



Digital Commons@

Loyola Marymount University
LMU Loyola Law School

LMU/LLS Theses and Dissertations

2022

A Bayesian Analysis of Early Śramaṇic Origin Stories

John Kingsley

Loyola Marymount University, jkingsley1026@yahoo.com

Follow this and additional works at: <https://digitalcommons.lmu.edu/etd>



Part of the [Buddhist Studies Commons](#)

Recommended Citation

Kingsley, John, "A Bayesian Analysis of Early Śramaṇic Origin Stories" (2022). *LMU/LLS Theses and Dissertations*. 1256.

<https://digitalcommons.lmu.edu/etd/1256>

This Thesis is brought to you for free and open access by Digital Commons @ Loyola Marymount University and Loyola Law School. It has been accepted for inclusion in LMU/LLS Theses and Dissertations by an authorized administrator of Digital Commons@Loyola Marymount University and Loyola Law School. For more information, please contact digitalcommons@lmu.edu.

A Bayesian Analysis of Early Śramaṇic Origin Stories Part I:
Historicity of the Buddha

by

John Kingsley

A thesis presented to the

Faculty of the Department of
Yoga Studies
Loyola Marymount University

In partial fulfillment of the
Requirements for the Degree
Master of Arts in Yoga Studies

May 2022

§I. Introduction

§1.1 – Prelude: Kitchen Table Theology

As a young child, long before the concept of “theological studies” was even a figment of my imagination, one of my earliest memories is sitting with my grandmother over the breakfast table. Assembling in her kitchen, in a ranch house nestled at the feet of the Blue Ridge Mountains in the immortal heart of Appalachia, East Tennessee, she would tell me Bible stories over pancakes that were shaped like Mickey Mouse. She went through the usual fables; Zacchaeus, the “wee little man,” Jonah and the whale, the feeding of the multitude, and many more. Sometimes she read from the Bible, sometimes spoke from memory, and sometimes we would look through *Hurlbut’s Story of the Bible* together so I could get a visual on the stories I was hearing.

One of the ones that always stuck out to me, a story that seemed to come just from my grandma (it was a little too grizzly for Sunday School, I believe), was the unfortunate death of John the Baptist. The way my grandma told the story - or, perhaps more accurately, the way I remember my grandma telling the story - Salome, the king’s daughter, danced for Herod and his guests at a party, and pleased the king so much that the king promised Salome anything she wanted. Unexpectedly, and to Herod’s chagrin, Salome asked for the head of John the Baptist on a platter, and Herod was begrudgingly forced to oblige. To this day, I cannot remember what the impetus was for my grandma telling me this story, but the way she taught me Bible stories certainly affected the way I view the world, even today.

Of course, five-year-old me would certainly not be able to mention to my grandma that neither Mark nor Matthew actually calls Salome by name; that comes from Josephus. I am not sure if my grandmother was reading *Antiquities of the Jews*, or if, perhaps more likely, she was

channeling the 1953 Rita Heyworth movie, or some sort of combination thereof. However, coupled with the backdrop of my grandparent's East Tennessee home, and with complex carbohydrates from the Mickey Mouse pancakes and a generous amount of Aunt Jemimah pancake syrup, the story forged itself into my brain. The fact that it was not necessarily a "Bible Story" in the strictest sense of the phrase does not matter. My grandmother was telling me something she felt was important and that I needed to know, and something she thought would help me later in life.

I tell the story above to describe what I call "kitchen table theology," and to illustrate the deep appreciation, respect, and reverence I have for it. My grandma passed a story down to me that was a product very much of her own world *in front of the text*, that is, a patchwork quilt of sources that made impressions in her mind over an amazing life. Those experiences are irreplaceable and shaped the way I think. I am about to spend the next ninety pages or so challenging historical consensus, asking difficult historical questions, and making claims that some might find unsettling (albeit about South Asian religions, and not Christianity; however, I fully intend to challenge fundamental Christian historical beliefs in future papers). I want to make it perfectly clear that I do this not to challenge any one person's faith or belief system. I have no interest in removing the *theological* validity from stories simply because I am challenging historicity. The wonderful magic that occurs over kitchen table theology is personal and safe, even with my empirical and analytical approach. I certainly do not have a grudge against Buddhism or any other faith, a proverbial axe to grind, or any of the other accusations often levied against those questioning historical-religious consensus. I am simply a scholar driven by questions, and I go to where those questions lead me.

While the theological messaging and interpretation behind certain parables and stories

can shift from individual to individual, we are inside the belly of a different whale when it comes to history. Of course, all of the old tropes apply; history is written by the victors, and decided by those who write it. However, when it comes to the intersection between theology and history, or more plainly, faith and history, the dance becomes much more delicate and tense. At times, certain fundamental beliefs – the beliefs that drive a human being to certain lifestyles, decisions, and actions – seem to be contingent on the historical veracity of certain events or individuals. Unfortunately for these beliefs, sometimes, historicity can be challenged, and even outright refuted. While disrupting the foundation of anyone’s core beliefs is not my intention, it is an unfortunate and unintended consequence of this type of research, and has unfortunately deterred many from even going down the path of historical-critical analysis of some of the most important figures in religion. Though I do not personally feel that the existence or non-existence of any religious figure has deep theological consequences for anyone, I acknowledge that this is my own perspective. As German scholar Matthias Henze aptly states, “bad history begets bad theology.” I would also argue that the reverse is true; bad theology begets bad history. I only ask that those reading this paper keep an open mind about my approach, challenge me where appropriate, and use my arguments to further the study of the wonderful and extraordinary religions of South Asia and beyond.

§1.2. The Problem

The commonly accepted origin stories of the main early śramaṇic¹ religions – Buddhism and Jainism – are contingent upon the historicity, or historical veracity of the existence, of the Buddha and Mahāvīra, their respective founders. However, in the field to date, there exists no comprehensive methodological analysis of the evidence that we have on hand. The historicity – of the Buddha, at least – has certainly been discussed and, to some extent, debated, but the methodologies are quite sporadic and the arguments – on both sides of the debate – are weak and full of logical fallacies. If the scholastic consensus of the origins of Buddhism and Jainism is correct, then one must accept the historicity of the Buddha and Mahāvīra. Therefore, it logically follows that to confirm such scholarly consensus, the historicity of the Buddha and Mahāvīra must be established.

Many stories of the Buddha and of Mahāvīra, the founders of Buddhism and Jainism, respectively, float around in the theological atmosphere. For the Buddha, they very quickly develop from the biographical (e.g., “Buddha was born into a royal lineage”) to the quasi-mythical (“Buddha remembered his past lives”) to the undeniably mythical (“Buddha entered his mother’s womb through the side as an elephant”). Several biographical references to the Buddha outside of what can be considered “canonical Buddhist text” exist, and those will be explored and analyzed further in this paper, but most biographies are written much later than the Buddha is supposed to have existed. As for Mahāvīra, the biographical information that can be pinpointed outside of Jain sources is practically non-existent.

¹ When it comes to diacritical markings of Sanskrit and Pāli words, I have relied on standard convention, unless I am quoting an author or a translation directly, in which case, I am deferring to the diacritics used by the author or translator.

In addition to this paucity of written evidence in the time of the figures in question, there is also the dubious lack of any sort of archaeological evidence for either person. There is, of course, evidence of the *belief* in the historical figures, and there is evidence of the *belief systems*, but there is very little in the archaeological record to suggest that the Buddha and Mahāvīra were actual historical figures, and what is there is questionable as evidence. Of course, on the other hand, a lack of evidence for historicity does not automatically prove the figures are ahistorical either; the methodology for evaluating and weighing evidence will be described in the next subsection of this paper.

The method this paper will use to investigate the origin theories of the early śramanic traditions is the application of Bayes' Theorem. Bayes' Theorem is essentially a mathematical representation of the likelihood of the evidence we have on hand given a certain hypothesis. It has been used in many fields, however, the first application of Bayes' Theorem to a historical figure is Richard Carrier's 2014 monograph *On the Historicity of Jesus: Why We Might Have Reason for Doubt*. The mechanics of the methodology will be explained in the next section; however, the beauty of Bayes' Theorem is that as new evidence is discovered, the final conclusion of likelihood can be adjusted.

Because of the depth and time needed to complete a full Bayesian analysis of both the Buddha and Mahāvīra, this paper will focus mostly on the historicity of the Buddha, and offer further research suggestions for that of Mahāvīra. However, the main objective of this paper is not necessarily to prove, one way or another, that these figures did or did not exist. It is to simply provide a framework for the methodology that I think is most effective at forcing historians – and theologians – to deductively and empirically analyze the questions in their respective fields. If one disagrees with my numbers and findings – and the depth and scope of this project *certainly*

does not allow for a complete and full survey of every piece of evidence, and I rely much on the consensus for many of my calculations – one simply needs to insert their own numbers into Bayes’ Theorem, as long as those numbers can be justified and explained. In fact, I *welcome* such challenges. If, in the following sections, I mis-analyze a piece of evidence, or mistakenly weigh evidence incorrectly, I wholeheartedly invite experts in the field to correct me and add to the project. At the level of a Master’s thesis, this is not about me being right about my conclusion, it is about me being sound in my methodology.

§1.3 Bayes’ Theorem

$$P(h | e, b) = \frac{P(h | b) \times P(e | h, b)}{[P(h | b) \times P(e | h, b)] + [P(\sim h | b) \times P(e | \sim h, b)]}$$

Where P = probability, h = hypothesis, e = evidence, b = background knowledge, $\sim h$ = alternative hypothesis (Carrier 2012, 695)

Now, take a deep breath, and calm the internal riot that you are planning inside your brain. Resist the urge to throw this paper into the nearest recycling bin, and whatever trauma the sight of a mathematical equation has conjured up, slowly inhale, then exhale, and let it dissipate. If you’re reading this, chances are you are in the humanities, or specifically the field of theological studies, and you may or may not have entered this field *precisely* because math was “not your thing.” That is fine. I was the same way. Over the course of the next section, I will explain the above equation – Bayes’ Theorem – in a digestible manner. Please forgive my relaxed and colloquial language during this explanation; in my experience with historians and

theologians, especially theologians who dabble in history, the brain power is better spent on wrapping the head around the idea of using math (the math itself is not that difficult) rather than being impressed with my academic prose. You will have ample opportunity for the latter; fear not, the rest of this paper will read much more like a traditional thesis. Just bear with me through this part.

James Joyce (the professor of philosophy and statistics at the University of Michigan, not the author of *The Dubliners*, *Ulysses*, and *Finnegan's Wake*, every single one of which is more challenging to grasp than Bayes' Theorem) explains it simply as “a simple mathematical formula for calculating conditional probabilities” (Joyce 2003). Richard Carrier describes it as “a description of valid deductive reasoning” (Carrier 2011). Essentially, it is a mathematical representation of the likelihood of a hypothesis being true given the evidence that we have *when compared to other explanations*. It is the emphasized part that is key here. For although evidence can have many different explanations, “possibly” does not mean “probably,” and therefore, *all* of the possible explanations for evidence that we have must be considered before we can decide if our hypothesis is the likely explanation for said evidence.

At this point, it is a good idea to bring up the fact that all of us practice and employ Bayes' Theorem on a daily basis without knowing it. We may not put it all into mathematical figures (more on that soon), but we certainly act based on presuppositions based on experience - *samskaras*, if you will. Consider preparing to drive your car.² If everything with your car looks and sounds “normal” – or, in Bayesian terms, the “evidence” – given your experience – or in Bayesian terms, “background knowledge,” you just assume – or have the “hypothesis” – that your car will start normally. In other words, the “hypothesis that your car will start normally has

² Richard Carrier uses the car analogy in *Proving History* (2012), however, the basketball analogy is mine.

a high probability.” However, if you walk up to your car and there is thick black smoke emanating from your hood, or if a bizarre noise sounds when you turn the key to start the ignition, the assumption – or “hypothesis” that everything is fine changes. This new “evidence” – the smoke and the noise – affects the probability that your car will start normally. Bayes’ Theorem simply shows the mathematical and empirical way that this hypothesis changes.

“Yes, but why math?” you are probably thinking right now. Allow me to point out that we use math and probability in history all the time, we simply do not realize it. For example, if we say “the Buddha probably existed as a historical figure,” what we are *really* saying is that “there is at least a greater than 50% chance that the Buddha existed as a historical figure.” However, sometimes our phrasing lacks certain specifics, and those specifics and their implications can change.

An elite basketball player will “likely” make a free throw, but does “likely” in that sense have the same surety as “my car will likely not explode and kill me when I try to start it?” Of course not. According to basketball-reference.com, Steph Curry is the all-time leader in free throw percentage with a 90.77% success rate. He is the only active player, and one of only three players in the history of the entire NBA and ABA, with free throw percentages above 90% (Curry, Steve Nash, and Mark Price) (NBA & ABA). In more mathematical terms, of the 4,320 players who have ever appeared in an NBA game,³ only 3 of them make or made a free throw 9 out of every 10 times. That puts these players in the top .069% - yes, the top *seven hundredths of a percent* - of players in NBA history, which would certainly qualify as “elite.” If Steph Curry is at the line and preparing to shoot a free throw, no one would think twice about saying he is “likely” to make the shot, However, if a specific car model only starts successfully and does not

³ At the time of this writing, March 8, 2022

explode and kill you 9 out of every 10 times – that is, one out of every 10 times, it *does* explode and kill you, we would be much more careful about using the phrase, “this car will ‘likely’ start safely.” We also probably wouldn’t call exploding one in every 10 times an “elite” safety record. As this example clearly demonstrates, we need to quantify and qualify our uses of terms representing mathematical figures. Bayes’ Theorem does that for us.

So now that we’ve talked about basketball and exploding cars, where does this bring us in terms of history? It would be quite an understatement to say that history has more grey areas than sports and automobile technology. There is much more ambiguity, and there is much more that we simply don’t know. There is no statistical website that counts exactly how many historical figures actually existed in the same manner that there is for basketball, and the standard for evidence of a historical biography in antiquity is much different than that of, say, whether a car explodes or not. Bayes’ theorem, even though it gives us numbers as probability, is understood as just that – a probability. Any time new evidence is introduced, that evidence changes. As Carrier describes it, the equation:

$$P(h | e, b) = \frac{P(h | b) \times P(e | h, b)}{[P(h | b) \times P(e | h, b)] + [P(\sim h | b) \times P(e | \sim h, b)]}$$

essentially translates into non-math speak as “with all the information that we know so far, then:”

The probability our explanation is true	=	-	How typical our explanation is	X	How expected the evidence is if our explanation is true	
			(The above figure) +	How <i>atypical</i> our explanation is	X	How expected the evidence is if our explanation <i>isn't</i> true

Equation taken from Proving History: Bayes’s Theorem and the Quest for the Historical Jesus, Kindle Edition, loc 695

In a simplified, very reduced form, Bayes' Theorem looks like this:

$$P = \frac{A}{A + B}$$

where P is the probability that we're right, A is the *prior probability we're right* (i.e., the number of times our explanation is true), and B is the number of times our explanation is *not* true. Or, in equation form, and it's very simplest:

$$\text{The probability our explanation is true} = \frac{\text{Times it's true}}{\text{Times it's true} + \text{Times it's false}}$$

Taken from Richard Carrier: Bayes' Theorem: Key to the Universe, from Skepticon 4 Convention, 2011

§1.3.1 A Real-World Example of Bayes' Theorem

Let's put this into action, just to get the mechanics of it down. I will use the very true example of me losing my wallet over the COVID-19 pandemic. I have simplified the details and numbers, but it will be more than sufficient to give an ample idea of how Bayes Theorem works, and how malleable it is, yet also how it can leave room for error. Remember, the figures we need are h (our hypothesis), b (background information), e (evidence), and ~h (the alternative hypothesis):

Hypothesis (h): I misplaced my wallet, I am scatterbrained and it is my fault, I will find it soon.

Alternative hypothesis (~h): My wallet has been found by someone else and I will never see it again. Still my fault probably.

Background Information (b): My routine consisted of doing schoolwork during the day, working out at a local park in the middle of the night, then going and recording music or practicing in a studio I was renting. So, in a given 24-hour period, I was only in one of 3 places: my apartment, the park, or the recording studio.

Evidence (e): For a week, there were no charges on my debit card, and nobody turned my wallet in missing anywhere I checked.

So now, let's give some hypothetical numbers. Again, for the purposes of this exercise, we are making these figures up, but for the actual application of Bayes' Theorem to the historicity of the Buddha and Mahāvīra, our figures will be based on actual research.

P(h|b): Of the 20 or so times I have lost my wallet, or anything, in my life, only one time has something actually been stolen. The other times have literally all been my own absent-mindedness. Therefore, the probability (P) of our first hypothesis – me simply misplacing my wallet and having it still be where I left it is 19 divided by 20, or 19:1 odds, or, for math's sake, .95. **P(h|b): .95**

P(e|h.b): The one time out of those 20 times where I hadn't misplaced my stuff, and it was *actually* stolen, there was different evidence. There were charges on my credit card, there was evidence of a break in to my car, and there were other things that did not appear in this situation. Every single other time, the times when I lost my wallet, there were no strange charges on my

credit card, and there was no evidence of a break in. So, how do we quantify these into numbers? The key here is *how expected the evidence we have on our hypothesis?* For example, my car wasn't broken into this time, however, if I simply left my wallet in the park while I was pretending to do a lot of pull-ups, we would not expect my car to be broken into. Remember, our hypothesis isn't "my car got broken into," it is "I left my wallet somewhere and someone took it." That "somewhere" doesn't have to be my car. So, the "evidence" that my car was not vandalized is *just as expected* on h as it is $\sim h$. Therefore, it does not affect the probability either way.⁴ In other words, me misplacing my wallet is just as likely an explanation for my car not being vandalized as someone taking my wallet from somewhere other than my car. Both are equally plausible given this evidence.

What about zero charges on my credit card? This makes it slightly different. Normally, when someone steals a wallet, they aren't looking for my incredibly stylish Atlanta Falcons logo wallet, they're looking for money. While this may not always be the case, the likelihood of my wallet getting lifted from somewhere and someone *not* attempting to use my credit card is quite low. It's not impossible – there is always a non-zero probability of anything,⁵ but to be on the safe side, let's argue *a fortiori* – or beyond a reasonable expectation – that 9 out of every 10 times a missing credit card does not have any charges out of it, it has not been used and hasn't been stolen. Therefore, on h , we would *expect* zero charges on my card nine times out of 10. The fact that there weren't any charges – or my bank issuing a fraud alert or anything like that – is evidence of a misplaced, but not stolen, wallet, or h . **P(e|h.b): .9**

P(e | $\sim h$. b): One of the most important components of Bayes' Theorem – and what makes it so

⁴ Mathematically, this is explained by each entity getting multiplied by the same number. If a certain piece of evidence is 50% expected on h and 50% expected on $\sim h$, then $.5h$ and $.5\sim h$ cancel each other out.

