# Ethical argumentation

We now have ethical theories. But before we can actually form/justify moral judgments with them, we need to be able to construct arguments. This chapter is all about **ethical argumentation**: determining whether acts are right or wrong. First, we look at some basics of argumentation. Second, we examine how we can combine argumentation with our ethical theories.

# 1 Types of arguments

## 1.1 What is an argument?

An **argument** is a set of statements. One of these statements is the **conclusion**. The other statements are the **premises** of the argument. The premises are assumed to be true. The argument now states that the conclusion is true as well. Let's denote the premises as  $P_1, P_2, \ldots, P_n$  and the conclusion as C. In general, an argument now takes the form of

$$P_1, P_2, \dots, P_n$$
, so  $C$ . (1.1)

Arguments can be judged on their effectivity. If the argument is always valid, we have a **logical analysis**. If the argument is sufficiently persuasive to convince the audience, then we have a **rhetoric analysis**.

Let's ask ourselves, when is an argument valid? We have a **valid argument** if the conclusion always must follow from the premises. Examples of valid arguments are

If 
$$p$$
, then  $q$ ,  $p$ , so,  $q$ . (Modus ponens) (1.2)

If 
$$p$$
, then  $q$ , not  $q$ , so, not  $p$ . (Modus tollens) (1.3)

It is clear that, when the two premises are true, the conclusion also must hold.

#### 1.2 Fallacies

An error or deficiency in an argument is called a **fallacy** (or **specious argument**). We can distinguish two types of fallacies: formal fallacies and informal fallacies. First, let's discuss formal fallacies. A **formal fallacy** is only determined by the form/structure of an argument. Any invalid argument is thus a formal fallacy. An example of a formal fallacy in an argument is

If 
$$p$$
, then  $q$ ,  $q$ , so,  $p$ .  $(1.4)$ 

A very powerful method to show the invalidity of an argument is to provide a counterexample. For the above fallacy, the situation 'q, not p' is a counterexample. All the premises hold, but the conclusion does not hold. Thus, the argument can not be valid.

In general, there are two ways to challenge an argument. One option is to show that the argument itself is invalid (as we have just done). The second possibility is showing that a premise is false. If the premises  $P_i$  of an argument don't hold, then the conclusion C isn't necessarily true either.

Now let's examine informal fallacies. An **informal fallacy** is based on considerations of the context/content of the arguments. We will examine a couple of examples now.

• In an attack on the person (Ad Hominem), we try to question (in some negative way) the presenter of the argument, instead of the argument itself. If we can make the presenter of the argument look unconvincing, then the argument will look unconvincing as well.

- We can **confuse law and ethics**. If we do this, we apply reasoning like 'if it isn't illegal, then it must be ethical'. But of course, there is still a big difference between law and ethics.
- In a **straw person** fallacy, we try to misstate the argument of a person. We then conclude that the original argument is bad as well.
- Wishful thinking occurs when we interpret facts according to how we would like them to be, instead of how they actually are.
- We have a **naturalistic fallacy** when we derive normative statements (what people ought to do) from descriptive statements (what people already do). So, we derive 'ought' from 'is'.
- Sometimes, we may use phrases/words that are unclear. This may cause the argument to have more than one meaning (ambiguity) or no distinct meaning at all (vagueness).

Next to this, there are also several fallacies related to risk. We'll examine the most important ones here too.

- In the **sheer size fallacy**, we justify an action X just because it has a smaller risk than a (possibly unrelated) action Y.
- The fallacy of naturalness is similar to the naturalistic fallacy: anything that is unnatural/not normal is said to be wrong. (We derive 'ought not' from 'is not'.)
- In the ostrich's fallacy, one argues that just because there are no detectable risks to an action X, there will be no unacceptable risks either. However, risks can of course always be hidden. (Also remember the precautionary principle.)
- In the **delay fallacy**, we say that is we wait, we will know more about an action X. We can then reduce the risks better. So, we should wait. The error here is that the assumption (that by waiting, you will know more) is virtually always true. So, you will wait indefinitely, while the problem may grow.
- The **technocratic fallacy** states that when a decision X is an engineering issue, engineers should decide whether or not X is dangerous. However, when discussing the 'dangerousness' of X, you often don't only need engineering skills, but also political/social/ethical skills. And engineers don't often have all that.
- In the **fallacy of pricing**, you try to weigh risks against each other by putting a price on everything. But the question is, can you put a price on everything? (What is the price of a human life?)

