LRP Week 5-2: Support

1 | How to Be Supportive

Recall the two types of desiderata (things we want) for a good argument map:

Support

In a good argument, the premises **support** the conclusion in that *if* the premises are true, we have good reason to think that the conclusion is true.[a]
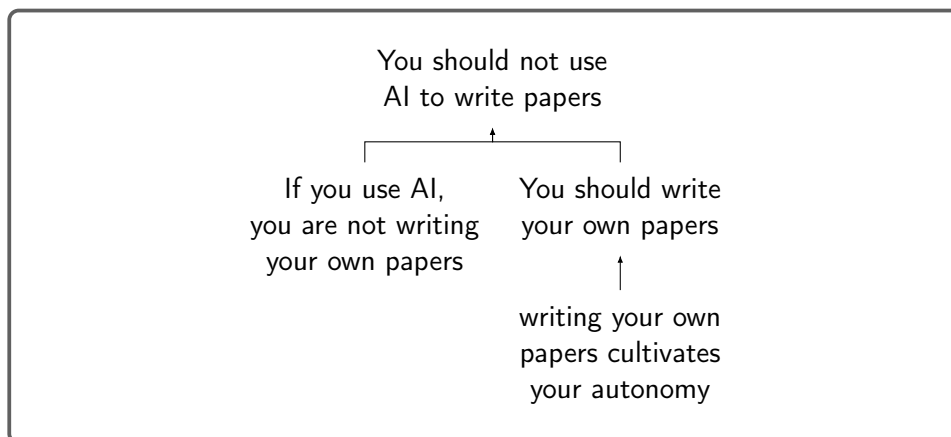
a. **Note**: In a truth-preserving argument, the premises *guarantee* the conclusion. Thus, if the premises are true, we have very good reason to think the conclusion is true (since it *must* be true). So in a truth-preserving argument, the premises *support* the conclusion.

Rules of Argument Mapping

1. **Simple Statements**: each premise should be a simple statement.
   (a) It should be a **statement**: something that can be true or false.
   (b) It should be as **simple** as possible.
2. **Mutual Dependence**: the premises in a one-step argument (or each step of a multi-step argument) should be mutually dependent. That is, they should able to support the conclusion *only* together with all of the other premises.

Suppose we have an argument map that follows the rules of simple statements and of mutual dependence. Does that mean the argument is good? Not quite. Rather, it means that we are in a good position to evaluate whether it is good.

Let's for instance analyze an argument from the previous handout.

You should not use
AI to write papers

If you use AI,
you are not writing
your own papers

You should write
your own papers

writing your own
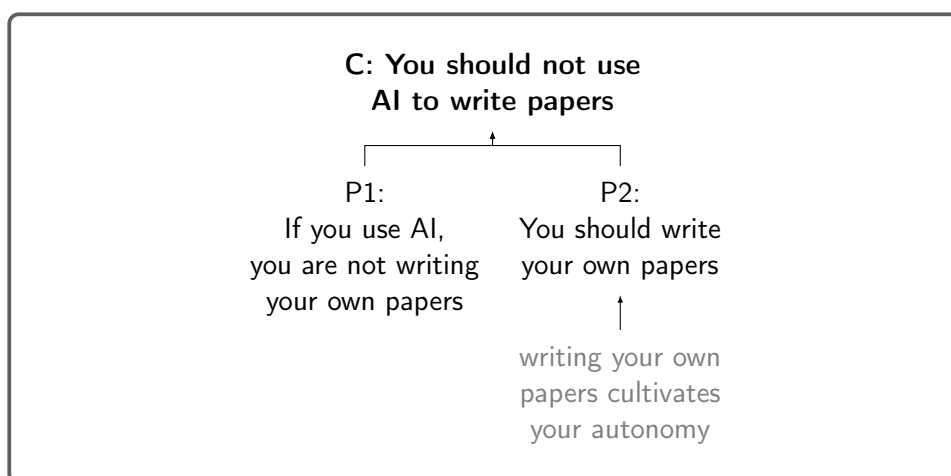papers cultivates
your autonomy

