7.8 The Dilemma

The dilemma is a common form of argument in ordinary language. It is, in essence, an argumentative device in which syllogisms on the same topic are combined, sometimes with devastating effect. Each of the constituent syllogisms may be quite ordinary, and therefore the dilemma is not of special importance from a strictly logical point of view. But the premises of the syllogisms so combined are formulated disjunctively, and devised in a way designed to trap the opponent by forcing him to accept one or the other of the disjuncts. Thus the opponent is forced to accept the truth of the conclusion of one or the other of the syllogisms combined. When this is done successfully, the dilemma can prove to be a powerful instrument of persuasion.

We say somewhat loosely that a person is “in” a dilemma (or “impaled on the horns of a dilemma”) when that person must choose between two alternatives, both of which are bad or unpleasant. The dilemma is a form of argument intended to put one’s opponent in just that kind of position. In debate, one uses a dilemma to offer alternative positions to one’s adversary, from which a choice must be made, and then to prove that no matter which choice is made, the adversary is committed to an unacceptable conclusion.

The distinguished physicist Richard Feynman, recounting his experiences in the 1986 investigation of the catastrophic explosion of the Challenger space shuttle, was caustic in his criticism of mismanagement by administrators in the National Aeronautics and Space Administration (NASA). He said:

> Every time we talked to higher level managers, they kept saying they didn’t know anything about the problems below them. . . . Either the group at the top didn’t know, in which case they should have known, or they did know, in which case they were lying to us.7

An attack of this kind is designed to push the adversaries (in this case the NASA administrators) into a corner and there annihilate them. The only explicitly stated premise of the argument is a disjunction, but one of the disjuncts must obviously be true; Either they knew or they didn’t know about the problems below them. And whichever disjunct is chosen, the result for the adversary is very bad. The conclusion of a dilemma can itself be a disjunction (for example, “Either the NASA administrators did not know what they should have known, or they lied”) in which case we call the dilemma a
complex dilemma. But the conclusion may also be a categorical proposition, in which case we call it simple dilemma.

A dilemma need not always have an unpleasant conclusion. An example of one with a happy conclusion is provided by the following simple dilemma:

If the blest in heaven have no desires, they will be perfectly content; so they will be also if their desires are fully gratified; but either they will have no desires, or have them fully gratified; therefore they will be perfectly content.

The premises of a dilemma need not be stated in any special order; the disjunctive premise that offers the alternatives may either precede or follow the other. And the consequences of those alternatives may be stated in a conjunctive proposition or in two separate propositions. An argument in dilemma form is often expressed enthymematically; that is, its conclusion generally is thought to be so obvious that it scarcely needs to be spelled out. This is well illustrated in a passage from a letter of President Abraham Lincoln, defending the Emancipation Proclamation that freed the slaves of the Confederacy:

But the proclamation, as law, either is valid, or is not valid. If it is not valid, it needs no retraction, If it is valid, it cannot be retracted, any more than the dead can be brought to life.

Three ways of evading or refuting the conclusion of a dilemma have been given special names, all relating to the fact that a dilemma has two (or more) “horns.” These three ways of defeating a dilemma are known as “going (or escaping) between the horns,” “taking (or grasping) it by the horns,” and “rebutting it by means of a counterdilemma.” Note that these are not ways to prove the dilemma invalid; rather, they are ways in which one seeks to avoid its conclusion without challenging the formal validity of the argument.

One escapes between the horns of a dilemma by rejecting its disjunctive premise. This method is often the easiest way to evade the conclusion of a dilemma, for unless one half of the disjunction is the explicit contradictory of the other, the disjunction may very well be false. For example, one justification sometimes offered for giving grades to students is that recognizing good work will stimulate the students to study harder. Students may criticize this theory using the following dilemma:

If students are fond of learning, they need no stimulus, and if they dislike learning, no stimulus will be of any avail. But any student is either fond of learning or dislikes it. Therefore a stimulus is either needless or of no avail.

This argument is formally valid, but we can evade its conclusion by going between the horns. The disjunctive premise is false, for students have all kinds of attitudes toward learning: Some may be fond of it, many dislike it, and many are indifferent. For that third group a stimulus may be both needed and of
some avail. Going between the horns does not prove the conclusion to be false but shows merely that the argument does not provide adequate grounds for accepting that conclusion.

When the disjunctive premise is unassailable, as when the alternatives exhaust the possibilities, it is impossible to escape between the horns. Another method of evading the conclusion must be sought. One such method is to grasp the dilemma by the horns, which involves rejecting the premise that is a conjunction. To deny a conjunction, we need only deny one of its parts. When we grasp the dilemma by the horns, we attempt to show that at least one of the conditionals is false. The dilemma just above, attacking the use of grades in school, relies on the conditional “If students are fond of learning, they need no stimulus.” The proponent of grading may grasp this dilemma by the horns and argue that even students who are fond of learning may sometimes need stimulus, and that the additional stimulus provided by grades promotes careful study by even the most diligent students. There may be good response to this, of course—but the original dilemma has been grasped firmly by the horns.

