

**UNDERSTANDING AS AN EPISTEMIC VIRTUE: A VALUE-DRIVEN NON-
FACTIVE ACCOUNT**

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ABSTRACT:

Understanding has been somewhat undervalued and underexplored in the current literature and often its value is tied into that of either truth or knowledge. This thesis aims to provide an account of understanding that defends its value as an epistemic good that is not contingent on either knowledge or truth. I will aim to construct an account that is value driven rather than nature driven as it seems that this is where the problem lies. In order to do this I will assess two current accounts of understanding and show that they cannot adequately explain the value that we give to understanding, nor do they explain how we understand.

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Introduction:

The idea of understanding is currently enjoying somewhat of a wave of interest in the field of epistemology. Unlike the debate on knowledge which has a long history, understanding is a newer and less explored area of research, although its waters of debate are no less muddy. This is perhaps due to its seemingly close ties with knowledge along with often being directly compared to knowledge in the current literature. And while understanding is epistemically quite close to knowledge, it seems to hold a value that is nonetheless distinct – although again, this matter is up for debate. There are no clear cut lines in the current research either, for example: it has been claimed by virtue ethicists that it is one of the fundamental goods of life¹ but some philosophers of science² have claimed that it has little distinctive value at all. Even within the field of epistemology, the value of understanding is debated. Jonathan Kvanvig³ for example, argues that it is more valuable than knowledge, Duncan Pritchard⁴ claims that it is the answer to the value problem for knowledge (to be discussed in Chapter 1) and Ayca Boylu claims that understanding is what makes knowledge valuable⁵.

So it does seem (at least on the outset) that understanding does hold at least some kind of special value and more so, we might be able to learn something about the epistemic value problem by delving into varying accounts of understanding. This should at least be reason to think that understanding is something that is worthwhile to look into.

While it is not my intention to argue, as Jonathan Kvanvig has already done, that understanding is more valuable than knowledge⁶, what I will present here instead is a case for the value of understanding – I take it that understanding is an epistemic virtue that must hold a high value (else it would not be an epistemic virtue) there is something that is valuable about coming to understand something and this is bound up in the act of grasping one's beliefs together. I will argue that understanding ought to be seen as a cognitive achievement which provides an epistemic value that is a normative requirement for living a good and flourishing life. Furthermore, unlike the other accounts that are currently on offer, I will be arguing that understanding need not be factive⁷. This is to say that in order to obtain understanding, one does

¹ See works from Wayne Riggs and Linda Zagzebski for examples of this.

² See works from Wesley Salmon for examples from the philosophy of science.

³ Jonathan Kvanvig "The Value of Knowledge and the Pursuit of Understanding" (2003)

⁴ Duncan Pritchard. "Part I: Knowledge and Understanding." in *The Nature and Value of Knowledge: Three Investigations*. Ed. Duncan Pritchard, Adrian Haddock, and Alan Millar. Oxford: Oxford UP, 2012.

⁵ Ayca Boylu "How Understanding Makes Knowledge Valuable", *Canadian Journal of Philosophy* (2010): p591-609

⁶ Kvanvig "The Value of Knowledge and the Pursuit of Understanding" (2003)

⁷ It is worth noting that these points do not necessarily relate, one can claim that understanding is a requirement for flourishing without conceptualising it as non-factive. Wayne Riggs has done something similar to this in his paper

not require truth first.