This argument map follows the rules of simple statements and the rule of mutual dependence. So it remains to see if the conclusions at each level are adequately supported by the premises below them.
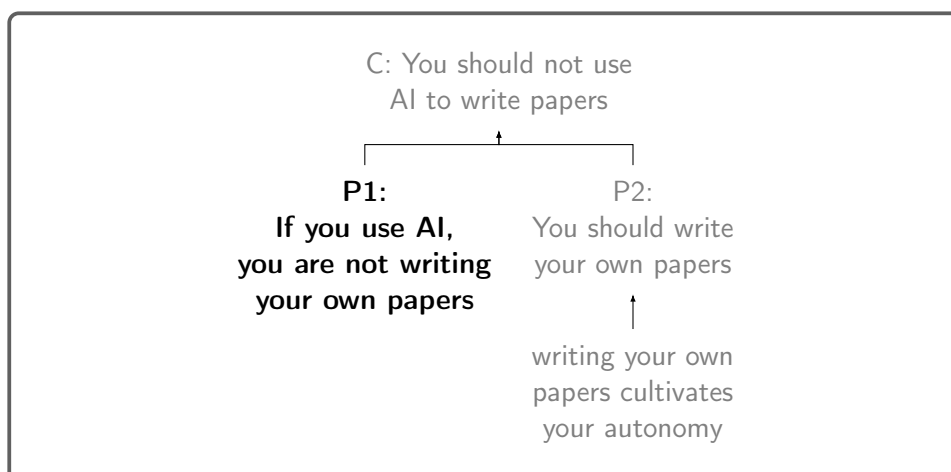
> **Recipe for Evaluating Support**
>
> Here's our recipe. We start at the top level. Then,
> 1. For each statement at the current level, go down a level and see if the premises there support the statement: if their truth would give you good reason to believe the statement. Ignore any further levels.
> 2. If more premises are needed at the lower level, add them. If a conclusion has no premises, you can add premises below it or simply "grant" it.
> 3. Go to the next level down and repeat.

Let's implement it for the argument above. I'll start at the top level (bolded), go one level down, and ignore further levels (greyed out).

C: You should not use AI to write papers

P1:
If you use AI, you are not writing your own papers

P2:
You should write your own papers
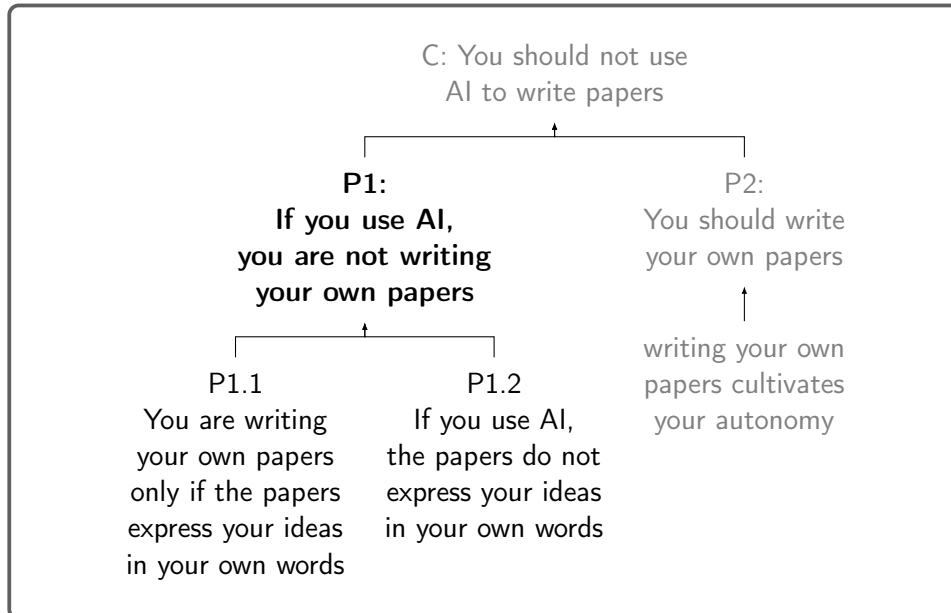
writing your own papers cultivates your autonomy