Rebutting a dilemma by means of a counterdilemma is the most ingenious method of all, but it is seldom cogent, for reasons that will appear presently. To rebut a given dilemma in this way, one constructs another dilemma whose conclusion is opposed to the conclusion of the original. Any counterdilemma may be used in rebuttal, but ideally it should be built up out of the same ingredients (categorical propositions) that the original dilemma contained.

A classical example of this elegant kind of rebuttal concerns the legendary argument of an Athenian mother attempting to persuade her son not to enter politics:

If you say what is just, men will hate you; and if you say what is unjust, the gods will hate you; but you must either say the one or the other; therefore you will be hated.

Her son rebutted that dilemma with the following one:

If I say what is just, the gods will love me; and if I say what is unjust, men will love me. I must say either the one or the other. Therefore I shall be loved!

In public discussion, where the dilemma is one of the strongest weapons of controversy, the use of a rebuttal of this kind, which derives an opposite conclusion from almost the same premises, is a mark of great rhetorical skill. But if we examine the dilemma and rebutting counterdilemma more closely, we see that their conclusions are not as opposed as they might at first have seemed.

The conclusion of the first dilemma is that the son will be hated (by men or by the gods), whereas that of the rebutting dilemma is that the son will be loved (by the gods or by men). But these two conclusions are perfectly compatible.
The rebutting counterdilemma serves merely to establish a conclusion different from that of the original. Both conclusions may very well be true together, so no refutation has been accomplished. But in the heat of controversy analysis is unwelcome, and if such a rebuttal occurred in a public debate, the average audience might agree that the rebuttal was an effective reply to the original argument.

That this sort of rebuttal does not refute the argument but only directs attention to a different aspect of the same situation is perhaps more clearly shown in the case of the following dilemma, advanced by an “optimist”:

If I work, I earn money, and if I am idle, I enjoy myself. Either I work or I am idle. Therefore either I earn money or I enjoy myself.

A “pessimist” might offer the following counterdilemma:

If I work, I don’t enjoy myself, and if I am idle, I don’t earn money. Either I work or I am idle. Therefore either I don’t earn money or I don’t enjoy myself.

These conclusions represent merely different ways of viewing the same facts; they do not constitute a disagreement over what the facts are.

No discussion of dilemmas would be complete unless it mentioned the celebrated lawsuit between Protagoras and Euathlus. Protagoras, a teacher who lived in Greece during the fifth century B.C., specialized in teaching the art of pleading before juries. Euathlus wanted to become a lawyer, but not being able to pay the required tuition, he made an arrangement according to which Protagoras would teach him but not receive payment until Euathlus won his first case. When Euathlus finished his course of study, he delayed going into practice. Tired of waiting for his money, Protagoras brought suit against his former pupil for the tuition money that was owed. Unmindful of the adage that the lawyer who tries his own case has a fool for a client, Euathlus decided to plead his own case in court. When the trial began, Protagoras presented his side of the case in a crushing dilemma:

If Euathlus loses this case, then he must pay me (by the judgment of the court); if he wins this case, then he must pay me (by the terms of the contract). He must either lose or win this case. Therefore Euathlus must pay me.

The situation looked bad for Euathlus, but he had learned well the art of rhetoric. He offered the court the following counterdilemma in rebuttal:

If I win this case, I shall not have to pay Protagoras (by the judgment of the court); if I lose this case, I shall not have to pay Protagoras (by the terms of the contract, for then I shall not yet have won my first case). I must either win or lose this case. Therefore I do not have to pay Protagoras?

Had you been the judge, how would you have decided?
Note that the conclusion of Euathlus’s rebutting dilemma is not compatible with the conclusion of Protagoras’s original dilemma. One conclusion is the explicit denial of the other. However, it is rare that a counterdilemma stands in this relation to the dilemma against which it is directed. When it does, the premises involved are themselves inconsistent, and it is this implicit contradiction that the two dilemmas make explicit.

**EXERCISES**

Discuss the various arguments that might be offered to refute each of the following.

**EXAMPLE**

1. If we interfere with the publication of false and harmful doctrines, we shall be guilty of suppressing the liberties of others, whereas if we do not interfere with the publication of such doctrines, we run the risk of losing our own liberties. We must either interfere or not interfere with the publication of false and harmful doctrines. Hence we must either be guilty of suppressing the liberties of others or else run the risk of losing our own liberties.

