

PHIL 103

Logic and Spirituality: A Supplementary Text for PHIL 103

Dr. Luke Cuddy



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Logic and Spirituality

Sadly, both terms (logic and spirituality) are sometimes misunderstood. For some, logic is the cold, dispassionate calculation of characters like Spock from *Star Trek*. That is, of people who lack emotion and simply try to analyze the world through reason and science. Most of us have friends or family members we could describe this way: people who may be brutally honest and ask for evidence for every claim uttered by those around them.

Yet, this characterization of logical people isn't quite accurate, is it. Think about people like this in your own life (maybe it's you!). Are they always logical? Do they always use evidence? Or do they sometimes forget their own rules, especially for their own beliefs and ideas? For example, a person may demand evidence and logic in evaluating the policies of a political candidate they don't like but be much more lenient with a candidate they do like.

As this class should have already taught you (in the accompanying *Logic and Critical Thinking* textbook), being logical is a complicated process. Given the prevalence of cognitive bias in every human being, no matter how logical one may be, we can be wrong and often are wrong. In addition, distinctions like left-brained (logical) versus right-brained (emotional) people have been shown to be overly simplistic.¹ We are all as human beings both logical and emotional. As the other textbook also notes, our beliefs are strongly motivated by our ideologies: political, religious, etc.

The solution to these problems of cognitive bias is not to throw one's hands up in the air and say, "well I might as well not worry since we're all biased!" The presence of bias does not mean logic is useless, as again has already been argued in the main course reader. To remind you, critical thinking is the careful application of reason or logic in evaluating

¹ Shmerling, R. H. (2022). Right brain/left brain, right? In *Harvard Health Publishing*. Retrieved from https://www.health.harvard.edu/blog/right-brainleft-brain-right-2017082512222

whether a claim is true. And there are two types of reasoning: inductive (probability-based) and deductive (certainty-based).

The value of applying logic to the world around us (and the value of science more specifically) can be seen in technology and medical science. Airplanes, computers, smart phones, video games (you name it) are results of very smart people applying logic meticulously over long periods of time.

One thing I would like to convince you of is that logic can also be applied to your mind in a way that can improve your well-being. When we apply logic to the world (apply it well!), we get incredible technology. But when we apply it to our minds (again, well!) we get better, more enriched lives.

Before getting there, though, we will need to talk about how logic functions in other cultures. First, it is important to be inclusive in our discussion of logic and to appreciate the ways that cultures both East and West have contributed to our understanding of our world. Additionally, many scholars in the academic world have pointed out the ways that Western scholars have unfairly centered cis gender white males when applying logic, sometimes leading to scientific racism or systemic racism.² These are important critiques of logic and reason that must be taken seriously. For example, in the name of science, early eugenicists claimed that the white race was superior to other races. And historical examples like Jim Crow laws remind us that even when people claim to be applying reason objectively, there can be racism baked into those very laws that negatively affect people of color even to this day.³

² For one of the most popular arguments for this perspective see: Kendi, I. X. (2019). *How to be an Antiracist*. New York, NY: Random House.

³ This perspective was developed by a school of thought called *critical race theory*. For more info see: Delgado, R. & Stefancic J. (2017). *Critical Race Theory*. New York, NY: New York University Press. However, critical race theory draws from a more broad framework called *critical theory*. For more on critical theory research a group of thinkers called *The Frankfurt School*, the most popular of whom was probably Theodor Adorno. For a more cynical view of critical theory, see: Pluckrose, H. & Lindsay J. (2021). *Cynical Theories*. Swift Press.

However, these are clear misuses of logic. Indeed, using logic well is what has allowed these scholars to critically analyze history and uncover the systemic racism and/or sexism, from James Baldwin to Simone de Beauvoir. Sadly there are some scholars who use these historical examples as a justification to reject logic as a whole, rather than as a useful critique of its unfair application. Yet this rejection is usually based on the false notion that logic itself is a product of cis white males.⁴ As we will see in the sections below, the evidence for logic being universal is overwhelming: it is and has been practiced by cultures all around the world from southern Africa to ancient China.

After we talk more about the universality of logic, we will discuss spirituality in more depth. Then, we will be ready to see the way that logic and spirituality connect.

Logic and Language

In discussing the universality of logic, it's worth returning briefly to symbolic logic. Recall that the symbolic logic chapter from the *Logic and Critical Thinking* textbook presented ways of using symbols—variables like X or Y and connectives like v or &—to simplify arguments. The following, for example, is a modus ponens argument first in natural language, then in symbolic logic:

If I meditate more, I will reach enlightenment.
 I meditated more.
 Thus, I have reached enlightenment.

 $\begin{array}{l} 1. \ M \rightarrow S \\ 2. \ M \\ /.: \ S \end{array}$

⁴ One common source of this argument is: Okun, T. White supremacy culture. In *dRworks*. Retrieved from https://www.whitesupremacyculture.info/uploads/4/3/5/7/43579015/okun_-white_sup_culture.pdf

As noted in that chapter, using symbols helps us to visualize the form of the argument. We can replace different content, and it will still be a modus ponens argument (even false content, remember). But what if we replace the content with another language? Let's try the same argument in Spanish:

- 1. Si medito más, voy a alcanzar la iluminación.
- 2. Yo he meditado más.
- Luego, he alcanzado la iluminación.

Notice that the concepts are the same, in both English and in Spanish. The symbolic representation is the same (even if we slightly modified the variables, it would still be modus ponens). This would be true in other languages as well, but I use these two because they are most common in our geographic area. Even if you just speak English, the point should be clear. If you speak another language, it may be worth formulating your own modus ponens argument in that language as well.

In that example, the translation is pretty similar and direct. However, there are other cases in which the translation is quite different. It's worth considering these other cases, because even when the translation is less direct, the logic and the concepts being represented remain the same.

English: to realize Spanish: para darse cuenta

English: cut to the chase! Spanish: vete al grano!

English: to get away with it Spanish: para salirse con la suya

Again we could translate these to other languages and the logic and concepts would remain the same, even if the representation would look different based on the alphabet of the language. For instance, we could represent the concept of the verb "to realize" with one variable, though it would be written out in natural language differently.

What I am trying to illustrate here is the universality of logic, that logic itself is even more fundamental than language, closer to math or music. An analogy might be that although songs vary by culture and time, the structure of music (such as the notes and scales) remains the same.

Logic in the San People in Southern Africa

More evidence of the idea that logic is universal can be found in the San people of the Kalahari Desert in southern Africa. Until quite recently, for thousands of years, the San lived a traditional foraging lifestyle. The more one studies other cultures in this respect, the more one is likely to draw the conclusion that logic is something independent of human beings, that human beings have discovered in different times and places. Math, again, is a good analogy. The mathematicians/natural philosophers Isaac Newton and Gottfried Leibniz discovered what we now call calculus independently, without communicating with each other. Examples like this suggest that math, like logic, is something much deeper than culture.

But returning to the San, some scholars argue that they endured for so long as a culture due to an intuitive grasp of critical thinking.⁵ They use inference, for example, when hunting. Recall from chapter 1 in the main textbook that inference is what we do when we draw conclusions from the available evidence—a key aspect of critical thinking. I may *infer* that my friend is embarrassed or angry because his face is getting red in a conversation. I may *infer* that a college class will be hard if the professor has a reputation for being hard.

