☐ True

☒ False

**Correct.**

**Answer: False.** India did not win more Olympic medals than the US in 2012, so there is no phenomenon to be explained in this example. Explanations generally assume that the event to be explained did happen.

**8.5 5. Why did he add more sugar? To make the cake sweeter.**

- ☐ causal
- ☒ teleological
- ☐ material
- ☐ formal

**Correct.**

**Answer: teleological.** A teleological explanation gives the purpose or function of the phenomenon that it explains, and this explanation says that his purpose was to make the cake sweeter.

**8.6 6. Why is the pillow so soft? Because it is filled with duck feathers.**

- ☐ causal
- ☐ teleological
- ☒ material
- ☐ formal

**Correct.**

**Answer: material.** A material explanation cites the material that makes up the thing to be explained, and this explanation cites the material in the pillow.

**8.7 7. Why doesn't the screwdriver work with the slotted screw? Because it is a Phillips screwdriver (with a cross-shaped end).**

- ☐ causal
- ☐ teleological
- ☐ material
- ☒ formal

**Correct.**

**Answer: formal.** A formal explanation cites the shape or form of the thing to be explained, and this explanation cites the shape of the screwdriver.

## 8.8 8. Why did the tire on her car go flat? Because it was punctured by a nail.

- ☒ causal
- ☐ teleological
- ☐ material
- ☐ formal

**Correct.**

**Answer: causal.** A causal explanation cites the event that brought about (or sustains) the thing to be explained, and this explanation cites the event of being punctured...

---

## 9 What are Arguments Made Of? Language

Arguments are sets of sentences, statements, and propositions. This means they are made of **language**. To understand arguments, we must understand the nature of language.

### 9.1 Humans as Rational Animals

Since arguments are made of language, only creatures that use complex language can give arguments. While some animals have minimal communication systems, they do not use language complex enough to argue.

- Aristotle defined humans as the **rational animal** (the animal that reasons/argues).

### 9.2 Four Basic Points about Language

1. **Language is Important:** It is difficult to imagine life without it.
  - **Example:** Helen Keller, who was blind and deaf, described the amazing transformation in her life when she learned language.
2. **Language is Conventional:** It follows general patterns of behavior (conventions) shared by society.
  - **Arbitrary but Necessary:** Like driving on the right side of the road (US) vs. the left (UK).
  - **Variability:** The word “football” refers to different sports in the US vs. the rest of the world.
3. **Language is Representational:** We use language to refer to objects and describe facts.
  - **Limit:** Changing language does not change facts.

- **Lincoln's Riddle:** If you call a tail a leg, how many legs does a horse have? **Four.** Calling a tail a leg doesn't make it one.

4. **Language is Social:** Language evolved for social interaction/function.

- We must follow shared conventions to communicate effectively.
- **Example:** You cannot successfully order "mega lemon juice" at a restaurant even if you think grapefruits look like big lemons.

### 9.3 Levels of Language Rules

Language follows rules at multiple levels:

- **Physical Production:** Speaking loud enough to be heard.
- **Semantics:** Using words with their correct meanings.
- **Syntax:** Structural rules (grammar and word order).
- **Etiquette:** Politeness required for cooperation.

### 9.4 Implicit Rules

We often follow linguistic rules without being consciously aware of them.

- **Example:** Why is the 'g' in *finger* hard, but the 'g' in *singer* soft?
- **Rule:** *Singer* is derived from a verb ending in 'ng' (sing), so it keeps the soft sound. *Finger* is not derived from a verb ending in 'ng', so it has a hard 'g'.

### 9.5 Quiz – What are Arguments Made Of? Language

#### Solved Questions: Linguistic Meaning and Language Rules

##### 1. Question 1

The English language could use the word "death" to refer to life.

- True
- False

**Correct Answer:** True

*Explanation:* Linguistic meaning can vary with social convention among all speakers of the language.

**Score: 1 / 1**

##### 2. Question 2



I can make the word “baboon” in the public English language mean my sister’s friends simply by stipulating that I personally will use the word “baboon” to refer to my sister’s friends.