Do the two premises together give us good reason to believe the conclusion? Use your judgement: but I think they do. So let's move to the next level and consider **P1** and **P2** in turn. Start with **P1**:

C: You should not use AI to write papers

**P1:
If you use AI, you are not writing your own papers**

P2:
You should write your own papers

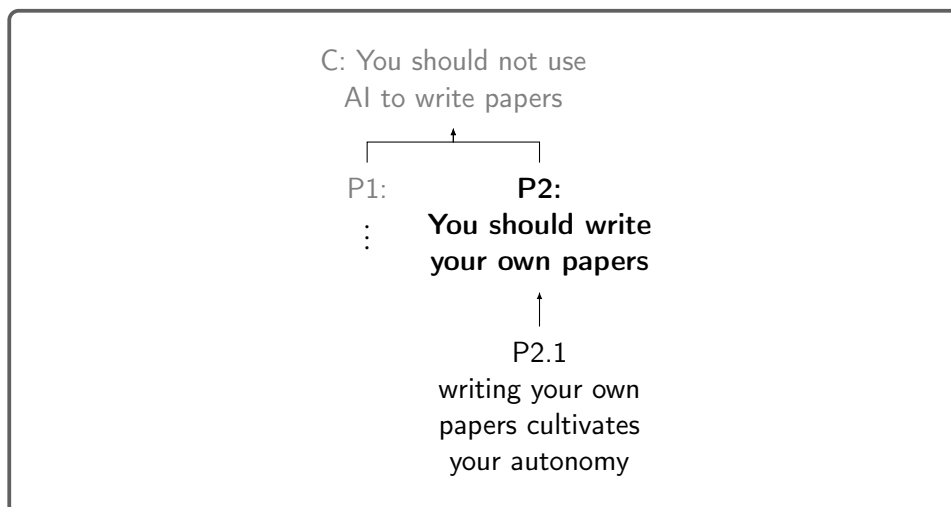writing your own papers cultivates your autonomy