**SOLUTION**

It is impossible to go between the horns. It is possible to grasp it by either horn, arguing either (a) that liberties do not properly include the right to publish false and harmful doctrines or (b) that we run no risk of losing our own liberties if we vigorously oppose false and harmful doctrines with true and helpful ones. And it could plausibly be rebutted (but not refuted) by the use of its ingredients to prove that “we must either be guiltless of suppressing the liberties of others or else run no risk of losing our own liberties.”

2. If you tell me what I already understand, you do not enlarge my understanding, whereas if you tell me something that I do not understand, then your remarks are unintelligible to me. Whatever you tell me must be either something I already understand or something that I do not understand. Hence whatever you say either does not enlarge my understanding or else is unintelligible to me.

3. If the conclusion of a deductive argument goes beyond the premises, then the argument is invalid, while if the conclusion of a deductive argument does not go beyond the premises, then the argument brings nothing new to light. The conclusion of a deductive argument must
either go beyond the premises or not go beyond them. Therefore either
deductive arguments are invalid or they bring nothing new to light.

4. If a deductive argument is invalid, it is without value, whereas a de-
ductive argument that brings nothing new to light is also without
value. Either deductive arguments are invalid or they bring nothing
new to light. Therefore deductive arguments are without value.

*5. If the general had been loyal, he would have obeyed his orders, and if
he had been intelligent, he would have understood them. The general
either disobeyed his orders or else he did not understand them.
Therefore the general must have been either disloyal or unintelligent.

6. If he was disloyal, then his dismissal was justified, and if he was unint-
elligent, then his dismissal was justified. He was either disloyal or un-
intelligent. Therefore his dismissal was justified.

7. If the several nations keep the peace, the United Nations is unneces-
sary, while if the several nations go to war, the United Nations will
have been unsuccessful in its purpose of preventing war. Now, either
the several nations keep the peace or they go to war. Hence the United
Nations is unnecessary or unsuccessful.

8. If people are good, laws are not needed to prevent wrongdoing,
whereas if people are bad, laws will not succeed in preventing wrong-
doing. People are either good or bad. Therefore either laws are not
needed to prevent wrongdoing or laws will not succeed in preventing
wrongdoing.

9. Archbishop Morton, Chancellor under Henry VII, was famous for
his method of extracting “contributions” to the king’s purse. A per-
son who lived extravagantly was forced to make a large contribu-
tion, because it was obvious that he could afford it. Someone who
lived modestly was forced to make a large contribution because it
was clear that he must have saved a lot of money on living expenses.
Whichever way he turned he was said to be “caught on Morton’s
fork.”

—Dorothy Hayden, Winning Declarer Play

*10. All political action aims at either preservation or change. When desir-
ing to preserve, we wish to prevent a change to the worse; when desir-
ing to change, we wish to bring about something better. All political
action is then guided by some thought of better and worse.

—Leo Strauss, What Is Political Philosophy?, 1959
11. If a thing moves, it moves either in the place where it is or in that where it is not; but it moves neither in the place where it is (for it remains therein) nor in that where it is not (for it does not exist therein); therefore nothing moves.

—Sextus Empiricus, *Against the Physicists*

12. And what a life should I lead, at my age, wandering from city to city, ever changing my place of exile, and always being driven out! For I am quite sure that wherever I go, there, as here, the young men will flock to me; and if I drive them away, their elders will drive me out at their request; and if I let them come, their fathers and friends will drive me out for their sakes.

—Plato, *Apology*

13. If Socrates died, he died either when he was living or when he was dead. But he did not die while living; for assuredly he was living, and as living he had not died. Nor did he die when he was dead, for then he would be twice dead. Therefore Socrates did not die.

—Sextus Empiricus, *Against the Physicists*

14. Inevitably, the use of the placebo involved built-in contradictions. A good patient–doctor relationship is essential to the process, but what happens to that relationship when one of the partners conceals important information from the other? If the doctor tells the truth, he destroys the base on which the placebo rests. If he doesn’t tell the truth, he jeopardizes a relationship built on trust.

—Norman Cousins, *Anatomy of an Illness*

15. The decision of the Supreme Court in *U.S. v. Nixon* (1974), handed down the first day of the Judiciary Committee’s final debate, was critical. If the President defied the order, he would be impeached. If he obeyed the order, it was increasingly apparent, he would be impeached on the evidence.


16. If we are to have peace, we must not encourage the competitive spirit, whereas if we are to make progress, we must encourage the competitive spirit. We must either encourage or not encourage the competitive spirit. Therefore we shall either have no peace or make no progress.

