

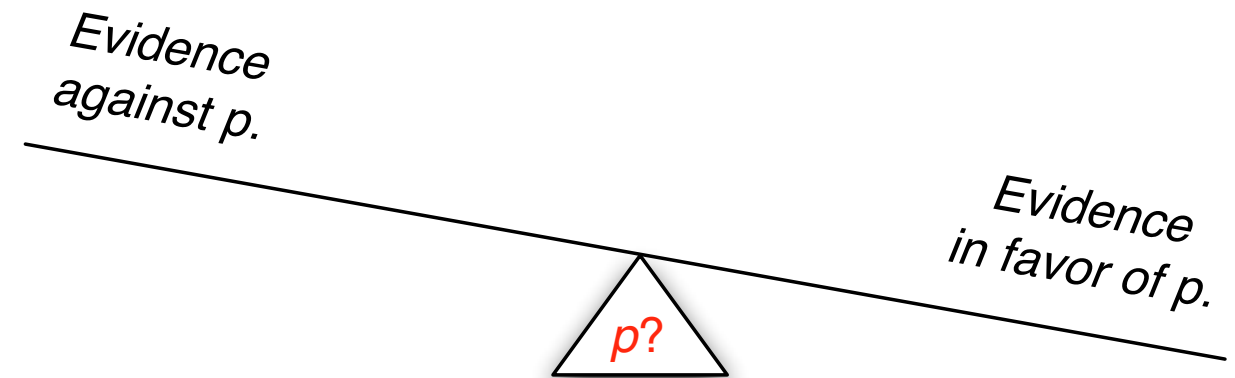
# Philosophy 101

(2/3/11)

- By now, you should have read all of Chapter 2 (carefully!). And, after today's lecture, you should start reading chapter 3.
- **HW #1 is due today. HW #2 has been posted.**
- **Our first quiz is next Thursday.** It will be on Chs. 1&2 (fill-in-the-blank & and short answer Q's). More next week...
- **I've posted a handout** on "3 Causes of Irrational Belief".
- Today: more on **Rational (and Irrational) Belief**
  - **Reasons for belief (i.e., evidence)**
  - **Three possible causes of irrational belief (handout)**
  - **Rationality, Relativity, and Objectivity**
  - **Next: Chapter 3 — Well-Formed Arguments**

## Rational Belief XIII

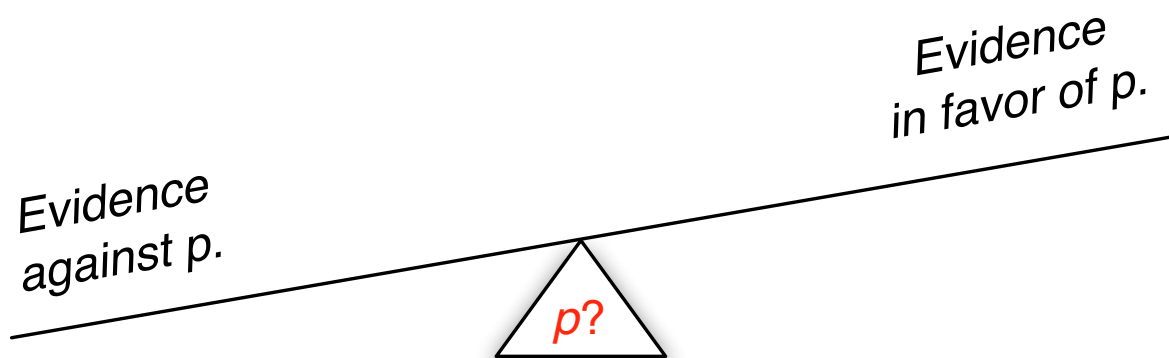
- **Reasons (or Evidence) for Belief**
  - I will adopt a "beam balance" metaphor in my discussions of evidence, belief, disbelief, and suspension of judgment.



- In the above picture, the evidence *in favor of p* slightly outweighs the evidence *against p*. The **rational attitude** to have here toward the proposition *p* is one of **belief** — to a slight degree.

## Rational Belief XIV

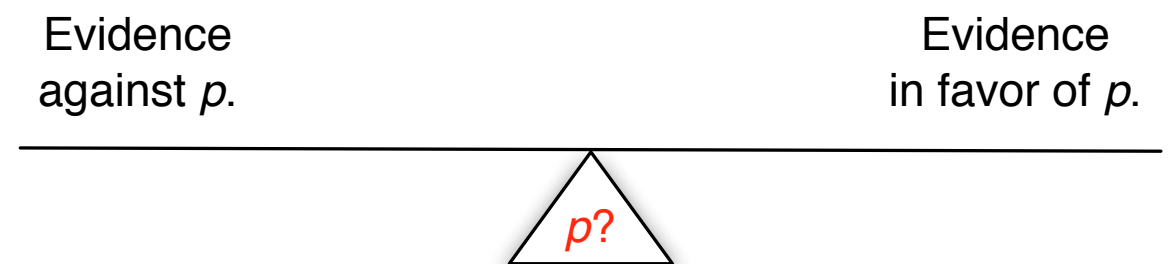
- **Reasons (or Evidence) for Belief**



- In the above picture, the evidence *against p* slightly outweighs the evidence *in favor of p*. The **rational attitude** to have here toward the proposition *p* is one of **disbelief** — to a slight degree.