In the case of the San, they use inference to track fleeing animals while hunting. For example, judging from their hoofprints/tracks or droppings,

⁵ All the information in this supplemental text on the San comes from: Pinker, S. (2021). *Rationality*. New York, NY: Viking.

the San modify the way they pursue each given animal. The prints may lead them to follow an animal's normal daily route. Or they may move in circles around the animal's last known location. But from an animal's tracks the San can make full blown arguments. Of course, they don't write these arguments down like we do in this class, but they are using the same universal application of logic that all human beings use. And although they don't write down the arguments, they do debate them amongst themselves—a process akin to the Socratic method wherein different hypotheses are proposed and analyzed.

For example, once the San have recognized the tracks of a steenbok or a duiker (both are types of antelope), they deduce that these animals can be hunted during the rainy season since their hooves are forced open by the wet sand and their joints stiffen. Fundamentally this is a deductive argument, and takes the form of precisely the sort of argument we studied in chapter 2 of the main course reader:

- 1. Animals whose joints stiffen due to rain can be hunted down during the rainy season.
- 2. Steenbok's and duiker's joints stiffen due to rain.
- Thus, these animals can be hunted down during the rainy season.

Other types of antelope, however, such as the kudu and eland have different characteristics and different tracks. These animals tire more easily in loose sand. So in this case the San use a different syllogism:

- 1. Animals that leave kudu or eland tracks in the dry season can be run down.
- 2. The animal that left these tracks must be a kudu or eland. Thus, this animal can be run down.

Just as we saw above, again, we can turn this into an argument in symbolic form. Let's let "animals that leave kudu or eland tracks" be "A," let's let "can be run down" be "R" (recall that the letters for variable choice is arbitrary). So the argument in symbolic form would be:

1. $A \rightarrow R$ 2. A/.: R

Although we won't go into all the details here, the San make deeper logical distinctions between animal tracks—such as determining specific individuals within species based on variations or nicks or even estimating the animal's age, sex, and more.

The San engage in critical thinking not just in the process of hunting but in discussions with each other. As mentioned above, these discussions can be characterized as Socratic. And like good critical thinkers, they don't succumb to appeals to authority—a fallacy (or mistake in reasoning) we will study in more depth later in the class. An appeal to authority is just what it sounds like: rather than presenting a good reason for something, you appeal to the authority of someone else. "Well Stephen Hawking was one of the smartest scientists in history, so when he says X, Y, or Z it must be true," would be a general example of appeal to authority.

Appeals to authority are not accepted when Socratic method type debates ensue among the San. For instance, a San elder cannot simply say, "I am the elder, you must listen to my interpretation of what this track means." He must provide reasoning, and that reasoning can be critiqued even by younger San. In fact, young women of the tribe can be more knowledgeable than men in interpreting the signs of an animal. The tracking scientist Louis Liebenburg, who has worked with the San for decades, reports one woman in particular who put the men to shame in her reasoning skills.

The San also engage in probability-based arguments, which you should know by now is inductive reasoning. For example, they know that the foot of a porcupine has two pads but a honey badger has one. However, they also know that it's possible a pad print may not register on especially hard ground. This knowledge implies that a track with one pad is quite likely that of a honey badger, and that a track with one pad being from a porcupine is less likely (but still possible). We could formulate an inductive argument from their analysis like this:

- 1. Most of the time that a track has two pad prints, it comes from a porcupine.
- 2. This track has two pawprints.
- Thus, it probably comes from a porcupine.

Notice that the argument leaves open the possibility of the track coming from something else (like a honey badger), but the highest probability is that it comes from a porcupine. Again, it's not as if the San are writing out these arguments, but inductive logic (in this case) is at the base of their thinking. Along these lines, the San sometimes engage in what is called Bayesian reasoning: a sort of inductive reasoning in which we make an inference based on the best available evidence and known facts about the world. When they find tracks that are ambiguous, they attribute them to a species that is very common in the area, until/unless future evidence overturns their hypothesis.

Another fallacy we will study later on in the class is the correlation is not causation fallacy, sometimes called the false cause. To put it simply, this fallacy happens when we think that two events that happen around the same time are related *causally*—meaning that one caused the other. But although correlation can *imply* causation it does not *guarantee* causation. An example would be: "Every time I drive to Southwestern (SWC), I hit all the red lights. I think driving to the college is causing those red lights." Although this is something many of us may think (at least I do sometimes!), it is an example of the false cause fallacy, since two events related in time (me driving to SWC and red lights) are not related by cause and effect.

The San's use of the false cause fallacy can be seen in a conversation among them documented by Liebenburg (the tracking scientist):

One tracker, Boroh//xao told me that when the [lark] sings, it dries out the soil, making the roots good to eat. Afterwards, !Nate and /Uase told me that Boroh//xao was wrong—it is not the *bird* that dries out the soil, it is the *sun* that dries out the soil. The bird is only telling them that the soil will dry out in the coming months and that it is the time of the year when the roots are good to eat.

This conversation among the San illustrates not only the use of the false cause fallacy by Boroh//xao, but the Socratic method since !Nate and /Uase listened to his argument and corrected it. Boroh//xao falsely identified the *cause* of the soil being dried out as being the bird, but the bird singing was only *correlated* with dry soil. The true cause was actually the sun.

The San are a fascinating culture and many more examples could be provided of their ability to think critically. However I will provide just one more general example. In the examples above, the San apply logic to hunting. But they also apply logic to their own social lives. They always share meat with bandmates who don't have food, or with nearby tribes without food, since they know the tables could turn and the luck could reverse at any point.

Logic in Ancient China

The evidence of the use of logic in ancient China is a bit more akin to the Western logic of Aristotle that we have been studying in this class since the beginning.⁶ For example, ancient Chinese logic was generally discussed and put together by philosophers and deep thinkers—or academics to be more general. However, the application of logic in ancient China was geared more towards living in harmony with others in

⁶ Willman, Marshall. (2022). Logic and language in early Chinese philosophy. In E. Zalta (Ed.), *Stanford Encyclopedia of Philosophy*. Retrieved from https://plato.stanford.edu/entries/chinese-logic-language/

society, whereas in ancient Greece it was geared towards both understanding the world around us and living well.

Scholars who study this topic tend to focus on the Mohists, students of the philosopher Mozi (470-391 b.c.e.), whose ideas played a central role in the development of China during the Warring States Period (479-221 b.c.e.). Thus this section will primarily focus on the Mohists. However towards the end we will discuss a Taoist philosopher, Zhuangzi (369-286 b.c.e.), who critiqued the Mohists and emphasized the importance of logic in a more spiritual context.

But again, to emphasize, unlike Aristotle these ancient philosophers did not create a formal logic apart from the use of language in a social or spiritual context. Thus, although there are many similarities between the logic itself with other cultures, the goals of this logic are different. Similarly with the San: although the San clearly think critically, it is primarily with the goal of hunting and survival. Nevertheless, as we will see, some of the core aspects of logic remain the same across all of these cultures—from logical inferences to inductive and deductive argumentation.

Indeed, the Mohists argued for a concept akin the Socratic method called *bian*, or disputation. Bian was a style or method of public debate that was refined by later thinkers. This method involved deducing true statements from previously known facts, proper generalizations from particular instances, and more.

