ILLUSTRATIVE ANALOGIES

Illustrative analogies are not arguments for any conclusion. Their sole purpose is to use a familiar thing as an analogy to help understand an unfamiliar concept or theory. What an illustrative analogy claims (but does not argue) is that the unfamiliar thing (say, Freud’s theory of Neuroses) is similar in important respects to the familiar (a steam boiler) such that the latter provides a framework to understand the former. But illustrative analogies are not used to endorse the unfamiliar thing—I can disagree completely with Freud’s theory, but still use the steam boiler analogy to make it clear what I am agreeing with.

ARGUMENTS BY ANALOGY

An illustrative analogy can be used as part of an argument by analogy, if one then goes on to draw a conclusion as a result of the comparison. For example, if I went on to say “and just as steam boilers are archaic and outmoded, so is Freud’s theory of Neuroses,” that would be an argument by analogy (albeit a fallacious one—it commits the fallacy of illustrative deduction [see p.335]). That is, illustrative analogies are just analogies, whereas arguments by analogy are arguments that include analogies. Illustrative analogies can look like arguments by analogy, if the analogy is between an unfamiliar thing and a familiar thing that is very unappealing. But by themselves they are just comparisons.

Typically, though, the kinds of analogies used in arguments by analogy are different from illustrative analogies, because usually arguments by analogy want us to draw conclusions about familiar things, and do so by pointing out that we hold similar views about other things. Thus, in arguments by analogy we usually already understand both things being compared, rather than just one. There are two kinds of argument by analogy, because there are two basic kinds of argument, deductive and inductive.

DEDUCTIVE ARGUMENT BY ANALOGY

General Form:

Premise 1 (ANALOGY) controversial case A is relevantly like less controversial case B
Premise 1a (SIMILARITY) the relevant similarity is that both A and B share feature y
Premise 2 (CLAIM) “you think x about B”
Premise 2a (PRINCIPLE) x is true of all cases that have feature y
Conclusion: Therefore, you should think x about case A

Often premises 1a and 2a are not explicitly stated, but if one is discussing an analogy, one should always try to work out what the relevant similarity is meant to be, and the underlying principle that is supposed to be true of both cases (and all cases relevantly similar).

For example, the argument from p. 328 opposing raising animals for food:

We would think it wrong for creatures from outer space, vastly more intelligent than humans, to cause pain to humans and eat them for snacks. So, analogously, it is wrong for us humans to cause pain to non-human animals and to eat them, simply because we are more intelligent than them.

This can be broken down into the general form as follows:

ANALOGY: Humans harming and eating animals is like super-intelligent space aliens harming and eating humans, because...
SIMILARITY: these are both cases where one type of being justifies harming and eating another type on the basis of superior intelligence.
CLAIM: You believe that it would be wrong for aliens to eat us despite their superior intelligence, because...
PRINCIPLE: superior intelligence is never a justification for harming or eating another being. Therefore:
CONCLUSION: You should accept that it is wrong for humans to harm and eat non-human animals.
How to Criticize Deductive Arguments by Analogy:
As we all know, the way to attack arguments is to attack the PREMISES. Accordingly, the ways to criticize deductive arguments by analogy can be broken down premise by premise.

1. **Rejecting the Analogy** (i.e., saying “A is not relevantly like B”)
   WARNING: One must be careful in taking this approach that one does not commit the fallacy of analogical literalism (see p. 343), that is, just pointing to any difference between A and B, not the similarity in premise 1a. Of course there are differences between the two cases, but most are irrelevant. So if one said “animals are different from humans—humans are much less hairy and they walk on two legs” this would be committing the fallacy. Another mistake would be to point to a supposed difference between A and B that is controversial without defending it—e.g., saying “humans have souls but animals do not.”

The correct way to reject the analogy can take two forms.

a) **Denying 1a** (i.e. saying that one of the cases does not have feature y) and explaining why that means that we can think x about one but not about the other.
   An example of that here would be to say that humans do not justify harming or eating animals on the basis of superior intelligence. Then the burden of proof is on the person saying this to explain the real basis according to which humans justify their treatment of animals.

b) **Agreeing with 1a, but pointing out that there are further differences between A and B that mean that we can think x about B but not about A**
   A good attempt here would be to say that while humans justify eating animals by superior intelligence, there is a minimal threshold of intelligence that makes it wrong for anyone to eat a being (say, the amount of intelligence necessary for language or a concept of self) which humans have but animals lack. That means that it is wrong to eat humans even if you are more intelligent than them, but not wrong to eat animals, because they fall below this threshold. If you take this particular approach, a very powerful tool is to re-cast the uncontroversial case (B) so that it shares the feature that you have pointed out exists in the controversial case, and then showing that we no longer think x about it once this change is made. In this case, you would have Space Aliens eating, instead of humans capable of language, some lesser beings who lack that capacity, and you would assert that now we would think it okay. (The one problem with this approach to the Space Aliens case is that we don’t in fact think it would be okay for Space Aliens to eat humans [such as babies or the severely retarded] who can’t use language. That might suggest that one should take a different approach for this particular argument.)

