CHAPTER SEVEN
ANALOGICAL ARGUMENTS

- Identifying analogical arguments
- Logical analogies
- Evaluating analogical arguments

IDENTIFYING ANALOGICAL ARGUMENTS

- Analogical arguments are arguments based on **comparison.**
- The standard form of analogical arguments is:

(1) X1s have features F1, F2, F3,…, and feature Fc.

(2) X2s also have features F1, F2, F3,...

Therefore,

(3) X2s probably have Fc.

- Analogical arguments have thus four parts:
    1) X1s --the analogues
    2) X2s --the primary subjects
    3) F1, F2, F3... –the similarities
    4) Fc—the conclusory feature

EXAMPLE

(1) Some existing fish have skin covered with close-set bifurcate dermal spinules and caudal fin rays that bifurcate, and they are frogfish.

(2) The fossilized fish has skin covered with close-set bifurcate dermal spinules and caudal fin rays that bifurcate.

Therefore,

(3) The fossilized fish is probably a frogfish.

ILLUSTRATIVE ANALOGIES

- Illustrative analogies are comparisons made to help people understand something.
- They differ from analogical arguments because they are not used for persuasion.
- Illustrative analogies thus lack a conclusory feature.

USES OF ANALOGIES

Analogies have several uses; amongst them:

- When people can't or shouldn't observe something, for ethical reasons
- When people can't observe something, because of technical or physical impossibilities
- To speculate about what could be the case in one place based on information about what has happened in another place
- To argue that two things should be treated in the same way
- To classify things

LOGICAL ANALOGIES

- A LOGICAL ANALOGY IS AN ANALOGICAL ARGUMENT THAT **COMPARES TWO ARGUMENTS.**

- A LOGICAL ANALOGY IS USED EVERY TIME WE CHECK FOR THE PROPER FORM OF AN ARGUMENT.

EXAMPLE (CONTINUES IN NEXT SLIDE):

ARGUMENT 1

(1) ALL ROSES ARE PLANTS

(2) ALL ROSES HAVE THORNS

THEREFORE,

(3) ALL PLANTS HAVE THORNS

ARGUMENT 2

(1) ALL GERMANS ARE AMERICANS

(2) ALL GERMANS HAVE LARGE FEET

THEREFORE,

(3) ALL AMERICANS HAVE LARGE FEET

LOGICAL ANALOGIES: AN EXAMPLE

From a comparison of arguments 1 and 2, the following analogical argument argument can be constructed:

(1) Argument 1 has form M and fails the proper form test

(2) Argument 2 has form M

Therefore,

(1) Argument 2 fails the proper form test

REFUTATION BY LOGICAL ANALOGY

- Logical analogies can also be used to show that **an argument has a flaw.**

<u>The strategy</u>:
Suppose that you want to show that there is a flaw in argument A.
Then you will do two things:

- You will construct an argument that is clearly **a bad argument**, and that is **relevantly similar to argument A**. Call it argument B.
- You will then construct another argument that says that **since B is a bad argument, A must be a bad argument as well.** Call this argument C.

Argument C will have the following form:

(1) Argument B has features F1, F2, F3…, and is a bad argument.
(2) Argument A has features F1, F2, F3...
Therefore,
(3) Argument A is a bad argument

REFUTATION BY LOGICAL ANALOGY: AN EXAMPLE

ARGUMENT A (MARTIN 1993):

(1) BEING ATTRACTED TO A MEMBER OF THE SAME SEX IS NOT NATURAL.

THEREFORE,

(2) BEING ATTRACTED TO A MEMBER OF THE SAME SEX IS WRONG.

ARGUMENT B:

(1) FLYING IN AN AIRPLANE IS NOT NATURAL.

THEREFORE,

(2) FLYING IN AN AIRPLANE IS WRONG.

ARGUMENT C (THE LOGICAL ANALOGY):

(1) ARGUMENT B HAS FEATURES F1, F2, F3…, AND IS A BAD ARGUMENT.