But again, the difference in goals between the Mohists and ancient Greek philosophers like Plato and Aristotle is fascinating. Whereas the Mohists didn't necessarily doubt their senses, the Greeks did. Plato, for example, stipulated that there is a difference between what we perceive and what is real, leading him to create his infamous theory of forms. This theory divides up reality into two: the world of appearance (that is, the world we perceive every day) and the world of forms (that is, the world of universals). By universals Plato means stuff like math, logic, and even experiences like love, which all humans can participate in. This division allowed Plato and other ancient Greeks to completely separate logic from everyday life—a trend that continues to this day. The ancient Chinese didn't do this, nor do the San. From the point of view of your professor (me), this is one of the ways that Western philosophy has failed humanity.

But anyway, because the Mohists were primarily focused on human behavior, their use of logic was sometimes more inductive (probabilitybased). For example, it was common to infer principles of how best to behave from the existing behavior of the most virtuous people. This is a standard type of inductive argument, *argument by analogy*—an argument that draws a conclusion from a comparison—which we will study later in the class. In this passage from one of the key Mohist writings, *Lesser Selections*, we see key aspects of arguments by analogy outlined:

Things have respects in which they are similar, yet is doesn't follow that they are completely similar. Parallels between expressions are correct only up to a point... Hence, expressions in analogies... become different as they proceed, become dangerous as they change direction, fail when taken too far, and separate from their root as they flow, and so one cannot be careless and cannot inevitably use them.

It is remarkable that these ancient Chinese thinkers, writing several thousand years ago, explained the idea and limits of an argument by analogy in pretty much the same way I explain it in chapter 4 of the course reader. Although arguments by analogy can be useful in making comparisons, they are only useful "up to a point." Indeed, one of the fallacies (mistakes in reasoning) we will study later in the class is the *false analogy*, which is basically a bad argument by analogy that is "careless," as the Mohists put it.

The Mohists also used logical operators that you should remember from chapter 3 of the main course reader, such as conjunction (yu) and disjunction (ruo). Some scholars argue that they used variables akin to

the variables from chapter 3 in claims of symbolic logic (like P & Q, or $A \rightarrow R$). They used other argument forms we studied in chapter 3, like modus ponens and modus tollens. They worked with a concept of necessity (*bi*), which may be related to the concept of validity (that is, that particular truths necessitate other truths).

However, it is important to note that some scholars disagree on whether or not the Mohists were using a concept of validity similar enough to the one we have used in this class drawing from Aristotle. This is because in Western logic, the concept of truth is intimately bound up with validity (as we learned, you must assume the truth of the premises to see if the conclusion follows with certainty). But the concept of validity (or the closest equivalent) in ancient China was connected more closely with what one ought to do socially rather than what is strictly true. That is, the concept is something that connects more closely to morality than to epistemology (theory of knowledge, remember, from chapter 1 of the course reader).

Nevertheless, some straightforward deductive arguments were expressed in Mohist writings, like this one:

- 1. Acts are humane if they resemble the actions of a sage.
- 2. What my mother did by feeding a beggar resembles the actions of a sage.

Thus, my mother's act was humane.⁷

This is a modus ponens argument, and regardless of whether or not they were using the concept of truth as we conceive it in the West, the Mohists were clearly using deductive logic here.

Although there is much more that could be said about the Mohists' use of logic, we will now take a brief look at Taoist logic before turning to ancient India in the next section. This section has already been fairly abstract. If you are having trouble with any of this, just remember that

⁷ Although the general argument appears in Mohist writings, I provide the specific act of the mother feeding the beggar for clarity.

thus far in this text the point is to see the different ways that logic is universal and practiced in all different types of cultures, even if the goals of that logic can be different.

The ancient Taoist philosopher Zhuangzi like most Taoists believed that human efforts at communication, including both language and logic, are inherently limited. For this reason he disagreed with the Mohist premise that logic can be used as a guide to action and good social behavior. As the Stanford Encyclopedia of Philosophy article on which this section is based notes:

Life is larger than what can be grasped by the human capacity for reason, and there are forms of intuitive knowledge or experience that cannot be explained by the crude implements of language.

However he still believed that logic is useful in a more spiritual context, and by some accounts he venerated reason as one of the primary modes of thought that can lead us to the Tao (or the way). We'll talk more about the Tao later, which can be seen as a version of pantheism—the idea the God exists as a force underlying and within everything. The idea of the limitations of logic but also its usefulness to spirituality will be explored thoroughly. But now we turn to logic in ancient Indian philosophy.

Logic in Ancient India

I conclude the discussion of cross-cultural logic with ancient India for a good reason: some traditions there were explicitly created with the goal of spiritual growth, that overlap with Zhuangzi's views. And recognizing the connection between logic and spirituality, of course (as can be seen from the title of this text), is one of the primary goals of this part of the class.

Like the Greeks, San, and Chinese, the Indians valued debate and expertise. The ancient Indian concept of public debate was called *pariṣad*. In fact, they even had rules for how debates should be

conducted, and when these rules were infringed by a participant, that participant was said to have lost the debate. For example, if a participant used fallacies (again, mistakes in reasoning) that was evidence that they lost.

But in some ways ancient India was very much like ancient Greece in particular. Like the Greeks, the Indians created treatises of topics like astronomy, law, architecture, and more.⁸ And some of these were dialogues not unlike those of Plato and Socrates. In one called the *Questions of King Milinda*, the king puts questions to a Buddhist monk named Nāgasena. The questions often take the form of elaborate analogies where the king Milinda is presenting apparent contradictions in Buddhist philosophy and Nāgasena is showing, through reason, that they are not contradictions at all.

In another book called the *Kathā-vatthu*, arguments are presented to show their logical inconsistency. In the following passage one of the debaters, Sthaviravādin, explains to the other what we would call a modus tollens argument:

Sthaviravādin: Is the soul known truly and ultimately?
Pudgalavādin: Yes.
Sthaviravādin: Is the soul known truly and ultimately just like any ultimate fact?
Pudgalavādin: No.
Sthaviravādin: Acknowledge your refutation,
If the soul is known truly and ultimately, then indeed,
good sir, you should also say that the soul is known truly and ultimately just like any ultimate fact.
What you say here is wrong: namely, that we ought to say (A) that the soul is known truly and ultimately; but we ought not to say (B) that the soul is known truly

⁸ All the information on ancient Indian logic in this section comes from: Gillon, Brendan. (2021). Logic in classical Indian philosophy. In E. Zalta (Ed.), *Stanford Encyclopedia of Philosophy*. Retrieved from https://plato.stanford.edu/entries/logic-india/

and ultimately just like any ultimate fact. If the latter statement (B) cannot be admitted, then indeed the former statement (A) should not be admitted. It is wrong to affirm the former statement (A) and to deny the latter (B).

Sthaviravādin's basic point is that if the first claim about the soul (A) implies the second claim (B), then the latter cannot be false while the former is true. This is how conditional statements work: the second depends on the first. Recall a modus tollens argument from chapter 3:

1.
$$A \rightarrow B$$

2. $\sim B$
/.: $\sim A$

As is pointed out in the passage, if B is not the case, then A cannot be the case either. Although these ancient Indian thinkers were not using variables, they were using logic as we know it in the West. This is yet more evidence that logic is universal.

