

Chapter One: Informal Logic

1. Arguments

Roughly speaking, logic is the study of **arguments**.

But the word “argument” is used to talk about quite different things, and not all of these are relevant to logic. Again speaking roughly, we can distinguish arguments we **have** from arguments we **make**.

An example: Ace and Rex **had** an argument. It went like this.

Ace: You’re an idiot. Chocolate ice cream is way better than strawberry.

Rex: You’re the idiot. Strawberry rules. You’re just too dumb to see that, like you were too dumb to notice that your pants were unzipped during the talent show.

Ace: How dare you bring that up! I never want to speak to you again.

Rex: Fine by me. And I want my skates back.

We could fairly describe this unhappy exchange as ‘Ace and Rex arguing,’ or ‘Ace and Rex having an argument’. This is argument as **dispute**, or **disagreement**.

But we wouldn’t accuse either Ace or Rex of **making** an argument here. Neither is trying to **convince** the other that he’s right, by presenting some **evidence in support** of his view.

Ace *could have* tried to make an argument in defense of his view, like this.

Ace: Chocolate ice cream is better than strawberry ice cream. And here’s why: a recent poll of college graduates found that nearly 50 per cent preferred chocolate ice cream, while only 20 per cent preferred strawberry.

Or like this.

Ace: It's clear that chocolate ice cream is better than strawberry ice cream. After all, my spiritual advisor told me so, and I trust his opinion on everything.

He might not succeed in convincing us in either case. But in each case we at least credit him with **making** an argument (however bad).

Indeed, it's the arguments we *make* that are judged **good** or **bad**, because these sorts of arguments are *for* something. When we *make* an argument, we're trying to **convince** someone that a certain claim is true, by providing some **evidence** in **support** of that claim. And when we make an argument that falls short of that goal – an unconvincing argument – we've made a bad argument.

(By contrast, that first “argument” between Ace and Rex isn't so naturally called good or bad, because a dispute or disagreement isn't really *for* anything.)

Logic studies arguments in this second sense: arguments that someone **makes**, and that can be judged **good** or **bad**.

2. Parts of an Argument.

Already we recognize that an argument has two parts: (i) the claim being argued for, and (ii) the evidence offered in support of that claim.

The claim being argued for is called the **conclusion** of the argument. So in the following argument, the conclusion is that *Rex owes Ace twenty dollars*.

Rex borrowed ten dollars from Ace on Friday. He borrowed another ten dollars from Ace on Saturday. And he hasn't paid any of that money back. So, *Rex owes Ace twenty dollars*.

The other sentences in this argument are intended as the evidence in support of that conclusion. We could call such sentences the *grounds*, or the *evidence*, or the *reasons* for believing the conclusion. Instead we'll use the

traditional, if slightly technical term “**premises**”. So the first three sentences of this argument are the **premises**; and the last is the **conclusion**.

Rex borrowed ten dollars from Ace on Friday.
He borrowed another ten dollars from Ace on Saturday.
And he hasn’t paid any of that money back.

} **Premises**

So, *Rex owes Ace twenty dollars.* **Conclusion**

3. Argument: A Definition

Noticing that both the premises and conclusion of an argument are sentences, we can attempt this preliminary definition.

An **argument** is a string of sentences, intended to convince someone of something.

(Admittedly sometimes – particularly in a logic book – we do build arguments just to study them, without intent to convince. But arguments in their natural environment – ordinary discourse – are made for purposes of convincing. In the same way, we sometimes buy a new car only to fill it with dummies and crash it in a lab. But the real purpose of cars remains to carry people and their possessions.)

Now, to **convince** someone of a certain claim is, roughly, to get them to believe that claim, by way of some reasons for that claim. Convincing involves getting the audience to believe the conclusion, *because of* their believing the premises. And believing a premise or conclusion means: believing that that sentence is *true*.

So we see that premise and conclusion must be sentences of a particular sort: those capable of being true. These are the **declarative sentences**. In our last example, all three premises and the conclusion were declarative sentences. By contrast, **interrogative** sentences (questions) like

What time is it?

and **imperative** sentences (commands) such as

Close the door!

are not capable of being true or false. Not being declarative sentences, they are not fit to serve as a premise or conclusion in an argument.

The following argument might seem an exception to that rule, since it appears to have a non-declarative sentence as its second premise.

If you want to pass logic, you should study.
Do you want to pass logic?

Alright, then: clearly, you should study

But closer examination reveals that the second sentence is not a premise at all. It is rather a question posed only in order to point to its obvious answer – namely that *you want to pass logic*.

And when we replace the question with its obvious answer, the argument fits together very logically.

If you want to pass logic, you should study.
[You want to pass logic.]

Alright, then: clearly, you should study

Here again, all the premises (including unspoken ones) and the conclusion are declarative sentences.

In light of this we tweak the earlier definition a bit, to yield our official definition of “argument”.

An argument is a string of declarative sentences intended to convince someone of something.