- True
- False

**Correct Answer:** False

*Explanation:* The meaning of a word in a public natural language like English depends on shared social conventions rather than on idiosyncratic stipulations by individuals. Stipulating that the word “baboon” refers to my sister’s friends does not change the meaning of the word in the public English language.

**Score: 1 / 1**

### 3. Question 3

People are always aware of the rules that they follow when they speak.

- True
- False

**Correct Answer:** False

*Explanation:* English speakers pronounce words such as “finger”, “singer”, and “plunger” correctly without knowing the explicit rule that governs these pronunciations.

**Score: 1 / 1**

### 4. Question 4

People are never aware of the rules that they follow when they speak.

- True
- False

**Correct Answer:** False

*Explanation:* People who are just learning a language often follow grammatical rules consciously before they become fluent.

**Score: 1 / 1**

---

## 10 Meaning

The rules of language are essential to arguments because they determine the meanings of words and sentences. While misspellings or mispronunciations usually do not destroy

an argument (unless they make it unintelligible), factors that affect the proposition expressed—the *meaning*—are critical.

We are not concerned with specific meanings like "clouds mean rain" (evidence) or the "meaning of life." We are focused on **linguistic meaning**—how to explain words and sentences to understand them.

## 10.1 The Referential Theory

A common view is the **referential** or **descriptive** view of language:

- **Theory:** The meaning of a word is the object it refers to, and the meaning of a sentence is the fact it describes.
- **Example:** "Chair" refers to the physical object. "I am sitting on the chair" describes the fact of sitting.

**Is this adequate?** No.

- It does not explain words like "Hello" (greeting, not referring).
- It does not explain logical words like "not" or "and". "Not" does not refer to a "negation object" in the room.

## 10.2 Meaning as Use

Ludwig Wittgenstein (20th-century Austrian philosopher) argued that **meaning is use**. To understand a word, ask how it is used by competent speakers:

- **"Hello":** Used to greet.
- **"Where is the library?":** Used to inquire.
- **"Gimme a pizza":** Used to order.
- **"And":** Used to conjoin sentences or things (e.g., "Roberto and Olivia"). It does not refer to an extra object.

## 10.3 Three Levels of Language Use

Language is used in diverse ways. We can distinguish three levels:

1. **Linguistic Act:** The act of saying meaningful words in a grammatical order.
2. **Speech Act:** What we do *in* saying the words (e.g., advising, ordering, promising).
  - *Example:* Saying "You ought to floss" is the act of *advising*, regardless of whether the advice is followed.
3. **Conversational Act:** The effect produced on the listener (e.g., persuading, convincing, frightening).

- *Example:* If the listener actually starts flossing, you have *persuaded* them.

**Note:** The next three lectures will explore these levels (Linguistic, Speech Act, and Conversational) in more detail. They are more abstract but important for understanding language, though not strictly required for the final quiz.

## 10.4 Quiz – Meaning

### 10.4.1 1. Arguments are fallacious when they are spoken in heavy accents.

☐ True

☒ False

**Correct.**

**Answer: False.** Accent is an aspect of language that does not affect truth or rationality, so it does not affect whether arguments are good as arguments.

### 10.4.2 2. The meaning of the phrase “my car” is the same as the object that is my car.

☐ True

☒ False

**Correct.**

**Answer: False.** As in the examples in the lecture, the phrase “my car” does refer to the object that is my car, but the MEANING of the word or phrase is still not the same as the REFERENT or the object to which the word refers. The meaning is not my car. Here’s why: If the meaning and the referent were exactly the same, then the word would have no meaning when there is no referent or no object for the word to refer to. But then it would be meaningless to say “I do NOT own any car” when it is true that I do not own any car, because then there would be no car to refer to. However, this sentence—“I do not own any car”—is not meaningless when I do not own any car, because then it is true. Therefore, it has meaning without a referent, so reference is not the same as meaning.