An example of their use of arguments by analogy can be seen here in another early text called the *Caraka-samhitā*:

- 1. The soul and space are both un-produced (not created by human beings).
- 2. Space is eternal.

Thus, the soul is eternal.

In another ancient Indian text, the $Up\bar{a}ya$ -hrdaya, an argument with similar content appears in a deductive form. As noted in the main course reader for this class, whether a passage is a deductive or inductive argument often depends on the intentions of the person making the argument. In this latter Indian text, we see that the authors intend certainty and are, thus, making a deductive argument:

- 1. Everything which is not perceptible by the senses (sight, taste, touch, etc.) is eternal.
- 2. The self is not perceptible by the senses.

Thus, the self is eternal.

As noted above, the ancient Indian philosophers valued debate. So there were some who challenged arguments like this for the eternality of the self. That is, there were some who claimed that there are other things not perceivable by the senses which could be eternal, seemingly discrediting the argument above. For example, sound:

- 1. Everything that is audible is eternal.
- 2. Sound is audible.

Therefore, sound is eternal.

Those making this argument about sound distinguished between hearing a particular sound in the moment and sound itself as a general phenomenon. However, *this* argument was in turn refuted by a philosopher named Dignāga, who pointed out that as far as we know sound only occurs in the present moments in which people hear it, therefore there is no independent evidence to establish sound existing as a general phenomenon apart from such moments.

This may be a bit confusing but the main point here is to illustrate yet another way that logic—in this case creating and debating arguments—exists cross-culturally.

One final example before finally moving on to spirituality. As noted earlier, ancient Chinese thinkers had different goals with logic and did not separate logic from reality in the same way Plato did with his theory of forms. However, Aristotle also disagreed with Plato on this point and attempted to combine the concept of universals (that some things are always true independent of humans) with particulars (the individual existence of things like people, rocks, anger, etc.). Plato separated the two into the world of forms and world of appearance, as mentioned. But Aristotle combined individual things with universals. For example, we are all individual humans with our own traits, but we share the universal of humanness. Books are all different but they share the universal of bookness. For Aristotle there is no separate world of forms—these forms exist within each individual thing. Some ancient Indian philosophers agreed with Aristotle, to the point that the idea was expressed by many different thinkers. For instance, it was pointed out by some that treeness exists as an inherent property in all trees, even if each individual tree is different.

Spirituality

Actually one more example from ancient Indian philosophy—sorry, I lied above when I said it would be the final example—because it's such a perfect transition to the topic of logic in relation to spirituality. Dignāga, mentioned above, made a distinction very similar to the one made in the main text of this class between inferences and arguments. The terms he used are often translated as *inference for oneself* (inference) versus an *inference for another* (argument).

For example let's say my friend and I are planning to go to a dinner with our other friends. But let's say my friend tells me that they will only come to the dinner if they finish their work project. If I go to the dinner and my friend doesn't show up, I can deduce that they didn't finish their project. This is an inference I may make in my head, but it could be spelled out as an argument. In fact it is yet another modus tollens argument:

1. If my friend finishes their project, they will come to dinner.

2. They didn't come to dinner.

So they didn't finish their project.

When I deduced that my friend wouldn't come in my head, that was just a general inference (inference for oneself), but when I wrote it out, that was an argument (inference for another). Although the distinction isn't perfectly defined, it may be more useful in a discussion of spirituality. Because spirituality is more personal, and can be related to selfdevelopment, inferences to oneself will be most important. For example, when we meditate, pray, or reflect we may make such inferences to help us understand our thoughts, feelings, or behavior.

But, finally, let's address the important but remaining question: what *is* spirituality? For many of us this question will relate deeply to religion. And indeed, one point I want to make absolutely clear here is that (for the purposes of this class at least) we are defining spirituality very broadly—there may not be a perfect definition considering human diversity in general. For this reason I do not define spirituality directly, but rather define it through example and discussion below.

The central thesis of this supplementary reading is that there is a connection between logic and spirituality, and that applying logic to our spiritual lives can not only make us happier but can help us understand more deeply our relationship to the rest of the universe. In this section we will talk first about different definitions of God, since God is often connected to spirituality. I will discuss my personal view on the matter—my beliefs are closely related to a school of thought drawing from Indian philosophy called *Advaita Vedanta*. But we will also focus on the philosophy of *Stoicism* and a modern psychological technique with many practical benefits called *Cognitive Behavioral Therapy* (or CBT).

But first off, what is God? If you grew up in the Western world (like most of us living in California), you will likely define God as an allpowerful, all-knowing, and all-loving being (or perhaps some variation on that). This concept of God draws heavily from the Abrahamic tradition, encompassing Judaism, Christianity, and Islam. And keep in mind that if you are Catholic, that is a version of Christianity. Despite other differences you may have with other versions of Christianity (Protestantism or Lutheranism, for example) you still share the same core beliefs, which include the concept of God. For one thing, this God is monotheistic, meaning that He is believed to be a divine being separated from the universe. Other concepts of God do not define Him as a single being, but a dual being. The Aztecs for instance believed in Omeoteotl, a dual God residing (in their belief system) atop thirteen celestial layers.⁹ Although this dual God purportedly created the world, there were also numerous lesser Gods involved, some of whom humans would impersonate during ceremonies and festivals.

In the Aztec religion, Omeoteotl was the source of two central forces in human beings: *tonalli* (in the human head) and *teyolia* (in the human body, specifically the heart). Aztec spirituality focused heavily on human beings for this reason, since humans were seen as the central homes of these two divine forces—illustrated by the centrally-located human in the Codex Fejérváry-Mayer (see table 1).

Although it's beyond the scope of this chapter to go into depth on Aztec or Abrahamic religions, I mention these examples to illustrate the many different ways different cultures do approach and have approached spirituality.

⁹ Carrasco, D. (1990). *Religions of Mesoamerica*. Long Grove, IL: Waveland Press.

Table 1. the Codex Fejérváry-Mayer¹⁰

In my case (as your professor), I approach spirituality through Advaita Vedanta, as mentioned above. Advaita is a belief system that can be classed as panentheism, or the idea that God/a divine force is within us. That is, unlike Jews, Christians, Muslims, and Aztecs, I do not see God as a being, but as a force or energy (or as something that words can't

¹⁰ Retrieved from https://www.pinterest.com/pin/420945896391785582/

describe so well). Before I go any further, I want to make absolutely clear that you do not have to agree with me—you can get a good grade in the class without agreeing with me on this or on anything else! In fact I hope to convince you that this is one of the beautiful things about spirituality: we can all believe different things about its source while employing similar techniques to improve our well-being. And if you are an atheist or agnostic, or just don't think much about stuff like this, I promise there is a place for you too, as I will discuss later.

The ancient Indian philosophy of Advaita is sometimes referred to as a version of *non-dualism*. For comparison, Christianity is said to be dualistic since it makes a distinction between body and soul—the soul is usually seen as something "floating" in the body somehow. On this view all humans have individual souls (and some would include other animals). The non-dualistic view of Advaita claims that rather than discrete souls there is in fact one universal soul/consciousness that we all share. It is at this point that words become more difficult, because some of my reasons for believing this are based on experience—in particular my experience with meditation. Also, the word soul has particular connotations in a Western context, which is why I prefer to use the term consciousness.