⁵ See Carrier, *Proving History*

effective – is it forces us to have a balanced look at our evidence. While it may be easy for our brains to find an explanation that works and run with it, proper Bayesian analysis also entails asking ourselves if any other explanation could account for the evidence that we have, and if so, how often that these *alternative* explanations are the case. This alternative explanation is represented mathematically by $\sim h$. As mentioned in the above description of $P(e|h.b)$, there are a few explanations *other than our hypothesis of a lost wallet that nobody has found* that would explain zero charges on my credit card. Someone could have found my wallet, taken it, fully intended to return it, and just have not gotten around to it yet. Someone could have been searching for cash and just ditched the wallet, or they could have lost the wallet themselves before they had a chance to use the credit card. So, we must find the probability of any of these things as opposed to me just having absent-mindedly leaving my wallet somewhere.

Hypothetically, let's call it 3 out of every 16 there is no charge on a credit card but the wallet is missing, it's one of these other explanations. **$P(e | \sim h. b)$: .188**

Now, believe it or not, our final figure is already taken care of. Since we're dealing with probabilities, and if a hypothesis has a 95% chance of being true, that means it has a 5% chance of *not* being true, we simply take the inverse of $P(h|b)$ and plug it into $P(\sim h|b)$. **$P(\sim h|b)$: .05**

Therefore:

$$P(h|b) = .95, P(e|h.b) = .9, P(\sim h|b) = .05, \text{ and } P(e|\sim h.b) = .188$$

$$P(h | e. b) = \frac{P(h | b) \times P(e | h. b)}{[P(h | b) \times P(e | h. b)] + [P(\sim h | b) \times P(e | \sim h. b)]}$$

Turns into:

$$P(h | e. b) = \frac{.95 \times .9}{(.95 \times .9) + (.05 \times .188)}$$

Which reduces to:

$$P(h | e. b) = \frac{.855}{(.855) + (.009)}$$

Which further reduces to:

$$P(h | e. b) = \frac{.855}{.864}$$

This says that given no charges on my credit card, no fraud alerts from my bank, and given my past history on losing items such as a wallet and having them *not* be stolen, the probability that I simply misplaced my wallet instead of someone stealing it was .855/.864, or 98.9%. Chances are pretty high, like higher than Steph Curry's free throw percentage high, that I lost my wallet and it wasn't stolen. Now, I knew this about myself, and inherently held off on ordering replacement cards, a new driver's license, and stuff like that, because even though I didn't actually do the above math and calculate the probability that my wallet wasn't stolen, I know my clumsiness pretty well, and did not want to go through the hassle of ordering new cards if there was a pretty high chance that my wallet wasn't *actually* lost. I was being Bayesian without even being Bayesian!

The amazing thing about Bayes' Theorem, and what makes it such a useful methodology, is any time new evidence appears, we simply calculate the expectation of the evidence given our hypothesis and put it into our existing calculations. The next wrinkle in this true story was that

about a week later, I noticed a strange charge on my bank statement. It was for \$250 from what seemed to be a gas station in Riverside, CA, about 50 miles from where I lived. This new piece of evidence completely changed the situation. I assumed my wallet had been found somewhere, and someone had tried to use my card to buy either a lot of gas or a lot of mediocre gas station coffee. I did think the amount was strange (a nice, even \$250? What are they refueling, an 18-wheeler?) and I didn't recognize the name of the charging entity; when I Googled it, nothing came up. Either way, I didn't make the charge, and I certainly wasn't in Riverside. So now, how expected our evidence is given our hypothesis, or $P(e|h.b)$, decreases drastically. Of course, there could be other explanations for that charge: it could be something I forgot about, someone could have accessed my debit card information beforehand, gotten my card info from an insecure website and *not* from a stolen wallet, it could be a bank mistake, etc. But the probability that my card *wasn't* stolen and it *was* charged at a gas station 50 miles away from my apartment a week after it went missing is quite low. For the purposes of this discussion, we can say the probability is *a fortiori* 1 in 19 (for math's sake, we can assume that this incident is the "20th" time, so we won't count it here), or .0523, that my wallet wasn't stolen in this situation. Let's also say that 24 times out of 25, the hypothesis of a stolen wallet explains the charge on the card. Does this mean my wallet was almost certainly stolen? There's only one way to find out: now, we use the same formula, and simply adjust our numbers for the new evidence:

$$P(h | e. b) = \frac{.95 \times .0523}{(.95 \times .0523) + (.05 \times .96)}$$

When the math is done, this gives a 51% chance that my wallet was misplaced and not stolen.

While that is a significant drop from our original 98.9%, it does not prove my wallet was "definitely" stolen. In my head, of course, I thought, "there's no way that my wallet wasn't

stolen after seeing that.” But in actuality, this evidence only made it pretty much a toss-up as to whether my wallet was still wherever I had left it, or it was way out past Interstate 10 in Riverside, well on its way to Beaumont, TX, or any other fine destination between Santa Monica and Jacksonville, FL (the ends of I-10). This is why Bayes’ Theorem is so important; it forces us to look at *how* new evidence affects our probabilities, and not just go on our emotional hunches. We may think a piece of evidence changes something drastically, but we don’t know for sure until we look at it in the complete context of evidence and what has happened in the past. In other words, it holds us to a certain level of accountability when considering all possible hypothesis. It forces us to recognize our own confirmation biases, which we all have, and account for them.

The epilogue to this little anecdote is that as soon as I saw that charge on my bank card, I ordered a new card, new driver’s license, and all that comes with replacing a wallet. About a week later, the day my new license showed up from the DMV, I went to go move a piece of furniture in my bedroom and lo and behold, there my wallet was. It wasn’t stolen after all. Bayes’ Theorem predicted what would happen – it didn’t explain the charge on my card; that’s for another investigation, above its pay grade, so to speak. But it was able to correctly predict that my wallet would eventually show up where I had left it.

§1.3.2 Bayes’ Theorem in History

Coming full circle, this forces us to evaluate claims we make in an empirical manner. For some parts of history, especially more recent history, the documentation and evidence is far greater than it was in antiquity, so this process is exponentially easier. We can say that Joseph Smith “probably” made up a story about treasure he found, because we have court records and

news stories convicting him of, for example, being a “disorderly person” and bank fraud. Of the stories of Joseph Smith claiming to know where treasure is, there is only one report of him having actually found treasure – a report made by him – but many reports of him never actually finding anything. After surveying the evidence and verifying information, we can, with some confidence, give a probability that a claim by Joseph Smith that he found treasure is true.

An important qualification here is to not, as they say, throw the baby out with the bathwater. Often times, when a piece of evidence is introduced, it changes our way of thinking and we can simply assume that everything else we know about the situation is wrong (see my wallet example above when I found the charge on my credit card). Bayes’ Theorem helps us check that tendency. Joseph Smith being a convicted fraudster does not automatically negate the validity of the Mormon religion, and it doesn’t even mean that he didn’t find the famous golden plates that are at the center of the faith. It just means that it’s very unlikely that he wasn’t lying when he said he found them.

A slightly more complicated, yet fairly obvious, scenario, is that of Tirumalai Krishnamacharya and the *Yoga Korunta*. Krishnamacharya is correctly credited with spearheading what we refer to as “modern yoga” today. According to Krishnamacharya, he was perusing the National Archives of India and he came across a 5,000-year-old text, the *Yoga Korunta*. The *Yoga Korunta* allegedly established and confirmed authenticity of his teachings. What a landmark, mammoth find, right? This text would be a complete game-changer in terms of upending the general consensus that modern postural yoga is essentially a modern development (Singleton 2010, Strauss 2004, de Michelis 2008, Mallinson and Singleton 2017, Alter 2004, Jain 2015).

However, as with many things that we get excited about, there is a caveat; we do not

actually have the text. Somewhere in between Krishnamacharya's discovery of the *Yoga Korunta* and someone asking to see the *Yoga Korunta*, it was, according to Krishnamacharya, eaten by ants. Not lost, not misplaced, not destroyed in a fire; it was eaten by ants.

On the surface, this sounds suspicious. That is our internal Bayesian mechanism kicking in. We may be asking ourselves "do ants eat paper?" Or, "have other yoga texts been eaten by ants?" These questions deal with the concept of *prior probability*. We may not actually do the math in our head, but we can assume that, just from general knowledge, the odds are pretty stacked against this particular story of the epicurean tendencies of arthropods holding any water. We could go further and ask if there are any other copies of this text, and, of course, the answer is "no."

Again, this in and of itself does not mean there was no *Yoga Korunta*. For a while, there was only one copy of the Rosetta Stone, and that's definitely real. We need to see if we could *expect* there to be any copies of the *Yoga Korunta*, and if we could expect there to be copies, then that *lack* of copies would certainly be evidence against the veracity of Krishnamacharya's story.

Luckily, Singleton has weighed in on this issue. He calls it "surprising" that none of Krishnamacharya's pupils made copies of the text, and it was not cited in an earlier work by Krishnamacharya (Singleton 2010). This is exactly what a Bayesian analysis asks us to do: contextualize evidence and reconcile expectations with reality. Of course, one may disagree with Singleton's assessment; that is the beauty of academia. But one would have to present a stronger argument than Singleton's proving that we would *not* have to expect any traces of this text to be present anywhere else in history. The methodology stays the same, but as the evidence shifts, so do the probabilities.

If we really wanted to do a full-on Bayesian analysis of the evidence, we would also have

to be confident that we know what ants do and don't eat. Again, our first reaction is probably "ants don't eat palm leaves and lacquer," but do we *really* know that? If pressed by someone to go deeper than an initial hunch, what evidence can we provide to support our argument that it is highly unlikely that ants *wouldn't* eat the *Yoga Korunta*? In order for an argument to be sound, it must have supporting evidence for everything. Because if, for example, we do research and realize that yes, ants *do* eat palm leaves and lacquer, or whatever material the *Yoga Korunta* was allegedly written on, we have to adjust our likelihood of our hypothesis being true given the evidence we have. Bayes' Theorem forces us to take the extra step and verify our claims, even the ones we dismiss as easy to prove.

This concludes a basic introduction to Bayes' Theorem and its applications in the humanities. While a full history of the Theorem and its broad use of applications in other fields is beyond the scope of this writing, for those interested, there are plenty of resources explaining what it is and why it is useful. From informative yet digestible internet videos (such as the one from the generally consistent *Crash Course* series)⁶ to McGrayne's *The Theory that Would Not Die*. While this information may be new to those of us in the humanities, Bayes' Theorem is a tried- and-true methodology for other fields. This paper will now show that using Bayes' Theorem in a historical approach will force us to reconsider prior assumptions and create a more thorough and logically sounds idea of the origin of the early śramanic traditions, Buddhism and Jainism.

⁶ <https://www.youtube.com/watch?v=9TDjifpGj-k> and <https://www.youtube.com/watch?v=51bLRF02b4w>

§II. The State of Current Scholarship

§2.1 Consensus

The general consensus among scholars is that both the Buddha and Mahāvīra were actual people that walked the Earth sometime through about the middle of the 1st millennium BCE. Most scholars consider them contemporaries, and very little outside the Jain literature actually mentions Mahāvīra. Questioning the historicity of the Buddha has certainly occurred, however, Drewes points out that very little actual evidence has been presented. His 2017 article *The Idea of the Historical Buddha*, which appeared in the *Journal of the International Association of Buddhist Studies*, provides a concise and apt summary of the development of historical Buddha research. His main findings were that those who argued *for* the historicity of the Buddha did so with either fallacious arguments such as the *ad populum* approach (Rhys Davids, Hermann Oldenberg, André Bareau), which essentially argues that because there's a consensus, it must be true, and the "Great Man Theory," as Drewes calls it, which argues that, according to Étienne Lamotte, "Buddhism could not be explained unless we accept that it has its origin in the strong personality of its founder" (Lamotte 1958, cf Drewes 2017). Drewes points out that even some of these writers that seem to take a stance in favor of history admit that the evidence is insufficient to make the case (EJ Thomas, Lamotte, Bareau, for example). These are the latest attempts at historical Buddha research, and Drewes, in his article, advocates for a tempered position of caution; he states,

Although the idea that the Buddha cannot be considered a historical figure may seem radical, my argument is really a minor one...my only real suggestion is that we make the small shift from speaking of an unknown, contentless Buddha to accepting that we do not have the grounds for speaking of a historical Buddha at

all (Drewes 2017).

I found three articles written in response to Drewes' article: Oscar von Hinüber, *The Buddha as a Historical Person*, JIABS 2019, Alexander Wynne, *Did the Buddha Exist*, Journal of the Oxford Centre of Buddhist Studies, 2019, and Bryan Levman, *The Historical Buddha: Response to Drewes*, Canadian Journal of Buddhist Studies, 2019. In addition, while not a response to Drewes, *The Authenticity of the Early Buddhist Texts* (2015) by Sujato and Brahmali argues that the earliest Buddhist texts “originated from a single historical personality, the Buddha,” and is thus relevant to this discussion (Sujato 2015, 6).

One aspect that is worth pointing out at this juncture is that von Hinüber seems to have misunderstood Drew's argument; to reiterate the above quote from Drewes, he is not arguing against historicity. He is simply arguing that we do not have enough concrete evidence to speak of the Buddha as situated firmly in history. Most reactions to Drewes - and anyone who makes Bayesian arguments in relation to the historicity of historical figures – are like this; rather than understanding what the actual arguments are, they simply throw up a spirited defense of the idea of historicity in general. This does not make them incorrect or invalid; however, it does fail to address the argument Drewes, and this paper, will make.

§2.1.2 Establishing a Criteria of Minimal Historicity

One of the main factors resulting in the lack of coherency in historicity arguments – both for and against historicity – is the lack of a consistent criteria as to what “historical” means. Take the example of Jesus Christ – when one person talks of a historical Jesus, they could be talking about a simple human itinerant preacher that pushed back against the centrality of the temple in Second Temple Judaism. When another person talks of historical Jesus, they could be talking

about a divine being that, at least according to the Gospel of John (and only the Gospel of John, but that’s a conversation for a different paper), turned water into wine. Proving mythical elements of a person’s biography – or, more perhaps more patly, one’s hagiography – did not actually happen is different from proving that person did not exist. In other words, most scholars (at least openly) believe Jesus existed. Many of those same scholars also do not believe that Jesus *actually* turned water into wine. These two separate arguments often get conflated, even unintentionally, so in order to properly debate and argue the topic of the Buddha’s historicity, one must actually establish exactly what “historicity” it is that is being argued.

Following the formula of Richard Carrier’s “minimal historicity hypothesis” for Jesus in his 2014 monograph *On the Historicity of Jesus, Why We Might Have Reason for Doubt*, for the purposes of this project, will establish the following criteria for a “historical Buddha:”

1. Someone with the name Siddhārtha Gautama was born in Lumpini to a royal lineage
2. Siddhārtha left his protected, insulated life as a prince and saw that all life is suffering.
3. After some trial and error, Siddhartha meditated under a tree, found success and fulfillment, and proceeded to teach his methods to followers until his death.

As one can easily notice, I have left out any sort of theological implications here, for example, by not using the term *nirvana*. I also am not concerned with the particulars of the sights the Buddha may have seen outside the palace; where the Buddha actually saw a dying man or not has nothing to do with his historicity. A real Buddha could have easily created that story to make a point. This investigation into historicity has exactly zero to do with later theologies. I also have no dates for the Buddha’s life as part of the criteria; dating events in South Asia is notoriously difficult and nothing about the story of the Buddha is contingent on other historical events

(except for occurring before the Aśokan reign). If all of the three of these above criteria can be even somewhat established with reasonable probability, it will be safe to say that a historical Buddha probably lived. However, if any of the above criteria cannot be established, then we will have to concede that, at least on the evidence we have right now, there was no historical Buddha, and the origin stories of the early śramanic cultures need to be reexamined.

This will eliminate the conflation of arguments discussed earlier. And of course, as with everything, this criterion need not be set in stone. If, for example, it can be proven that the historical Buddha need not have been from royal lineage, then this criterion can be adjusted as more evidence becomes uncovered. On the other end, if it can be proven that a historical Buddha had to have lived during a certain time period, that time period can be inserted in to the criteria. At some point, however, the further we deviate from this criterion, the further we get from the idea of a historical person and the closer we get to an ambiguous, arbitrary set of broad facts that could be placed upon any living being.

§2.1.3 Establishing an Alternative Hypothesis

Much of the criticism of mythicism is directed towards what essentially is “naysaying.” Often times, those trying to question historicity are not able to prove an alternative. While the scope of this paper is mostly methodology, for every h , there has to be a $\sim h$. So, where h is that a historical Buddha, matching the criterion of minimal historicity described in §2.1.2, founded Buddhism, $\sim h$ is that the Buddha began as a mythical character and details of his biography were later written into history, starting with Aśvaghōṣa’s *Buddhacarita*. This process is known as “Euhemerization,” after the 4th century Greek writer Euhemerus, who would essentially “write” mythical characters into history. How and why that may or may not have happened will be the

subject of a follow up to this study, but this study will show that, given the evidence we have, that is the *most likely* form of mythicism.

Oftentimes, critics of mythicism view the Euhemerization of figures as a sort of “conspiracy theory,” where a council of people sat around and tried to invent a character in one sitting. This may be the case, but I find that the most plausible case for a mythical Buddha states that over time, oral legends of the Buddha that appear in the Early Buddhist Texts (EBTs) grew into one legend that was crystalized by the more mythical biographies. These biographies were composed, at the earliest, several centuries after the Buddha would have survived. Sujato and Brahmali (2015) seem to be arguing against this version of mythicism in their book, *The Authenticity of the Early Buddhist Texts*. Just like we need to be precise in our definition of what a historical Buddha is, we should also be precise in what our definition of what a mythical Buddha is so arguments and conversations can be streamlined. Whenever I refer to “mythicisim,” “~h,” or a “mythical Buddha,” I am referring to a Buddha that began as an early legend and then later became written into history, not a Buddha that was later invented out of a theological vacuum.

§2.2 Drewes’ Argument: An Analysis

Drewes’ article is essentially in two parts: a summary of scholarship on the historical Buddha, and then a series of arguments that pushes back on the idea that we can say with any degree of certainty that there was a historical Buddha. In order to avoid diluting his first argument, I will quote it in full here:

The problem here is that it is not clear that the tradition itself envisioned the Buddha as an actual person. Early Buddhist authors make little effort to associate the Buddha with

any specific human identity. Familiar narratives of the Buddha's life may seem to tell the story of a specific person, but these are only found in late, non-canonical texts. Early texts, such as the *suttas* of the Pali canon, say hardly anything about the Buddha's life, and identify him in only vague terms. Rather than a specific human teacher, he appears primarily as a generic, omniscient, supra-divine figure characterized primarily in terms of supernatural qualities. Indeed, although this fact is almost invariably obscured in scholarship, early texts fail to provide us with a proper name (Drewes 2017).

This seems to reduce to the argument that the earliest texts, those closest to the supposed time of the Buddha, do not identify a particular human being specifically, and the most obvious point is that early texts fail to identify the historical Buddha by name. Drewes goes on to argue that his traditional name, Siddhārtha Gautma, is “not attested in any early source,” and that his “surname,” Gautama, is more of an epithet than an actual name. The Gautama *gotra*, or lineage, is one of eight ancient lineages that Brahmanical tradition recognizes as having descended from eight mythical *ṛṣis*, and there were certainly plenty of figures in South Asian antiquity identified as Gautamas. Additionally, the Śākya clan, of which the Buddha was supposedly a member, is not attested anywhere else in non-Buddhist sources (Wilson 1832, 7-8, cf Drewes 2017).

