Philosophy 247/247W/447
Philosophy of Language
Fall 2007

Argument Extraction, Explanation, and Evaluation (EEE)

Most arguments that appear in (for instance) newspaper editorials, legal briefs, ordinary speech, and philosophical writing do not come with numbered premises and conclusions. To *evaluate* such arguments, it is often helpful to first *extract* a *formal* argument, with numbered premises and conclusion, from the text. It is often desirable also to *explain* the resulting formal argument before evaluating it.

1. Extracting Arguments From Texts

To **extract** an argument from a text, do the following.
  a. Locate the main conclusion of the argument and formulate it in clear, literal terminology.
  b. Locate the central premises from which the main conclusion is derived, and state them in clear, literal terminology.
  c. If necessary, add suppressed premises and subconclusions so as to make the argument valid.
  d. Eliminate all idle premises.
  e. Write the entire argument in numbered premise-conclusion form.

Often many different reasonable arguments can be extracted from a single text. Our goal when extracting arguments will be to find the strongest, and most interesting, arguments that can reasonably be attributed to the author of the text.

Premise Indicator Words
Authors often indicate the premises of their arguments with *premise indicator words*. These include

　　　because, for, since, given that

These words appear before the sentence that is the premise. Consider the following very simple text.

　　A.　　Abortion is wrong *because* fetuses are innocent human beings.

The word 'because' appears before the sentence 'fetuses are innocent human beings'. So this latter sentence should probably appear as a premise in your extracted argument. Other examples:

B.   *Since* fetuses are innocent human beings, taking their lives is morally wrong.

C.   Meanings are clearly mental in nature, *for* human minds grasp the meanings of words.

Conclusion Indicator Words

Some words indicate a conclusion in the text, including:

so, therefore, thus, hence, it follows that, consequently

The sentences that appear after these words are conclusions (or subconclusions) of arguments.

D.   Fetuses are innocent human beings, so abortion is wrong. (Compare with (A) above.)

E.   Words in English are meaningful. It follows that those words have meanings.

F.   No telescope, microscope, X-ray machine, PET scan, or MRI has ever revealed the presence of a meaning anywhere. Hence, there are no such things as meanings.

Adding premises to obtain a valid argument

The extracted argument should be valid: that is, each *simple* argument in it should be valid. An argument that is invalid can often be transformed into a valid argument that the author would accept by adding a conditional premise. For instance, consider the simple text (G) below.

G.   Hillary is a U.S. Senator. So, even an idiot can see that she is a federal employee.

When extracting a numbered-premise-and-conclusion argument from (G), we leave out the unnecessary rhetoric. As a first step we get (H) below.

H.   1.   Hillary is a U.S. Senator.
      2.   Therefore, Hillary is a federal employee

This argument is invalid. But it can be transformed into a valid argument by adding a conditional premise to get argument (I).

I.   1.   Hillary is a U.S. Senator.
      2.   If Hillary is a U.S. Senator, then Hillary is a federal employee.
      3.   Therefore, Hillary is a federal employee.

Further, the added premise is almost certainly one that the author would accept.

Idle premises

The arguments you extract from texts should have no idle premises. Informally speaking, an idle premise is one that plays no role in supporting the conclusion of the argument in which it appears. A bit more precisely:

> Def.   *S* is an *idle premise* in *A* iff: *A* is a valid argument, *S* is a premise in *A*, and the argument obtained by deleting *S* from *A* is valid.

For example, sentence (3) in argument (J) is an idle premise in (J).

> J.   1.   Hillary is a U.S. Senator.
>   2.   If Hillary is a U.S. Senator, then Hillary is a federal employee.
>   3.   Hillary receives a check from the U.S. Treasury Department every week.
>   4.   Therefore, Hillary is a federal employee.

An even more obvious case of an idle premise is line (3) in (K).

> K.   1.   Hillary is a U.S. Senator.
>   2.   If Hillary is a U.S. Senator, then Hillary is a federal employee.
>   3.   Snow is red.
>   4.   Therefore, Hillary is a federal employee.

Notice that argument (K) is *unsound* because line (3) is false. Idle premises are bad because they do nothing to support the argument's conclusion, yet they increase the risk that the argument is unsound.

2. Explaining An Extracted Argument

To **explain** an argument that you have extracted, do the following.
  a.   Define all the technical terms that appear in the argument.
  b.   Give reasons for *each* of the premises of the argument *line by line*. (Do *not* give reasons for the main conclusion and subconclusions.) In some cases, the author's text provides reasons to believe the premise. In other cases, you must provide reasons which would lead a reasonable person to accept the premise. These should be consistent with the other premises of the argument, and preferably reasons that you think the author would accept.

You may define technical terms in your line-by-line explanation of the premises, if you wish.

Sometimes an author will give reasons for a premise which, if they were included in the formal numbered argument, will make the argument impractically long. In this case, you can present what you take to be the main reasons for the conclusion in the numbered premises and put the subsidiary reasons in the explanation. In cases where your extracted argument contains a

premise for which the author provides no reason, you should consider the reasons that *you* can think of for accepting it and present those in the explanation.

You should *not* explain the conclusions and subconclusions of arguments. If the argument is valid, and the premises are true, then the conclusions and subconclusions must also be true. The technical terms that appear in conclusions and subconclusions of valid arguments appear in the premises of those arguments (with the exception of some oddball arguments), so you should have already defined those terms when you explained the premises.

3. Evaluating An Extracted Argument

To **evaluate** an argument that you have extracted and explained, do the following.

     a.   State whether each *simple* argument is valid or invalid. If the argument is complex, then for each simple argument in it, state whether that simple argument is valid. (If you extracted the argument correctly, each simple argument will be valid.)

     b.   For each simple argument that is valid, state the name of the logical form that it exemplifies (MP, MT, etc.).

     c.   State whether the argument is sound.

     d.   If the argument has one or more premises that are false or controversial, point out the weakest such premise and criticize it (present some objection to it). Be sure to specify which premise you are criticizing.

I will usually ask you to state a reasonable objection to the argument, even if you think that it is sound. Sometimes, I will ask you to describe how the author might respond to the criticism you present in (d).

Sample Texts for EEE

1. Philosophers who accept the referential theory of meaning say that the meaning of a word is the thing it refers to. But that's just silly. The word 'the' has a meaning–it's not just a meaningless sound. But just try pointing at the thing that it refers to! Obviously, 'the' doesn't refer to anything. Those referentialists need to learn a little common sense.

2. When George uttered the sentence 'Pegasus does not exist', he used the name 'Pegasus' to refer to Pegasus. (What else would he be referring to? *Bill Clinton*, maybe?) But if he referred to Pegasus, then there must be a Pegasus. So Pegasus must exist.

3. Anyone who puts aside his prejudices and just thinks for a minute will realize that there are nonexistent objects. Look, obviously Homer Simpson, Santa Claus, and Huckleberry Finn are things don't exist. So, there are things that don't exist, and so there are nonexistent objects. Yes, Virginia, there is a Santa Claus, only he doesn't exist.

4. If meanings are ideas, then all we ever talk about are our own ideas. How stupid is that?