I mentioned the Taoist philosopher Zhuangzi before and although I don't share all his beliefs about Taoism, I am in agreement with him about a couple of things. First, I also believe that life is larger than what can be grasped by logic, and that includes definitions. However, I also believe that logic can be extremely useful in leading us to God (in his words, the way, in mine, universal consciousness). Although it's not precisely the same as spirituality, Zhuangzi provides an example of a worker who builds wooden wheels that illustrates well the idea that sometimes knowledge simply cannot be put into words:

I look at it from the point of view of my own work. When I chisel a wheel, if the blows of the mallet are too gentle, the chisel slides and won't take hold. But if they're too hard, it bites in and won't budge. Not too gentle, not too hard—you can get it in your hand and feel it in your mind. You can't put it into words, and yet there is a knack to it somehow. I can't teach it to my son and he can't learn it from me. So I've gone along for seventy years and at my age I am still chiseling wheels. When the men of old died they took with them the things that couldn't be handed down. So what you are reading there must be nothing but the chaff and dregs of the men of old.¹¹

Again chiseling wheels isn't the same as practicing spirituality, yet there are aspects of spiritual experiences and meditative experiences that are in fact difficult to convey through logical arguments and, frankly, must be experienced. As I've said, logic can help, but it is also not the goal.

In a nutshell, Advaita is a non-dual belief system that says (like many other belief systems) we are born into ignorance—but ignorance in the sense that we are conditioned to believe from a young age that we are separate beings, not just separate bodies but separate souls.¹² This perspective of separation creates all sorts of problems for us, including but not limited to a sense of disconnectedness from others and the world. If we feel disconnected and separate, we are more likely to be depressed and, frankly, treat others badly.

It is for these reasons that Advaita is focused on weeding out this "ignorance." However, it is very, very difficult, because the sense of separation can assault us on multiple levels. Even if I have understood the logic that I am not a separate being, for example, I can still feel that way physically in my body (emotionally, in this case) when someone, say, says something mean and I take it personally. I may turn red, or

¹¹ From *Stanford Encyclopedia of Philosophy* entry on Logic and language in early Chinese philosophy (cited previously).

¹² All the information on Advaita Vedanta in this supplementary text comes from my own experiences practicing it and from the following two sources: Menon, Sangeetha. (2021). Advaita Vedanta. In S. Ranganathan (Ed.), *Internet Encyclopedia of Philosophy*. Retrieved from https://iep.utm.edu/advaita-vedanta/; Hodgkinson, B. (2006). *The Essence of Vedanta*. London, England: Arcturus Publishing.

literally feel changes in my stomach. But many times it's much more subtle and we may not realize the way our bodies and minds are reacting to what someone said or to an experience. We'll return to some of these points below when we discuss meditation.

There are of course still more ways to conceive of God. We've looked at God as a being, as a dual being, and as universal consciousness. As noted previously, there is also pantheism (what Taoists believe) wherein God is identical with the universe. I have heard some scientificallyminded people refer to the *majesty* of the universe as akin to God—for example, such people may take incredible hikes into the mountains and their experiences will make them feel what may be described as "one with God," even if they do not believe in any traditional concept of God.

But what if you are an atheist? What if you don't believe in any God? Or what if you don't even believe that the universe has any sort of majesty? If this is what you think, you could probably be described as a *nihilist*, which is more or less someone who thinks that there is no inherent meaning to life. Someone might tell you that we can create our own meaning, but then you might reply that even *that* has no deep, inherent meaning. After all, you might argue, the sun is going to explode someday, and human life as we know it will be wiped from a vast, uncaring universe. Who cares if I created my own meaning?

Without directly disputing this perspective per se, my reply would be: even if that is all true and the universe has no meaning, don't you want to have peace of mind at least while you're here on the planet? You don't have to believe in any kind of God, or any sort of divine consciousness, but you can still follow some spiritual techniques that might at least make your day to day experience a little less miserable (and maybe even much better than that).

This is where Stoicism comes in, which we'll talk more about soon—an ancient Greek and Roman philosophy that has enjoyed a resurgence in the modern world. One of the very reasons for this resurgence is precisely because so many people feel a lack of meaning that traditional

religions (with their concepts of God) do not alleviate. Public intellectual and philosopher Massimo Pigliucci, for example, is a stoic and has written books about how much Stoicism has helped improve his well-being.¹³ He is also a scientist and an atheist.

I also use Stoicism as a jumping off point for the more practical aspects of spirituality because for those of us who *do* believe in some concept of God, the principles of stoicism can still apply. We just may have different ideas about the source of it. In my case, that source is a Godlike consciousness we all share, whereas for others it might be the Christian God of the Bible. The great thing is that for our purposes, it doesn't matter. We can disagree on some things and agree on others regarding spirituality. Additionally, if you feel that any of the applications of logic and spirituality outlined in this text are unfair or missing anything, please tell me. I will listen and, if you convince me, add any ideas you may have for improvement.

How Logic can Help with Spiritual Growth

A good place to start here is a very basic meditation technique that is often referred to as mindfulness meditation. Although this technique is sometimes associated with particular religious traditions and is indeed an aspect of Stoicism, we will think of it as something disconnected from any tradition. We will think of it as simply sitting quietly and watching what happens in your environment both internally and externally. This does not require you to believe anything about God or anything else.

We may do this meditation in class, but even if we do I highly recommend trying it out on your own. There are useful videos online (all you have to do is google mindfulness meditation), but you really don't need them. Just turn all your devices off—phone, television, iPad, etc. and try to sit still in observation. Don't judge yourself, just simply

¹³ His main book on the topic is: Pigliucci, M. (2017). *How to be a Stoic*. New York, NY: Hachette Book Group.

observe everything that arises in your experience, from thoughts to emotions to sounds.

Now this is the real test: how long could you do it for? One minute? A couple minutes? Five minutes? In my experience, this is much harder to do for beginners than they generally think it will be. And if you struggled with it—if you couldn't help checking your phone, for example—than it may mean that you are less spiritually developed than you think. I don't mean that personally at all, when I first started meditating I made the same realization about myself. It's also a common revelation in meditation groups. If you struggled you have to ask yourself, why? It seems so simple, doesn't it? To sit quietly and observe for a few minutes? But if you couldn't do it, why not? Why is it so hard?

Although the Stoic worldview can be complicated (and differs depending on the Stoic in question), the basic idea is that we should not fight against what we cannot change and we should accept reality as it is.¹⁴ Anytime we get angry, or impatient, we are fighting against what is. That is, we are fighting against the universe, which is a losing battle. It may suck that you are going to be in traffic for two hours according to Google Maps, but there is also nothing you can do about it.

But what is reality? This is where we can go back to our disagreements about God, or lack thereof. For some of you, reality will be identified with God's plan. For me, it's the reality of universal consciousness. The ancient Stoics saw reality as related to something called the *logos*, or a guiding, organizing principle behind the universe. But if you're an atheist, you can just think of reality as your literal day-to-day experience.