Essentially, Drew points out here that the earliest sources we could possibly consider close to the time of the Buddha fail to a) name him and b) place him in an existing historical dynasty.

From a Bayesian perspective, only part of this argument holds water. It is well established that after the Indus Valley seals, which contain very, very rudimentary characters that could be considered “writing,” there is no writing in South Asia until the time of Aśoka. Therefore, we have a void of anything to which to compare Drewes' name argument. On the surface, of course it would seem odd that early texts did not actually name a leader of their

movement. But we have nothing else to compare it to. We do not have another South Asian religious leader whose historicity is established that *is* specifically named in its texts. So, this idea that “we would expect there to be a specific name” is somewhat an arbitrary, modern invention. Sure, *today*, that would be bizarre; if the Branch Davidians did not name David Koresh as their leader, and we had nothing else to prove that David Koresh existed, such as a birth certificate, school records, census records, etc., then that would be evidence that David Koresh did not exist. But the environment in the first millennium BCE in South Asia is quite different than it is in the United States today, so of course, the standards of what is “expected evidence” must be different. For example, we do not have census records from 500 BCE in South Asia, so we do not know what the every-day naming conventions would be. Therefore, this evidence of a non-specific name is *just as expected* on historicity as it is on ahistoricity, therefore rendering it as ineffective on either side of the argument. It is not enough simply to state that something is unexpected; one must either cite scholarship as to why the evidence is unexpected on a certain hypothesis, or prove it as such onseelf. In this case, Drewes does neither.

Drewes’s next argument is slightly more epistemologically sound; however, when held up to Bayesian methodology, it is easy to see how the argument needs to be developed in a more concrete manner. Essentially, Drewes addresses what he refers to as the “Great Man Theory” – the idea that *somebody* had to be behind the beliefs that came to be known as Buddhism. With regards to the Buddha in particular, this is argued both by Koeppen, Oldenberg, Monier-Williams, and Lamotte. As Koeppen states, “the emergence of an order, a sect, a church without a founder is inconceivable, and it is almost as inconceivable that the memory of this founder could ever go completely out in the circle of his followers and adherents” (Koeppen 1857).

Monier-Williams is more specific:

Buddhism is nothing without Buddha... No religion or religious system which has not emanated from some one heroic central personality, or in other words, which has not had a founder whose strongly marked personal character constituted the very life and soul of his teaching and the chief factor in its effectiveness, has ever had any chance of achieving world-wide acceptance, or ever spread far beyond the place of its origin (Monier- Williams 1889).

Drewes seems to address both the Buddha-specific and non-specific argument that “a religion has to have a founder” by stating:

“Many, I suspect, have felt that it is unlikely that a religious tradition would claim to have a single founder – or re-establisher – contrary to fact, but religious traditions often do so, among other reason, to be able to specify a coherent source for authority or revelation. Indeed, many, perhaps most, religious traditions that claim to have a single founder did not actually have one” (Drewes, 2017).

While Drewes is correct, it is argumentation that follows that is somewhat irrelevant to his point. The actual Bayesian argument against the “Great Man Theory” will be discussed in the Evidence section of this paper, however, for now, it is sufficient to note that Drewes introduces an irrelevant reference class to which to compare the Buddha. He rightly claims that many religious traditions either made up their origin stories or attributed their origins to a fictitious character, however, with the exception of Laozi, the characters he cites – Abraham, Moses, Vyāsa, Vālmiki, Agamemnon, and King Arthur– do not occupy the same functionality as the Buddha. Their ahistoricity is almost unanimously accepted; however, Abraham and Moses are not considered the founders of Judaism. Rather than preaching wisdom and insight, they were

more channels of a particular vision of God and a way to distributed that God's message to the Israelites. Vyāsa is not considered the founder of anything; authorship of several Indian religious texts is attributed to somebody named Vyāsa, as is the Mahābharata to Valmiki, but no thought is said to be traced back to either writer individually. Agamemnon is simply a character in a Greek epic. King Arthur does not currently have religious adherents. Drewes is right to argue that these figures never historically existed; however, in relation to Drewes's argument, it does not mean anything in pertinence to the likelihood of the Buddha's historicity (again, with the exception of Laozi). This argument *could* be utilized in a different position, but not one in pertinence to the "Great Man Theory." A stronger, more concrete argument, and one that will be made later in this paper, would be something to the effect of arguing that the ancient Israelite religion – what came to be known as Judaism during the Second Temple period – serves as the scriptural basis for modern-day Judaism, Christianity, and to an extent, Islam, which make up a large part of the world today. There is no recognized founder for the Israelite religion of the Ancient Near East, so there is precedent for an influential religion to not have a founder.

Drewes's last argument is quite Bayesian, but interestingly, he does not defend it with any sort of evidence, which is something he criticizes others for doing in the same paper. He states, "In ancient India, attributing the origin of family lineages, religious traditions, and texts to mythical figures was not only the norm, but the rule, with very few known exceptions predating the Common Era." Drewes then cites no examples of "the rule," nor does he cite the "very few known exceptions." We are simply to take his word for it. This does not do anything for an argument, nor does it set up for a proper response within the academic community. And, of course, there are simply other reasons why we do not have sources for historical figures before the Common Era, not the least of which is that writing did not exist in South Asia before the

Aśokan edicts. This does not mean Drewes is wrong, however, it does mean that this argument, unless backed up with scholarship and evidence, cannot be used in the argument for or against historicity.

While the above criticisms may seem harsh on Drewes, one can find sympathy with Drewes – and anyone else – in so erring, simply because it is so common. This is why Bayes’ Theorem is crucial. It would force a scholar like Drewes to look at his reference class of Agamemnon, King Arthur, and the others and ask himself if it really is as relevant as he initially argues. While the positions make sense in a vacuum, when applied with context, they do not quite stack up so well. When responses, such as the one I will deal with in the next section, dissect such arguments, they end up simply disproving the worthiness of the evidence and not really getting at the heart of the argument, which creates a never-ending hamster wheel of logical fallacies, and does not advance scholarship in any way.

§III. The Prior Probability

§3.1 Introduction to the Prior Probability, $P(h|b)$

One of the most important, yet also one of the most misunderstood, features of Bayes’ Theorem is the notion of *prior probability*. Simply put, the prior probability, or $P(h|b)$, is the frequency in which our hypothesis is true as has occurred throughout history. In other words, without factoring in any of the evidence for our particular hypothesis in our particular case, prior probability essentially tells us what *normally* happens. As Richard Carrier explains it, “prior probability is based on the general expectations produced by our background knowledge, as distinct from what we consider the evidence that needs to be explained by our hypothesis” (Carrier 2014, 238-239). It sets a baseline expectation for what we can believe to be true in most

cases pertaining to the one we are currently working with.

One common example of this takes place every single year in the National Football League. Until the 2021 season, every team in the NFL played 16 regular season games. After the second week of the season, articles begin circulating about teams that are 0-2 – that is, are winless through the first two games of the season. It has become somewhat of an unofficial tradition to rank the 0-2 teams by their chances to make the playoffs. Between 2002, when the league expanded to 32 teams, and 2021, 12.5% of the teams that lost their first two games made the playoffs (or would have made the playoffs in the NFL’s current 14 team playoff format; the league adopted its current playoff arrangement in 2020) (Barnwell 2021). This is a perfect example of the prior probability. If, for the sake of discussion, one uses the numbers from 2002-2020 (a proper Bayesian analysis would have to include the latest season, 2021, in which none of the seven teams that started 0-2 made the playoffs, so that 12.5% probability would be slightly reduced), this would be our $P(h|b)$.

What this prior probability gives us is a sizeable and relevant reference class (32 teams over the course of 19 seasons, which would be 608 total team-seasons, counting each team’s individual season as one team-season) that allows us to compare certain criteria (an 0-2 start) with a hypothesis (a team will not make the playoffs). Given everything that has happened in the last two decades in the NFL, if a team starts 0-2, we can make a reasonable assumption that their probability of making the playoffs is quite low, because we have verifiable data that confirms such an assumption.

What the prior probability does *not* give us is evidence. If we use data in our calculation of prior probability, we *cannot* use it as data for evidence. That would be, to put it bluntly, “double-dipping,” and would create an unsound equation. Once we have used 0-2 teams in the

past 19 seasons as a reference class, that number stays on that side of the equation. A team starting 0-2 is in no way, shape, or form proof that it will not make the playoffs. Opponents of Bayes' Theorem will commonly conflate these two entities, so it is important to understand the difference. There are many *other* factors that could count as evidence that would tip the scales in favor of a team making the playoffs. For example, if the Atlanta Falcons start the season 0-2, but played their first two games against the two best teams in the NFL and their schedule gets exponentially easier, then it is reasonable to expect that a few games into the season, they will have a better record. If, by the end of the year, they have a 14-2 record, they will almost *certainly* make the playoffs, and the fact their only two losses happened in their first two games becomes irrelevant. There can be other examples of *evidence* to explain a loss, such as their entire quarterback corps becoming exposed to COVID-19 and being unable to play in a game, leaving the team without a quarterback (as happened to the Denver Broncos in 2020). If in the future, all NFL records after 2022 somehow get destroyed, and we somehow do not know who made the playoffs in what year, an 0-2 start would not necessarily count as *evidence* that a team did not make the playoffs; it is simply a mathematical representation of what has happened in the past based on evidence that we do have. It is a starting point. The fact that a team started 0-2 puts them in a reference class that contains mostly teams that do not make the playoffs is not evidence that said team did not make the playoffs. That probability – the *posterior probability*, or the probability that our hypothesis is true, is based on evidence to be examined in the future, multiplied by this prior probability.

§3.2 The Reference Class

Now that we have established the concept of a reference class for establishing prior

probability, or $P(h|b)$, and demonstrated an example of it using a modern situation (the National Football League), we can now turn our attention to applying all of these concepts to the issue at hand: the origin of South Asian śramaṇic traditions. The reference class we will use for our prior probability is a mythotype developed by Lord Rank and Otto Raglan, aptly entitled the Rank-Raglan Mythotype. It is a set of 22 characteristics that are found across hero narratives in Indo-European mythology, and individuals are “scored” based on how many of these characteristics they match. The 22 elements of the Rank-Raglan Mythotype are:

1. Hero's mother is a royal virgin;
2. His father is a king, and
3. Often a near relative of his mother, but
4. The circumstances of his conception are unusual, and
5. He is also reputed to be the son of a god.
6. At birth an attempt is made, usually by his father or his maternal grandfather to kill him, but
7. he is spirited away, and
8. Reared by foster -parents in a far country.
9. We are told nothing of his childhood, but
10. On reaching manhood he returns or goes to his future Kingdom.
11. After a victory over the king and/or a giant, dragon, or wild beast,
12. He marries a princess, often the daughter of his predecessor and becomes king.
13. For a time he reigns uneventfully and
14. Prescribes laws, but
15. Later he loses favor with the gods and/or his subjects, and
16. Is driven from the throne and city, after which
17. He meets with a mysterious death,
18. Often at the top of a hill,
19. His children, if any do not succeed him.
20. His body is not buried, but nevertheless
21. He has one or more holy sepulchres (Rank 164)

Raglan himself scores the following characters according to his scale:

1. Oedipus: 21
2. Moses: 20
3. Theseus: 20
4. Dionysus: 19

5. Watu Quinung: 19
6. King Arthur: 19
7. Romulus: 18
8. Perseus: 18
9. Heracles: 17
10. Llew Llawgyffes: 17
11. Bellerophon: 16
12. Jason: 15
13. Zeus: 15
14. Nyikang: 14
15. Pelops: 13
16. Robin Hood: 13
17. Ascelpius: 12
18. Joseph (son of Jacob): 12
19. Apollo: 11
20. Sigurd/Siegfried: 11
21. Elijah: 9 (Rank 165-173)

The historicity of each of these 21 characters is generally denied, except by religious apologists. Again, as with the football example above, scoring on this list does not necessarily mean one is ahistorical; it is not evidence. However, it does begin to give us a reference class from which to assess and assign a prior probability of historicity.

One of the criticisms of the Rank-Raglan Mythotype is that it is easily malleable; i.e., being liberal with the criteria can allow anyone to shoehorn in a verifiably historical figure into “mythological” status with wide enough usage of the mythotype. One oft-cited example of this is Francis Lee Utley’s 1965 article *Lincoln Wasn’t There or Lord Raglan’s Hero*. In the article, which is clearly satire, Utley finds that Abraham Lincoln scores a 22 out of 22 on the Rank-Raglan scale. Dundes describes the article as “somewhat tongue-in-cheek;” this description is certainly an understatement if there ever was such a thing. Consider the following from the essay:

Raglan’s fourteenth point concerns the early uneventful reign of the hero. This is a mere doublet of the male Cinderella aspect of his childhood, but the myth makes

something of it. There were many doubts in his early administration of his ability to lead the Union armies. He trusted too long the vacillating McClellan and other impotent generals. He was notoriously slow in decision, unforceful, even woman-like, in act. He was reported to have said that it was lucky that God did not make him a woman, since he was unconstitutionally unable to say No. (Utley 1965)

This is, of course, complete satire. Lincoln was elected in 1860 and inaugurated on March 4, 1861. Less than six weeks into his presidency, on April 12, 1861, General Pierre Gustav Toutant Beauregard ordered the bombardment of Fort Sumter, near Charleston, South Carolina, launching the United States into a four-year civil war. To call it an “uneventful reign” is clearly sardonic. The essay is brilliantly written and, to put it colloquially, a hilariously entertaining read. It *does* underscore the importance that appearance on the Rank-Raglan scale does not prove ahistoricity, only that the mythical elements of the story are most likely untrue. As Dundes analyzes, “the fact that a hero’s biography conforms to the Indo-European hero pattern does not necessarily mean that the hero never existed. It suggests rather that the folk repeatedly insist upon making their versions of the lives of heroes follow the lines of a specific series of incidents” (Rank 211).

Richard Carrier has taken the Rank-Raglan mythotype a step further by re-scoring Raglan’s list to more “rigorous” standards and adding Jesus and Plutarch. Carrier’s adjusted scores rank as such:

1. Oedipus: 21
2. Moses: 20
3. Jesus: 20
4. Theseus: 19
5. Dionysus: 19
6. Romulus: 18
7. Perseus: 17
8. Hercules: 17

9. Zeus: 15
10. Bellerophon: 14
11. Jason: 14
12. Osiris: 14
13. Pelops: 13
14. Asclepius: 12
15. Joseph: 12

In this list, Carrier includes only those whom he scores a 12 or higher; a reference class is built around those scoring above 50% on the Rank-Raglan scale. This reference class is relevant to the Buddha in that, with the exception of Jesus, each and every one of these figures is overwhelmingly accepted as mythical, and “yet every single one of them was regarded as a historical person and placed in history in narratives written about them” (Carrier 2014, 229-232). This is *precisely* what we’re investigating with the Buddha; was he an actual historical person, or was he simply a myth “euhemerized” into existence by writers and legend? The next step in determining a prior probability for the historicity of the Buddha is to see how he scores on the Rank-Raglan criteria.

- 1. His mother is a royal virgin: 1⁷**
- 2. His father is a king: 1**
3. Often a near relative of his mother: 0
- 4. The circumstances of his conception are unusual: 1**
- 5. He is also reputed to be the son of a god: 1⁸**
6. At birth an attempt is made, usually by his father or his maternal grandfather to kill him: 0⁹
7. He is spirited away: 0

⁷ None of the biographical sources mention anything about his mother being a virgin, however, the concept of immaculate conception certainly applies here. According to the *Lalitavistara Sūtra*, the Buddha needed a mother who had no children, and she had to be chaste for a period of thirty-two months (3.50). Given the nature of the Buddha’s conception, the idea of virgin birth certainly fits this mythotype.

⁸ While not the “son of God” in the Hellenistic sense of the Ancient Near East, it is clear that “Father” in the sense of biological conception also does not apply here. To argue *a fortiori*, we only score this half of a point, since there are no “gods” per se in Buddhism as there are in, say, pagan Hellenistic religions. But a council of awakened Buddhas did assist the Buddha in helping him choose the circumstance and location of his birth, and his birth was *certainly not biological to a human father*.

⁹ Some associate Suddhodana’s, the Buddha’s father, attempt to shield him from his future by sheltering his life as a sort of attempt to “kill his destiny,” but this is quite a stretch. However, the literary importance and implications of his sheltered childhood are quite obvious.

8. Reared by foster -parents in a far country: 0
9. We are told nothing of his childhood: 0¹⁰
- 10. On reaching manhood he returns or goes to his future Kingdom: 1¹¹**
- 11. After a victory over the king and/or a giant, dragon, or wild beast: 1¹²**
- 12. He marries a princess, often the daughter of his predecessor: 1¹³**
13. And becomes king: 0
- 14. For a time he reigns uneventfully: 1**
15. Prescribes laws: 1
16. Later he loses favor with the gods and/or his subjects: 0
17. Is driven from the throne and city: 0
- 18. He meets with a mysterious death: 1**
19. Often at the top of a hill: 0
20. His children, if any do not succeed him: 1
- 21. His body is not buried: 1**
- 22. He has one or more holy sepulchres: 1**

By this criteria, Gautama Buddha scores a 13 on the Rank-Raglan scale. Obviously, there is some room for interpretation, discussion, and objectivity in any sort of compilation such as this, but compare my standards to those in *In Quest for the Hero*, and I suspect one will think they are reasonably comparable. The difference between this reference class and the one Drewes brought up in his article is that all of its members are linked by one commonality: scoring over 11.

The only other peer-reviewed study on the Bayesian analysis on the historicity of a figure in ancient history is Richard Carrier's monograph *On the Historicity of Jesus: Why We May have Reason for Doubt* (Sheffield-Phoenix, 2014). Carrier presents the prior probability, or P(h|b), using the same Rank-Raglan mythotype as above, except, obviously, for Jesus. There are 15 members of the list as presented by Carrier, and the 16th, our study here, would be Buddha. We cannot *assume* the Buddha's historicity or ahistoricity, so in order to come up with a probability that a member of the Rank-Raglan class scoring above 11 (or 50%) was historical, we use the

¹⁰ This could count as 1, since the Early Buddhist Texts (EBTs) have nothing much to say about his childhood, but the EBTs do not have much biographical information anyway, so I will not count this point.

¹¹ Siddhartha Gautama leaving the palace when upon his coming of age, sees his famous four visions, and subsequently begins to seek enlighten and teach *outside* his protected inner circle.

¹² The Buddha is tempted by Māra and prevails

¹³ According to the Mahavamsa, Yaśodharā, the Buddha's wife, was a princess, daughter of King Suppabuddha.

law of succession to determine the probability that a member of said class that we are testing – in this case, the Buddha – conforms to the uniform experience of all of the other members in that class. In other words, what is the likelihood that any random figure from history scoring above 11 on the Rank-Raglan scale will be ahistorical?