In order to do this, I am going to argue that understanding is achieved through the act of grasping one's beliefs – but I will flesh out the notion of grasping in Chapter 3. For now, what is important is to note that through the act of grasping our beliefs we gain the kind of epistemic coherence which gives the underlying structure into which those beliefs fit – that is, we gain an understanding of the structures into which isolated 'facts', that we know about the world, fit and this grasp is non-factive in nature. Thus, I argue, it is through the act of grasping that understanding constitutes a cognitive achievement. What seems clear to me is that the concept of understanding is deeply bound up with its value. For me, understanding is a kind of epistemic value that is more than just an epistemic success of sorts. I want to be explicit about this claim because much of the discussion in this thesis will be centred on discussions of the value of understanding and I will be presenting a value driven account as opposed to a nature driven one. Further, and importantly, it is through understanding in this way we not only come to be in a particular relationship with the world which cannot be achieved by merely knowing about the world, but more importantly, we have ourselves achieved an important epistemological state in doing so. This state is distinct from that of knowledge, and I think, is a different kind of cognitive achievement. Being in such an epistemological state, I argue, constitutes a way of being in the world which not only makes us better suited to make and fulfil our important life goals, but is necessary for our being able to have the kind of rich engagement with the world, others and ourselves in order to live meaningful lives. Through understanding, we are able to engage with the world in a way that knowing does not allow us to. Given this, I argue that the cognitive achievement of understanding realised through the act of grasping one's beliefs constitutes a cognitive achievement that has final value and fulfils an epistemic normative requirement for human flourishing.

“Understanding Virtue and the Virtue of Understanding” although he argues for a broader account of virtue that might include understanding rather than arguing for an account of understanding as I am doing here.

Chapter 1: Knowledge and Understanding – finding and defining the boundaries between them.

I am going to begin this thesis with a quick breakdown of the nature and value of knowledge. While this might seem like a bit of a departure since this thesis is focussed on an account of understanding, I think it is important to look into and recognise where a large part of the debate around understanding comes from. Furthermore, many theorists – Kvanvig among them – have taken to viewing understanding as a means of rescuing the value of knowledge, or providing a solution to the value problem for knowledge. As such, much of the current literature compares and contrasts understanding with knowledge. The sheer amount of work that has been done on knowledge indicates that there is a wealth of research available that may help in the task of explaining not only the value of understanding but its nature as well. It is important to recognise that a large part of the discussion on understanding is an attempt to solve the problems encountered when pursuing the value of knowledge.

1.1. Finding and Defining the Nature of Knowledge:

Imagine that you walk into your house and glance at the clock on the wall, the time reads 3:15. Unbeknown to you, the clock happens to be broken and has stopped at 3:15, but more so, that also happens to be the correct time at the moment you look at it. Intuitively, it seems that you are right, but it does not seem that you have knowledge. Or rather, we wouldn't want to say that you have knowledge because you simply got lucky and happened to see the clock at one of the two possible times that it could have been "right".

This little thought experiment is a simpler version of what we call a Gettier⁸ case. Simply put, a Gettier case entails one coming to hold a belief that cannot be called knowledge because it is merely lucky that it happened to be true. We can still say that when you look at the clock you hold a justified true belief, but your belief does not and cannot count as knowledge because you just happened to be true, it was by sheer luck that you were right – even though, in this case, your belief is perfectly justified.

Justification is a requirement for knowledge because it provides us with a reason for truly believing, and it acts as a way to provide us with good evidence for holding our true belief. But as the Gettier problem shows, a justified true belief can nevertheless be epistemically lucky in a way that is inconsistent with knowledge. We want to be right, and we want to know that we are right. Once we open up our knowledge to doubt in this way then any apparent knowledge we

⁸ Edmund Gettier "Is Justified True Belief Knowledge?" *Analysis* vol 23(1963). (6):121-123.

have can be questioned. It is possible that any true belief we have may have turned out to be true accidentally. So even seemingly justified cases are not strong enough to protect us against luck. What follows from this conclusion are two separate but related points. Firstly, Gettier cases show that we need a new theory of knowledge that is not just a justified true belief theory as the tripartite account is not sufficient enough to provide us with knowledge as we would need some kind of anti-luck condition. Secondly, Gettier cases show that we can never know that we know something *regardless of what the right theory of knowledge is*. This is hugely problematic for any account of understanding that is going to rely on knowledge in order to obtain.