Perhaps you agree with this statement already, and think no further argument is necessary. But suppose we ask: *why* is it that if you use AI, you are not writing your own papers?
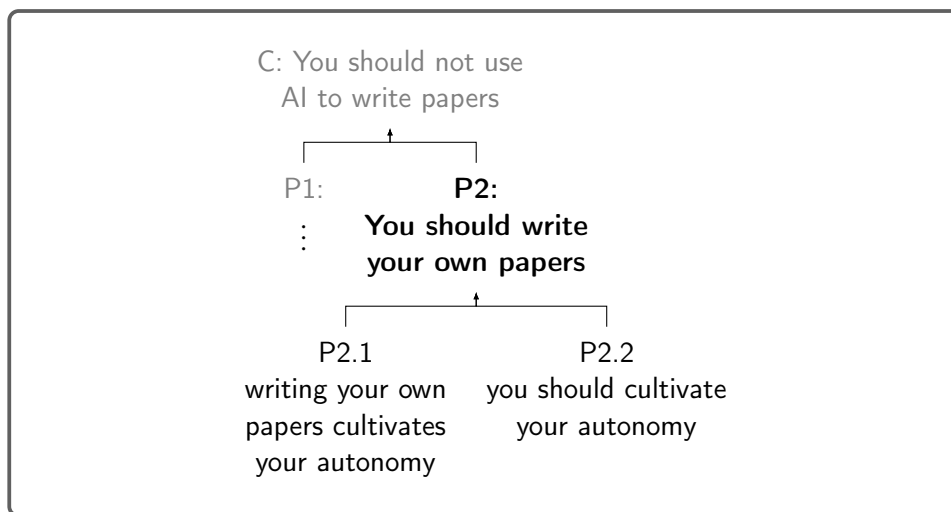
Recall that Aylsworth and Castro argue as follows: you are writing your own papers only if the paper expresses your own ideas and are in your own words. So we could add this argument below P1:
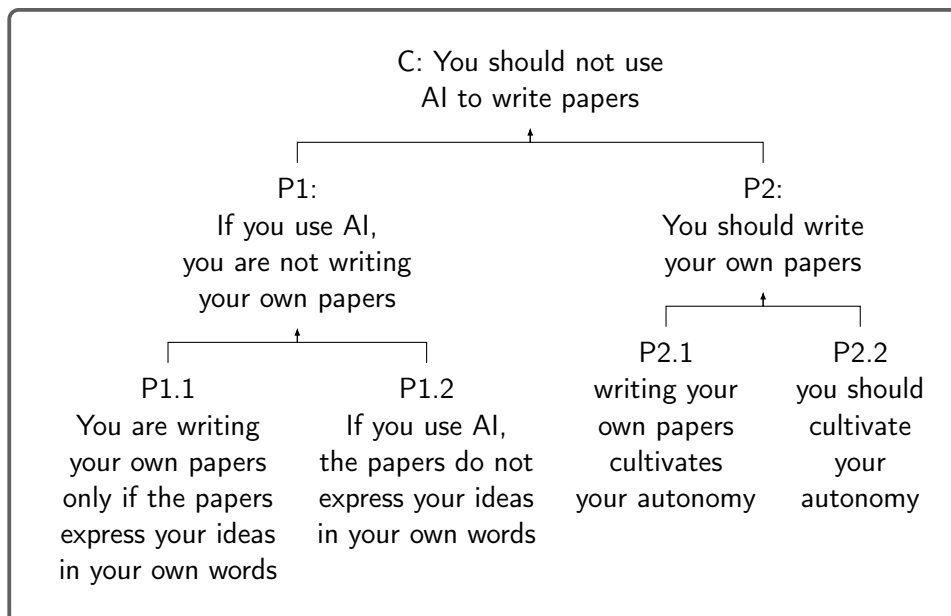
C: You should not use
AI to write papers

P1:
**If you use AI,
you are not writing
your own papers**

P2:
You should write
your own papers

writing your own
papers cultivates
your autonomy

P1.1
You are writing
your own papers
only if the papers
express your ideas
in your own words

P1.2
If you use AI,
the papers do not
express your ideas
in your own words

Let's move now to P2, setting P1 aside for now:

C: You should not use
AI to write papers

P1:
⋮

P2:
**You should write
your own papers**

P2.1
writing your own
papers cultivates
your autonomy

Here, we have a premise, P2.1, that supports P2. But we can ask: *why* does the fact that writing your own papers cultivates your autonomy support the claim that you should write your own papers? It seems we're missing a link in the argument. What's missing? Well, P2 is about something you *should* do, and P2.1 talks about cultivating autonomy, but the link between the two is not entirely obvious. We should add a premise that links the two: the argument makes sense if we suppose that you should cultivate your autonomy.

C: You should not use
AI to write papers

P1:   P2:
  :   **You should write
         your own papers**

P2.1   P2.2
writing your own   you should cultivate
papers cultivates   your autonomy
your autonomy

After doing our steps with P1 and P2, our entire argument map (so far) looks like this:

C: You should not use
AI to write papers

P1:   P2:
If you use AI,   You should write
you are not writing   your own papers
your own papers

P1.1   P1.2   P2.1   P2.2
You are writing   If you use AI, writing your you should
your own papers   the papers do not own papers   cultivate
only if the papers express your ideas cultivates   your
express your ideas in your own words your autonomy autonomy
in your own words

At this point, the next task would be to continue the steps with P1.1, P1.2, P2.1, and P2.2, until we're satisfied with the reasoning for all of the premises at all of the levels. Depending on how thorough we want to be, we could go further and further.[1]

---

1. And more advanced philosophy is often the practice of going *annoyingly far* into these argument maps.

2 | The Varieties of Support

Premises can support their conclusions in different ways. Here are two axes on which premises can differ in how they support their conclusions:

1. The support can be **theoretical** (giving reasons for belief) or **practical** (giving reasons for action).
2. The support can be **deductive** (logical) or **inductive** (empirical).