The difference between REFERENCE and MEANING can also be shown by the fact that two phrases can have different meanings even if they refer to the same object. For example, the phrase “my car” and the phrase “the car parked over there” might refer to the very same car on one occasion when my car is parked over there. Nonetheless, these phrases do NOT have the same MEANING in general, because one phrase (“my car”) is about ownership, whereas the other phrase (“the car parked over there”) is about physical location. They describe different aspects of the same object. Moreover, even if both phrases do happen to refer to the same object on this one occasion, the phrases do NOT ALWAYS refer to the same object. They do not refer to the same object on other occasions, such as when your car is parked over there instead of mine. When cars move (or when I sell my car), these phrases still have the same meaning as before even though the phrases do not refer to the same objects as before. The point is that the meaning of the phrase does not vary

whenever the object varies, so the meaning cannot be identical with the object. That is why the meaning of the phrase “my car” is NOT the object that is my car.

**10.4.3 3. We can describe the meaning of a word or sentence by specifying how it is used.**

☒ True

☐ False

**Correct.**

**Answer: True.** This is what Wittgenstein meant by his slogan “Meaning is use.”

**10.4.4 4. To say “I am sorry” is to apologize to someone even if that person does not forgive you, so apologizing is**

☐ a linguistic act

☒ a speech act

☐ a conversational act

**Correct.**

**Answer: a speech act.** A speech act occurs even if the intended effect does not occur.

**10.4.5 5. To utter a series of words that are meaningful together is to perform**

☒ a linguistic act

☐ a speech act

☐ a conversational act

**Correct.**

**Answer: a linguistic act.** A linguistic act is just the utterance of a meaningful sentence.

**10.4.6 6. To alert someone to a danger is to make that person aware of that danger, so alerting is**

☐ a linguistic act

☐ a speech act

☒ a conversational act

**Correct.**

**Answer: a conversational act.** A conversational act is the bringing about of an effect.

---

# 11 Linguistic Acts

This lecture deals with the **linguistic level** of language, which is simply the production of a meaningful utterance.

## 11.1 Definition of a Linguistic Act

To perform a linguistic act, you must utter a set of words that are:

1. **Meaningful:** The words themselves must have meaning (Semantics).
2. **Grammatical:** The words must fit together according to the rules of the language (Syntax).

**Example:** "It's easy" is a linguistic act because "it's" is a valid contraction, "easy" is a word, and they follow English syntax.

## 11.2 Components of a Linguistic Act

Although simple, linguistic acts require specific conditions:

### 1. Meaningful Words:

- Humming a tune is *not* a linguistic act (no words).
- Singing lyrics ("I love Miranda...") *is* a linguistic act.
- Nonsense sounds (e.g., Lewis Carroll's *Jabberwocky*: "Twas brillig and the slithy toves...") are *not* linguistic acts because the words are not meaningful in English.

### 2. Meaningful Order (Grammar):

- "My dog has fleas" is a linguistic act.
- "Dog fleas my has" is nonsense (bad syntax).

### 3. Semantic Consistency:

- Noam Chomsky's example: "Colorless green ideas sleep furiously."
- Grammatically correct (Adjective Adjective Noun Verb Adverb).
- Semantically nonsense (Ideas can't be green or sleep).
- Therefore, it is *not* a successful linguistic act.

## 11.3 Complex Cases and Ambiguity

Some utterances are tricky to categorize.

### 11.3.1 Garden Path Sentences

Sentences that lead you to parse them incorrectly at first.

- **Example:** "The man who whistles tunes pianos."
- *Confusion:* "Tunes" looks like a noun (melodies) initially.
- *Real Meaning:* "Tunes" is the main verb. The man (who whistles) tunes pianos.

### 11.3.2 The "Buffalo" Example

A famous example of extreme ambiguity that is still grammatically valid.

- **Buffalo (City):** A city in New York.
- **Buffalo (Animal):** American bison.
- **Buffalo (Verb):** To trick or fool.

