

❖ *Further Topics in Informal Logic* ❖

1.10. 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 – attempting to detect the hidden gears and pulleys involved in producing the intuitive judgments we make about such cases.

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 needn't, in that case, study.

Such a scenario would be a validity counterexample for the original (one-premise) 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.)

As a second example: note that the following argument is invalid as it stands.

“If Suki's ticket is valid, then so is mine. But my ticket lacks the seal of the lottery bureau. So neither Suki's ticket nor mine are valid.”

1. If Suki's ticket is valid, then so is mine.
2. (But) my ticket lacks the seal of the lottery bureau.

∴ Neither Suki's ticket nor mine are valid.

For imagine a scenario where both tickets are valid despite lacking the seal. Call this “Situation B”.

Situation B: It's true that if Suki's ticket is valid then mine is as well. And in fact both Suki's ticket and mine are valid, despite lacking the seal of the lottery bureau.

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

1. If Suki's ticket is valid then so is mine.

TRUE

2. My ticket lacks the seal of the lottery bureau.

FALSE

∴ Neither Suki's ticket nor mine are valid.

Now in fact it seems clear that the author of the argument is taking for granted – assuming, but leaving unspoken – that **no ticket is valid without the seal of the lottery bureau.**

1. If Suki's ticket is valid then so is mine.
 2. (But) my ticket lacks the seal of the lottery bureau.
 - [3. No ticket is valid without the seal of the lottery bureau.]**
-

∴ Neither Suki's ticket nor mine are valid.

For if my ticket is invalid for lack of the seal, and Suki's is no more valid than mine, then Suki's isn't valid either.

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

Situation B: Both Suki's ticket and mine are valid, despite lacking the seal of the lottery bureau.

Situation B:

TRUE	1. Suki's ticket is only valid if mine is.
TRUE	2. My ticket lacks the seal of the lottery bureau.
FALSE	[3. No ticket is valid without the seal of the lottery bureau.]
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FALSE	∴ Neither Suki's ticket nor mine are valid.

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

1. If Suki's ticket is valid then so is mine.
 2. My ticket lacks the seal of the lottery bureau.
 - [3B. Suki and I bought our tickets on the same day.]**
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∴ Neither Suki's ticket nor mine are valid.

And the problem is that adding this premise doesn't render the original argument **valid**. (Equivalently: adding (3B) doesn't ward off Situation B as a validity counterexample.)

2. Simplicity. In the next case, the added premises don't seem like the ones the author intended but left unspoken.

1. If Suki's ticket is valid then so is mine.
 2. My ticket lacks the seal of the lottery bureau.
 - [3C. Tickets lacking the seal of the lottery bureau are only valid if bought from a specially licensed lottery agent.**
 - 4. Suki and I bought our tickets from Dr. Slim, who's not a specially licensed lottery agent.]**
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∴ Neither Suki's ticket nor mine are valid.

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 earlier, adding the single premise "No ticket is valid without the seal of the lottery bureau" 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. If Suki's ticket is valid then so is mine.
 2. But my ticket lacks the seal of the lottery bureau.
- [3D. My ticket isn't valid.]**

∴ Neither Suki's ticket nor mine are valid.

Note that this argument is **valid**: if Suki's ticket being valid would mean mine was as well, but in fact my ticket isn't valid, then Suki's ticket isn't valid either. 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: Both Suki's ticket and mine are valid, despite lacking the seal of the lottery bureau.

Situation B:

TRUE	1. If Suki's ticket is valid then so is mine.
TRUE	2. My ticket lacks the seal of the lottery bureau.
FALSE	[3D. My ticket isn't valid.]
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FALSE	∴ Neither Suki's ticket nor mine are valid.

Still, (3D) doesn't seem to be what the author was leaving unstated in this argument. The drawback to (3D) – compared to (3), “No ticket is valid without the seal of the lottery bureau,” – is that (3D) and Premise (1) together validly entail the conclusion. That means (3D), when combined with Premise (1), **makes Premise (2) completely useless**. Even if we threw out Premise (2), we would still have a valid argument.¹

VALID

1. If Suki's ticket is valid then so is mine.
- [3D. My ticket isn't valid.]**

∴ Neither Suki's ticket nor mine are valid.

¹ See 4.5.1. Problem D1.

It would be odd for the author to 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.²

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

(Equivalently: with the unstated premise(s) added, every premise should play a role in making the argument valid. That's a result we don't get in that last argument, with Premise 3D; for there Premise 2 could be thrown overboard, but the resulting argument would still be valid.)

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 **evaluation** (where validity and validity counterexamples were central). But if restoring unstated premises is part of argument mapping, then the line between description and evaluation start to blur. For on the one hand, in order to get clear on what's a validity counterexample for a particular argument we have, as an essential preliminary, to first put that argument into standard form or an argument map. But on the other hand we see now that in order to include unstated premises in an argument map, we are guided by (among other factors) validity. If argument structure is needed to assess the argument's validity, but consideration of validity guide us in identifying the correct argument structure, then the tasks of argument description and argument evaluation may not be so cleanly separated after all.

² The principle applies only to the **existing** (spoken) premises, because any added premise 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. (In particular: the added premises shouldn't render any of the original, stated premises unnecessary.)