## Rational Belief XV

- **Reasons (or Evidence) for Belief**



- In the above picture, the evidence *against p* and the evidence *in favor of p* are balanced. The **rational attitude** to have here toward the proposition *p* is one of **suspension of judgment**.

- Remember, this is *just one of the several ways* in which *suspension* can be the rational attitude to have toward *p*.
  - [Note, also, that *suspension* does *not* come in degrees.]

## Rational Belief XVI

- **Fallibilism**

- It is very important to note that *our evidence can be misleading*. That is, it can sometimes be rational to believe something which happens to be *false*. This is called *fallibilism*.

### Example 2.3

Prior to the presidential election of 1948 it was widely believed that the Republican candidate, Thomas Dewey, would defeat the Democratic incumbent, Harry Truman. Polls showed Dewey to be far ahead and nearly all the experts predicted his victory. Early election returns conformed to the predicted pattern, and the early editions of some newspapers reported that Dewey had won. A famous photograph shows a triumphant Truman holding a newspaper with a banner headline reading "Dewey Wins." To everyone's surprise, Truman won the election.

## Rational Belief XVII

- **Fallibilism**

- In this case, it would have been *rational* for the average person (when they went to bed on the night of the 1948 presidential election) to believe the following proposition:

- (†) Dewey won the 1948 presidential election.

- All the information available the night before all the election results were in pointed to (*supported*) a Dewey victory.

- As it turned out, Truman had actually won the election.

- But, the evidence available the night before strongly supported the opposite conclusion – that (†) was *false*.

- **Moral:** *inconclusive evidence can be misleading!*

## Rational Belief XVIII

- **Conclusive Evidence**

- Sometimes, however, our evidence is **conclusive**.

- That is, in some cases, our evidence in favor of a proposition *p* is so strong that it leaves no room for the falsity of *p*.

- When this happens, we say the evidence for *p* is *conclusive*.

- But, it is actually **quite rare** that we are in possession of conclusive evidence for *p* (**discuss!**). As a result, it would be a mistake to require conclusive evidence for rational belief.

- If we required conclusive evidence for rational belief, then it would *almost never* be rational to believe (or disbelieve!) *anything*. We'd end-up *suspending judgment on everything*.

- **Remember:** *beliefs come in degrees, and so does evidence!*

## Rational Belief XIX

- **The Principle of Proportional Belief (PB)**

- It is important to remember that belief comes in degrees, and that evidential support also comes in degrees.

### Example 2.4

Jim Shortz teaches a physical education class of 100 students. He knows that there are 51 freshmen and 49 sophomores in the class. After class one day he finds that one student left a book in the room. He has no reason at all to think that either freshmen or sophomores are more likely to leave a book behind. Knowing that there are more freshmen than sophomores in the class, Jim believes that the book belongs to a freshman.

- Consider the following proposition:

- (F) The person who left the book behind is a freshman.

- Is it rational for Jim to believe (F)? **Yes!** His evidence (*slightly*) favors (F), and so he *should (weakly) believe* that (F) is true.

## Rational Belief XX

- **The Principle of Proportional Belief (PB)**

- This basic idea leads us to the following principle, which we will call the **Principle of Proportional Belief**:

- (**PB**) It is rational to proportion the strength of one's belief to the strength of one's evidence. The stronger one's evidence for  $p$  is, the stronger one's belief in  $p$  should be.
- In the previous example, Jim's belief that (F) should only be *very weak*. But, he should *slightly favor* (F) over not-(F).
- Of course, it would probably be unwise for Jim to take any important actions on the basis of his belief in (F).
- But, that (*practical* consideration) does not threaten the *epistemic rationality* of Jim's (*weak*) belief that (F) is true.

## Rational Belief XXI

- **Three Causes of Irrational Belief (see my handout)**

- (a) **Misevaluation of Evidence**. Sometimes, we fail to properly *evaluate* or *assess* the weight of some evidence. *E.g.*:
  - **Anecdotal Evidence**. We often hear vivid and compelling *examples* or *cases*. For instance, we may be told about a *particularly bad case* of welfare fraud. And, we may conclude that the welfare system is (generally) corrupt.
  - The news coverage nowadays tends to include a lot of *anecdotal* or "*worst case*" evidence (*and colorfully presented!*), which can cause us to *exaggerate* (or *downplay*) evidence.
  - More generally, ***rhetorically powerful presentation*** of evidence can cause us to *mis-evaluate* that evidence.

