

Chapter 1

Don't Believe Everything You Think

Chapter Recap

People think critically when they evaluate reasoning used in coming to conclusions. Conclusions are beliefs; when they are expressed using true-or-false declarative sentences, they are claims (or statements or assertions). A belief (or opinion or claim or statement, etc.) whose truth is independent of whether people think it is true is objective.

An issue is simply a question. One uses an argument to establish a position on an issue; the position is the conclusion of the argument. Evaluation of arguments can be skewed by emotion, wishful thinking, self-interest, confirmation bias, and other psychological impediments to objectivity.

What follows is a more complete list of ideas explored in this chapter.

- **Claim:** When a belief (judgment, opinion) is asserted in a declarative sentence, the result is a claim, statement, or assertion.
- **Objective claim vs. subjective claim:** An objective claim is true or false regardless of whether people think it is true or false. Claims that lack this property are said to be subjective.
 - **“Fact vs. opinion”:** People sometimes refer to true objective claims as “facts,” and use the word “opinion” to designate any claim that is subjective.
 - **“Factual claim”:** An objective claim. Saying that a claim is “factual” is not the same as saying it is true. A factual claim is simply a claim whose truth does not depend on our thinking it is true.
 - **Moral subjectivism:** Moral subjectivism is the idea that moral judgments are subjective. “There is nothing either good or bad but that thinking makes it so.”
 - **Issue:** A question.
 - **Argument:** An argument consists of two parts—one part of which (the premise or premises) is intended to provide a reason for accepting the other part (the conclusion).
 - **“Argument”:** People sometimes use this word to refer just to an argument’s premise.
 - **Arguments and issues:** The conclusion of an argument states a position on the issue under consideration.

- o **Cognitive bias:** A feature of human psychology that skews belief formation. The ones discussed in this chapter include the following:
 - **Belief bias:** Evaluating reasoning by how believable its conclusion is.
 - **Confirmation bias:** A tendency to attach more weight to considerations that support our views.
 - **Availability heuristic:** Assigning a probability to an event based on how easily or frequently it is thought of.
 - **False consensus effect:** Assuming our opinions and those held by people around us are shared by society at large.
 - **Bandwagon effect:** The tendency to align our beliefs with those of other people.
 - **Negativity bias:** Attaching more weight to negative information than to positive information.
 - **Loss aversion:** Being more strongly motivated to avoid a loss than to accrue a gain.
 - **In-group bias:** A set of cognitive biases that make us view people who belong to our group differently from people who don't.
 - **Fundamental attribution error:** Having one understanding of the behavior of people in the in-group and another for people not in the in-group.
 - **Obedience to authority:** A tendency to comply with instructions from an authority.
 - **Overconfidence effect:** A cognitive bias that leads us to overestimate what percentage of our answers on a subject is correct.
 - **Better-than-average illusion:** A self-deception cognitive bias that leads us to overestimate our own abilities relative to those of others.
- o **Truth:** A claim is true if it is free from error.
- o **Knowledge:** If you believe something, have an argument beyond a reasonable doubt that it is so, and have no reason to think you are mistaken, you can claim you know it.

Answers to Text Exercises

Exercise 1-1

1. ▲ An argument consists of two parts, one of which, the premise, is intended to provide a reason for accepting the other part, the conclusion. Unfortunately, sometimes people use the word “argument” to refer just to the premise.
2. True
3. False
4. ▲ False

5. True
6. True
7. ▲ True
8. False
9. True
10. ▲ False. As an example of an opinion that isn't subjective, we (the authors) are of the opinion there is life somewhere else in the universe. If there is life, our opinion is true. If there isn't, then it is false. We don't know whether our opinion is true or false, but we do know that it is one or the other, and we know that whether it is true or false is independent of whether we think there is life somewhere else in the universe.
11. False
12. Moral subjectivism
13. ▲ c. The first order of business is to determine what the issue is.
14. True
15. False
16. ▲ True
17. True
18. False
19. ▲ True
20. False

Exercise 1-2

1. ▲ This item belongs in one group.
2. This belongs in a different group than 1.
3. This belongs in a different group than 1.
4. ▲ This item belongs in the same group as item 1.
5. This belongs in a different group than 1 and 4.
6. This belongs in a different group than 1 and 4.
7. ▲ This belongs in a different group than 1 and 4.
8. This belongs in the same group as 1 and 4.
9. This belongs in the same group as 1 and 4.
10. ▲ This belongs in the same group as 1 and 4.

Exercise 1-3

1. ▲ Not objective
2. Objective
3. Objective
4. ▲ Not objective
5. Objective

6. Objective
7. ▲ Not objective
8. Not objective
9. Objective
10. ▲ Objective
11. Not objective
12. Objective

Exercise 1-4

1. ▲ Subjective
2. Not subjective
3. Not subjective
4. ▲ Subjective
5. Not subjective
6. Subjective
7. ▲ Not subjective, assuming the speaker is expressing the opinion that the movie frightened his sister a lot
8. Subjective
9. Subjective
10. ▲ Not subjective, unless the speaker intends to imply that Trump's hair is unattractive, in which case the assertion would be subjective

Exercise 1-5

1. ▲ Argument
2. Not an argument
3. Not an argument
4. ▲ Not an argument
5. Not an argument
6. Argument
7. ▲ No arguments here
8. Argument
9. Argument
10. ▲ Argument (The last sentence is a conclusion.)

