

Basic Argument Forms Keith Burgess-Jackson

Argument forms are skeletons of arguments. They are what is left of an argument after its flesh (content, substance, matter) is removed. In a zoology or anatomy course, you might be expected to identify and distinguish raccoon, skunk, ringtail, opossum, wolverine, coati, and badger skeletons. What makes this task difficult, and what leads some students to fail to accomplish it, is that these species are *similar* as well as subtly *different*. In this course, I expect you to be able to identify and distinguish the following four argument forms, which, as in the case of the real skeletons, are similar as well as subtly different:¹

	Valid	Invalid
Affirming Mode	If p, then q. p. ∴ q. Modus ponens	If p, then q. q. ∴ p. Fallacy of affirming the consequent
Denying Mode	If p, then q. Not q. ∴ Not p. Modus tollens	If p, then q. Not p. ∴ Not q. Fallacy of denying the antecedent

Do you see why each of the valid forms is valid (i.e., truth-preserving)? Do you see why each of the invalid forms is invalid (i.e., not truth-preserving)? For each *invalid* argument form, give an example in which the premises are true and the conclusion false. Is it possible to do this for the *valid* argument forms? Why or why not?²

1. Statements of the form “If p, then q” have two parts. The “if” part—in this case, “p”—is known as the *antecedent* (part that comes before); the “then” part—in this case, “q”—is known as the *consequent* (part that comes after). In the statement “If q, then p,” “q” is the antecedent and “p” the consequent.

2. “∴” means “therefore.” “Modus ponens” is Latin for “affirming mode.” “Modus tollens” is Latin for “denying mode.” These terms were used by philosophers and theologians during the Middle Ages and continue to be used today. I expect you to know the names and what they refer to.