§3.3 Calculations and Prior Probability, P(h|b)

Of the 15 members of the Rank-Raglan scale, exactly none of them are proven to be historical. Carrier makes a convincing case that given the evidence we have, the current assumption that there was an actual historical Jesus that founded a religion and was crucified by the Romans is an unlikely explanation for the circumstances. While that debate is beyond the scope of this thesis, I have not yet come across an adequate rebuttal to his conclusion. Therefore, I shall count Jesus as ahistorical for the low-end probability, but as historical for the high-end probability.

As mentioned above, the law of succession gives us a probability for anyone meeting the qualifications of the reference class having the same *experience* as said reference class; in this case, historicity. Laplace's Rule of Succession states:

$$(s + 1)/(n + 2)$$

where s = the number of confirmed cases in the references class for the experience that we are looking for (in this case, historicity), and n = the total number of cases in the reference class. On the low end, of course, we can give 0 cases as being confirmed historical, which gives us $(0 + 1)/(15 + 2)$, or $(1/17) \approx .058$, or a 5.8% chance of historicity. On the high end, being overly generous to all rules of logic to argue as far *a fortiori* as possible, we can grant Jesus, Moses, Joseph, and just to be extra cautious with the math, two of the pagan figures (which two in

particular does not matter since the math is the same, but I like the minotaur story, so we will grant historicity to Theseus, and Dionysus, because I passed the level 1 sommelier test way back when). This gives us a new $n = 5$, so $(5 + 1)/(15+2) = 6/17 \approx .353$, or approximately 35.3%. So, for our final figures, we will calculate a probability range: one using this low end of 5.8%, and one using a high end of 35.3%. I would ask anyone who thinks that the prior probability would be higher than this find more than five on this list that can be proven as historical. Even of the five I selected, at least two (Moses and Joseph) are agreed as ahistorical by an overwhelming consensus, and I sincerely think one would be hard-pressed to find anyone who seriously thinks any of the pagan figures in the list actually existed. It would certainly take a magic ball of thread to lead one out of that labyrinth. Even *if* Jesus was historical, and despite what you are telling yourself under your breath at this very second, the evidence we have for it is nowhere near as compelling as you might think (again, read Carrier 2014, *the whole thing*, and then reconsider), that leaves realistically 1 in 15 members of this class as historical.

At this point, it is important to reiterate what these numbers actually are. They are *not* evidence that the Buddha did not exist. It is *not* a 5.8% to 35.8% probability range that the Buddha did not exist. It is simply saying that given the sample size that we have, anyone who meets 11 out of the 22 criteria (remember, the Buddha meets 13, so even if you score it a bit harsher, he can still reasonably be scored an 11, and thus be considered a qualifying member of the Rank-Raglan class) has somewhere between a 6-36% chance of being an actual historical person. Without considering any other evidence, at best, there is a slightly less than 36% chance that the Buddha was a historical person, given what we know about figures in antiquity.

One common rebuttal to the Rank-Raglan presentation is that it is too objective; that plenty of historical people meet the criteria. With this, either the criteria become *so* relaxed that

anyone could fit them, or the argument stops there and no sources are cited. The article mentioned above, the Utley piece using Abraham Lincoln as an example, *Lincoln Wasn't There, or Lord Raglan's Hero*, is often cited for this purpose. However, as mentioned (and demonstrated) above, this article is clearly satire, and it makes one question if the person making the argument has actually read the essay. As previously mentioned, it is *highly* recommended, but not for empirical evidentiary reasons. One of the more high-profile arguments against the use of the Rank-Raglan mythotype comes from James McGrath in *Rankled by Wrangling over Rank-Raglan Rankings: Jesus and the Mythic Hero Archetype*, posted on his website, *The Bible and Interpretation*. McGrath is a Christian apologist, and while there is nothing wrong with that inherently, it severely limits his ability to objectively engage with secular research. In addition, he makes a critical error common in apologetics – mistaking *prior probability* for *evidence*. To make his point, he quotes folklorist Alan Dundes (emphasis my own):

The fact that a hero's biography conforms to the Indo-European hero pattern *does not necessarily mean that the hero never existed*. It suggests rather that the folk repeatedly insist upon making their versions of the lives of heroes follow the lines of a specific series of incidents. Accordingly, if the life of Jesus conforms in any way with the standard hero pattern, *this proves nothing one way or the other with respect to the historicity of Jesus* (McGrath, quoting Dundes).

Apt readers may recognize this quote from a few pages ago; I include it again here for context as to how easy it is to conflate prior probability and evidence. Again, this quote is in relation to the historicity of Jesus, which, to put it mildly, is a delicate subject, but the error in interpretation still remains. Neither I (nor in this particular case, Carrier) are arguing that inclusion on the Rank-Raglan scale is “proof” that said figure never existed. It just gives us a prior probability

from which to work. And this happens in every situation. Just because Steph Curry hits 90% of his free throws is by no means “evidence” that he will sink his next one. It just means that given the circumstances, he usually does. Just because 19 out of 20 times when I cannot find my wallet it is misplaced and not stolen is not “evidence” that the wallet is lost. It just gives us a better, more informed place to start. We need more evidence in each specific case to test our hypothesis. The same applies here. Gautama Buddha scoring 13 on the Rank-Raglan scale proves nothing in terms of his historicity, but it gives us an idea of where to begin.

One last note on the Rank-Raglan scale: it is important to remember that all of the figures that I have used on the scale are from antiquity. Some have tried to argue that since Harry Potter scores an 8, that invalidates the methodology. That logic is flawed; there are plenty of mythological figures that have nothing to do with the general arc of the Rank-Raglan mythotype. Another issue is that of available details. In today’s world, we have access to exponentially more details about someone’s life. Someone could comb thorough, say, Abraham Lincoln, or Barack Obama, and find 22 elements that almost match up with the Rank-Raglan criteria. However, an important distinction is that in antiquity, we *do not have such access*. So, the fact that the details that randomly passed through the filter of time seem to match up with mythological figures only makes it that much more improbable. When we have so little to look at, yet such a high percentage of such details is consistent across a wide variety of historical figures, we have to take that seriously (Carrier 2012).

Therefore, P(h|b):

Low End (*a judicantiori*): .058

High End (*a fortiori*): .358

§IV The Evidence

§4.1 Introduction to the Evidence

At this juncture, we have established low and high margins for our prior probability of the Buddha being a historical figure. The next step is to analyze the evidence that we have in order to see how this particular situation and set of circumstances differs from the others in our reference class. While our reference class has 15 members, each one has a unique set of circumstances that will affect the *posterior* probability in some way. Just as in my wallet example at the beginning of this paper, any time evidence gets introduced, we have to look at *how expected that evidence would be* if our hypothesis were true versus *how expected that evidence would be* if another hypothesis was true. If the evidence in question is *just as likely* on one hypothesis than the other, than it becomes a wash – we simply do not put it into the equation.¹⁴ For example, if my wallet is missing, but my car is not broken into, that “evidence” that my car is not broken into is just as easily explained and expected on a “wallet is lost” hypothesis than it is a “wallet is stolen” hypothesis, since there are many plausible explanations as to why both a lost and stolen wallet could occur without a car break-in.

The evidence we have for the historicity of the Buddha is two-fold: textual and archaeological. As with many figures in antiquity, the amount of evidence is scant. What also complicates the situation is the fact that in between the seals of the Indus Valley Civilization, which may or may not contain writing, and the Aśokan edicts, which date from the 3rd century BCE. In that sense, the lack of first-person textual sources is not surprising; we do not have sources from contemporaries of the Buddha (including Mahāvīra) because we do not have

¹⁴ Of course, we *could*, but it would make no mathematical difference, since we would be multiplying both sides of the equation by the same figure.

sources from *anything* before the edicts. Therefore, what can realistically count as expected evidence, one way or the other, is severely limited. We can certainly say for sure that people existed in South Asia before the third century, so the lack of written sources alone does not condemn any South Asian figure to euhemerization. It is the components of those sources that we will investigate in this section of the paper. For each piece of evidence, we will need to ask four questions, as described by Richard Carrier in *Proving History* and *On the Historicity of Jesus*:

1. How likely is it that we would have this evidence if our hypothesis is true?
2. How likely is it that the evidence would look like it does if our hypothesis is true?
3. Conversely, how likely is it that we would have this evidence if the *other* hypothesis is true?
4. How likely is it that the evidence would look like it does if that other hypothesis is true?
(Carrier 2014, 245)

There are also certain arguments made for historicity that are considered evidence by some, such as the argument from embarrassment, and the argument ad populum. Such arguments are, in general, very hard to uphold from a Bayesian perspective, as they naturally reinforce one's own inherent bias on a subject. In a sense, they can also be described as "secondary" evidence; they do not deal with what is actually in the literature or in the dirt, they deal with the *effects* of such evidence. These arguments were briefly mentioned previously in this paper, but specific arguments made in Von Hinüber's response will be dealt with in this section, after the actual evidence we have on hand is discussed.

§4.2 Textual Evidence – Tracing Historical Memory

The state and timeline of textual evidence for Gautama Buddha are, in some ways, analogous to that of textual evidence for Jesus, although with a greatly expanded timeline. The general consensus is that the earliest writings we have concerning Jesus are the authentic Pauline

epistles, which date from the around 50s CE, then the anonymously composed four canonical gospels, which chronologically begin with the Gospel of Mark, somewhere around 70 CE and continue through the Gospel of John, which can be dated to roughly 95 CE.¹⁵ The Pauline epistles - at least the ones considered authentic by the academy¹⁶ - give extremely little, if any, biographical information about Jesus. This is a crucial point, because it is at this juncture where some conflate writings concerning *the existence of a Christ following movement*¹⁷ with *writings about a historical Jesus*. Writing about proto-Christianity is not the same thing as writing about Jesus. Nobody makes the argument that people did not *believe* there was a Jesus by the 50s CE. However, when searching for details about the historical, flesh-and-blood Jesus, the existence of evidence of a movement inspired by him is not proof he existed.¹⁸ The first real biographical details we have about Jesus come from the four canonical gospels, and those are anonymously written and highly mythologized. Only the Gospel of Luke makes an attempt to come across as somewhat historical, and a quite mild one at that. This gives us a general timeline of Jesus' birth from somewhere between 4 BCE and 6 CE,¹⁹ his death some 30 years later, Paul's missionary work about 20 years after that, and only *after* that do we have some sort of biographical reference to a historical figure of Jesus who walked the Earth. In a more general sense, we first have the supposed existence of Jesus, followed by evidence of a movement based around Jesus, and it is only after that do we find any sort of biographical information, untrustworthy as it may

¹⁵ These dates represent an overwhelming academic consensus; however, part of that general consensus is that these dates are very loose and based around the Jewish War, resulting in the destruction of the temple, in 70 CE. For an excellent, accessible summary of the issues surrounding gospel authorship and dating, see Ehrman 2005.

¹⁶ As they appear canonically: Romans, 1 and 2 Corinthians, Galatians, Philippians, 1 Thessalonians, Philemon

¹⁷ "Christianity" had yet to become its own religion, so to speak, in Paul's time; rather, it is more historically accurate to refer to it as a Christ following sect of Judaism that accepted non-Jews, or Gentiles, into the movement.

¹⁸ This will be discussed at a later section in the paper, but one need only to reference Osiris, Polynesian cargo cults, or any of the other examples of movements based around ahistorical figures.

¹⁹ Matthew and Luke disagree on the date of Jesus's birth, and the Talmud, which is a much later text, places Jesus in the 1st century BCE.

be historically. *The textual evidence for the historical Jesus does not predate the textual evidence for the movement of people following Jesus.*

The pattern for the Buddha is strikingly similar, again albeit over a much wider timeline. The current scholastic consensus is that the Buddha lived and died in the middle of the 5th millennium BCE. Exact dates and a brief history of the dating of the Buddha's life have shifted with scholarship,²⁰ but for now, it is sufficient to say that his life is placed around 500 BCE. Like in the Jesus situation, the first written evidence we have are the edicts of Aśoka some 250 years later; however, only one of the more some 30 edicts, the Lumbinī pillar, actually mentions anything concretely biographical about the Buddha. It is only several centuries later – and almost 700 years after the supposed life of the Buddha - that we get the first biographical details of the Buddha's life, in Aśvaghōṣa's *Buddacarita*, which literally translates to something like “the Doings of the Buddha,” but, like the Gospels, this is a highly mythological work. Just like in the Jesus tradition, biographical details of the leader of the cult come *after* general details have been written down. The Early Buddhist Texts (EBTs) are much less concerned with biographical details than they are concerned with parables and teachings (Brahmali, 91)

Another apt comparison between the post-lifetime biographical details of both Jesus and the Buddha is the notable fact that neither biography is written in the language that either figure would have historically spoken. Jesus would have spoken Aramaic, and the Buddha would have spoken an “early-eastern Middle Indian Dialect of Kosala-Videha” (Witzel 2009, von Hinüber 2006). The gospels (as well as the rest of the New Testament) were, of course, composed in

²⁰ Summarized in Dietz, *The Dating of the Historical Buddha in the History of Western Scholarship up to 1980*, from *When Did the Buddha Live? The Controversy on the Dating of the Historical Buddha*, 1995, Bechert ed.

Koine Greek, and the earliest Buddhist texts composed in Pāli,²¹ which is a language “created some time after the Buddha” (Brahmali 2015, 55). While this may seem obvious to some, especially in Jesus studies, this point directly infers another point of discussion: *we do not have the exact words of neither Jesus nor the Buddha*. We do not even have the words in their exact language. All we have is what whoever wrote Mark (or Matthew, Luke, or John) says Jesus said, and whoever wrote the Pāli Canon says the Buddha said. So, if we are to re-construct a lifetime and teachings of a historical figure based on such biographies – and in the case of the Buddha, this is what we are trying to do - we have to understand that we are working from texts that are not only post-date their supposed lifetimes, but are not even in the original language that would have constituted the quotidian *carita* of said figures.

§4.2.1 The Early Buddhist Texts (EBTs) and Early Biographical Details

The best, most informed, and most Bayesian textual argument for historicity of the Buddha comes from Sujato and Brahmali in *The Authenticity of the Early Buddhist Texts*. Here, they argue that

The EBTs [Early Buddhist Texts] were edited and arranged over a few centuries following the Buddha’s demise. The texts as we have them now are not a *verbatim* record of the Buddha’s utterances, but the changes are in almost all cases details of editing and arrangement, not of doctrine or substance. (Brahmali, 10)

Essentially, Sujato and Brahmali argue for a composition date of the EBTs that pre-dates the later, more mythological, hagiographical biographies. They argue - correctly, in my opinion -

²¹ Sujato and Brahmali make the argument that Pāli is not so different from dialect that “in all probability” is very similar to the dialect of the Historical Buddha, however, this argument is more oriented towards the dating of the Pāli Canon and not the linguistic accuracy of the words in them.

that the EBTs accurately portray the geographical and political location at the time of the Buddha in texts that more or less avoided later corruption and anachronisms that condemn other texts to inauthenticity.²² Their argument for historicity is based on the authenticity of these texts and the and since these texts, which are otherwise trustworthy, contain the words and teachings of “the Buddha,” then those words would logically have had to be accurately been recorded and transmitted, thus these words and teachings were more or less spoken as written by the one who the texts say spoke them. In short, since EBTs are reliable, then we can trust the EBTs when they portray a single, historical Buddha and his teachings.

Politically, the time of the EBTs comes right before a major shift in the political situation of Northern India. Much of what we know about this comes from Megasthenes, the Greek ambassador of Seleucis I to Chandagutta’s (Sanskrit: *Chandragupta*)²³ court at Pāṭaliputta. The EBTs, however, contain only one reference to the Greeks, which is highly unlikely if the texts were composed later, when interaction with Greek culture was much more of the normative milieu. The EBTs also describe multiple nations around the Ganges plain, but shortly after the time of the EBTs, the area was united into one kingdom. Pāṭaliputta itself was a major center during the Mauryan Dynasty, and the EBTs make little mention of the city. Finally, Chandagutta and Asoka are absent from the EBTs, and the silence of the texts on these figures makes it unlikely that they were composed after their existence, as it would seemingly be tempting to include such major figures in any sort of writing (as later Buddhist texts do) (Brahmali 2015, 13-25). Sujato and Brahmali make the following cogent – and Bayesian – argument:

²² Such as, for example, camels in the desert at the time of the Israelite exodus. Camels were not in the area until later, which indicates a later composition date.

²³ In this section, I follow the convention of Sujato and Brahmali and defer to the Pāli spelling of proper names when they do and the Sanskritized versions when they elect to.

Many of these events would have been witnessed by the Buddha's direct disciples, and the rest by the first couple of generations of his followers. Yet not a single hint of any of this has made its way into the EBTs...the simplest explanation is that the main content of the EBTs derives from the lifetime of the Buddha, during which the 16 nations were the dominant political feature, and this content was left unchanged despite the political upheaval that followed. (Brahmali 2015, 22)

However, just because the date of a text can be pinpointed does not mean that every single character in the text was a historical figure. It is appropriate, at this juncture, to remind the reader of the criterion of historicity for the Buddha. We are looking for specific biographical details that conform to that description, and there simply are none in the EBTs that are not highly mythologized. It is plausible that whoever wrote the EBTs used the character of the Buddha to promote certain teachings and ideas, and having done so while composing all of the texts before the time of Candagutta. This hypothesis will be elaborated on later in the paper; however, it is sufficient to say that if we read the EBTs *without* knowledge of later Buddhist biographies, we would be unable to construct a biography that matched our criterion of historicity. Remember, our ~h, or mythical Buddha, *allows* for such composition; the writers of the EBTs were including sayings of a mythical Buddha whose biographical details got filled in later.

§4.2.1.1 *Pāsarāsisutta* (MN 26)

As far as biographical sources in the EBTs, we are quite limited. The *Pāsarāsisutta*, or *Noble Search*, *Majjhimanikāya Sutta* 26 (MN 26), the Buddha describes the desire to seek the reason for the sufferings he saw as described in the later biographies:

Bhikkhus, before my enlightenment, while I was still only an unenlightened Bodhisatta, I too, being myself subject to birth, sought what was also subject to birth; being myself subject to ageing, sickness, death, sorrow, and defilement, I sought what was also subject to ageing, sickness, death, sorrow, and defilement. Then I considered thus: ‘Why, being myself subject to birth, do I seek what is also subject to birth? Why, being myself subject to ageing, sickness, death, sorrow, and defilement, do I seek what is also subject to ageing, sickness, death, sorrow, and defilement?’ (MN 26, Bhikku Bodhi trans., Bodhi 2009).

If we read this through the lens of the familiar story – that the Buddha saw the “four sufferings” when he left his sheltered palace and became exposed to the harsh realities of corporeal life – it is easy to “read into” this passage and imply that this is what the Buddha is talking about here. But we must remember that that story is a later invention; reading that story into this passage is an anachronism. The story as we know it and as far as we know, did not exist yet, just like Candagutta and a unified Northern India. It is an anachronism, just like a mention of Candagutta would be an anachronism or referring to a unified Northern India would be an anachronism, as Sujato and Brahmali aptly claim. There is nothing in this passage that is overly mythological; there are, of course, references to past lives, but even in an assumed naturalistic worldview, someone simply speaking that they believe they lived a past life is completely expected. It happens all the time, even in modernity. All we have evidence of here is that the Buddha *somehow* realized that life is suffering and sought a way to get out of it.