### 1.3 Non-deductive arguments

Valid arguments are of a **deductive** nature: the conclusion is fully enclosed in the premises. These arguments are thus **monotonic**. However, many arguments in daily practice are **non-deductive arguments** (also known as **non-monotonic arguments**). The premises (if true) now only give a limited support to the conclusion, but they do not guarantee that the conclusion is true. Accepting the conclusion is now solely based on considerations.

A frequently occurring form of non-deductive argumentation is the **inductive argumentation**. On the basis of a limited number of cases, we conclude that a law must hold for all cases. Non-deductive argumentations can never be called 'valid'. Instead, if a non-deductive argumentation makes sense, then we call it a **sound argumentation**.

To find out whether a non-deductive argumentation is sound, we should consider several **assessment questions**. An example of an assessment question is: 'are there sufficient cases to conclude that the law must hold for all cases?' If all the assessment questions can be answered positively, then the argumentation is sound.

# 2 Application of argumentation to ethical theories

#### 2.1 Argumentation by analogy

When applying **argumentation by analogy**, we compare our situation to another analogous situation. If the other situation is morally correct, then our situation must be morally correct as well, and vice versa. For example, is it morally bad to digitally enter someone's computer uninvited? We could say that it is, because it is analogous to entering someone's house uninvited, and that is morally bad too.

There are a few important assessment questions corresponding to this kind of argumentation. Are the two situations comparable? And are the assumptions about the analogous situation true? (That is, is it really morally bad to enter someone's house uninvited?) If these question are answered positively, then we have a sound argumentation. Do note that argumentation by analogy is non-deductive. We can never be entirely certain that the two situations are comparable.

# 2.2 Argumentation in utilitarianism

In utilitarianism, an action is morally acceptable if and only if that action can be reasonably expected to produce the greatest happiness for the greatest number of people. In **utilitarian pleas**, the **means-ends argumentation** is of fundamental importance. The means-ends argumentation states that, if you wish to achieve an end x, you have to carry out action y.

There are several assessment questions concerning the means-ends argumentation. Can we exectute action y? Isn't there a better action than y to reach x? Aren't there any bad side-effects to y? And most importantly, does y indeed realize x? The latter question is related to the **causality argumentation**. The causality argumentation states that a certain consequence q (or x) can be derived from a certain situation/action p (or y).

# 2.3 Argumentation in Kantian reasoning

In the Kantian theory, an action is morally acceptable if and only if it meets the categorical imperative. The argumentation that we can use does depend on which formulation of the categorical imperative we take.

First, let's examine the first formulation: the universality principle. 'Act only on that maxim which you can at the same time will that it should become a universal law.' To defend that an action h is morally acceptable, we now use **reductio ad absurdum** (or **proof from the absurd**). We take the action 'not h' and make a universal law of it. Now we show that this will lead to morally unacceptable situations. Thus, there is a contradiction and h must be morally acceptable.

The just described method often works. But there are some problems attached to it. It can be very hard to find 'not h'. And this is because, in real life, things are virtually never a matter of yes/no and true/false. For example, is the opposite of 'I like you' perhaps 'I'm not that fond of you' or is it 'I really hate you'? There is no obvious answer, because there are simply several degrees of 'liking someone'.

Now let's examine the second formulation: the reciprocity principle. 'Always act as to treat humanity, whether in your own person or in that of any other, in every case as an end, never as means only.' Let's suppose we want to apply this principle to an action. When doing this, we must ask whether the persons effected by the action would agree to the means and the end of the action. If they do, then the action is morally acceptable.

# 2.4 Argumentation in virtue ethics

In virtue ethics, an action is morally acceptable if and only if that action is what a virtuous agent would do in the circumstances. A **virtuous agent/person** is someone who acts virtuously: he exercises the virtues. But how do we decide what a virtuous person is like? To find this out, we can use **characteristic-judgment argumentation**. It states that, if some person X displays certain characteristics  $s_1, \ldots, s_n$ , then an action X is justified for person X.

The characteristic-judgment argumentation has several important assessment questions. Does X really have the characteristics  $s_1, \ldots, s_n$ ? And does having  $s_1, \ldots, s_n$  really mean that action A is justified? Is it true that no more/less characteristics are required to justify A? Only when all these assessment questions can be answered positively, will the characteristic-judgment argumentation be a sound argumentation.