**Sentence:** "Buffalo buffalo Buffalo buffalo buffalo buffalo Buffalo buffalo."

- *Meaning:* Bison from Buffalo, NY, whom other bison from Buffalo, NY bully, also bully bison from Buffalo, NY.
- It is a meaningful linguistic act, even if difficult to parse.

## 11.4 Conclusion

If you are careful and charitable, you can often make sense of utterances that initially seem meaningless. If they can be interpreted meaningfully, they function as linguistic acts.

---

## 12 Quiz – Linguistic Acts

### 12.1 Question 1

**Sentence:** *The old man the ship.*

**Answer:** Meaningful.

**Explanation:** At first glance, this sentence appears meaningless because it leads the reader down a garden path. If *the old man* is interpreted as a noun phrase, the sentence seems to lack a verb. However, *the old* can function as a plural noun referring to old people, and *man* can function as a verb meaning to operate or staff. Under this interpretation, the sentence means:

The old people manage the ship.

## 12.2 Question 2

**Sentence:** *I feel as much like I did yesterday as I do today.*

**Answer:** Not meaningful.

**Explanation:** Although the sentence is grammatically well-formed, it fails to convey a clear or coherent meaning. The comparison is circular and does not express a meaningful proposition. This example, attributed to Daniel Wegner, illustrates that grammaticality does not guarantee semantic meaningfulness.

## 12.3 Question 3

**Sentence:** *The cotton clothing is made of grows in Mississippi.*

**Answer:** Meaningful.

**Explanation:** This sentence is a garden-path sentence. Initially, *the cotton clothing* may be misinterpreted as a noun phrase. The correct interpretation treats *the cotton* as the subject, with *clothing is made of* functioning as a reduced relative clause. The intended meaning is:

The cotton that clothing is made of grows in Mississippi.

## 12.4 Question 4

**Sentence:** *The square root of pine is tree.*

**Answer:** Not meaningful.

**Explanation:** The sentence is syntactically well-formed but semantically incoherent. It combines mathematical and biological concepts in a way that produces no interpretable meaning. The apparent clarity arises only from phonetic similarity to a meaningful sentence.

---

# 13 Speech Acts

The second level of language is speech acts. While linguistic acts are about meaningful utterances, speech acts are about what we do *in* saying the words.

## 13.1 Definition

- **Core Concept:** With a speech act, the saying so makes it so.
- **Function:** The words themselves perform an action rather than just describing the world. The utterance changes reality.

## 13.2 Examples

- **Games (Baseball):**

- *Scenario:* A batter has two strikes and three balls. The pitcher throws near the strike zone. The batter doesn't swing.
- *Interaction:* The batter asks the umpire, "Am I out or was that a walk?" The umpire responds: "You ain't nothing till I say so."
- *Lesson:* The umpire's words make it a strike or a ball. Even if he makes a mistake (calling a ball a strike), his saying so makes it a strike within the game because he has the authority.

- **Ceremonies (Marriage):**

- *Scenario:* In a traditional ceremony, the officiant asks the couple if they take each other as spouses. They say "I do."
- *Action:* The officiant then says: "I now pronounce you husband and wife."
- *Effect:* By uttering those words, the officiant makes them husband and wife. The words change their relationship legally, religiously, and personally. He pronounced them *by means of* saying the words.

## 13.3 The Thereby Test

The "Thereby Test" is a general test to identify speech acts.

**Formula:** If I say, "I [verb]," then I *thereby* [verb].

In this formula, the first instance of the verb is in quotation marks (referring to the words), and the second is not (referring to the world). The test shows how words change the world.

### Applying the Test:

- **Valid (Speech Acts):**

- "I pronounce you man and wife" → I *thereby* pronounce you man and wife.
- "I apologize" → I *thereby* apologize.
- "I thank you" → I *thereby* thank you.
- "I promise" → I *thereby* promise.

- **Invalid (Not Speech Acts):**

- "I walk" → I *thereby* walk.
- *Reason:* Saying you walk describes the action, but saying it doesn't *make* it happen.