## Rational Belief XXII

- **Three Causes of Irrational Belief**

- (b) **Misidentification of the *Total* Evidence**. Sometimes, we are *mistaken* about what our ***total*** evidence is.
- Sometimes, we focus only on *part* of our (total) evidence. And, while we may correctly assess the weight of *that part* of our total evidence, we may *fail to include* relevant evidence.
- For instance, going back to the Jim Shortz example. Suppose Jim *also* notices that the book was a textbook for an upper-level math course *that almost no freshman ever take*.
- Jim still has *some evidence in favor of* the book belonging to a freshman (*i.e.*, that 51/100 of his students are freshman). But, he now has *additional evidence that undermines that evidence*.

## Rational Belief XXIII

- **Three Causes of Irrational Belief**

- Even if we manage to avoid errors of type (a) and (b), we can *still* be led to irrational beliefs, *if* we allow ourselves to be moved to belief by *motivational* or *pragmatic* factors.
- (c) **Motivational Errors**. Sometimes our hopes and fears (& other emotions) can lead us to irrational beliefs.

### Example 2.5

Opto Mist is planning a picnic for Saturday. He has been working very hard lately, good friends are coming into town for the day, and he has a wonderful place picked out for the picnic. Opto very much wants to go on this picnic. The weather forecast for Saturday is quite tentative. The forecaster says that there is a 50 percent chance that it will be sunny and a 50 percent chance that it will rain. It all depends on which direction a storm system goes, and it is too early to tell which way it will go. Because Opto wants so much for it to be nice, he believes that it will be sunny on Saturday.

## Rational Belief XXIV

### • Three Causes of Irrational Belief

#### • (c) **Motivational Errors** (*cont'd*)

➡ Even if believing *p* has *good consequences* for us, this does *not* make it *epistemically* rational for us to believe that *p*.

#### • **Example:**

• It may be *beneficial* for a baseball player (*S*) to believe that

(*p*) *S* will get a base hit when he comes up to bat.

But, this does *not* make it *epistemically* rational for *S* to believe that *p* (unless **this** makes *p* more probable than not).

• **Note:** it may be *all things considered* “reasonable” for *S* to believe *p* — even if it is *not epistemically* rational for *S* to believe *p*. We are interested in (*purely*) *epistemic* reasons for belief.

## Rational Belief XXV

### • Irrational Belief and our Beam Balance Analogy

• The three causes of irrational belief we have just seen can be understood in terms of our *beam balance analogy*.

• (a) **Misevaluation of evidence.** In this case, we are *weighing* a *piece* of evidence *E*, but our “*scale is broken*” — our “*beam balance*” *does not reflect the true weight of E*.

• (b) **Misidentification of our total evidence.** Even if we weigh *some* of our evidence *correctly*, we may fail to put *all* of our evidence on the scale — *some evidence is left out*.

• (c) **Motivational errors.** Even if we *weigh our total evidence correctly*, we may be influenced by *non-evidential* (*non-epistemic*) factors like hopes, fears, consequences, etc.

## Rational Belief XXVI

### • Rationality, Relativity, and Objectivity

• The *truth* of a person’s belief is *not relative* — that is, a proposition/belief can’t have *one truth-value* for one person, and a *different truth-value* for another person.

• But, the *rationality* of a belief *can* vary from person to person, *because different people can have different evidence*.

#### Example 2.6

You are on a jury hearing the case of Heza Thief, who is accused of robbing a bank. The evidence presented against Thief isn’t very convincing. One witness tentatively identifies him as the robber but admits under cross-examination that he didn’t get a very good look at the robber. Other seemingly honest witnesses report that Thief was with them at the time of the robbery, thus providing him with an alibi. No fingerprints, suspicious financial dealings, or past record is brought up to indicate his guilt. In fact, however, Thief is guilty. His witnesses were paid off to support his alibi and the police have done a bad job investigating this case.

## Rational Belief XXVII

### • Rationality, Relativity, and Objectivity

• Consider the following proposition:

• Heza Thief robbed the bank.

• In this case, **your** evidence does **not** support this proposition. So, it is **not** rational for **you** to believe it.

• But, consider whether it would be rational for **Heza himself** to believe this proposition. Suppose he vividly and clearly *remembers* robbing the bank, etc.

• Here, it **is** rational for **Heza** to believe that he robbed the bank, while it is **not** rational for **you** to believe this.

• In this sense, *rationality is relative to the total evidence available*.

## Rational Belief XXVIII

- **Rationality, Relativity, and Objectivity**

- Remember back to our example of the proposition:

- The earth is flat.

- At one time, *almost everybody* believed that this proposition was true. Nowadays, *almost nobody* believes this.

- While the claim is (in fact) *false*, this does *not* prevent both sets of beliefs from being *rational*. This is because:

- The evidence available at that time supported the claim that the earth was flat. But, since then, we have obtained ***new evidence*** which *overturns* that verdict, and supports the *falsity* of the claim. So, *both sets of beliefs are rational*.