§4.2.1.2 *Mahāparinibbānasutta* (DN 16)

The *Mahāparinibbānasutta* (DN 16) is biographical, but highly hagiographical. It

describes the death of the Buddha with clearly symbolic and mythological imagery. The story itself can be seen as somewhat of a passion narrative, complete with a sort of “last supper” of “pig’s delight” (DN 16, 4.20) and a weather phenomenon (“a terrible and hair-raising” earthquake,” DN 16, 6.10) (Walshe 2012, 270). None of these details make it into the general historical biography of the Buddha because they are so obviously historical embellishments. It is certainly within the realm of possibility that an earthquake *happened* to occur at the exact same time of the Buddha’s death; this is somewhat analogous to the synoptic gospels’ account of the three-hour darkness, and, in Mark, an earthquake that occurred during Jesus’s crucifixion (Mt. 27:45, Mk. 15:33 and Lk. 23:44-45). In the Jesus passion narrative, we have the expectation that such events would be corroborated elsewhere, as has been proven by Carrier, rendering the actual occurrence of such natural phenomena highly unlikely (Carrier 2012, Ch. 3).²⁴ We do not have such an analysis available for the earthquake mentioned in DN 16, but this does show precedent of natural events being fabricate to construe a literary point. Also, it mentions the Buddha’s death, so if verses *were* composed during the Buddha’s lifetime, it naturally follows that anything *after* the Buddha’s death would have been a later addition to the text.

Von Hinüber also discusses the *Mahāparinibbānasutta*:

So, even if there had been the will or at least the intention of the early Buddhist authors of the *Mahāparinibbānasuttanta* to portray a more or less exact historical record of the nirvāṇa, miraculous and supernatural events were impossible to avoid in an environment in which the practice of all sorts of yogic achievements was common place. Miracles simply were part of the world-view of the authors of the

²⁴ Carrier also addresses the claim that Thallus mentioned the darkness surrounding the crucifixion sometime shortly after after 52 CE in *Thallus and the Darkness at Christ’s Death*, in the *Journal of Greco-Roman Christianity and Judaism*, Volume 8 (2011-2012).

Mahāparinibbānasuttanta. (von Hinüber 2008, 207-208)

The argument Von Hinüber makes here is that, to use a colloquial phrase from earlier, we should not throw the proverbial baby out with the bathwater when it comes to obviously fabricated events in descriptions of events that could have accurately transpired. It is here where we face the enormous challenge of finding kernels of history within legends that have developed over the better part of a millennia. The literary convention of the time was to include miraculous events surrounding the death of a religious figure, so the description of the Buddha's nirvāṇa in the *Mahāparinibbānasuttanta* fits well within the normal expectations of a period description of a historical event. In other words, it is not unreasonable to expect that the author(s) of the *Mahāparinibbānasuttanta* could have elaborated on an event that actually took place, adding elaborate and fanciful details that clearly did not happen. Embellishment in and of itself render an event as fabricated.

However, Bayesian methodology requires us to take this a step further than most would. "Possible" does not mean "probably," and just because the evidence (elaboration of historical material by religious writers of a certain time) fits a certain hypothesis (that the Buddha actually existed), does not mean it does *not also fit another hypothesis*. And if it *does* fit another hypothesis, then how well that evidence fits that other hypothesis needs to be weighed against how well it fits the original hypothesis. For example, if my car window is shattered, it is very well within the realm of reasonable expectation that a rock shattered it. However, that does not mean a rock actually shattered it. It could have been a baseball. It could have been any number of things. If there is a rock inside my car on the seat by the shattered window, that is evidence that is *more* expected on the rock hypothesis than on the baseball hypothesis. If there is a baseball on the car seat next to the shattered window, then the evidence favors the baseball hypothesis.

However, if there is neither a rock nor a baseball in the car, then we have no other evidence that would favor one hypothesis over the other. Thus, we would need to admit ambiguity as to what broke the window, or search for more evidence.

In this case, in order to see if the *opposite* of von Hinüber's reasoning is true, we would need to find examples of miraculous events that are certainly ahistorical in the literature of the time and location. If we can find such examples, then we can also say that Von Hinüber's evidence not is not only explained by a hypothesis of historicity, but is also just as solidly explained by a hypothesis of ahistoricity.

In the Buddhist literature, such finds are rather easy, but in order to stay in the same reference class, we will limit our search to the EBTs. Elsewhere in the EBTs, there are plenty of examples of clear myth. DN 17, the *Mahāsudassana Sutta*, contains the elaborate and mythological story of King Mahāsudassana, who renounces his life of splendor to retire to meditation in his palace built by the gods. The number 84,000 occurs regularly throughout the story, a clear indication of literary device. The *Mahāgovinda Sutta* speaks of one of the Buddha's past lives, which, assuming a naturalistic worldview, would be difficult for the academic to take literally (Walshe 2012). These are examples of clearly mythological instances where embellishment has also occurred. So, yes, while the literary convention at the time was to use mythological events surrounding religious figures who *may* have lived, it was also to use such techniques to describe characters and events that *did not* live. If that were the case, one would have to defend the historicity of King Mahāsudassana, and I have yet to find anyone willing to undertake that. At best, one could say King Mahāsudassana "might have lived, but also might be a fabricated character," which is what Drewes argues regarding the Buddha. While the EBTs could possibly contain words that trace back to the historical Buddha, they also clearly contain

fabrications within them that are used to convey a literary, theological, soteriological, or philosophical purpose. Of course, every single detail of the EBTs does not need to be historically accurate in order for there to have been a historical Buddha; however, at some point, scholars are picking and choosing what they want to be distilled into potential quasi-historicity when there is clear element of myth in the canon.

Another interesting point von Hinüber makes is that the death of the Buddha was an event “witnessed by many monks” (von Hinüber 2008, 207). Unfortunately, von Hinüber cites no evidence as to such witnesses. He is likely referring to *Mahāparinibbānasuttanta* 6.10, where “those monks who had not yet overcome their passions wept and tore their hair, raising their arms, throwing themselves down and twisting and turning, crying: All too soon, the Blessed Lord has passed away...” (Walshe 2012, 271-272). But this raises more questions than answers. Not one of these monks, who were clearly impacted by the event, told the story in their own vernacular to anyone else? Did all of their remembrances of the event get consolidated in to this one part of the Pāli Canon? Why is this the only reference we have of an event that supposedly affect hundreds of followers? Of course, there are plenty of assumptive explanations on either side of this question, and the important detail that there are simply no written records still plays a significant role in the analysis of our lack of sources for the Buddha’s death. But if von Hinüber is basing the idea that the Buddha’s death was witnessed by many on the *Mahāparinibbānasuttanta*, then stronger evidence than that is needed, since Von Hinüber himself allows that the *Mahāparinibbānasuttanta* has many fabricated elements.

Regarding the composition of the *Mahāparinibbānasuttanta*, von Hinüber offers the following:

Given the importance of the rise of the Maurya empire even under Candragupta, who is better known for his inclination towards Jainism, one might conjecture that the latest date for the composition of the *Mahāparinibbānasuttanta*, at least for this part of it, is around 350 to 320 BC. If this is not altogether too far off the mark, and if it is remembered that the date of the nirvāṇa can be assumed to be about 380 BC, this dating of the text certainly has also some consequences for the assessment of the content. For a distance in time of roughly thirty to sixty years from the event recorded to the text conceived allows for a fair chance to trace true historical memory. (Von Hinüber 2008, 206)

This raises several questions, not the least of which is, “what is meant by ‘fair chance?’” Is it a 40% chance? A 60% chance? For if there is a “fair chance” to trace this to “true historical memory,” that logically requires there to be inverse of a “fair chance” (the inverse of a 40% chance would be a 60% chance, and the inverse of a 60% chance would be a 40% chance) that it *does not* trace back to “true historical memory.” Of course, since von Hinüber does not give us a numerical expression of what “fair chance” is, that 30-40% inverse figure is simply a guess. And a 40% chance that story does not trace back to “true historical memory” is certainly enough to warrant at least the admission that we cannot be certain on Buddha’s historicity.

Additionally, there is also the fact that “roughly thirty to sixty years” can also be plenty of time for a legend to take shape. Even if one accepts the historicity of Jesus, as the overwhelming majority of scholars do, one must accept the fact that the only two narratives of

his birth, the Gospels of Matthew and Luke, differ wildly on their respective birth narratives.²⁵

The four gospels also all differ slightly in their descriptions of the passion narrative, especially in the Gospel of John, where the narrative takes place in a completely different year than that of the synoptics. The differences are irreconcilable; attempts to marry the stories are simply apologetic tactics and do not sway the consensus (Carrier 2014, Carrier 2016, Ehrman 2007). At most, only one of the birth narratives can be true. This means that even with the approximate “30 to 60 year” window that Von Hinüber gives as a plausible indication of a connection to a historical memory, which coincidentally fits within the timeline of the literature we have for Jesus, either the writer of Matthew or the writer of Luke (or both writers) invented a birth narrative. So yes, 30 to 60 years does leave time for some sort of connection to an actual historical event, but 30 to 60 years also gives a writer plenty of time to invent a legend, as either Matthew or Luke (again, or both) has logically had to have done. Even if one of those gospels is word-for-word inerrant, then the other is, by default, errant, and thus contains fabricated legend. Either Matthew or Luke (it doesn’t matter which one) inventing a birth narrative is something we have hard evidence for in the fact that logistically, only one of them, at most, can be historically accurate. And what this means for the purposes of this discussion is that one of those, either Matthew or Luke (or both), created a fictional narrative that was about 40 years after the birth of Jesus, or in the exact time frame von Hinüber references here.

²⁵ This often comes as a surprise to people who are not used to the historical-critical method of Biblical interpretation. I cite Carrier and Ehrman because they both do an excellent job of laying out the differences in a digestible way, but honestly, one only needs to simply read the first few chapters of both Matthew and Luke to see the distinct differences in the birth narrative. Most Christmas pageants and plays that we are used to usually are some sort of combination of both stories, which I affectionately have named the “Gospel of Mathtlue.”

§4.2.1.3 *Mahāpadānasutta* (DN 14)

The *Mahāpadānasutta* (DN 14) is a discourse on lineage. The numbers are clearly round and literary; the previous Buddhas lived for 80,000 years (Vipassī), 70,000 years (Sikhī), 60,000 (Vessabhū), 40,000 (Kakusandhu), 30,000 (Konāgama), and 20,000 (Kassapa). Our Buddha's lifetime is simply described as “short...seldom that anybody lives to be a hundred” (DN 14 1.7, Walshe 2012 trans.). Relevant to our criterion of historicity is 3.30:

He gained his full enlightenment under an *assattha*-tree...his chief personal attendant is Ānanda, his father is King Suddhodana, his mother was Queen Māyā, and his royal capital is Kapilavatthu. Such was the Lord's renunciation, such his going-forth, such his striving, such his full enlightenment, such his turning of the wheel... (DN 14 3.30, Walshe trans.)

This is the closest thing we have to a biography that gives the general story arc of the Buddha. In my opinion, this is the *best* evidence we have for a historical single origin figure, as it specifies the Buddha's mother and father, and alludes to the Buddha's renunciation. It is not as specific as our criterion of historicity; however, it is as close to a full birth-to-nirvana story as we have come so far. It should be remembered that this is supposedly the Buddha, talking in the third person, recounting what the Gods told *him* about *his own birth*. For that to be the *only* reference to the story arc is a bit puzzling; however, it is something. Additionally, in 1.30, the Buddha Vipassī is described as having “two courses:” to live the household life and stay in royalty, or to leave and become a Buddha (Walshe 2012, 205). This is congruent with Buddha criterion for minimal historicity, albeit on a much more general scale. It can plausibly be inferred that our Buddha, Gautama Buddha, faced the same choice. How likely is it that when recounting his own birth story, if he actually was, that he would omit his birthplace? Or the emotion that his

parents showed when he left home and their reluctance to let him go? There may be no concrete or absolute answers to these questions, and ancient history is always somewhat ambiguous.

Von Hinüber, for his part, discusses the *Mahāpadānasuttanta* in a Bayesian sense:

...the life of the first Buddha Vipassin is described in detail and serves as the model for the biography of all Buddhas. It is not clear whether a purely mythological model influenced later descriptions of the biography of the Buddha Gotama or whether, the other way round, some facts preserved from the life of a historical Buddha were incorporated into the mythological account...this model life does not contain any hint at the nirvāṇa or at events surrounding the nirvāṇa of Vipassin. Nothing that presupposes the Buddha's death is mentioned. This observation can be interpreted in two ways. Either the story is so old that it was told while the Buddha was still alive, which would explain the missing age and the missing nirvāṇa; or much more likely, a later redactor could have easily adjusted the story and shaped it in such a way as it would have been told by the Buddha himself before his nirvāṇa. No decision is possible between these two sides of the alternative. This passage contains nothing that could be used for tracing events during the Buddha's life time (von Hinüber, 2019).

This segment of some length is quoted in its entirety in order to demonstrate the Bayesian elements at work. First, von Hinüber presents two competing hypotheses: that a “purely mythological model” of Vipassī Buddha influenced the birth stories of later Buddhas (i.e., Gautama Buddha), and that the life of the historical Buddha influenced birth stories of *previous* Buddhas (in this case, Vipassin). He then analyzes the evidence in the passage and determined that it is *no more likely* on one hypothesis than on the

other, and therefore, makes no difference on either side of the debate. In antiquity, much, if not most, of our evidence will have this outcome, especially in South Asia, where there is literally nothing written down before the reign of Aśoka, around 250 BCE. Von Hinüber has presented a promising set of hypotheses for investigation of the historical Buddha; unfortunately, he stops there and continues on to other arguments. With proper evidence analysis and argumentation, this could (and, I might add, should) be a paper in and of itself. Essentially, von Hinüber is arguing that we do not have any sort of higher expectation on either a historicity or non-historicity hypothesis. However, we must consider the entirety of the EBTs when assigning evidentiary expectations, which will be done at the end of this section. Von Hinüber's hypotheses are slightly different than ours.

It cannot be ignored that the common story of the Buddha – that which meets our criterion for historicity – is told in this text, but *told as the story of the Buddha Vipassī*. It is *not* told as the story of Gautama Buddha. Vipassī journeys out of his royal home and sees an old man, a dead man, a sick man, and a renunciate. When our Buddha, Gautama, is hearing the *devas* tell his story, this part is omitted. Of course, as mentioned previously, we can infer it into the story, but that is exactly what we are doing – conjecturing that that is what “the Gods” meant. Conversely, it is entirely plausible that the story of the Buddha Vipassī existed as an oral tradition before these texts got canonized and as the asceting school that recognized Gautama Buddha as its leader and founder emerged as the either mythical or historical founder of Buddhism, this story was simply overlaid upon him.

§4.2.1.4 *Mahāsacckasutta* (MN 36)

Von Hinüber makes an argument that a contradiction in the *Mahāsacckasuttanta* is evidence for historicity. In the account, the Buddha is not a prince, but the son of a peasant and not a king, and meditates under a Jambu tree, and not a Aśvattah tree, as is told in later biographies, while his father is doing common field labor. The commentators and later interpreters re-work the story into one that suits the common biography; Buddhagosa turns the story into the Buddha's father – a king - working with a golden plow in a ceremonial ploughing, which, as von Hinüber aptly states, “is obviously a far cry from what the text says.” The original story is incredibly plausible, and the attempted retrofitting of the story into a more palatable context for later practitioners indicates a strong possibility that the story could be true.

There are two main issues with this analysis. The first, *possible ergo probable*, has been discussed; the plausibility of the story does not necessarily indicate the truth of the story. The second has to do with the criterion of historicity for the Buddha established earlier in this section. What exactly is von Hinüber arguing here? Is he saying that the Gautama Buddha, son of Siddhodana, was *not* a prince? Has von Hinüber established a minimum criterion of historicity for his own hypothesis? The biography of the ahistorical Buddha could certainly be based on elements of the life a historical figure that did not actually found Buddhism. This actually fits our basic alternative hypothesis, that the Buddha could have been a real person, but the story we know now was written later to reify and unite previous oral tradition. But would this be considered the “historical Buddha?” As Albert Schweitzer aptly observed in the context of the historical Jesus, the image of the historical Jesus tended to change based on whatever one was searching for (Schweitzer 1906). If there is to be any progress in this field, there needs to be some consistency in what is actually being discussed and debated. Is von Hinüber arguing that

the historical Buddha was not a prince? Bayesian methodology would help to streamline these arguments into a more coherent set by applying them towards a particular hypothesis. To put it more colloquially, it would help the arguments “stay on track.”

Another argument von Hinüber makes in regards to the above “contradiction” is that the tree under which the Buddha meditated is different than the tree under which he sat on to attain enlightenment. In the above story, the young Buddha sits under a rose-apple, or Jambu, tree, and later in life, the Buddha, of course, reached enlightenment under an Aśvattha, or sacred fig, tree. Von Hinüber argues, “If this episode was a late invention, an Aśvattha tree would have been an obvious choice foreshadowing enlightenment.” How does von Hinüber know this? Is he so familiar with the literary styles of Buddhist literature that he knows what the anonymous author of a text that is over 2,000 years old would have written? While an Aśvattha tree may seem an obvious choice for *some* authors *today* who wanted to employ foreshadowing as a literary device, what evidence does von Hinüber have to substantiate his claim that that was the practice in the first millennium BCE? From a Bayesian perspective, this is the kind of evidence we would need to support an argument like this. While it is certainly an interesting point, we cannot for certain claim to know what ancient Buddhist authors “would have done” if they wanted to foreshadow an event. And if von Hinüber *does* know, he needs to cite his research.

Finally, just because the story is not a “late invention” does not make it historically accurate down to the last detail. Von Hinüber may very well be absolutely on the mark with his analysis of the date of the composition of the text, but that does not automatically mean that all stories in it are accurate. By that logic, any parable that contains verisimilitude and lacks anachronisms would have to be taken seriously and we know that in most cultures, parables were (and are) used to communicate messages.

§4.2.1.5 *Achariyabhutasutta* (MN 123)

The biographical details in the *Achariyabhutasutta* contain many mythological descriptions of the Buddha's birth, as well as verses that very closely parallel or resemble the *Mahāpadānasutta* (DN 14). For example, in MN 123, Ānanda says, "other women give birth while sitting or lying down. Not so the mother of the being intent on awakening. She only gives birth standing up.' This too I remember as an incredible quality of the Buddha" (Middle Discourses, Sujato trans). In DN 14, the Buddha says "it's normal that, while other women carry the infant in the womb for nine or ten months before giving birth, not so the mother of the being intent on awakening. She gives birth after exactly ten months" (Long Discourses, Sujato trans).

