

❖ *Further Topics in Informal Logic* ❖

1.11. Unstated Premises

We've seen already arguments where the speaker clearly seems to intend a premise which is left unstated. The following was an early example.

If you want to pass logic, you should study. Do you want to pass logic?
Alright, then: clearly, you should study.

We rejected the following attempt to state the argument in standard form, since it treats a question as a premise.

☠ Not the Standard Form of This Argument ☠

1. If you want to pass logic, you should study.
- 2. Do you want to pass logic?**

∴ You should study

Instead, we took that question as a rhetorical question, stated only to point to its obvious answer – that yes, *you do indeed want to pass logic*.

1. If you want to pass logic, you should study.
- 2B. [You want to pass logic.]**

∴ You should study

While identifying the unstated premise here seems obvious, perhaps even trivial, we now consider which factors guide us in identifying unstated premises so effortlessly.

1. Validity. The previous argument, in its final form, illustrates one obvious contribution which a missing premise should make in an argument. For note that as stated, the argument is **valid**.

VALID

1. If you want to pass logic, you should study.

2B. [You want to pass logic.]

∴ You should study

If the premises are true – if it's true that *you want to pass logic*, and that *you should study if you want to pass logic* – the conclusion must be true as well: in that case you should indeed study.

Whereas if it's not given that you want to pass logic – if, in the extreme, you even wanted to fail – then it would not at all follow that you should study.

Situation A. It's true that you should study if you want to pass Logic. But in fact you don't want to pass Logic, and you shouldn't, in that case, study.

Such a scenario would be a validity counterexample for the argument, showing that from Premise (1) alone the conclusion *doesn't* follow.

INVALID

1. If you want to pass logic, you should study.

∴ You should study

(If this argument, *as stated*, still seems valid, that's probably because the assumption that you want to pass is so natural that it's difficult to suppress when reading the argument.)

Whereas for the argument with Premise 2B added, Situation A is no longer a validity counterexample: for in Situation A, Premise 2B is false.

Situation A:

TRUE

1. If you want to pass logic, you should study.

FALSE

2B. [You want to pass logic.]

FALSE

∴ You should study

So one obvious reason why we take a sentence to be intended, but left unspoken, is because adding it to the stated argument renders that argument valid.

1. Validity: The added premise(s) should make the argument valid.

(Note that, consistent with this principle, if the argument as stated is already valid, we don't take it to have any intended but unspoken premises.)

Likewise the following argument, as it stands, is invalid.

“Neko's not a dog unless Jack's a dog too. But all dogs bark. So Neko must not be a dog.”

1. Neko's not a dog unless Jack's a dog too.
2. All dogs bark.

∴ Neko [isn't] a dog.

For imagine a scenario where all dogs bark, and Neko and Jack are two barking dogs. Call this “Situation B”.

Situation B: All dogs bark, and Neko and Jack are both barking dogs.

In Situation B both premises of the argument are true, but the conclusion is false – a **validity counterexample**, establishing that the **argument is invalid**.

Situation B:

TRUE	Neko's not a dog unless Jack's a dog too.
TRUE	2. All dogs bark.
<hr/>	
FALSE	∴ Neko [isn't] a dog

Now in fact it seems clear that the author of the argument is taking for granted – i.e., assuming but leaving unspoken – that **Jack doesn't bark**.

1. Neko's not a dog unless Jack's a dog too.
 2. All dogs bark.
 - [3. Jack doesn't bark.]**
-

∴ Neko [isn't] a dog.

For if Jack doesn't bark, and all dogs do, then Jack isn't a dog; so by Premise (1) Neko's not a dog either.

And note that with this additional premise, Situation B doesn't qualify as a validity counterexample for the (fully stated) argument.

Situation B: All dogs bark, and Neko and Jack are both barking dogs.

Situation B:

- | | |
|--------------|--|
| TRUE | 1. Neko's not a dog unless Jack's a dog too. |
| TRUE | 2. All dogs bark. |
| FALSE | [3. Jack doesn't bark.] |
| | <hr/> |
| FALSE | ∴ Neko [isn't] a dog |

By contrast, it strikes us as wrong to add the following premise.

1. Neko's not a dog unless Jack's a dog too.
 2. All dogs bark.
 - [3B. Neko and Jack aren't the same color.]**
-

∴ Neko [isn't] a dog.

And the problem is that adding this premise doesn't render the original argument valid.