What spirituality comes down to on a practical level, most can agree, is being ok with how things are in your life in general. That might include your day-to-day experience, but also can be related to what you have

¹⁴ All the info on Stoicism comes from: Baltzly, Dirk. (2018). Stoicism. In E. Zalta (Ed.), *Stanford Encyclopedia of Philosophy*. Retrieved from

https://plato.stanford.edu/archives/win2022/entries/stoicism/

done in your life and who you are as a person. Yet who you are and your day-to-day experience are intimately related. For example, to be happy now in this moment, you must be ok with the good and bad things you've done in your life. Maybe you stole from a friend once, or mistreated someone you love. From an Advaita perspective in particular, being ok with things like this does not mean ignoring them; it means addressing them rationally and thinking through them. This, of course, is where the logic comes in.

Drawing from my own experience with Advaita, below we will focus on particular topics relevant to spiritually, explicitly applying logic. But we will also draw from Stoicism and its instantiation in the psychological method of CBT. But to emphasize, we will do all this from an inclusive perspective that allows for full participation from any spiritual tradition (or lack thereof).

Meditation vs Investigation

At this point in human history there is so much scientific evidence for the benefits of meditation (especially mindfulness meditation as described above) that I don't even need to cite it. It is known to calm nerves, provide more focus, provide emotional balance, and so forth. And this does not include the spiritual benefits. If you've already studied meditation or meditate yourself, you'll be aware that there are quite a few types. Some are related to breathing techniques, body exercises, creating mental pictures, etc. Many of these techniques are valuable and if you have ones that already work for you, that's great. To put it in the language of logic, the conclusion that you should meditate is backed up by at least one strong premise involving the extensive scientific evidence.

However, I would distinguish meditation from another type of internal reflection/focus: investigation. I understand that this is a somewhat arbitrary division of concepts but in my experience, despite other superficial differences, when we look inward we are either meditating or investigating.

Meditation is usually more passive, such as not so much watching your breath but allowing it to occur naturally in your moment-to-moment experience. But investigation is more active. For example during prayer, some people may ask internally why God allowed a particular event to occur, or may ask what they can do to please God. Investigation is more about thinking through stuff in your own mind, making inferences to yourself. Thus, the investigation is where logic is most important.

Your Basic Reality

One word my Christian students and friends often use is *grace*, as in the grace of God. Although I am not a Christian, I really like the connotation of this word and think it emphasizes an important aspect of reality. It connotes love, forgiveness, beauty, understanding. I believe there is a grace to the world we inhabit as well, but for me I find it in the universal consciousness that I believe resides in all living things. For me, that is my basic reality, consciousness. What is it for you? Is it God? Is it simply the world as it has changed and evolved since the Big Bang, leading to us? Is it math? Music? What is the foundation on which you think reality is based?

This is important to spirituality because it will always be in the back of your mind—what you think is real—so why not make it explicit? For example, here is my argument for why I define universal consciousness as the ultimate reality:

- 1. The argument from Advaita for universal consciousness is the most convincing to me of all other arguments about spirituality (including traditional concepts of God, atheist, pantheism, etc.).
- 2. My meditative and investigative experiences reveal that consciousness is universal in my moment-to-moment experience (the no self argument).

Thus, universal consciousness is my basic reality.

Now, both of these premises require their own expansions, and I could spend a lot of space explaining each. But here is not the place to

expand—suffice it to say that over time I have been convinced of them. Again you don't have to agree with me, it's just an example. How would you create such an argument, what would your basic reality be, and why?

The reason why this is an important first step in applying logic to spirituality is that what you believe to be real or true is always with you in the background, through everything you do. If I truly believe there is no meaning to anything, for example, that's going to have an influence at least part of the time on my thoughts, feelings, and behavior. When thinking of what you believe about reality, try to get at *what you really think*, not what society thinks you're supposed to think, or what others think. But what you *really think*.

In my case, all my experiences are tinged with the knowledge (from my perspective) that we are all parts of a universal consciousness and that I am not a separate entity. One consequence of this belief is that I feel connected to everything at all times. That includes when I'm in traffic, frustrated by someone, or even in a verbal dispute with someone. It doesn't mean I won't still succumb to my emotions and, say, raise my voice at times; but it does mean that I never forget that blissful background reality and that I have access to it.

How does your background reality influence your life? If you believe in God, do feel like God is something (however you define the term) you can fall back on? If you're an atheist, what is your background reality? Nature?

Acceptance

Whatever your background reality is—whatever you believe is real—it is related intimately to the idea of acceptance. Acceptance is exactly what it sounds like and is a key aspect of most spiritual traditions: accepting things as they are. Although a deep acceptance of how things are is vital to Stoicism, *The Serenity Prayer* encapsulates this wisdom too:

God, grant me the serenity to accept the things I cannot change Courage to change the things I can And wisdom to know the difference

CBT researchers have put it this way:

Acceptance, as we mean it, is the voluntary adoption of an intentionally open, receptive, flexible, and non-judgmental posture with respect to moment-to-moment experience... a "willingness" to make contact with distressing private experiences or situations...¹⁵

The difficulty here is especially acute when dealing with our own behavior and events in our lives. It's not as hard to observe others (which is why the concept of people watching is quite common) but much more difficult to observe ourselves. And the Stoics in particular emphasize that we should observe ourselves and each other with a sense of indifference. The difficulty of observing things in our lives honestly, and of accepting them, is why many people (as I have done) emphasize mindfulness meditation as a first step. Mindfulness meditation moves us towards acceptance of our moment-to-moment experience, and makes it easier to eventually face distressing things that we may not want to face.

For the Stoics, some of this acceptance follows from an idea encapsulated by a quote from the Stoic Epictetus, a Roman slave: "It's not the things that disturb us but our judgments about them."¹⁶ Thus it is not what happens per se that causes us distress, it is *how* we think about what happens. And if we truly accept things as they are we will be in a better place to change what we want to change. For the Stoics, we can primarily change only ourselves and the way we see the world to improve our individual well-being.

¹⁵ All discussions of CBT and CBT researchers come from: Robertson, D. (2020). *The Philosophy of Cognitive Behavioral Therapy* (CBT). New York, NY: Routledge.

¹⁶ Epictetus. (2004). *Enchiridion*. T. Crawford (Ed.). New York: Dover.

As may be the case with some of you, I do not agree with the Stoics entirely on this last point, as I talk more about below in the subsection on love. But I couldn't agree with them more regarding the idea of acceptance in general.

One last point about acceptance. It is sometimes confused with liking something that is bad—if you accept the Holocaust, or the unjust murder of an unarmed citizen by a police officer, does that mean you are condoning those events? Not at all. As CBT researchers point out:

Acceptance... does not mean wanting or liking something, wishing it were here, or judging it to be fair, right, or proper. It does not mean leaving changeable situations unchanged—it means to embrace experiences as they are, by choice, and in the moment.

To connect this section to logic, one valuable exercise is to reflect on aspects of your life that have been easy to accept, and ones that have been difficult. You could think about the past or the future. It is also worth reflecting on how you came to accept something over time that at first was difficult, or on something you still have trouble accepting. Then you could try to create an argument that includes a universal or general premise about how best to accept something difficult.