Exercise 1-6

1. ▲ This passage does not contain an argument.
2. This passage contains an argument whose conclusion is that we will have to find someone else who owns a truck.

3. This passage contains an argument whose conclusion is that bans on firearms are unproductive.
4. ▲ This passage contains an argument whose conclusion is that computers will never be able to converse intelligently through speech.
5. This passage contains an argument whose conclusion is that *The Carrie Diaries* isn't very good.
6. This passage does not contain an argument.
7. ▲ This passage contains an argument whose conclusion is that chemicals in teething rings and soft plastic toys may cause cancer.
8. This passage contains an argument whose conclusion is that as long as the number of lethal weapons in the hands of the American people continues to grow, so will the murder rates.
9. This passage contains an argument whose conclusion is that times have changed.
10. ▲ This passage does not contain an argument.

Exercise 1-7

1. ▲ a
2. a
3. d
4. ▲ c
5. c
6. c
7. ▲ b
8. c
9. a
10. ▲ b

Exercise 1-8

1. ▲ We (the authors) think we probably tend to overestimate the probability of types of events that are fresh in our minds (availability heuristic).
2. We (the authors) think we are probably subject to belief and confirmation bias and must guard against a tendency to overestimate the strength of arguments whose conclusions we agree with.
3. If the student (or anyone) likes an animal, he or she might tend to dismiss considerations against keeping it as a pet. This would be a type of belief bias.
4. ▲ Belief bias is the tendency to evaluate an argument on the basis of how believable its conclusion is to us. Confirmation bias is the tendency to attach more weight to evidence that supports our own point of view.
5. An effective corrective for belief bias is to ask someone who might disagree with your conclusions to evaluate your arguments.

Exercise 1-10

1. Students' answers will vary. There is a God: The best explanation of the existence of life is that it was created by a cosmic intelligence.

There is no God: If God exists, there would be incontrovertible, unambiguous evidence of that fact. The only evidence that fits that category is reports of miracles and they are all suspect.

2. Students' answers will vary. Illegal immigrants should not be eligible for health care benefits: We don't provide health care to citizens of other nations who live in their own country. Why should we give them health care if they live here?

Illegal immigrants should be eligible for health care benefits: They pay sales taxes, gasoline taxes, and other taxes and contribute to the economy in other ways. Besides, if they don't receive health care they will utilize hospital ERs for routine health problems, which will drive up medical costs for everyone.

3. Students' answers will vary. Handgun owners should be required to register each handgun they own: Criminals won't register their guns, which will make it easier for police to detain them if they are found to possess a gun.

Handgun owners should not be required to register any handgun they own: This should not be done because such a requirement violates the Second Amendment to the Constitution, which guarantees people the right to keep and bear arms.

4. Students' answers will vary. The phrase "under God" should be removed from the Pledge of Allegiance: The phrase should be removed because as long as it exists only monotheists can pledge allegiance in good conscience.

The phrase "under God" should not be removed from the Pledge of Allegiance: The phrase should not be removed because it has only ceremonial and patriotic significance and nobody is forced to utter it.

5. Students' answers will vary. Sex education should be taught in public schools: This education should be provided in schools to familiarize children with the dangers of sexually transmitted diseases and to educate them on how the human reproductive system works.

Sex education should not be taught in public schools: Sex is too personal to be talked about in public schools, and it is the business of parents to educate their children in this area of life.

Exercise 1-11

1. ▲ This passage contains an argument whose conclusion is that the stock market probably will go down.
2. This passage does not contain an argument.
3. This passage does not contain an argument.
4. ▲ This passage contains an argument whose conclusion is that probably more women than men are upset by pornography.
5. This passage does not contain an argument.
6. This passage does not contain an argument.
7. ▲ This passage does not contain an argument.
8. This passage does not contain an argument.
9. This passage does not contain an argument.
10. ▲ This passage is subtle, but the speaker is giving a reason for thinking *AI* was the best talent show on TV. So the passage contains an argument whose conclusion is that contention.

Exercise 1-12

1. ▲ a
2. c
3. b
4. ▲ b
5. a
6. b
7. ▲ e. (Reading the passage very closely, you can see that the premise (which follows “since”) addresses the issue whether it is surprising that the winner of this year’s spelling bee is a straight A student whose favorite subject is science.)
8. b
9. c
10. ▲ c. (But notice YOUR FRIEND hasn’t given a reason for thinking the governor has been good.)

Exercise 1-13

1. ▲ Whether police brutality happens often
2. Whether to concentrate our crime-fighting efforts on enforcement

3. Whether the gender of a Supreme Court justice matters
4. ▲ Whether we have a good reason to believe the world is independent of our minds
5. Whether Algernon will get a good grade if he takes Professor Bubacz's class
6. Whether sales taxes hit poor people harder than rich people
7. ▲ Whether you should sign up for lessons on how to use a synthesizer if you buy one
8. Whether possession of hypodermic syringes without a prescription should be legal in the eleven states
9. Whether one should suspend judgment about everything except what is absolutely certain
10. ▲ Whether Native Americans, as true conservationists, have something to teach readers about their relationship to the earth (There are other points made in the passage, but they are subsidiary to this one.)

