Chapter 2 Recognizing Arguments

Argument is a set of claims; one of which is supported by the other(s).

Argument is defined as "...any giving of reasons, evidence, or support for the claim that something is true. 2 important elements involved in arguments as the foundation of critical thinking in this course (identification, and evaluation).

Arguments at their most basic level consist of conclusions and premises.

If X is a dog, then X is an animal. (being a dog is a sufficient condition for being an animal).

If X is not an animal, then X is not a dog. (being an animal is a necessary condition for being a dog).

Note that these two statements are equivalent.

A claim is a statement that has truth-value.

It is sunny today.

Barack Obama is the 44th President of the United States.

Today is Saturday.

Mauritania is bordered by the Mediterranean Sea.

What is an argument?

An argument is a set of claims; one of which is supported by the other(s).

 The **conclusion** is the claim that the arguer is trying to prove or support.

 The **premise** is a claim providing support for a conclusion.

In the context of critical thinking, an argument means the presentation of a reason(s) to support a conclusion(s), or: Argument = Reason + Conclusion

Argument Example:

Don't Trust John	because	he's a politician.
Conclusion	**Indicator**	**Reason**

Continuing Claim
A single sentence may contain more than one claim.
George owns a cat, and Jones owns a dog.
George owns a Siamese, which is a breed of cat.
George got a new cat because his other one died.

Inference Indicators

Inference indicators are words and phrases signaling the presence of a premise and/or a conclusion.

Conclusion Indicators
- ✔ therefore...
- ✔ thus...
- ✔ consequently...
- ✔ so...
- ✔ hence...
- ✔ accordingly...

Premise Indicators
- ✔ because...
- ✔ since...
- ✔ for...
- ✔ given...
- ✔ as...
- ✔ follows from...

Eexplanation

An **explanation** is a set of claims accounting for how or why a given fact is true.

- **The explanandum is the fact being explained.**
- **The explanans is the account offered for some given fact.**

Arguments vs. Explanations

Both contain at least two claims.

Both provide reasons.

Different purpose.

Arguments (attempt to) prove that something is true.

Explanations describe how or why something is true.

I was late to class because my car wouldn't start.

I should be excused since it was not my fault.

The Hurt Locker was awarded the Oscar for best picture in 2009, since the Academy wanted to honor women directors.

The Hurt Locker was awarded the Oscar for best picture in 2009, since I remember watching Kathryn Bigelow giving her acceptance speech.

Recognizing Arguments

Step 1: Count the claims

Arguments must contain two or more claims.

Step 2: Look for reasons

Arguments contain a claim that is supported by the other(s).

Step 3: Identify the purpose

Arguments offer proof that a claim is true.

Explanations describe how or why a fact is true.

Argument, Explanation, or Neither ….

Police are looking for a suspect who robbed a local gas station last week. Video from the station's security camera shows a man walking into the store with a gun, pointing it at the cashier, and exiting the store with cash from the register. No injuries have been reported.

[1] If the branch manager is promoted to vice president of the company, then he will transfer to the main office. [2] He is bound to be promoted. [3] So, he will be transferring to the main office.

1 + 2--------□3

Identifying Claims

A claim is a statement that has truth-value.

- **It is sunny today.**
- **Barack Obama is the 44th President of the United States.**
- **Today is Saturday.**
- **Mauritania is bordered by the Mediterranean Sea.**

Identifying Claims

Not all sentences are claims.

- Where is Mauritania located?
- Please take me to the cinema.
- Let's go to the cinema.

Hint! Test using "it is true that …"

Descriptive vs. Evaluative Claims

- Compare these two claims:
  - Today is Monday.
  - The weather is lovely today.

Descriptive vs. Evaluative Claims

- **Many wars have been fought over religious differences.**
- **Capital punishment is immoral.**

Note: Both are claims!

Descriptive vs. Evaluative Claims

- **Descriptive claims describe some situation or other.**
- **Evaluative claims make a judgment about whether something is**
  - **good or bad,**
  - **right or wrong,**
  - **beautiful or ugly, and the like.**

Descriptive vs. Evaluative Claims

Which claim is descriptive and which is evaluative:

- **Susan is planning to play golf this afternoon.**
- **Susan should learn to keep her left arm straight on her backswing.**

Why are evaluative judgments claims?

- We normally think that our evaluative judgments are true.
- People do disagree about the truth of these judgments.

Counting Claims

- **By definition an argument must contain a minimum of two claims.**

Counting Claims

- **A single claim can be expressed in different sentences.**
    - **Mike voted for Obama.**
    - **He voted for Obama.**
    - **Obama is the candidate he voted for.**

Counting Claims

- A single sentence can represent different claims.
  - She went to the store.
  - Jane went to Macy's.

Counting Claims

- **A single sentence may contain more than one claim.**
  - **George owns a cat, and Jones owns a dog.**
  - **George owns a Siamese, which is a breed of cat.**
  - **George got a new cat because his other one died.**

- **Identify the two claims expressed in the sentence,**
  - "Dr. Samaneh's class is held in room 103, which is in the 1st floor."

Counting Claims

- **Multiple claims can be combined in a sentence to form a single claim.**
  - **We can go to the park or stay home.**
    - **Disjunctive claim**
  - **If you complete all your homework, then you will be prepared for class.**
    - **Conditional claim**

Why does the sentence "Sally owns a cat and Jim owns a dog" express two claims, while "Sally owns a cat or Jim owns a dog" expresses only one?

How many claims?

"For"

- **Normal pregnancies last for 40 weeks.**
- **This is a normal pregnancy for the fetus is developing at the expected rate.**

"Since"

- **I have lived in the UAE since I was born.**
- **I live in the UAE since I live in Dubai, which is a city in the UAE.**

Demonstrate that the sentence "I haven't eaten for a long time" expresses only one claim, not two.

 I haven't eaten for a long time. ‼

What is an explanation?

An **explanation** is a set of claims accounting for how or why a given fact is true.

- **The explanandum is the fact being explained.**
- **The explanans is the account offered for some given fact.**

Arguments vs. Explanations

- **Both contain at least two claims.**
- **Both provide reasons.**
- **Different purpose.**
  - **Arguments *(attempt to) prove that* something is true.**
  - **Explanations describe how or why something is true.**

Arguments vs. Explanations

- I was late to class because my car wouldn't start.

- I should be pardoned since it was not my fault.

Arguments vs. Explanations

- *The Hurt Locker* was awarded the Oscar for best picture in 2009, since the Academy wanted to honor women directors.

- *The Hurt Locker* was awarded the Oscar for best picture in 2009, since I remember watching Kathryn Bigelow giving her acceptance speech.

Arguments vs. Explanations

- *The Hurt Locker* **was awarded the Oscar for best picture in 2009, because it featured a realistic representation of military experience by excellent actors.**

- *The Hurt Locker* **was awarded the Oscar for best picture in 2009, because the newspaper reported that it did.**

Arguments vs. Other Non-Arguments

A passage may be **neither an argument nor an explanation** because:

- It contains only one claim, or
- None of the claims provides reasons for any of the others.

Recognizing Arguments

Step 1: Count the claims

 Arguments must contain two or more claims.

Step 2: Look for reasons

 Arguments contain a claim that is supported by the other(s).

Step 3: Identify the purpose

 Arguments <u>offer proof that</u> a claim is true.

 Explanations <u>describe how or why</u> a fact is true.

Argument, Explanation, or Neither?

- *We believe that the suspect in this case is the same one responsible for two other gas station robberies that occurred earlier this month. The physical descriptions are very similar, and the same kind of weapon was used in all three incidents.*