Again, it is not my intention here to provide an account of such positions that might solve the Gettier problem – any such solution would hardly make a difference at all for an account of understanding that does not conceive of understanding being a species of knowledge⁹ – rather I simply want to provide background to the problems of knowledge accounts on the whole in order to illustrate later on how they impact accounts of understanding that rely on knowledge. It is not just that there are problems with the explaining the nature of knowledge, there is also a problem regarding its value and how we can account for its apparent value. In fact, it seems that many of the value problems for knowledge are a result of trying to figure out its nature and find solutions to the problem of its nature. It is imperative that we have a working account of knowledge that isn't influenced by such debilitating problems if we are to come up with an epistemic goal that is worthwhile.

1.2. Searching for the Value of Knowledge:

In epistemological literature one of the key discussions is centred on providing a detailed account of knowledge. It has been generally held that knowledge has some special or distinctive epistemic value¹⁰. There are several problems that one encounters when attempting to defend this claim and these boil down to three main value problems.

1. How do we account for knowledge being more valuable than mere true belief?
2. How do we account for knowledge being more valuable than any other proper subset of the sum of its parts (for example justified true belief)?

⁹ More so, what the Gettier problem demonstrates is that we cannot ever be sure that our beliefs are not true merely by accident. So we cannot tell what we know. I doubt that a solution to the Gettier problem would ever solve such an issue even if we were to come up with a theory that is counter-example proof it would still be unclear whether or not any actual beliefs we have meets that theory's luck-proofing requirements or whether it is lucky.

¹⁰ Kvanvig "The Value of Knowledge and the Pursuit of Understanding" p1

3. Why do we prefer knowledge over something that falls incrementally short of knowledge¹¹?

The underlying problem here can be phrased as: why am I in a better epistemic position when I know than when I truly believe? What is it about knowing that puts me in a better position and how do we explain it? And what is knowledge comprised of? Furthermore, once we take into account the problems arising from the Gettier problem and subsequent cases, we have a few more issues:

1. It seems that we need a new theory of knowledge.
2. Gettier cases show that we cannot tell whether or not we have knowledge.
3. Gettier cases also show that whatever knowledge turns out to be it is unclear why it is valuable.

It should be noted here that there is currently no generally accepted account of knowledge (largely due to the problems raised through Gettier cases). No one in the literature has argued for an unmodified tripartite account of knowledge (knowledge is a justified true belief) since around 1963, and the general consensus is that knowledge is some or other modification of the tripartite account where knowledge is a justified true belief plus an as yet unspecified anti-luck condition. It is not my intention here to argue for any specific account of knowledge nor do I intend on speaking to the issues raised above, rather I simply wish to highlight the problems with accounts of knowledge as many theories of understanding rely on the use of knowledge in a variety of ways.

Moving on then, I am going to discuss the primary value problem for knowledge which is illustrated through the swamping problem¹² which goes as follows:

If we suppose that we have two identical true beliefs, one formed reliably (I have justification for my true belief and thus seem to have good evidence for believing it) and the other is not reliably formed then one should be more valuable to us because of the fact that it has been formed in a reliable manner. We value reliability because it leads us to a true belief that we can call knowledge, but if those beliefs are identical then it is hard to see why I should value the reliably formed one over the one that isn't. Once I have my true belief, it does not seem to make a difference how it was actually formed. This issue can be illustrated with what has come to be known as the swamping problem: Imagine two great cups of coffee, identical in every relevant respect. They look the same, taste the same, smell the same, are of the same quantity, and so on.

¹¹ Pritchard "The Nature and Value of Knowledge: Three investigations" p10

¹² Pritchard "What is the Swamping Problem" in *Reasons for Belief*, Andrew Reisner & Asbjørn Steglich-Petersen (eds.) (2011)

Clearly, we value great cups of coffee. Moreover, given that we value great cups of coffee, it follows that we also value reliable coffee-making machines i.e., machines which regularly produce good coffee. Notice, however, that once we've got the great coffee, we don't then care whether it was produced by a reliable coffee-making machine. That is, that the great coffee was produced by a reliable coffee-making machine does not contribute any additional value to it.