Many of the points of analysis for the *Achariyabhutasutta* are the same as the *Mahāparinibbānasuttanta*, so they need not be rehashed here. All that is necessary to point out here is that in the EBTs, the mentions of the birth and death of the Buddha are cloaked in mythology and legend. The fact that the *Achariyabhutasutta* and the *Mahāparinibbānasuttanta* on certain specific details of the Buddha's birth does not necessarily imply that a historical person actually undertook those details, even if they are very human (a ten-month gestation is nowhere near as mythological as some of the other aspects of the birth story that show up in later narratives).

§4.2.1.6 Final Thoughts and Conclusions: The EBTs

Wynne gives a list of examples, taken from Sujato and Brahmali, from the EBTs that show a "humanness" to the Buddha, or what Wynne calls "quirky details" that "convey a realistic flavor:"

- The Buddha sleeping on a pile of leaves in the winter (AN 3.35)
- The Buddha washing his own feet (MN 31)

- The Buddha being seen as a simple *bhikkhu*, and not being recognized (MN 140)
- The Buddha claiming to enjoy going to the toilet (AN 8.86)
- The Buddha teaching Pasenadi how to lose weight (SN 3.13)
- The Buddha avoiding Brahmin householders, because they are noisy (AN 5.30)
- The Buddha dismissing monks because they are noisy, but then changing his mind because lay people persuade him (MN 67)
- The Buddha complaining of back pain and then lying down in a Dhamma talk (MN 53)
- The Buddha warming his back in the sun; his skin is flaccid and wrinkly, his body stooped (SN 48.41)
- Bhaddāli refusing to keep the Buddha's rule about eating after midday (MN 65)
- The Buddha dying of bloody diarrhoea [sic] (DN 16) (Wynne 2019)

These certainly do convey some sense of realism to the story of the Buddha, but does that imply historicity? In order to test these in a Bayesian manner, one must see if we have any known mythological figures that exhibit the characteristics or actions that Wynne (again, via Sujato and Brahmali) list. And of course, one need not dive very deep into the literature, South Asian or otherwise, to find examples of either a) clearly mythical figures taking almost the same actions as above, or b) historical figures whose actions are clearly invented to convey a point:

- In Genesis 28:10-22, Jacob sleeps on a pillow made of rock before climbing a ladder to heaven (cf AN 3.35).
- In three of the four canonical gospels, Jesus washes the feet of his disciples in a clear literary display of humility (Mt 26:14-39, Lk 22:24-27, Jn 13:1-17) (cf MN 31).
- In Mark's gospel, Jesus is a much more "incognito" and "under the radar" character. While Jesus may have existed, this is certainly at odds with John's gospel, so (at least) one of them clearly invented a public profile for Jesus that served their own literary and theological purpose (cf MN 140)
- The passion narratives in all four canonical gospels, which have been generally accepted as mythological or literary creations even if Jesus was a historical figure, depict and embarrassing and gruesome death for Jesus (cf DN 16)
- Rāma is persuaded by his subjects to reject Sīta, as she had been staying with Rāvana (cf MN 67)
- Yudhisthira literally gambling away his entire kingdom

Additionally, the inverse of this situation can also apply. Take, for example, the famous story of George Washington. A young Washington allegedly chopped down a Cherry tree, and came clean to his father when pressed about it, famously saying, "I cannot tell a lie." This is commonly

accepted as a folk tale to build Washington's legacy. Of course, George Washington was a real historical figure. But what we see in this situation is a humanistic detail that was *invented* about him. So even when the details are realistic, such as something as plausible as cutting down a Cherry tree as a child, there are instances where those details are invented. Realism does not preclude fabrication. There are simply too many instances of the inverse being true in order to accept realistic, humanly details about the Buddha that appear in stories that are centuries younger than his purported lifespan as evidence he existed. Of course, this does not mean it is evidence that he *did not exist* either, it just simply means that we cannot know for sure. Therefore, the evidence does not count for either hypothesis.

In sum, the EBTs provide very few biographical details that are not cloaked in myth. While Sujato and Brahmali have a very strong argument for the composition date of the texts, that argument gets conflated with the assumption that the words spoken trace back to a historical character. The more sayings and sermons that the Buddha has recorded, the less likely it is that none mention any sort of life growing up. This is somewhat analogous to the letters of Paul; Paul wrote thousands of words, and none mention a biological, earthly Jesus. That is simply strange. Compare that to Pliny the Younger who wrote letters about his uncle and adopted father, Pliny the Elder, to Tacitus, who certainly would have been aware of Pliny the Elder; the Younger's letters are full of details about his beloved, deceased father (Carrier 2014, 511-513). The argument made that tries to explain Paul's silence on a historical Jesus is more or less that those he was writing to already know the details, so Paul did not need to retell them; this is similar to the argument that Sujato and Brahmali make regarding the EBTs silence on biographical details:

The EBTs display little interest in the Buddha's biography. This is in stark contrast to other Buddhist literature. This is most naturally explained if the EBTs

stem mainly from the historical Buddha himself. He was interested in teaching the Dhamma, not telling his life story. And where the Buddha does speak of his own life, it is always to give a teaching on how he practised to reach awakening, presumably to set an example to be emulated. Those around him knew him personally and did not need a lengthy biography. Only after he died was there a need to develop a biographical literature, beginning with the *Mahāparinibbāna Sutta*, then the *Khandhakas*, then the full-fledged biographies, such as the *Mahāvastu*, the *Lalitavistara*, and the *Jātaka Nidāna*. (Brahmali 2015, 91-92).

Again, this explanation carries some weight and is certainly plausible, but is it more plausible than these sayings just being attributed to a fictional character whom the writers originally wanted to appear as human? While we do not have relevant sermons from other South Asian religious figures, it is worth noting that preachers, from the pulpit, recite details of Jesus's biography every single Sunday to even the most pious of church goers who can quote the Bible verses verbatim with the preacher. The silence is not condemning to historicity, but it is not helpful, either, and therefore I think Sujato and Brahmali's argument above (as well as the Pauline one, which is addressed in Carrier 2014, 511-595) needs further examination and vetting before we can just assume that the Buddha was not concerned with details of his current life.

Wynne states that "if the Buddha had been invented, the mythic trends of such texts as the *Mahāpadāna Sutta* would be more apparent, and the canonical discourses would not be so realistic and modern in tone" (Wynne 2019). However, the *Mahāpadāna Sutta* is canonical, and while the rest of the canon certainly can be described as "less mythical" than that particular text, we have to look at only those texts that provide biographical details, and the *Mahāpadāna Sutta* is the longest and most biographical text in the Pāli Canon (of about 5 biographical texts), and

that makes its hagiographical overtones significant.

The “humanistic” details pointed out by Sujato and Brahmali, and listed by Wynne, could be just as easily explained on a hypothesis of either historicity or myth. There are too many examples in extant literature from all over the world of humanistic details being applied to mythical figures, or humanistic details getting invented to shape a narrative of a mythical figure. For this argument to work, then these humanistic details need to be based in history, not in literature.

One final thought experiment would be to imagine that we had zero biographical sources outside the EBTs. What would our story of the historical Buddha be then? It could plausibly meet the criterion for historicity, but it could also plausibly not. The story of the Buddha leaving the palace and seeing the four sufferings are attributed to Vipassī, not Gautama. We have no Lumbinī, the city so revered in later literature. We have a lineage, a mother, and a father, so there is something, but there is, in reality, not much there, until we add in the (highly mythological) details that come beginning with the *Buddacarita*, which is entirely too late (perhaps 900 years after the supposed death of the Buddha) to be considered source material.

In mathematical terms, I will grant that *a fortiori*, the evidence would be 100% expected if there was a historical Buddha (h), and 50% (.5) expected as it would be if it were a Euhemerized Buddha (~h). I believe that we could show that, across the entirety of mythical literature, there are consistent humanistic details at least 50% of the time when dealing with known mythical figures. My personal opinion (*a judicantiori*), however, is that more realistically, this is 80% expected on historicity (h) and 100% expected on mythicism (~h).

Given the silence of the EBTs on biographical details, and the unconvincing nature of the “humanistic details,” these calculations feel appropriate. Again, the numbers are secondary to the

methodology here; I am well aware that a MA thesis does not allow for the time or depth to come up with truly accurate numbers for these topics. I am simply trying to demonstrate the methodology and the math involved in deductive reasoning when it comes to vague problems in ancient history. Particularly of interest to me is the transmission of the Vipassī story onto Gautama, and the scholastic disagreement between von Hinüber and Sujato and Brahmani over the reliability of the *Mahāpadāna Sutta*.

§4.2.2 Other Textual Considerations

Levman also makes several points regarding textual evidence, including an argument from silence: “Yet it is surprising that, while virtually all brahmanical sources put down the Buddhist, none seem to adopt the (very condemnatory) Drewesian criticism, that he many never have existed at all” (Levman 2019). This is essentially an argument from silence, and if one wants to make that argument in defense of historicity, there are plenty of ways to make that argument against historicity. Levman quotes *Sūtrakṛtāṅga* 1.1.17:

Some fools say that there are five skandhas of momentary existence. They do not admit that (the soul) is different from, nor identical with (the elements), that it is produced from a cause (i.e., the elements), nor that it is without a cause (that is, the eternal) (ibid, translation Jacobi).

Again, this is proof positive of *Buddhism*, but not necessarily that of the historical Buddha.

Levman sums up his argument from silence by stating: “Surely, if the Buddha were a fake historical personage, the Jains would have been the first to make that accusation” (Levman 2019).

Maybe, but also, maybe not. In the polemical dialogue between early śramaṇic cults and Brahmanical traditions, I am aware of no text that specifically criticizes Brahminism for, say, the

clear ahistoricity of Krishna. Krishna, like the Buddha, had very human traits and qualities, and perhaps people in antiquity *believed* Krishna existed, but today, he is very solidly accepted as mythical. If we were to expect polemical attacks on the mythical nature of the Buddha, why would there not be the *same* expectation for the mythical nature of any of the other countless figures in South Asian religious history? Given even simply the mythical nature of the Buddha's birth, it could be even presumed that the Buddha was seen as greater than human from the very beginning. That is not a hypothesis that needs to be proven here, however, raising it simply gives another plausible explanation for the "argument from silence" Levman makes.

Wynne states that "if the Buddha had been invented, the mythic trends of such texts as the *Mahāpadāna Sutta* would be more apparent, and the canonical discourses would not be so realistic and modern in tone" (Wynne 2019). However, the *Mahāpadāna Sutta* is canonical, and while the rest of the canon certainly can be described as "less mythical" than that particular text, we have to look at only those texts that provide biographical details, and the *Mahāpadāna Sutta* is the longest and most biographical text in the Pāli Canon (of about 5 biographical texts), and that makes its hagiographical overtones significant.

So essentially, what we have from textual evidence is nothing that cannot be explained best by only a historicity hypothesis. One can certainly argue that some of these stories might contain traces of historical memory, but as previously mentioned, something that "might" imply one thing automatically also implies it "might not." This is the core of Bayesian interpretation in history; looking at *all* of the plausible hypotheses, and not just one. The arguments von Hinüber makes take plausibility in explanations other than historicity, and I have provided concrete examples of such above.

Personally, I believe that such mythologization is more indicative of myth than it is

history, because of the absence of anything written before and up to the Buddha's time, I cannot empirically argue that point. But in general, the research done by Radcliffe Edmonds and William Doty, and cited by Carrier, describe myth as a vessel that authors used to communicate a message involving "plans for reforming society, or proposing and defending models for how society or the world should function (or do function)" (Carrier 2012, 351, cf Edmonds 2004, Doty 2000). The stories of the Buddha do exactly that. The explanation that requires the least ad hoc assumptions, or "Occam's Razor," if you will, is that these stories were fabricated to convey a point. That is a proven methodology taken on by writers of all eras and geographical regions and requires no previous assumptions. Assuming these stories contained kernels of historical truth is just that – an assumption. Of course, it is a *plausible* assumption, but as has been stated, and cannot be stated enough, plausible does not necessarily mean probable. The majority of this type of study, however, is done on Hellenistic and Roman traditions, and while there are some apt comparisons and connections between Greek and South Asian literature traditions (in fact, the only reason why we have hypothetical dates for the Buddha is *because* of the interaction between the Greeks and the South Asians), it is nowhere near as in-depth on the South Asian side of things. Taking this into consideration, for the low end of our probability $P(e|h.b)$, we can carefully assume that more of these fantastical stories are mythical rather than historical, even in the South Asian sphere (Rāma, Sītā, Arjuna, Krishna, Yudhisthira, etc. are all mythological characters that have biographies with elements like the Buddha's). Surely, of all of the myths and parables in the world, there are more mythological characters than real characters. However, this is dangerously close to the Rank-Raglan reference class, and since that was used in our prior probability, it cannot be counted as evidence.

Another argument commonly employed by defenders of historicity is the argument from

embarrassment. In a story that appears in both the *Ariyapariyesanasuttanta* in the *Majjhimanikāya* and the *Mahāvagga* of the *Vinayaṭṭaka*, the Buddha is questioned by Upaka, an Ājīvika. Upaka asks the Buddha, who is freshly awakened, about his teacher and his lineage. The Buddha responds emphatically that he is the highest teacher and reached awakening under no teacher, and he follows his own *dhamma*. Unimpressed, the Ājīvika says, “Maybe, sir,” and walks off down the “wrong path.” Von Hinüber is quite clear on his assessment that the embarrassment criterion applies here:

Every Buddhist expects of course that a person who had the unbelievably good luck to be the first human being ever to be able to profit from the Buddha’s newly acquired knowledge would praise him enthusiastically and accept his teaching.

However, exactly the opposite happens. Upaka remains skeptical, which was hard to digest for later Buddhist, but is a strong indication of genuine memory.

Essentially, as von Hinüber states above, the criterion of embarrassment is the belief that an author would not make up a detail that was “embarrassing,” therefore, anything written by an author that would paint him or her in a negative light must not be a lie, rendering such detail true. But how do we know his claim that “every Buddhist expects of course that a person who had the unbelievably good luck to be the first human being ever to be able to profit from the Buddha’s newly acquired knowledge would praise him enthusiastically and accept his teaching?” is true? What evidence does von Hinüber have to support this? If he has any, he does not cite it; therefore, one can only imagine that this is an ad hoc assumption on his part, and not a valid argument.

In *Proving History*, Richard Carrier gives a thorough explanation as to why the criterion of embarrassment is problematic when it comes to making an argument. One issue with the

embarrassment criterion arises when one considers the argument that later redactors sought to re-interpret the story or interpret linguistic devices in a different manner to make the Ājīvika's response less resistant to the Buddha's initial teachings. Since at the earliest, this story could not have been written down until the appearance of written materials in South Asia around 250 BCE, this story, assuming historicity, would have had to already have been in existence for around two and a half centuries. That is more than enough time for anyone telling the story of the Buddha to notice such an "embarrassing" detail and tweak the story when retelling it. The fact that later commentators attempt to change the story is more indicative of such a story never having existed before, because if the immediate reaction of the Buddhist is to soften the embarrassment, it most likely would have happened by the time these stories were physically written down. Another element to this is that in modernity, we have no way of knowing what an author in antiquity would or would not have been embarrassed by. Perhaps the scribe that wrote this story down was simply trying to paint a picture of an ignorant rival śramaṇic cult. If one argues that Upaka's rejection of the Buddha's teachings only became embarrassing later, then the criterion of embarrassment no longer applies to the author.

Not only do we not know what was embarrassing to Buddhist writers in antiquity, but we simply do not have the context in which to question the intentions of the author. And since we do not have the diaries of the Buddha himself, even purported "words of the Buddha" have an author other than Siddhārtha Gautama. The criterion of embarrassment also ignores other elements in antiquity, including South Asian literature, where the ahistoricity of certain characters is never in dispute, despite the presence of "embarrassing" elements. Again, one need look no further than the *Mahābhārata*, where Yudhisthira literally gambles away his family's rightful kingdom, launching them into a 13 year exile. However, I am not aware of anyone

making the claim that this quite embarrassing detail is proof of the historicity of Yudhisthira. The literary applications of this story are quite obvious. There are many other examples of this, but those will be discussed and dissected in the Evidence section. Carrier bluntly describes the use of the criterion of embarrassment as “bootstrapping:”

Thus historians cannot hide behind meaningless assertions like “more probably historical” in order to bootstrap their way to “probably is historical.” That’s logically invalid, and therefore not a rational historical argument. You have to confront the hard question: just how probable is it? And Bayes’ Theorem is the only viable method for answering that question” (Carrier 2012, 138).

Thus, I conclude that this evidence is just as easily explained on either hypothesis; we cannot factor this literary evidence into our Bayesian analysis of the historicity of the Buddha. If we were, it would mathematically cancel out: assigning 50% likelihood on $P(e|h.b)$ would entail a value of .5, and since the values are the same on both hypothesis, $P(e|\sim h.b)$ would also equal .5, thus multiplying the set of evidence for each hypothesis by .5 (or any other value, as long as both values were the same) would result in no mathematical difference in the final outcome. We cannot take any of the examples in post-EBT Buddhist literature as evidence for historicity, because there is simply not enough in the material that separates it from other written materials about clearly ahistorical figures. Later Buddhist literature is just that – too late. The clearly mythological features of the Buddha’s biography have already been used in our calculations on prior probability. On the other hand, the simple existence of mythological stories about someone does not automatically mean that person did not exist. It means we simply cannot tell from the evidence that we have on hand. Therefore, for our textual evidence:

	<i>a fortiori</i>	<i>a judicantiori</i>
P (e.EBT h.b)	1	.8
P(e.OtherArguments h.b)	N/A	N/A
P (e.EBT ~h.b)	.5	1
P(e.OtherArguments ~h.b)	N/A	N/A

§4.3 Physical Evidence – The Aśokan Edicts

It has been previously mentioned in this paper, and is common knowledge, that there is simply no system of writing that exists before the Aśokan edicts in South Asian antiquity. This makes it incredibly difficult to weigh certain textual evidence; we do not know if a certain piece of evidence is likely or not if there is simply no written tradition on which to base those calculations. As a comparison, the reason that it is strange that the Pauline epistles (again, the authentic ones) do not mention much, if anything, about a historical Jesus is because those epistles exist in the first place. We have letters from a follower of Jesus, written shortly after the time of Jesus, that do not mention any historical details about his life. There is no equivalent in our current study; if there was a parallel “epistle” writer who did (or did not) mention the Buddha doing regular historical things, then that would tip the evidentiary scales in one direction or the other. However, we do not have such a thing for the Buddha, or for anyone else, for that matter. Because of this, the first (chronologically speaking) hard, physical evidence scholars point to is the inscriptions of the Aśokan edicts. Patrick Olivelle aptly states,

“The discovery of the Aśokan edicts for the first time raised an ancient Indian individual from the fog of history and legend into the light of history. Given that the edicts in some way communicated Aśoka’s personal messages, cultural

historians of ancient India had for the first time an unparalleled source for reconstructing the person and activities of an ancient Indian king” (Olivelle 2010, 1).