2. **Rejecting the Principle**
   There are two ways to do this:
   a) **Denying the claim and the principle** (i.e., premises 2 and 2a)
      For example, if I said “I do not think it would be wrong for super-intelligent aliens to chow down on humans” this would mean that I can deny that it is wrong to eat animals. However, in a good argument by analogy the claim will be one that most people accept, so if one rejects it, one must offer good reasons.

b) **Accepting the claim (2), but denying that it implies the principle (2a)**
   In this case one might say “yes, it would be wrong to eat humans, but not because superior intelligence doesn’t justify eating other beings.” To take this approach, however, one must explain why the particular claim (wrong for more intelligent aliens to eat humans) is not evidence for the general principle (wrong for any being to justify eating another on the basis of superior intelligence). Usually to do this one must point to a relevant difference between A and B, which takes us back to the first strategy, Rejecting the Analogy.
Inductive Argument by Analogy

Unlike deductive arguments, where if the general principle is right and cases A and B are both instances to which the principle applies, the conclusion follows automatically, in inductive arguments, the conclusion could always be false.

General Form:
Premise 1 (ANALOGY)   Case A is relevantly like case B (and C and D... etc.)
Premise 2 (CLAIM)   Case B (C, D, etc.) has feature f
Conclusion:   Therefore, case A will have feature f

Differences Between Deductive and Inductive Arguments by Analogy:
The main difference between the two types of argument is that an inductive argument can vary in strength between very weak and very strong (i.e., from having practically no reason to believe the conclusion to very good reason to believe it), and what determines the strength is (a) how similar case A is to the previous cases and (b) how many cases there have been in the past. If case A is identical to cases B, C, D, etc., then the argument is strongest. However, in a Deductive argument, if case A and B were identical, then there would be no point to making the argument, because the point of deductive analogy arguments is to make you change your mind (or realize what you really believe) about a case by comparing it with a different (although relevantly similar) case. (What would be the point of comparing humans eating animals to humans eating animals?)

However, otherwise, the two types of argument are fairly similar, in that you can often convert one into the other. Perhaps the best way to tell the difference is to think about where the evidence comes from for the general principle. For example, consider this inductive argument:
Every Oldsmobile Cutlass I’ve ever owned has had radiator problems, so this one I’m considering buying will have them as well.

If we were to try to state a general principle involved here it would be “All Oldsmobile Cutlasses have radiator problems.” Contrast this with the principle in the Thomson case, “Nobody has a right to use your body against your will, even if doing so is necessary to keep them alive.” The evidence for the principle about Cutlasses comes from experience, while the evidence for the rights principle is our basic beliefs about rights, it’s not dependent on evidence. I could disprove the Cutlass principle by showing plenty of cases of reliable Cutlasses, but there’s no real evidence that counts against the rights principle.

Summary of Fallacies to do with Analogies

Faulty Analogy
This is simply a failed analogy. That is, where the two things being compared are obviously relevantly different. For example, one of Rush Limbaugh’s favorite stunts when he appears in front of a like-minded audience is to put a condom over his microphone and say “There! Now we’re going to practice ‘safe talk!’” His point is to suggest that, just as a condom over a mike will not prevent profanity being heard, so condoms do not make sex ‘safe’. But of course, condoms are not designed to stop sound but they can significantly reduce the chances of pregnancy or transmission of disease.

Illustrative Deduction
This fallacy is committed when a conclusion is drawn from an illustrative analogy. This is a fallacy because the point of an illustrative analogy is to help us understand the way something works, not to argue for any general principles. That is, in an argument by analogy, there is an implied principle that applies to the two cases, but in an illustrative analogy there is no principle, only a comparison. So, to use the Freudian neuroses/steam boiler example: the point of the analogy is not to claim that there are rules that apply to both beyond the similarities already stated, so if I were to argue “steam boilers can rust, therefore Freud’s theory will ultimately decay” I would be committing the fallacy.

Analogical Literalism
Unlike the previous two, this fallacy is not committed by the person giving the analogy, it is committed by a person who criticizes the analogy by pointing to just any difference between the two things being compared. It can be committed against an illustrative analogy ("neuroses can’t rust, so that analogy sucks!") or an argument by analogy ("fetuses can’t play violins, so that argument fails!").