

# EVALUATING ARGUMENTS BY ANALOGY

## EVALUATION CRITERIA

Arguments by analogy (ABA), like all inductive arguments, only establish the probability of their conclusion. However, some ABAs are stronger (more convincing) than others.

Here are 5 criteria we can use to evaluate ABA:

1. How many conceivable instances is the inference based on?
2. How diverse are the instances?
3. How many relevant similarities are shared among the things said to be analogous?
4. Are there significant differences between the premises and conclusion, which undermine or weaken the inference?
5. Weigh the inference against the evidence provided by the premises.

## EXAMPLE

Lets analyze an argument using the 5 criteria:

All 10 baristas at Linnea's are usually friendly and helpful,

A new barista has recently been hired

Therefore, the new barista will probably be friendly and helpful

1. How many conceivable instances is the inference based on?

The first premise claims that all ten baristas are friendly and helpful, so it is based on ten instances. There is no number of instances that correlates to a stronger or weaker argument because the inference always depends on the context of the premises. However, because ten happens to be the total number of baristas, this strengthens my argument. If the inference was based on only knowing one of the ten baristas the argument would be much weaker (less convincing).

2. How diverse are the instances?

If I only go to Linnea's at noon, then the instances are not varied. It's quite possible that a happy barista working at noon may not be so enthusiastic while working at 6am or 11pm. However, if I have encountered baristas at all hours of the day then the instances are diverse.

3. How many relevant similarities are shared among the things said to be analogous?

It may be just one, that they all work at Linnea's, or it could be more. For example, all the baristas choose their hours, get paid the same, etc.

Irrelevant shared characteristics or properties would be if all the baristas had brown hair, or each new a foreign language. These common traits do not strengthen the argument.

4. Are there significant differences between the premises and conclusion, which undermine or weaken the inference?

For example, if the new barista is getting paid significantly less or working reluctantly to pay off debts while all the other baristas work for extra income, these types of differences make the conclusion less probable. Intuitively, these differences cause one to become skeptical or even doubt the conclusion.

5. Weigh the inference against the evidence provided by the premises.

How reasonable is it to assume the conclusion based on the evidence provided by the premises?

Reasonability depends on the relative scope of the inference.

As the argument stands, is it reasonable?

Yes, because the inference is clearly supported by the premises.

However, what if the conclusion claimed that not only will the new barista be happy and helpful, but all future baristas to ever be hired will share those traits.

Is the argument still reasonable?

No, because the inference is not obviously supported by the premises.

An ABA is *stronger* if the scope of the premises is similar to the scope of the conclusion

An ABA is *weaker* if the scope of the conclusion is broader than the scope of the premises