(2) ARGUMENT A HAS FEATURES F1, F2, F3...

THEREFORE,

(3) ARGUMENT A IS A BAD ARGUMENT.

THE TRUE PREMISES TEST FOR ANALOGICAL ARGUMENTS

- Analogies often use **imaginary cases**.
- Example: Judith Jarvis Thomson's argument in defense of abortion (p. 255).

(1) In the case of the famous violinist, Hadia's right to choose what happens to her body conflicts with Victor's right to life, and it wouldn't be wrong for Hadia to cause Victor to die.

(2) In the case of abortion, a woman's right to choose what happens to her body conflicts with the fetus's right to life.

Therefore,

(3) In the case of abortion, it is not wrong for a woman to cause the fetus to die.

- **Are premises based on imaginary cases always false?**

DIGRESSION: THE EPISTEMIC VALUE OF IMAGINATION

- It is at least controversial that imaginary cases do not amount to genuine knowledge.

- Although there are cases whether imagination is not a reliable guide to knowledge, there are also many cases where it is.

  Example of the former: Meeting your twin

  Example of the latter: What color is the snow in Miami?

THE TRUE PREMISES TEST FOR ANALOGICAL ARGUMENTS

- When is a premise based on an imaginary case true?

- Answer: An imaginary premise can be regarded as true when people in the **audience** shares the author of the argument's view.

- The moral: Imaginary premises are **not automatically false premises.**
- They can be used in arguments in order to motivate the audience's intuitions on the subject.

- Hence: An argument can **use imaginary premises and still pass the true premises test.**

THE PROPER FORM TEST FOR ANALOGICAL ARGUMENTS

THERE ARE TWO CONDITIONS FOR AN ANALOGICAL ARGUMENT TO PASS THE PROPER FORM TEST:

1) THE ARGUMENT CAN BE PUT IN THE **STANDARD FORM** OF AN ANALOGICAL ARGUMENT
   - IF ANY OF THE FOUR PARTS IS MISSING, THE ARGUMENT FAILS THE TEST.

2) THE ARGUMENT HAS **MANY IMPORTANT RELEVANT SIMILARITIES**, AND **FEW IMPORTANT RELEVANT DISSIMILARITIES**
   - IF SIMILARITIES BETWEEN THE PRIMARY SUBJECT AND THE ANALOGUE ARE NOT RELEVANT, OR IF THERE ARE RELEVANT DISSIMILARITIES AMONG THEM, THE ARGUMENT FAILS THE TEST.

RELEVANCE IN SIMILARITIES AND DISSIMILARITIES

- A feature F1, F2, F3…is a **relevant similarity** when the fact that the X1 and X2 share this feature provides some evidence that X2 has the conclusory feature Fc.
  - If it doesn't provide such evidence, the similarity is irrelevant.

- A feature F is a **relevant dissimilarity** when the fact that X1 and X2 don't share the feature provides some evidence that X2 doesn't have the conclusory feature Fc.
  - If it doesn't provide such evidence, the dissimilarity is irrelevant.

- Since **relevance is a matter of degree**, analogical arguments can be **weaker or stronger** to different degrees.
  - The more relevant the similarities are, the stronger the analogy.

RESPONDING TO ANALOGICAL ARGUMENTS

There are three possible ways to respond to an analogical argument:

1) Agree that X1 and X2 are relevantly similar, and agree that both have Fc
   - It is morally permissible for Hadia to unplug herself, and it is morally permissible for the woman to have an abortion

2) Agree that X1 and X2 are relevantly similar, and deny that either has Fc
   - It i not morally permissible for Hadia to unplug herself, and it is not morally permissible for the woman to have an abortion

3) Disagree that X1 and X2 are relevantly similar, because:
   a) The similarities are not relevant
   - Being plugged to the violinist and being pregnant are only superficially similar (x is connected to y)

   b) There is a relevant dissimilarity
   - Being plugged to the violinist is unlike being pregnant; the fetus shares the mother's DNA.