Or, as Thapar puts it:

“In the study of the Mauryan period a sudden flood of source material becomes available. Whereas with earlier periods of Indian history there is a frantic search to glean evidence from sources often far removed and scattered, with the Mauryan period, there is a comparative abundance of information, from sources either contemporary or written at a later date” (Thapar, 5).

Much has been written about the history and construction of the edicts; this paper will simply summarize the relevant consensus and analyze the evidence accordingly.

The date of Aśoka, who was a king of the Mauryan dynasty, is hinged around the *parinirvāṇa*, or death, of the Buddha, another reason why the historicity of the Buddha is such an important topic to analyze (Thapar, 12). However, as will be discussed in a further section of this paper, the *parinirvāṇa* of the Buddha need not be historical for it to be used as a reference for real events. According to the *Mahāvamśa* and the *Dīpavamśa*, Aśoka ascended the throne 218 years after the *parinirvāṇa*. The exact date of *parinirvāṇa* is disputed, as will be summarized later; however, that is not important for our immediate purposes. What is important to this portion of the discussion is that Aśoka’s reign began sometime around 269 BCE (ibid, 15). The specific year itself is inconsequential and is outside the scope of this particular project, but the general consensus of around the middle of the 3rd century BCE is accepted here.

At some point, Aśoka converted to Buddhism. The general story is that after the Kalinga War, overcome with remorse and ashamed at the harm he had caused, he converted to the faith

of non-violence (Kulkarni 1990, Irons 2016, Irving 2004).²⁶ Thapar is unconvinced that this is the particular reason, citing the general unreliability of the obviously opportunistic Buddhist sources describing such a conversion, although the 13th major rock edict describes this in some detail. Again, *when* and *why* Aśoka converted is not of direct importance to the current discussion. What is important is the inscriptions left by Aśoka describing his connection to Buddhism, demonstrating his adoption of *dhamma* as a way to rule (Singh 353). There are “minor rock edicts,” which are generally more religious in nature, and “major rock edicts” and “major pillar edicts” which tend to be more political in nature (Kulkarni 1990, Thapar 1997). The major rock inscriptions certainly mention *dhamma*, but only in a more political sense. Thapar herself pushes back at the aging consensus that Aśoka’s *dhamma* was a “synonym for Buddhism.” Since we are specifically concerned with what Aśoka had to say about Buddhism, we will only engage those inscriptions that mention Buddhism, or what Thapar qualifies as the “minor rock inscriptions,” here (Thapar 1997).

At this juncture, it should also be noted that Gregory Beckwith has raised objections to the consensus that Aśoka commissioned all of the edicts, and observes that

Absolutely no careful scientific epigraphical or palaeographical study of the inscriptions themselves has ever been done in the century and a half since their first decipherment. Careful *preliminary* examination indicates that the traditional view is partly or even wholly incorrect. (Beckwith 2017, 227)

While the merits of Beckwith’s arguments for the entire corpus of edicts are beyond the scope of this project, it is important to point out the academic trend of simply accepting a consensus.

Consensus is there for a reason; however, when challenged, those challenges must be taken

²⁶ It should be noted that while Kulkarni gives this as an explanation, he notes his disagreement with Aśoka’s Buddhist faith in his article.

seriously. Beckwith raises good points, and they will be dealt with in the inscriptions that pertain to the topic at hand.

Of the 29 inscriptions Thapar lists, only four of them specifically pertain to Buddhism: the Calcutta-Bairāt (or Bhabra) Inscription, The Nigalisāgar Pillar Inscription, The Schism Edict, and the Rummindei Pillar Inscription. Of these, only the Bhabra Inscription and the Rummindei Inscription *specifically* mention Gautama Buddha, and the authenticity of the Rummindei Inscription is questioned. We shall look at the first three edicts now, and deal with the Rummindei Inscription afterwards.

The Calcutta-Bairāt inscription references seven works: the *vinayasamukasa*, the *aliyavasas*, the *angālabhasyas*, the *moneyasūta*, the *upatisapasina*, and the *lāghulovada* (Hultsch 1925). Thapar translates these as the “Excellence of the Discipline, the Lineage of the Noble One, the Future Fears, the Verses of the Sage, the Sūtra of Silence, the Questions of Upatissa, and the Admonition to Rahūla on the subject of false speech” (Thapar 1997). No specific biographical details of the Buddha are mentioned; only references to his alleged words. The Nigalisāgar Pillar Inscription references another Buddha, Buddha Konākamana, but not Gautama Buddha. The Schism Edict simply deals with organizational aspects of “the Order.”

Beckwith describes some fascinating problematic features of the Calcutta-Bairāt Inscription. It is the only inscription to mention Maghda, it eschews the title *devānāṃpriya*, and contains the anachronistic reference to the “three jewels” of Buddhism: reverence and faith in the Buddha, the Dharma, and the Saṃgha. Paleographical analysis also shows a higher percentage of unique words in this particular inscription as compared to the other major inscriptions. By citing the fact that one of the texts referenced in the edict, the *vinayasamukasa*, has been identified with the *vinayasamukase*, which he dates to the 5th century CE, Beckwith shows that the dating of this

edict to Aśoka is problematic. At the very least, it raises enough questions to require that, as evidence, the Calcutta-Bairāt inscription needs further reference.

However, even those who argue for historicity admit this. Levman, in his response to Drewes, references to the Calcutta-Bairāt inscription in order to make his point, calls the work “proof of a nascent historical canon in the middle of the third century BCE, within approximately one hundred and fifty years of the Buddha’s passing” (Levman 2019). Again, if Levman is to be believed, and I have no reason within the scope of this paper to doubt his assertions, this provides convincing evidence of *Buddhism*, but not necessarily evidence of the *historical Buddha* himself. There are plenty of cults and religions throughout history that have rather quickly developed followings around mythical characters.²⁷ In the very same paragraph, Levman states

“None of this proves the historicity of the Buddha, but the historical reality of Asoka has never been challenged, and it is certainly significant that neither he nor the other members of the Buddhist *saṅgha* had any doubts as to the historical existence of the Founder (ibid).

If this is not evidence for the historicity of the Buddha, then why is it even being discussed in a paper that is supposedly naming evidence for a historical Buddha? And this assertion is presumably not taking Beckwith’s reservations about the evidence into account. The argument Levman seems to be making is that since other figures in antiquity believed in a historical Buddha, than he must have existed. And this, of course, is plausible. But it is *also* possible that figures several hundred years after the supposed lifetime of the Buddha either believed in a mythological figure. Even if they believed he was historical, a few centuries is plenty of time for

²⁷ Cargo cults, etc.

a legend to develop and take hold.

If, again, we return to the four questions posed by Carrier, we come up with the following simple Bayesian analysis of these three edicts:

1. How likely is it that we would have this evidence if our hypothesis is true?

On a hypothesis of historicity, it is likely that these edicts would mention the Buddha.

2. How likely is it that the evidence would look like it does if our hypothesis is true?

The difficulty here is the lack of biographical information. There is only a fleeting reference to certain texts, and even then, nothing to corroborate what is on the Bhabra Inscription. It does seem somewhat odd that out of 29 edicts about *dhamma*, only one mentions certain texts, and there, seven are listed. This is out of place. Seemingly, Aśoka would have been referencing these texts in other locations. Maybe he did, but until we find them, this is an outlier. Again, with nothing else to compare it to, it exists in an evidentiary vacuum, but the silence on the other edicts can be deafening here. If Aśoka was such a fervent convert, as the 13th Major Rock Edict describes, would he not be more inclined to talk about the inspiration for his conversion?

3. Conversely, how likely is it that we would have this evidence if the *other* hypothesis is true?

It is very likely. Aśoka could have easily believed in a historical Buddha and made these edicts. The *belief* in a historical figure is not the same as the *existence* of a historical figure.

4. How likely is it that the evidence would look like it does if that other hypothesis is true?

Aśoka did not reference any other figures, so we do not have anything to compare it to asses a ‘likelihood,’ although it is certainly within the realm of plausibility that if Aśoka believed in a historical Buddha, he would have written about him.

Of course, this is on the *a fortiori* side of the equation; by taking Beckwith’s objections into consideration, one starts to lose confidence in the evidentiary value of the edicts (Beckwith 242-245).

Of the four edicts describing Buddhism, only the Rummindei Pillar Inscription at Lumbinī contains any sort of biographical information. The inscription itself is quite short:

When king Dēvānāmpriya Priyadarśin had been anointed twenty years, he came

himself and worshipped (this spot) because the Buddha Śākyamuni was born here. (He) both caused to be made a stone bearing a horse (?) and caused a stone pillar to be set up, (in order to show) that the Blessed one was born here. He made the village of Lummini free of taxes, and paying (only) an eight share (of the produce). (Hultzsch 1925)²⁸

This is Hultzsch's literal translation. Thapar makes an effort to make the translation somewhat more legible, as she does with all of the inscriptions:

The Beloved of the Gods, the king Piyadassi, when he had been consecrated twenty years, came in person and revered the place where Buddha Śākyamuni was born. He caused a stone enclosure to be made and a stone pillar to be erected. As the Lord was born here in the village of Lumbinī, he has exempted it from tax, and fixed its contribution [i.e., of grain] at one-eighth. (Thapar 1997)

As one can see, this edict clearly references our Buddha in question, Gautama Buddha, and clearly lists a birthplace for him. This is the *only biographical detail* in the 29 Aśokan edicts that we have, and a minor one at that. Lumbinī, or present-day Rummindei, is mentioned as the Buddha's birthplace in at least the *buddhacarita*, *lalitavistarasūtra*, the *mahāvastu*, and the *nidānakathā*. All four of these texts are, to put it mildly, wildly mythological. As previously discussed, Von Hinüber and others have attempted to extract genuine historical details out of the grandiose mythology in these stories, however, all of this is simply speculation. There is simply no other independent corroboration of the Buddha being born at Lumbinī. The biographical texts are also much later than Aśoka, and Lumbinī does not specifically appear in the EBTs. Where did Aśoka get this information from? Were there early, oral versions of the *buddhacarita*

²⁸ Interestingly, Hultzsch provides the Sanskrit translation with Devanagari script. Why he does this is unclear; the edict is in Brahmi script.

circulating? Was the Buddha actually born in Lumbinī? We simply cannot tell from the evidence at hand. The Rummindei Pillar could be an independent source, but it is *entirely within the realm of possibility* that Aśoka was simply using the Buddhist sacred texts as a source. We simply do not know, and do not have any evidence to favor either position here.

However, one could plausibly imagine that since Aśoka referenced seven texts in the Calcutta-Bairāt Edict, we can be fairly certain that he was familiar with Buddhist literature. Therefore, an explanation that Aśoka simply got his information from Buddhist religious tradition, since that is the only tradition that we have proof of existing that mentions the Buddha's birthplace, I feel like best explains the evidence of the Rummindei Pillar. It requires one less assumption – that there are other, more historical sources about the Buddha that Aśoka would have been exposed to. Occam's Razor suggests that this is not independent corroboration of the birthplace of the Buddha. This, of course, would be accepting the authenticity of the Calcutta-Bairāt *a fortiori*.

There are other problems with the Rummindei Pillar, namely that of its authenticity. Beckwith mentions the fact that the Buddha's epithet appears in its Sanskrit form, *śākyamuni*, instead of its Prakrit *sakamuni*. Beckwith calls this "astounding" and "otherwise unattested until the late Gāndhārī documents." The Sanskrit would not appear in the region for another few centuries. The inscription is also in the ordinary third person, not the royal third person.

Additionally, the Pillar was discovered by Anton Fürher, a conman and forger who has long been exposed (Beckwith 244-246). And if, in fact, the legend of the Buddha's birth at Lumbinī was an invention by Aśvagoṣa, that places this edict in the middle of the first millennia CE, and much too late for evidentiary consideration.

So, at best, what we have are the two edicts that specifically mention the Buddha both

containing striking anachronisms, as pointed out by Beckwith. If they are later than the Mauryan dynasty, we can fully expect the legend of the Buddha to have taken shape by the time of their actual composition. In an effort to argue *a fortiori* as much as I plausibly can, I will assign the evidence of the Rummindei Pillar a 90% expectation, or .9, on historicity (h), meaning that this evidence is highly expected on historicity. For \sim h, or myth, I will assign a 50% expectation, or .5. I personally believe that with all the monuments to mythical characters throughout history, this is not unreasonable. Realistically, however, I believe that with Beckwith's objections taken into consideration, the evidence is more likely on myth than on history, with a 70% expectation, or .7, on history (h), and a 100% expectation on myth (\sim h).

With this one minor biographical reference removed, we have exactly zero details about the historical Buddha's life before the Common Era. Our minimal mythicist hypothesis, or \sim h, would certainly allow for the existence of some sort of inscriptions about *dhamma*, so the expectation for all of the other edicts, for both *a fortiori* and *a judicantiori*, would be 100%. The 250 years or so between the supposed lifetime of the Buddha and the Aśokan administration is plenty of time for a legend to develop, as noted above. One must not conflate evidence of *Buddhism* with evidence of the *historical Buddha*. Again, I am not arguing that Buddhism itself didn't exist, only that it's founder could be mythological. For historicity of the non-Rummindei inscriptions (h), I will assign an upper bound probability of 65%, or .65, which I think is generous. I think someone would be hard-pressed to argue that for epigraphical evidence to be considered as indicative of historicity, the lack of a mention the subject in question is not problematic. For the lower bound probability, I will assign a 50% expectation, or .5. In the records of all historical figures that started movements, certainly more than half of them had biographical descriptions by their most devout and high-profile followers. I think we could have

expected Aśoka, if the inscriptions are authentic, to write more about the Buddha's life, since he showed an inclination to do so in the other edicts.

§4.3.1 The Piprahwa Vase

One mention of the Piprahwa relics is appropriate here. The Piprahwa relics are cited by some, including Sujato and Brahmali, as external validation of the EBTs (Brahmali 2015, 119). However, the most famous relic, a jar containing the supposed bones of the Buddha, dates from the 3rd century BCE (Srivastara 1980). Indian Epigraphist AH Dani states:

As the inscription refers to the remains of the Buddha, it was originally dated to the pre- Mauryan period, but it has been brought down to the third century BC²⁹ on a comparison with Aśokan Brāhmī. The style of writing is very poor, and there is nothing in it that speaks to the hand of the Aśokan scribes...on these grounds the inscription may be confidently dated to the earlier half of the second century BC. (Dani 1997, 56)

This alone should present enough of a counter argument to at least remove the Piprahwa relics from evidentiary consideration for this project. There are simply too many plausible alternative explanations for them to count as evidence for a historical Buddha. It could be the Buddha's bones in a new vase, or it could simply be an invented relic.

²⁹ In my own writing, I have gone with the current academic convention of using BCE and CE for dates; however, here, Dani uses BC, so I will use that in a direct quotation of Dani's work.

Therefore, we can present the figures to be taken into account:

	<i>a fortiori</i>	<i>a judicantiori</i>
$P(eRummindei h.b)$.9	.7
$P(eNonRummindei h.b)$.65	.5
$P(eRummindei \sim h.b)$.5	1
$P(eNonRummindei \sim h.b)$	1	1
$P(ePiprahwa h.b)$	N/A	N/A
$P(ePiprahwa \sim h.b)$	N/A	N/A

§4.4 The “Great Man Theory”

One of the arguments that scholars make when arguing for the historicity of the Buddha is referred to by Drewes as the “Great Man Theory.” Essentially, it makes the argument that *someone* had to have come up with these concepts and ideas. It is not an argument unique to Buddhism; many Christian apologists defending the historicity of Jesus make the same claim (although it is quite obvious that nothing Jesus is quoted as saying in the gospels is *that* different than streams of messianic Judaism of the time period). According to Wynne, “a highly original doctrinal edifice, in which pragmatism, philosophical reticence, negation and ineffability blend in and out of the Buddha’s quietistic personality, is too unusual to have been invented. We are force to conclude that it was not” (Wynne 2019). Levman also makes a similar point:

Are we to say that these teachings were simply invented or evolved? Is that even possible? Can a system of thought of such subtlety and insight, which has cast aside the veil of existence and provides the real possibility of liberation from *samsara* after countless lifetimes, *not* be the result of a single, brilliant, insightful

individual? (Levman 2019)

I would answer Levman's question with a "yes." Over the course of human history, successful movements, especially religions, are hardly ever invented out of whole cloth. A more modern example of this is the Burned-Over district in upstate New York during the time of the Second Great Awakening in the United States. Religious fervor was burning the region (hence the name "Burned-Over District," and "new religions" and sects were appearing frequently. Two of the more well-known products of this district are the Millerites, led by William Miller, who were convinced that the eschaton was coming and even calculated (and recalculated, and recalculated again, when the eschaton never came) the specific date for the eschaton based on the Hebrew Bible,³⁰ and the Church of Jesus Christ of Latter-Day Saints, more commonly known as the Mormons. Both of these sects were started by individuals, and because of their more recent date, we know the individuals that started the movements, but both men took existing movements and slightly tweaked them. They are both based off of Protestant Christianity, which split from Nicean Christianity, which developed in the first few centuries after "Christianity" was simply a Jewish messianic cult with faith in Jesus as the messiah. The Millerites, after the eschaton never came, would eventually develop into the Seventh-Day Adventist movement.

The "Great Man" theory might explain the above two religions, or perhaps more accurately, offshoots of one religion. However, when we search for the roots of ancient religion, we are hard pressed to find any founders at all. As mentioned earlier, the religion of the Ancient Near East is responsible for Christianity, Islam, and of course, Judaism, the three of which represent 4.59 billion adherents (Religious Composition by Country 2020), or almost 60% of the world's religious population. There is no recognized founder for the Israelite religion of the

³⁰ A fascinating work about this is Festinger's *When Prophecy Fails*. It is not just about the Millerites, but the same principal of confirmation bias and eschatological thinking applies.

Ancient Near East, so there is precedent for an influential religion to not have a founder. In addition, I would ask those adherents of the “Great Man Theory,” who founded Vedic Brahmanism? Who founded Hinduism? A set of unique and influential ideas need not necessarily a founder.

With the hindsight of 2000 years, and a lack of context, of course distinct differences appear between Christianity and the original Jewish teachings. But the more one looks into the minutiae of the changes, the more gradual and less extreme the changes begin to appear. Moses and Abraham are now considered by the academic consensus to be mythical, so that leaves arguably the most influential religion of all time, the movement perhaps responsible for monotheism, without a known founder. If the theological academic community can be accepting of monotheism to be without a founder, then it is plausible that the Buddhist teachings could have developed syncretically and organically as well. Again, this is not evidence for or against a historical Buddha; it is simply pointing out that arguing that “someone had to come up with these ideas” is not logically sound; as mentioned before, there is precedent for major movements to not have a founder.

The argument can, of course, be taken at the macro level, where *somebody* had to be the inspiration for these ideas, be they monotheism, Buddhism, Hinduism, or anything else. But at that point, one can be so zoomed out that *anything* can be subsumed into any idea. This is where the criterion of minimal historicity comes factors into consideration. By specifying what exactly it is we are looking for – no more, no less – we are able to make more informed and deductive analytical decisions.