A common example I could provide is that of loss—be it the death of a loved one, the ending of a relationship or friendship, a change in career/life path, etc. Without getting too personal, I went through a loss when I was about 22 years old that hit me pretty hard. I was depressed for over a year, and drank a lot of alcohol to cover up how I felt. Although I eventually recovered, 10 years or so later I fell back into a similar depression (even deeper this time) after a friend died and a romantic relationship ended. However this time I started making comparisons between the experiences; I didn't even remember how I recovered the first time. But when I thought through everything, making inferences to myself—using logic to connect all the dots—I realized what I had forgotten: time. Time is the key. It's not everything, but it is so important to let time heal things. For instance, early on in a loss there

are simply things you're not ready to face. But time softens them and makes them easier to digest, at least from my perspective. By connecting my two experiences I was able to draw a conclusion from them that helped me in the present with my moment-to-moment existence. If I were to write that argument out, it would look like this:

- 1. My current experience of loss and my previous experience are similar in that I feel and felt a lot of depression and anxiety.
- 2. But in the past, the depression and anxiety went away over time. Thus, my current feelings of depression and anxiety will go away over time.

Although I had naturally heard the phrase "time heals all wounds" before, creating this inference in my head helped me to verify the truth of this phrase in my own life. It also led me closer to the full acceptance of the losses I had experienced that I would eventually have. I mention all this not to say that it's a universal experience that you all could feel too (though it may just be); it is simply an example to reflect upon.

Investigation of the Self

Self-analysis or self-investigation can of course take different forms. We could analyze deep philosophical questions like what is the self? Literally, what am I? Just my body? Mind? Both? Neither? Indeed it is questions like this that led me to believe I am best defined as universal consciousness (insofar as words can describe it), and not a discrete separate consciousness/soul. I'm sure the answer would be and is different for many of you.

Or we could analyze our values, why we believe the things we do and where those beliefs come from. What are my morals? Or is morality relative? These are deeper and personal questions, so rather than get into the weeds here I simply present them for optional reflection.

But there is also a more practical self-analysis that relates to our day-today and moment-to-moment experience. It is something we can do through inferences in our heads—inferences to oneself, in Dignāga's words—or we could write them down into arguments. In my eyes this process is a key part of the concept of investigation as outlined above.

For example, let's say I make the following inference in my head, here turned into an argument:

She didn't respond to my text.
 So she's not interested in me romantically.

Think about what general premise is needed here to make the argument work that is unstated. And are you intending this argument to yourself to be inductive or deductive? If it's deductive, you should have a premise like, "Every time someone doesn't respond to a text it means they are not interested romantically." But is that really what you mean? You're obviously not talking about friends and family, so you probably want to modify it to, "Every time a potential romantic partner doesn't respond to a text it means they are not interested romantically." A little better, but how much experience do you have with the potential romantic partners of other people? It's probably best to personalize it completely, as this is an internal inference to yourself: "Every time a potential romantic partner doesn't respond to *me*, it means they are not interested." Now, think back to your experience, is it true in your experience that every time such a partner doesn't text you back it necessarily means they are not interested? Have there not been times where the cause of the person not getting back to you was something else? Like being busy or losing their phone? Being at work? In class? Talking with family? Playing a game? Watching Netflix?

After these considerations, I would imagine many people would downgrade the strength of their argument to an inductive one. For most of us, there are cases where potential romantic partners didn't get back to us and it turned out to be something innocuous. Perhaps some of you are thinking that yes this is true, but still when people don't text you back in this context it's at least a good sign that a person is not interested romantically. That's fair, and so you might create a premise like this: "Most of the time a potential romantic partner doesn't respond to me, it means they are not interested." In my case, I would create a premise like the following, and I will include the whole argument for clarity:

- 1. Sometimes when a potential romantic partner doesn't respond to me, it means they are not interested romantically.
- 2. She didn't respond to my text.
- So she might not be interested in me romantically.

Now that I have used logic to uncover the assumption in my own thinking, I can reflect a bit more on it. If I accept the logic of the above argument, I should feel a lot better if a potential romantic partner does not text me back right away—after all the conclusion is that she *might* not be interested which is much different from *definitely* not interested. I could even modify the argument to include a specific amount of time: does she text me back within an hour? A day? A week? All of these could mean different things and are probably worth thinking through, relative to my previous experiences. Moreover, I can see how weak and ambiguous the initial argument is that I wrote above in premise/conclusion format.

After going through this process, I am more in touch with reality as it is. I can also see that my initial argument was actually quite weak, and therefore did not justify any initial feelings I may have felt. For instance, if I genuinely felt like she didn't have any romantic interest, that could produce negative feelings of rejection. This also tells me that perhaps on other occasions my initial thoughts and/or feelings should not be trusted immediately.

It's also of course possible that you go through this logical process with something else, and that your initial impression is totally justified. But even here, at least now you know for sure or to a higher degree of probability. And this knowledge will push you towards acceptance. Let's say you were wondering if a particular person is really your friend or if they are just using you. After applying logical thinking to the issue (as I did above with texting), let's say you find that it's highly likely that they are in fact using you. Now that you know it's likely, there's no need to waste any more thoughts or time on this person. That may be painful—you may not have wanted it to be true—but at least you won't be in denial. And you will have gained knowledge and strength for dealing with future similar situations.

Love

One nagging question that may have been in the back of your mind is, how can we worry about stuff like spirituality and love and selfdevelopment when there is so much suffering and cruelty in the world? From wars to starvation to racism to discrimination. Who cares about what my reality is when we could be helping people and making the world a better place?

First of all, the very fact that you think this (for those of you who do think it) is an indication that you are accepting a particular version of what reality is. For example, you are clearly not a nihilist. If you were if you believed life has no meaning—it would seem strange to care so much about the suffering of others. Or, you may be motivated to help others because it's what you think God wants you to do. This view, too, presupposes a particular way of looking at and understanding reality.

Like so much of this chapter, there's no way we're going to agree on some of this. But, I will try to persuade you of one thing: individual spiritual development and a desire to make the world a better place are not incompatible. Arguably, they are two sides of the same coin. Indeed some of the most well-decorated activists in history have also been very spiritual. Martin Luther King Jr, for example, was strongly motivated to achieve racial justice by his belief in a loving God that unites people of all races.

On the other hand, it is arguably as important to feed the human mind/soul (whatever word you want to use) as it is to feed the human

body. Even, perhaps especially, people in poverty and more dire situations need spirituality. Although it's a cliché, we should remember that happiness (however we define it) and money are not necessarily even correlated. Some of the strongest, most well-adjusted people I know are people who have experienced tremendous hardship. I quoted Epictetus above—a Roman slave who despite his circumstances achieved a deep mental peace and acceptance.

Although not one spiritual tradition has a monopoly on love, in Buddhism in particular there is a focus on the idea that one cannot become an enlightened being (a Buddha) without also developing a love of humanity and all living beings. Many Buddhists would say that such a development is a *necessary* result of becoming enlightened. A discussion of Buddhist enlightenment is outside the scope of this text, but it's not hard to see the way that as one becomes wiser (as opposed to just smarter), they become more compassionate and understanding. In my tradition of Advaita—which connects in some ways with the concept of Buddha nature in Buddhism—as one becomes aware of their true nature as something connected to all things rather than as separate, one becomes more empathetic and concerned with the well-being of others. But even without any religious baggage, becoming more aware of the sources of your own behavior can help you understand that others might be similarly motivated and that, therefore, you should have compassion for them.