## 13.4 Appropriate Circumstances

Speech acts function only under **appropriate circumstances**. We can modify the Thereby Test: “If I say ‘I [verb]’ in the appropriate circumstances, then I thereby [verb].”

### 1. Authority and Context:

- You cannot randomly walk up to a couple on the street and pronounce them married. It requires an officiant, a license, and the couple’s active participation (saying “I do”).
- *Controversy*: People often disagree on what constitutes “appropriate circumstances.” For example, debates over same-sex marriage are often disagreements about whether the circumstances (e.g., gender of the participants) are appropriate for the speech act of marriage to be valid.

### 2. Sincerity (or Lack Thereof):

- If I say “I apologize” but do not feel sorry, I have *still apologized*.
- It is an insincere apology because the internal circumstance (feeling sorry) was missing, but the speech act itself occurred. The words were said in the right context to count as an apology.

### 3. Uptake (The Listener’s Role):

- Some speech acts require the listener to accept or “take up” the act.
- *Betting*: If I say “I bet you Duke will win,” and you refuse (“No, I won’t bet”), then the speech act of betting has *not* occurred.
- *Promise vs. Threat*: The difference often depends on the listener’s attitude. “I will come to your house” is a promise if you want me to come, but a threat if you don’t.

## 13.5 Argumentation as a Speech Act

Why do we study speech acts in a course on arguments?

- **Arguing is a Speech Act**: When you argue, you are using language to provide reasons.
  - **Justifying and Explaining**: Justifying a belief or explaining a phenomenon involves using language (speech acts).
  - Therefore, to understand arguments, we must view them in the context of these other speech acts.
-

## 14 Questions and Answers: The Thereby Test

### Question 1

A verb fails the thereby test if there is any case in any circumstance where I say “I \_\_\_\_\_” but I do not thereby \_\_\_\_\_.

**Answer: False**

I can say “I promise to meet you” in some unusual and inappropriate circumstances without thereby promising to meet you. For example, if an actor during a play says, “I promise to meet you,” then that actor does not really promise to meet you. He is just repeating lines in a play, not genuinely promising.

However, these abnormal cases do *not* show that the verb “promise” fails the thereby test, because the complete thereby test includes a crucial qualification: *in appropriate circumstances*. Utterances made in inappropriate circumstances do not show that a verb fails the thereby test.

This was also illustrated by the marriage pronouncement example. Saying “I now pronounce you husband and wife” performs the speech act of pronouncing them married only when uttered in appropriate circumstances. Uttering the same words to a random couple on the street does not perform the speech act. Thus, the sentence is false because it refers to “any case in any circumstances” without limiting them to appropriate circumstances.

### Question 2

Whenever a verb passes the thereby test (that is, whenever the verb fits into the blank in “If I say ‘I \_\_\_\_\_’ in appropriate circumstances, then I thereby \_\_\_\_\_”), the verb names a speech act.

**Answer: True**

This is precisely the point of the thereby test.

### Question 3

Concluding is a speech act.

**Answer: True**

If I say “I conclude that Pluto is not a planet” in appropriate circumstances (including the presence of premises and possibly authority), then I thereby conclude that Pluto is not a planet. Hence, “conclude” passes the thereby test.

#### **Question 4**

When I say, "I order you to leave" in appropriate circumstances, then I thereby order you to leave.

**Answer: True**

Ordering is a speech act.

#### **Question 5**

When I say, "I ordered you to leave yesterday" in appropriate circumstances, then I thereby ordered you to leave yesterday.

**Answer: False**

This utterance reports a past action rather than performing an order in the present. If I ordered you to leave on Monday and say on Tuesday, "I ordered you to leave," my Tuesday utterance does not issue an order. The ordering occurred on Monday, not in the act of speaking on Tuesday.

#### **Question 6**

When I say, "My sister orders you to leave" in appropriate circumstances, then I thereby order you to leave.

**Answer: False**

This sentence reports what my sister does rather than issuing an order myself. I do not perform the speech act of ordering in the act of uttering these words, nor does my sister perform the order through my utterance. Our utterances accomplish separate speech acts.