§V – Bayesian Calculation: Historicity of the Buddha

	<i>a fortiori</i>	<i>a judicantiori</i>
P (h b)	.358	.058
P(~h b)	.642	.942
P (e.EBT h.b)	1	.8
P(e.OtherArguments h.b)	N/A	N/A
P(eRummindei h.b)	.9	.7
P(eNonRummindei h.b)	.65	.5
Total P(e h.b)	.585	.28
P (e.EBT ~h.b)	.5	1
P(e.OtherArguments ~h.b)	N/A	N/A
P(eRummindei ~h.b)	.5	1
P(eNonRummindei ~h.b)	1	1
P(ePiprahwa h.b)	N/A	N/A
P(ePiprahwa ~h.b)	N/A	N/A
Total P(e ~h.b)	.25	1

a fortiori:

$$P(h | e. b) = \frac{.358 \times .585}{(.358 \times .810) + (.642 \times .25)}$$

$$P(h | e. b) = \frac{.209}{.209 + .161}$$

$$P(h | e. b) = \frac{.209}{.370}$$

$$P(h|e.b) = .565 \text{ or } 56.5\%$$

a judicantiori

$$P(h | e. b) = \frac{.058 \times .28}{(.058 \times .28) + (.942 \times .1)}$$

$$P(h | e. b) = \frac{.016}{.016 + (.942 \times 1)}$$

$$P(h | e. b) = \frac{.016}{.958}$$

$$P(h|e.b) = .017, \text{ or a } 1.7\% \text{ chance}^{31}$$

In our final Bayesian analysis for the historicity of the Buddha, we have a probability range from 1.7% to 56.5% that, given the evidence we have, there was actually a historical figure with the elements described in the “minimal historicity” theory above. I have been very

³¹ I have rounded to the third decimal place, or .00X, for the purposes of these calculations

conservative with my own estimates on likelihood ratios and probabilities, taking into account the limited nature of this particular project, and the additional research that would be necessary to more precisely assign probabilities to each piece of evidence; however, I feel like I have been as generous to historicity as one could possibly be. Remember, on the upper bound probability, the *a fortiori* estimation, we have granted the existence of Jesus, Joseph, Moses, Dionysus, and Theseus. In order to successfully argue that the upper bound probability is accurate, one would have to verify the existence of any five members of the Rank-Raglan class above (again, which particular five do not matter; the math works out to the same). I personally do not think this is possible, and I will enthusiastically change my calculations if one *can* come up with five historical members of the Rank-Raglan class.

For the *a fortiori* estimate, I have also ignored the scholarship by Beckwith and others that label the Aśokan edicts as problematic. I have gone with the consensus, in order to allow for more research and analysis of the evidence on hand. Even in the *a judicantiori* evidence, I have been conservative with my probability estimations. In reality, I believe that it is *much* more likely that a historical figure would have much more and much less problematic evidence surrounding him or her, but again, given the scant nature of South Asian writing around the time period of our current concern, I am being cautious.

What this means is that scholars cannot say for sure that we have “overwhelming evidence” that the Buddha existed. In fact, even with our most *generous* evidence, and allowing for the historicity of a minotaur-slaying hero, among others, and ignoring the many red flags around the Aśokan edicts, there is *still* just below a 57% probability that the Buddha actually existed. Logically, a 57% chance that there was a historical Buddha entails that there is a 43% chance that there was not. Essentially, we have a toss-up. That latter part is what most scholars

tend to ignore. Drewes is right to say that “we do not have the grounds for speaking of a historical Buddha at all” (Drewes 2017).

§VI – Conclusion and Future Research

In this study, Bayes’ Theorem has been applied to analytically and deductively consider evidence on two hypotheses: one that states that there was a flesh-and-blood Buddha, and the other that states that that Buddha was a mythical character later written into history. The methodology of this project is much more important than the final calculations; by considering an alternative hypothesis, one is able to see how compelling the evidence *actually is* for what it is we are trying to prove.

The essential findings of this project that there are other hypotheses that explain what little evidence we have for a historical Buddha, other than the traditional biographical assumptions. This, of course, does not mean that for sure there *was not* a historical Buddha; in fact, it appears that there is just above a 50% probability that one actually existed and walked the earth. For ancient history, that is relatively high. But in all actuality, the numbers are secondary here. What is most important, and what I hope to have accomplished here, is to shed light on the methodology that we as historians and theologians use to analyze evidence. This paper makes it apparent that the Aśokan edicts need to be analyzed further. It makes it apparent that texts need to be analyzed for historical detail not within the small, narrow lens of one hypothesis or opinion, but in the entirety of plausible situations. And, perhaps most importantly, this paper seeks to encourage everyone to question what we think they know, and ask *why* they think they know it. If someone uses this methodology, first proposed by Richard Carrier in the field of Jesus studies and now continued in the field of South Asian studies by myself, and comes up with completely

opposite conclusion, then I will be satisfied that my work has made an impact. I am not out to hunt down and disprove historical figures for the sake of being contrarian; I just seek empirical and deductive truth.

Personally, I feel like the 56% figure will decrease once more research is done and the expectation of evidence on (h), or historicity, goes down. It is my gut feeling that research into the Aśokan edicts will show that there is actually less evidence of the Buddha than we think. However, the *entire point* of this paper is to ignore my gut feeling and go with proper, sound methodology. Of course, there is some decision making and guessing involved; it is, after all, ancient history. We do not, and never will, come close to knowing anything about it. However, the less of the “gut feeling” methodology we use, the more sound our reasoning is. Also, that 56% figure, remember, is based on accepting the historicity of Jesus, Moses, Joseph, Theseus, and Dionysus (or any other two figures on the list in section 3). Take away the Pagan gods, and that figure drops to 41.7%.³²

If there *was not* a historical Buddha – and this paper as shown that that is *at least* a plausibility, then the next question to ask is “where and when did Jainism and Buddhism split?” The term for the divergence of Judaism and Christianity is referred to as “the parting of the ways;” that phrase is also apt in this context. In fact, Sujato and Brahmali use the following Buddhist connections to Jainism in the EBTs as evidence for the authenticity of the EBTs:

1. Criticism of Brahmanical animal sacrifice
2. Some ideas about karma, opposed to Brahmanical views
3. The importance of generosity
4. Social stratification: the khattiya caste is regarded as superior to the Brahmanical caste
5. Paccekabuddhas: including some of the same names
6. The idea of a sequence of past ‘ford-makers’ (titthakara
7. Shared stories: the Pāyāsi Sutta

³²

$(3 + 1)/(15 + 2) = .235$, $P(h | e, b) = \frac{.235 \times .56}{.235 \times .56 + (.137 \times .328)} = .137/.328 = .417 = 41.7\%$

8. Shared similes
9. Vocabulary: they have a large religious vocabulary in common, including epithets for their respective leaders, and general
10. religious terminology
11. Common verses and verse lines
12. Stylistic parallels: the use of some of the same metres in verse composition (Brahmali 2015, 34)

While Sujato and Brahmali use this list to argue that the EBTs have an early composition date concurrent with Jainism, this is *exactly the type of evidence we would expect* if we hypothesized, for example, that Buddhism started out as a sect of Jainism. This also goes against the “Great Man Theory;” according to the above list, some of the speech and ideas of the Buddha were not brand new, but already established in the Jain tradition.

Another issue is that the dates for Buddhism and Jainism are circularly intertwined. Because of the description of the Buddha’s disciple’s conversations with Mahāvīra, and the description of Jains in the Pāli Canon, we can conjecture that whoever composed that literature, presumable the Buddha, was writing in a milieu that included Jainism. However, according to Mette, on a paper written for the Dating of the Historical Buddha conference, “The significance of the Buddha’s deathdate for the review of the origins of Jainism can not [sic] be overestimated, exactly because the roots of Jainism are much more obscure than those of Buddhism” (Mette 1995). If we have no death date of the historical Buddha, what does this mean for the dates of Jainism? Can we date the *mythological* Buddha?

It bears repeating that I do not, under any circumstances, believe that a group of monks or leaders conspired together to create a legend of the Buddha out of whole cloth. I am of the belief that *if* there was not a historical Buddha, then the legend developed slowly and organically until at some point, a biography for the Buddha was composed. I find it particularly interesting that the literary historiography of the Buddha is quite similar to that of Jesus; the amount of

biographical details in the texts actually *increases* as the composition of the texts get later.

At the end of the proverbial day, “the kitchen table theology” is safe. Whether or not the Buddha existed, or whether or not his transformational journey out of the palace is a literary device or a historical detail, the Buddha’s teachings have had an unmistakable effect on humanity. My interest is purely historical and empirical. However, life is not all empirical. Faith requires the extraordinary, and I personally find that a beautiful aspect of humanity. However, I believe true wisdom is understanding when to engage the empirical process and when to disengage it to appreciate the unexplainable. Living in such a duality is difficult and messy, but I would like to think that the Buddha, historical or not, would approve.

BIBLIOGRAPHY

- Allen, C. (2011). *The buddha and dr führer: An archaeological scandal*. London: Haus Publishing.
- Alter, J. S. (2004). *Yoga in modern India: The body between science and philosophy*. Princeton and Oxford: Princeton University Press.
- Barnwell, B. (2021, September 23). Ranking 0-2 NFL teams in 2021: Could the winless Giants, Colts, Vikings and others still make the playoffs? Retrieved March 23, 2022, from https://www.espn.com/nfl/insider/insider/story/_/id/32257715/ranking-0-2-nfl-teams-2021-winless-giants-colts-vikings-others-make-playoffs
- Beckwith, C. I. (2017). *Greek buddha: Pyrrho's encounter with early buddhism in Central Asia*. Princeton: Princeton University Press.
- Bhattacharya, V. (1948). *Buddhist texts as recommended by Asoka*. Calcutta: University of Calcutta. doi:http://ignca.gov.in/Asi_data/7386.pdf
- Bronkhorst, J. (2000). *The two traditions of meditation in ancient India*. Delhi: Motilal Banarsidass.
- Bronkhorst, J. (2013). *Greater Magadha: Studies in the cultures of early India*. Delhi: Motilal Banarsidass.
- Bronkhorst, J. (2016). *How the Brahmins won: From alexander to the Guptas*. Leiden: Brill.
- Carrier, R. (2011, November 25). Bayes theorem: Key to the universe - youtube.com. Retrieved March 9, 2022, from <https://www.youtube.com/watch?v=HHIz-gR4xHo>
- Carrier, R. (2012). *Proving history: Bayes's theorem and the Quest for the historical jesus*. Amherst, NY: Prometheus Books.
- Carrier, R. (2014). *On the historicity of jesus: Why we might have reason to doubt*. Sheffield

- England: Sheffield Phoenix Press.
- Carrier, R. (2016). *Hitler Homer Bible christ: The historical papers of richard carrier 1995-2013*. Richmond, CA: Philosophy Press.
- Cort, J. E. (2020). *Brill's Encyclopedia of jainism*. Leiden: Brill.
- Dani, A. H. (2015). *Indian palaeography*. New Delhi, India: Munshiram Manoharlal Pvt.
doi:<https://archive.org/details/indianpalaeographyahmadhasandaniuniversityofpeshawar/page/n1/mode/2up>
- De Michelis, E. (2008). *A history of modern yoga: Patañjali and Western Esotericism*. London: Continuum.
- Drewes, D. (2017). The Idea of the Historical Buddha. *Journal of the International Association of Buddhist Studies*, 40, 1-25.
- Ehrman, B. D. (2007). *Misquoting Jesus: The story behind who changed the Bible and why*. New York: HarperOne.
- Hultzsch, E. (1925, January). Inscriptions of asoka. new edition by E. Hultzsch : Eugen Hultzsch: Free download, Borrow, and streaming. Retrieved April 20, 2022, from <https://archive.org/details/InscriptionsOfAsoka.NewEditionByE.Hultzsch/page/n353/mode/2up?view=theater>
- Irons, E. (2016). Ashoka. In *Encyclopedia of Buddhism* (2nd ed.). Facts on File, Credo Reference:
<http://electra.lmu.edu:2048/login?url=https://search.credoreference.com/content/entry/fofbuddhism/ashoka/0?institutionId=853>.
- Irving, W., Porakishvili, N., Venkatesan, P., & Ward, K. (2004). Aśoka. In *Encyclopedia of buddhism*. Taylor & Francis Group.

- Jain, A. R. (2015). *Selling yoga: From counterculture to pop culture*. Oxford: Oxford University Press.
- Jain, J. C. (1992). *Studies in early jainism: Selected research articles*. New Delhi: Navrang. Jaini, P. S. (1998). *The Jaina Path of purification*. Delhi: Motilal Banarsidass.
- Joyce, J. (2003, September 30). Bayes' Theorem. Retrieved March 8, 2022, from <https://plato.stanford.edu/archives/spr2019/entries/bayes-theorem/>
- Karetzky, P. E. (2014). *Early Buddhist narrative art: Illustrations of the life of the buddha from Central Asia to China, Korea and Japan*. Lexington, KY: Createspace Independent Publishing Platform.
- Kulkarni, S. D. (1990). Inscriptions of aśoka : A reappraisal. *Annals of the Bhandarkar Oriental Research Institute*, 71(1/4), 305-309. Retrieved April 21, 2022, from <http://www.jstor.org/stable/41693531>
- Lai, W. (1982). The Search for the Historical Śākyamuni in Light of the Historical Jesus. *Buddhist-Christian Studies*, 2, 77-91. doi:10.2307/1390076
- Lalwani, K. C. (1975). *Sramana Bhagavan Mahavira: Life and doctrine*. Calcutta: Minerva Associates Publications.
- Levman, B. (2019). The Historical Buddha: Response to Drewes. *Canadian Journal of Buddhist Studies*, 14.
- Long Discourses 14: Mahāpadānasutta (B. Sujato, Trans.). (n.d.). Retrieved May 02, 2022.
- Majjhima Nikāya 26. The Noble Search (B. Bodhi, Trans.). (2009). Retrieved May 02, 2022, from <https://suttacentral.net/mn26/en/bodhi?reference=none&highlight=false>
- Mallinson, J., & Singleton, M. (2017). *Roots of yoga*. London: Penguin Books.
- Maraldo, J. C. (1986). Hermeneutics and Historicity in the Study of Buddhism. *The Eastern*

Buddhist, 19(1), 17-43. Retrieved February 24, 2022, from

<http://www.jstor.org/stable/44361727>

Megasthenes, & Stoneman, R. (2022). *Megasthenes' indica a new translation of the fragments with commentary*. London: Routledge/Taylor & Francis Group.

Mette, A. (1995). The Synchronism of the Buddha and the Jina Mahāvīra and the Problem of Chronology in Early Jainism. In 1910454457 1335160513 H. Bechert (Author), *When did the buddha live?: The controversy on the dating of the historical buddha ; selected papers based on a symposium held under the auspices of the Academy of Sciences in Goettingen* (pp. 179-184). Delhi: Sri Satguru.

Middle Discourses 123: Acchariyaabbhutasutta (B. Sujato, Trans.). (n.d.). Retrieved from

<https://suttacentral.net/mn123/en/sujato?layout=plain&reference=none&es=asterisk&highlight=false&script=latin>

NBA & ABA Career Leaders and records for Free throw pct. (n.d.). Retrieved March 8, 2022,

from https://www.basketball-reference.com/leaders/ft_pct_career.html

Olivelle, P. (2010). *Asoka: In history and historical memory*. Motilal Banarsidass.

Player season finder. (n.d.). Retrieved March 8, 2022, from

https://stathead.com/basketball/psl_finder.cgi?request=1&match=combined&type=totals&per_minute_base=36&per_poss_base=100&lg_id=NBA&is_playoffs=N&year_min=&year_max=&franch_id=&season_start=1&season_end=-1&age_min=0&age_max=99&shoot_hand=&height_min=0&height_max=99&birth_country_is=Y&birth_country=&birth_state=&college_id=&draft_year=&is_active=&debut_yr_nba_start=&debut_yr_nba_end=&is_hof=&is_as=&as_comp=gt&as_val=0&award=&pos_is_g=Y&pos_is_gf=Y&pos_is_f=Y&pos_is_fg=Y&pos_is_fc=Y&pos_is_c=Y&pos_is_c

f=Y&qual=&c1stat=&c1comp=&c1val=&c2stat=&c2comp=&c2val=&c3stat=&c3comp=&c3val=&c4stat=&c4comp=&c4val=&c5stat=&c5comp=&c6mult=&c6stat=&order_by=g &order_by_asc=&offset=4300

Rank, O., Somerset, R. F., Dundes, A., & Segal, R. A. (1990). *In quest of the hero*. Princeton (N.J.): Princeton university press.

Religious composition by country, 2010-2050. (2020, July 27). Retrieved March 15, 2022, from <https://www.pewforum.org/2015/04/02/religious-projection-table/2010/number/all/>

Rhys Davids, T., & Fausbøll, V. (2000). *Buddhist birth stories: The oldest collection of folk-lore extant*. London: Routledge.

Samuel, G. (2013). *The origins of yoga and tantra: Indic religions to the thirteenth century*. Cambridge: Cambridge University Press.

Schopen, G. (1997). *Bones, stones, and Buddhist monks collected papers on the archaeology, epigraphy, and texts of monastic Buddhism in India*. Honolulu: University of Hawai'i Press.

Schults, B. (May 2016). A Note on Śramaṇa in Vedic Texts. *Journal of the Oxford Centre for Buddhist Studies*, 10.

Schweitzer, A. (1906). *The quest of the historical Jesus: A critical study of its progress from Reimarus to Wrede / by Albert Schweitzer*. London: A & C Black.

Seifert, F. (1982). Historical-Critical Analysis and Buddhist-Christian Dialogue. *Buddhist-Christian Studies*, 2, 63-76. doi:10.2307/1390075

Singh, U. (2019). *A history of ancient and early medieval India: From the stone age to the 12th century*. Noida, India: Pearson.

Singleton, M. (2010). *Yoga body: The origins of modern posture practice*. Oxford: Oxford

University Press.

- Srivastara, K. M. (1980). Archaeological Excavations at Piprahwa and Ganwaria and the Identification of Kapilavastu. *The Journal of the International Association of Buddhist Studies*, 3(1), 103-110.
- Strauss, S. (2004). *Positioning yoga*. Oxford: Berg.
- Von Hinüber, O. (2019). The Buddha As A Historical Person. *Journal of the International Association of Buddhist Studies*, 42, 231-264.
- Von Hinüber, O. (2021, November 21). Hoary past and hazy memory: On the history of early Buddhist texts. Retrieved April 8, 2022, from https://buddhistuniversity.net/content/articles/hoary-past-hazy-memory_hinuber-oskar-v
- Walshe, M. (2012). *The long discourses of the buddha: A translation of the Dīgha Nikāya*. Boston, MA: Wisdom Publications.
- Witzel, M. (2009). Moving targets? texts, language, archaeology and history in the late Vedic and Early Buddhist periods. *Indo-Iranian Journal*, 52(2-3), 287-310.
doi:10.1163/001972409x12562030836859
- Wynne, A. (2019). Did the Buddha Exist? *Journal of the Oxford Centre for Buddhist Studies*, 16, 98-148.