Another way to say it is that if we are not very spiritually developed ourselves—if we don't have much self-knowledge—we may not be in a good place to help others. In fact, our attempts to help others may be counterproductive and even patronizing. If I don't have a good understanding of human nature, or of the specific people or person I am trying to help, how can I really know what is best for them?

Logic and Spirituality Possible Homework or Classwork

Exercise 1-1

Instructions: Reflect back on the investigation of the self subsection at the end of this main text. Consider inferences like the one provided about not responding to a text message. First complete the unstated premises in the questions below, then create 4 more of your own arguments based on examples from your life. For each argument explain in a short paragraph why you chose to make the unstated premise inductive or deductive.

#1)

1._____ 2. I did bad on the test. I am a bad student.

Why is your premise deductive or inductive?:

#2)

 This person is not talking to me. So they are unfriendly.

Why is your premise deductive or inductive?:

3)
1. _____
2. I did something stupid in public. Thus, people think I look like an idiot.

Why is your premise deductive or inductive?:

#4)

2. I think the situation is a disaster. So the situation is actually a disaster.

Why is your premise deductive or inductive?:

1. _____

#5)

- 1. _____
- 2. I cannot accept/am having trouble accepting a bad event that occurred in my life.

Thus, I will never be able to accept it and move on.

Why is your premise deductive or inductive?:

Instructions: Do you believe God exists and, if so, how do you define the concept? If you don't believe, why not? How does your belief influence your behavior, or does it? Reflect on these questions below in a couple of paragraphs.

Exercise 1-3

Instructions: Consider examples in your life of **meditation** and **investigation**. Even if you don't meditate, try to think of any time in which you were simply alone observing what's happening—maybe on a hike, or after an event waiting for your friends. Describe this for a few paragraphs. Then, do the same with investigation as it is discussed in this main reading.

Instructions: Test your reading comprehension and choose the best answer for each multiple-choice question.

1) One of the main points of this text is to illustrate that logic is universal—that is, that logic is practiced around the world in different cultures.

- a. True
- b. False

2) At the beginning of this text, Professor Cuddy argues for the position that...

- a. The presence of systemic racism and sexism suggests that logic is not universal and should be rejected.
- b. Just because logic has been misapplied in history does not mean we should reject logic as a whole.
- c. Logic functions so differently in other cultures than it does in the West that it doesn't make sense to make comparisons between cultures.
- d. You must accept on faith or authority that logic is universal.

3) When the San people engage in debate, they generally provide arguments/reasoning rather than use fallacies like...

- a. Deductive arguments
- b. Appeal to authority
- c. Probability-based reasoning
- d. Appeal to ignorance

4) Zhuangzi, like most Taoists, believed that while logic and language are useful, they are also inherently limited.

- a. True
- b. False

5) The main text presents examples of the ancient Chinese using deductive arguments, but with the purpose of guiding social behavior. One of the main points here is...

- a. The ancient Chinese didn't use logic as effectively as the ancient Greeks did.
- b. The goals of logic are the same in all cultures.
- c. Although there are many similarities in the use of logic across cultures, the goals are often different.
- d. The Mohists did not understand what an argument by analogy is.

6) One of the ways in which ancient India was like ancient Greece is that...

- a. Both wrote books with dialogues that made use of logic and reason.
- b. Both rejected the use of logic and reason.
- c. Neither used modus tollens arguments.
- d. Neither debated ideas amongst each other.

7) In the text Professor Cuddy claims that there is a perfect, direct definition of spirituality.

- a. True
- b. False
- 8) Advaita Vedanta is non-dualistic in the sense that...
 - a. It claims there are two worlds, just like Plato said.
 - b. It claims that morality is relative to cultures.
 - c. It says that God is a separate being, all-powerful, all-knowing, and all-loving.
 - d. It says that there is only one universal consciousness/soul.

Instructions: Consider the example in this text from Zhuangzi regarding the person who chisels wooden wheels. Think of and then describe an example like this in your own life where one must experience something to truly understand the nuances of it.

Exercise 1-6

Instructions: Consider the concept of acceptance from the main text. Try to think of previous experiences in your life that were hard to accept, or that still are. Have there been things that were hard for you to accept at first, but that you eventually did? Complete the argument by analogy below if possible but if not, write out a couple of paragraphs regarding your thoughts on acceptance.

- 1. My current experience of loss/suffering and a previous such experience are similar in that _____
- 2. In the past, I reached acceptance by _____

Thus, I can reach acceptance now in the same way.

Instructions: In the main text, Professor Cuddy provided his argument for what he takes to be his basic reality. What is it for you? Complete the following questions (feel free to add premises in the first if you want).

#1)

1.	
2.	
3.	
Thus, X is my basic reality.	

#2)

Now that you have determined your basic/background reality, reflect upon how it plays out in your life in a couple of paragraphs. If you believe or don't believe in God, for example, how does that influence your behavior? How does it influence your relationships with others?

Instructions: Consider the concept of values. Values might be more straightforward, like valuing family or education. Or they might be deeper, like believing that we should always act in ways that avoid harming others. Complete the argument below by choosing a value that is important to you and then creating premises to support it (as always, you can add premises if you want).

 1.

 2.

 3.

Thus, X is a value that is very important to me.

Exercise 1-9

Instructions: Consider the topic of spirituality and love. Do you believe that the two are in conflict? Reflect on examples in your life where you either helped someone in need, or at least had the desire to help. Describe the people or person you helped and how you can be sure that you truly helped them. Address these points in a couple of paragraphs.

Instructions: The activities below draw directly from Stoicism and CBT. They are suggestions for how best to conduct yourself throughout a given day, from morning to evening. Read and reflect on how you might incorporate something similar into your own life.

Mornings)

- The view from above: begin your day by calming your mind and gathering your thoughts to prepare for the day ahead. Observe or imagine the sun rising and the stars later at night, picturing yourself below them as an integral part of the whole.
- Mentally rehearse the day ahead. Consider the consequences of being guided by fear, irrational desires, etc. Then consider the consequences of being guided by wisdom, understanding, compassion, etc. You may want to picture it mentally as a fork in the road.

Throughout the day)

- Whatever you do, remember that you are responsible only for your own actions. You have control over your actions and thoughts but not over other events. Make an effort to accept circumstances beyond your control without complaint. Remind yourself of the transience of material things and their place within the whole.
- Even when problems arise with others, make an effort to genuinely understand them as if they were your brothers, sisters, friends, etc. Accept that even so sometimes things may not turn out as you prefer. Ask yourself what people you respect would do in the same situation—be it Jesus, La Malinche, Confucius, Socrates, etc.
- Exercise the power of your mind (maybe through mindfulness) by transferring any strong emotional connection

you have to external things (like traffic or rude people) onto your faculty of judgment itself. That is, focus not on what is external to your mind but what is occurring *inside* it in the present moment. Pay close attention to latent value judgments you may be making, about yourself or others. Separate your thoughts from the actual facts. Question immediate impressions that enter your mind.

Evenings)

- Mentally review what happened throughout your day from beginning to end, three times.
- Reflect on any mistakes you made that go against your core values.
- Reflect on what you did well, what strength or wisdom you showed, and praise yourself for it.
- Finally, reflect on what you didn't do or what you could do better next time, and how you could behave differently in the future to better align with your core values.





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