17. The argument under the present head may be put into a very concise form, which appears altogether conclusive. Either the mode in
which the federal government is to be constructed will render it sufficiently dependent on the people, or it will not. On the first supposition, it will be restrained by that dependence from forming schemes obnoxious to their constituents. On the other supposition, it will not possess the confidence of the people, and its schemes of usurpation will be easily defeated by the State governments, who will be supported by the people.

—James Madison, *The Federalist Papers*, no. 46, 1788

18. . . a man cannot enquire either about that which he knows, or about that which he does not know; for if he knows, he has no need to enquire; and if not, he cannot; for he does not know the very subject about which he is to enquire.

—Plato, *Meno*

19. We tell clients to try to go through the entire first interview without even mentioning money. If you ask for a salary that is too high, the employer concludes that he can’t afford you. If you ask for one that is too low, you’re essentially saying, “I’m not competent enough to handle the job that you’re offering.”


*20. “Pascal’s wager” is justifiably famous in the history of religion and also of betting. Pascal was arguing that agnostics—people unsure of God’s existence—are best off betting that He does exist. If He does but you end up living as an unbeliever, then you could be condemned to spend eternity in the flames of Hell. If, on the other hand, He doesn’t exist but you live as a believer, you suffer no corresponding penalty for being in error. Obviously, then, bettors on God start out with a big edge.


**SUMMARY**

In this chapter we have examined syllogistic argument as it is used in ordinary language, exhibiting the different guises in which syllogisms appear and showing how they may be best understood, used, and evaluated.

In Section 7.1, we explained the need for techniques to translate syllogistic arguments of any form into standard form, and we identified the ways in which syllogistic arguments may deviate from standard-form categorical syllogisms.
In Section 7.2, we explained how syllogisms in ordinary language appearing to have more than three terms may sometimes have the number of terms in them appropriately reduced to three—by elimination of synonyms, and by elimination of complementary classes.

In Section 7.3, we explained how the propositions of a syllogistic argument, when not in standard form, may be translated into standard form so as to allow the syllogism to be tested either by Venn diagrams or by use of the rules governing syllogisms. Nonstandard propositions of nine different kinds were examined, and the methods for translating each kind were explained and illustrated:

1. Singular propositions
2. Propositions having adjectives as predicates
3. Propositions having main verbs other than the copula “to be”
4. Statements having standard-form ingredients, but not in standard-form order
5. Propositions having quantifiers other than “all,” “no,” and “some”
6. Exclusive propositions, using “only” or “none but”
7. Propositions without words indicating quantity
8. Propositions not resembling standard-form propositions at all
9. Exceptive propositions, using “all except” or similar expressions

In Section 7.4, we explained how the uniform translation of propositions into standard form, essential for testing, may be assisted by the use of parameters.

In Sections 7.5 and 7.6, we explained enthymemes, syllogistic arguments in which one of the constituent propositions has been suppressed, and sorites, in which a chain of syllogisms may be compressed into a cluster of linked propositions.

In Section 7.7, we explained syllogisms other than categorical: disjunctive syllogisms and hypothetical syllogisms, so called because they contain disjunctive or hypothetical premises.

In Section 7.8, we discussed the rhetorical use of dilemmas, disjunctive arguments that give to the adversary a choice of alternatives neither of which is acceptable. We explained and illustrated the three possible patterns of rhetorical response: going between the horns of the dilemma, grasping the dilemma by its horns, or devising a counterdilemma.
End Notes

1. Immanuel Kant, *Critique of Pure Reason*, 1787, The Analytic of Concepts, chap. 1, sec. 2. More than a century later, Bertrand Russell presented a very different interpretation of singular propositions and universal propositions, and he later argued (in *My Philosophical Development*, 1959) that logic “cannot get far” until the two forms are seen to be “completely different” because the one (the singular) attributes a predicate to a named subject, while the other (the universal) expresses a relation between two predicates. Russell’s interpretation had by that time become central to the theory of quantification in modern symbolic logic, discussed at length below, in Chapter 10; Kant’s observation pertained to the use of singular propositions in traditional syllogisms, which he knew to be very powerful logical instruments.

2. In some contexts the article “the” is deliberately omitted to achieve desired ambiguity. When United Nations Resolution 242 was adopted, calling for the return of “territory” captured by Israel in the Six-Day War in 1967, it was formally agreed that the English version of the Resolution would be authoritative, because the Resolution when expressed in French would require the definite article (le territoire), of which the English translation is “the territory,” meaning all the territory captured, which is precisely what the agreed-upon English version carefully refrains from saying. The omission of the definite article in English can be logically significant.


5. All the following exercises, except 4 and 6 under A, are taken, with little or no modification, from Lewis Carroll’s *Symbolic Logic* (New York: C. N. Potter, 1977).