2. Simplicity. Note that the following added premises don't seem like the ones the author intended but left unspoken.

1. Neko's not a dog unless Jack's a dog too.

2. All dogs bark.

[3C. No Siamese cats are dogs.

4. Jack is a Siamese cat.]

∴ Neko [isn't] a dog.

And that is so even though Premises (1) through (4) together do validly entail the conclusion.

Now granted, if Premises (3C) and (4) were common knowledge, it might indeed be reasonable to simply state Premises (1) and (2) along with the conclusion. But where these sentences are not taken as common knowledge, the person making the argument would not naturally count on his audience to fill in the gaps in the argument with (3C) and (4). We assume unspoken premises are ones that are fairly obvious in light of what *is* said in the argument, and that supplying missing premises will thus be just closing gaps among the spoken premises.

That will involve only the bare minimum premises necessary to close these gaps. But clearly, adding Premises 3C and 4 to this last argument is *not* adding the bare minimum necessary to close the gaps and render the argument valid. For as we saw, adding the single premise "Jack doesn't bark" is sufficient to yield a valid argument.

Thus beyond considerations of validity, we seem to be guided as well by a principle of **simplicity**: add the simplest further premise(s) needed to render the argument valid.

2. Simplicity: The added premise(s) should be as simple as possible (that is: the simplest set of premises which renders the argument valid).

3. No Useless Sentences (Again). Finally, consider this alternative suggestion for an unstated premise.

1. Neko's not a dog unless Jack's a dog too.

2. All dogs bark.

[3D. Jack isn't a dog]

∴ Neko [isn't] a dog.

Note that this argument is valid: if Neko's being a dog would mean that Jack's a dog, but in fact Jack isn't a dog, then it follows that Neko isn't a dog. And indeed while Situation B served as a validity counterexample for the original argument (without added premises), it's not a validity counterexample when (3D) is added.

Situation B: All dogs bark, and Neko and Jack are both barking dogs.

In situation B:

TRUE

1. Neko's not a dog unless Jack's a dog too.

TRUE

2. All dogs bark.

FALSE

[3D. Jack isn't a dog.]

FALSE

∴ Neko [isn't] a dog.

Still, (3D) doesn't seem to be what the author was leaving unstated in this argument. And the drawback to (3D) – compared to (3), “Jack doesn't bark,” – is that (3D) and Premise (1) together validly entail the conclusion. Now it's true that validly entailing the conclusion is the first, and most important, requirement for unstated premises. But here (3D), when combined with Premise (1), **makes Premise (2) completely useless**. Even if we throw out Premise (2), we still have a valid argument.

VALID

1. Neko's not a dog unless Jack's a dog too.

[3D. Jack isn't a dog]

∴ Neko [isn't] a dog.

But it seems very odd that the author would take the trouble to state Premise (2) explicitly if it plays no role in validly yielding the conclusion. For in general we suppose people don't go around uttering or writing sentences for no reason.

Here we return to a principle invoked earlier in argument mapping: the **No Useless Sentences Principle**. In its current application this principle bars us from adding premises that would render any *existing* premise useless for purposes of validly reaching the conclusion.¹

3. No Useless Sentences: No sentences in the argument should be useless to reaching the conclusion validly.

Together these three principles – Validity, Simplicity, and No Useless Sentences – capture why certain further premises seem intuitively to be the one(s) left unspoken but taken for granted in an argument, and why various other possible premises don't.

4. Conclusion: Description and Evaluation Revisited. Recall that we originally approached (informal) logic in two steps: **description** (culminating in argument mapping and its guiding principles) and then **evaluation** (where validity and validity counterexamples are central). But if we include restoring unstated premises as part of argument mapping, then the line between description and evaluation seems somewhat artificial. For on the one hand, in order to get clear what a validity counterexample needs to be for a particular argument, we have as an essential preliminary first put the argument into standard form or an argument map. But on the other hand, we have seen here that our primary consideration in adding unstated premises is validity – the central topic of argument evaluation. The tasks of argument description and argument evaluation may not, then, be so cleanly separated after all.

¹ The principle applies only to the *existing* (spoken) premises, because any added premise which is useless to validly reaching the conclusion would already be blocked by the principle of simplicity.

Summary: Principles for Adding Unstated Premises

- **1. Validity:** The added premise(s) should make the argument valid
- **2. Simplicity:** The added premise(s) should be as simple as possible (that is: the simplest set of premises which renders the argument valid).
- **3. No Useless Sentences:** No sentences in the argument should be useless to reaching the conclusion validly.