Exercise 1-14

1. ▲ MRS. is addressing both issues raised by MR.
2. PARKER is not addressing MOORE's issue, which is whether the administration's latest Afghanistan proposal will make matters worse.
3. SHE has raised the issue of whether HE gives her enough help around the house and whether HE ever does anything. HE responds to the second issue explicitly and by implication to the first issue. SHE responds by raising the question of who does the most.
4. ▲ CAUTIOUS is addressing the issue raised by HEEDLESS, i.e., whether people should complain about what we are doing in Afghanistan.
5. MR. JR is not addressing MR. RJ's issue, which is whether more casinos are needed around here.
6. COUCH POTATO is addressing JOE FITNESS's issue, i.e., whether he should fix the chain on his bike.
7. ▲ OLD GUY is addressing YOUNG GUY's issue, i.e., whether baseball players are better now than forty years ago.
8. STUDENT TWO is not addressing STUDENT ONE's issue, which is whether studying is a waste of time.
9. PATRIOT does not take issue with PHILATELIST's statement that U.S. postage stamps are now being printed in Canada.

10. ▲SECOND NEIGHBOR is addressing the issue raised by FIRST NEIGHBOR, which is whether SECOND NEIGHBOR has a right to make so much noise at night. SECOND NEIGHBOR thinks he has the right.
11. STUDY PARTNER TWO is not addressing STUDY PARTNER ONE's issue, which is whether they should get a pizza. Instead, STUDY PARTNER TWO raises the question of whether to get an anchovy pizza.
12. MALE STUDENT is not addressing FEMALE STUDENT's issue, which is whether the Internet is overrated.
13. ▲DEVON is not addressing RAMON'S issue, which is whether this English course is a complete waste of time.
14. CULTURALLY CHALLENGED PERSON'S SPOUSE is addressing CULTURALLY CHALLENGED PERSON's issue, which is whether they should go to a concert.
15. DEMOCRAT is not addressing REPUBLICAN's issue, which is whether Obama's budget requests make sense.
16. ▲PARKER isn't addressing MOORE's issue, which is whether Thomas Brothers or Vernon Construction does better work. Instead, he addresses whether Thomas Brothers charges too much.
17. SUBURBANITE is not addressing URBANITE's issue, which is whether the new requirements are a good thing environmentally.
18. ENTREPRENEUR is responding to CRITIC's issue of selling junk bonds without emphasizing the risks involved.
19. ▲On the surface, it may seem that both hands address the issue of whether a person such as ONE HAND can feel safe in her own home. But ONE HAND's real issue is whether the large number of handguns makes one unsafe in one's own home. OTHER HAND ignores this issue completely.
20. ANOTHER is not addressing ONE GUY's issue, which is whether DVD recorders are overpriced.
21. FRIEND is addressing FED UP's issue, i.e., whether to exercise an early retirement option and move to his place in Arkansas.

22. ▲ JENNIFER does not address the issue raised by KATIE, which is whether she (JENNIFER) would be better off riding a bike to school. JENNIFER, in effect, changes the subject. Instead of addressing whether she would be better off riding a bike to school, JENNIFER starts talking about KATIE, as if KATIE'S behavior somehow invalidates what KATIE has asserted. This is similar to item 5, in which MR. JR changes the subject in a similar way.
23. KEN is not addressing DEZRA'S issue, which is whether Ken should mow the lawn with bare feet.
24. MAO is not addressing YAO'S issue, which is whether the fact that iMacs never get viruses is a nice feature of the computer.
25. ▲ HERR ÜBERALLES thinks they spend more than they should on heating. FRAU ÜBERALLES reminds him that she gets cold easily, which she thinks justifies the heating expense. She addresses the issue raised by him.

Exercise 1-15

1. ▲ Pertains to moral right/wrong
2. Doesn't pertain
3. Pertains to moral right/wrong
4. ▲ Pertains to moral right/wrong
5. Pertains to moral right/wrong
6. Doesn't pertain
7. ▲ Doesn't pertain
8. Doesn't pertain
9. Pertains to moral right/wrong
10. ▲ Pertains to aesthetic good/bad
11. Doesn't pertain
12. Doesn't pertain
13. ▲ Doesn't pertain (It merely explains how to stop the decline in enrollments)

Exercise 1-16

1. ▲ b. Both are arguments.
2. a. Both are explanations.
3. c. Both are explanations.
4. ▲ b. Both are arguments.
5. b. Both are explanations.
6. b. Both are arguments.

7. ▲b. Both are explanations.
8. a. Both are arguments.
9. b. Both are arguments.
10. ▲a. Both contain two assertions, the second of which is implied to take priority.

Question Posed in Box on Page 9

1. Can bears and other animals think critically?

Unquestionably animals think, but do they review and evaluate their thinking? We don't know, but we have our doubts.