#### **Question 7**

When I say, "I apologize for hurting you" in appropriate circumstances, then I thereby apologize for hurting you.

**Answer: True**

Apologizing is a speech act and passes the thereby test.

#### **Question 8**

When I say, "I am sorry for hurting you" in appropriate circumstances, then I thereby am sorry for hurting you.

**Answer: False**

Being sorry is a psychological state, not a speech act. One may feel sorry without uttering these words, or utter the words without genuinely feeling sorry. While the sentence can function as an apology, the feeling itself is not a speech act.

### **Question 9**

When I say, "I advise you to keep trying" in appropriate circumstances, then I thereby advise you to keep trying.

**Answer: True**

Advising is an illocutionary act and passes the thereby test.

### **Question 10**

When I say, "I convince you to keep trying" in appropriate circumstances, then I thereby convince you to keep trying.

**Answer: False**

Convincing requires a perlocutionary effect on the audience. This effect occurs after the utterance, not in the very act of speaking.

### **Question 11**

When I say, "I warn you of the danger" in appropriate circumstances, then I thereby warn you of the danger.

**Answer: True**

Warning is a speech act.

### **Question 12**

When I say, "I make you aware of the danger" in appropriate circumstances, then I thereby make you aware of the danger.

**Answer: False**

Making someone aware requires a perlocutionary effect in the audience. Since this effect occurs after the utterance, it does not occur in the very act of speaking.

---

## **15 Conversational Acts**

We have discussed two levels of language: the linguistic level and the speech act level. The third level is the **conversational act**.

## 15.1 Definition

The basic idea is that we use language to bring about a change in the world.

- **Example 1:** Asking a friend, “Could you lend me your car?”
  - **Goal:** To get the keys and permission (a change in physical location and legal rights).
- **Example 2:** Saying, “The moon is full.”
  - **Goal:** To inform the friend and change their beliefs.

**Official Definition:** A conversational act is the bringing about of the intended effect, which is the standard effect for the kind of speech act that the speaker is performing.

**Key Characteristic:** The act does not occur unless the effect occurs.

- **Analogy:** Pulling a trigger is not an act of *killing* unless the person actually dies. Similarly, you haven’t performed the conversational act of *persuading* unless the person is actually persuaded.

## 15.2 Grice’s Conversational Maxims

To bring about these effects, rational people follow rules. Paul Grice formulated these as **Conversational Maxims**, which apply when people are cooperating.

### 1. Quantity:

- Don’t say more than is required (point gets lost).
- Don’t say less than is required (misleading).

### 2. Quality:

- Don’t say what you believe to be false (don’t lie).
- Don’t say what you lack adequate justification for.

### 3. Relevance: Be relevant to the purpose of the conversation.

### 4. Manner: Be brief, be orderly, avoid obscurity, and avoid ambiguity.

## 15.3 Conversational Implication

We use these maxims to understand implied meanings.

**The Waiter Example:** A waiter says, “You can have cake or ice cream.”

- **Implication:** You cannot have pie.
- **Reasoning:** If pie were available, the Rule of Quantity would require him to mention it. Since he didn’t, we infer it’s not available.

**Misleading:** If the waiter knows there is pie but wants to save it for a favorite customer, he misleads you by violating the cooperative spirit while technically speaking the truth.

### 15.3.1 Canceling Implications vs. Logical Entailment

A key feature of conversational implication is that it can be **canceled**.

- **Conversational Implication:** The waiter can say, “You can have cake or ice cream... oh, and you can also have pie.” This does not contradict the first statement.
- **Logical Entailment:** If you say, “Alice is my sister,” it entails “Alice is female.” You cannot say, “Alice is my sister, but she is not female.” This is a contradiction.

**Application to Arguments:** Bad arguments often exploit conversational implication to mislead without stating falsehoods (e.g., a politician citing benefits of a policy while omitting relevant negative consequences). To refute them, one must identify that they are violating the maxim of quantity.

---