Support: Theoretical or Practical

To figure out if support is theoretical or practical, ask if the conclusion claims that something is **true**, or whether it says that you should or ought to to **do** something.

Theoretical Support: Deductive or Inductive

To figure out if support for a theoretical conclusion is deductive or inductive, ask: supposing that the premises are true, do I think that the conclusion is **more likely**, or that it the conclusion is **guaranteed** as a matter of logic?

Practical Support: Deductive or Inductive?

To figure out if support for a practical conclusion is deductive or inductive, ask: supposing that the premises are true, do I have **conclusive** reason to do what the conclusion says, or only defeasible, "**other-things-equal**" reason?

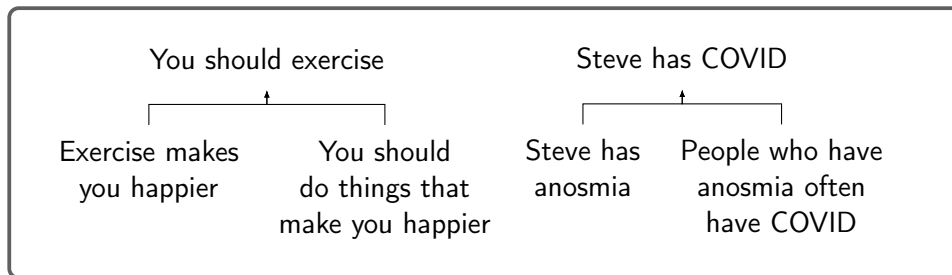Combining all of this, we can create the following table:

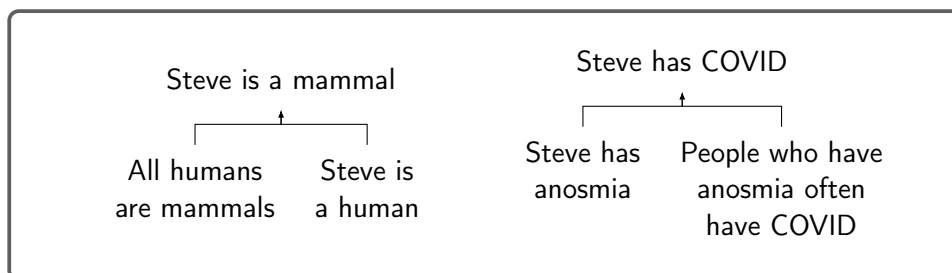**The Varieties of Support**

Assuming that we accept the premises:

	Deductive (Logical)	**Inductive (Empirical)**
Theoretical (what to believe)	guarantees truth of conclusion	makes conclusion more likely to be true
Practical (what to do)	gives conclusive reason for action	gives "other-things-equal" reason for action

---

Our talk of truth-preserving logic machines so far has been in the *deductive* end of things. Now we're zooming out and considering support more generally. In the second half of the class we will be consider *inductive* reasoning more closely.

Exercise: which one is theoretical, and which practical?

You should exercise

Exercise makes you happier   You should do things that make you happier

Steve has COVID

Steve has anosmia   People who have anosmia often have COVID

Below are two arguments giving theoretical support to a conclusion. Which one is deductive (logical), and which one is inductive (empirical)?

Steve is a mammal

All humans are mammals   Steve is a human

Steve has COVID

Steve has anosmia   People who have anosmia often have COVID

Below are two arguments giving practical support to a conclusion. Which one is deductive (logical), and which one is inductive (empirical)?

You should exercise

People who exercise are often happier   You should do things that make you happier

You should not write your papers with chatGPT

Writing your papers with chatGPT is cheating   You should never cheat