To make this a little clearer; say that we are told that only one of the many identical cups of great coffee has actually been made by a reliable coffee making machine and the other was made by an unreliable one. This seems to have very little bearing on which cup one preferred. It is likely that one would be indifferent to which cup of coffee it is and what machine it was made by. So, whatever value is given to a cup of coffee through being produced by a reliable coffee making machine is being swamped by the value given to that coffee in virtue of being a good cup of coffee.

By analogy – and taking it back to where we started – when we are faced with two identical true beliefs, one of which formed by reliable methods and the other not, it seems that it shouldn't make a difference to us which one we have. If we only value reliable belief forming processes as a means to true belief (just as we only value reliable coffee makers as a means to good coffee), once we have the true belief then it shouldn't matter to us whether that good was also acquired through reliable means.

The implicit claim that is shown here is that if a property is only instrumentally valuable to some further end, then in cases where the further end is already present, no further value is added to it by the presence of the instrumentally valuable property. The point here being that once I have a true belief, the fact that it came about through reliable means does not add any actual value to my true belief, much like a good cup of coffee from a reliable machine does nothing to enhance the value of it being a good cup of coffee.

But we are not really interested in reliability, so why is this relevant? Well, the intuition that we can follow with the coffee cups example is that if a property is only instrumentally valuable relative to some further good then in cases where the further good in question is already present no further value is actually conferred by the presence of the instrumentally valuable property¹³. So what can be gathered here is that the swamping problem is analogous to a general thesis about value – if the value already exists, then no extra value is conferred by having the extra property. So when we apply this to knowledge, then it can be shown that what we value about knowledge is not that it was formed by reliable means (i.e. that it was justified) but that it was true. Remember, knowledge needs to be more valuable than any constitutive value of the

¹³ Pritchard "What is the Swamping Problem" in *Reasons for Belief*, Andrew Reisner & Asbjørn Steglich-Petersen (eds.) (2011): p248

sum of its parts, but if the value of justification is swamped by the value of truth, then what we are left with is that it is only the true belief that is valuable. What this implies is that the value of knowledge only has value in virtue of being of a true belief, but this cannot be right because we are trying to show that knowledge is more valuable than true belief. It might be the case that there is something about knowledge that is more valuable than a true belief (and our intuition points to this) but if that is the case, then the worry¹⁴ still holds – it might be that the value of truth swamps that of knowledge and we only value knowledge because it is true. The value of knowledge then comes from truth and it holds no special value over and above that of truth.

This seems like an insurmountable problem, some like Jonathan Kvanvig take this conclusion to show that knowledge has little special value and we ought to search elsewhere instead – though other philosophers working in this area have offered other accounts of knowledge in order to solve it. It is not my intention here to argue for any account of knowledge nor do I intend on taking Kvanvig's side in arguing that knowledge has no special value. However, I think that it is worthwhile to look into discussions of knowledge in order to help explain why the accounts of understanding that are currently on offer might not work as well as they ought to – for some are linked heavily with knowledge, but I will expand on this in later chapters.

1.3. Separating Knowledge from Understanding

In the previous section I gave a brief breakdown of knowledge and I think it is necessary here to show how knowledge and understanding differ in a conceptual sense particularly because much of the work around understanding is a direct result of problems encountered when trying to account for the nature and the apparent value of knowledge. When one comes to know specific facts, or memorises data sets, for example, when I know that the sun always rises in the east and sets in the west, or I know that the sky is blue, I have certainly uncovered something about the world, but understanding these facts seems to relate to a different kind of epistemological state. *Understanding* why the sun rises in the East and sets in the West or that the sun moves in the way that it does rather than *knowing* these things tells us something important about the world and brings us closer to it, but it also requires that we ourselves have done more than mechanically obtained an isolated true fact about the world– that is, understanding requires us to have both obtained those isolated 'facts' and requires us to be in a particular epistemological state in which those facts no longer stand alone, but cohere. If we take it that the world has a structure or structures then the facts that we come to 'know' about the world must also help to reveal this

¹⁴ What we value about knowledge is not that it is reliably formed, but that it is true.

underlying structure, and it seems that comprehension of these structures in an important epistemic goal.¹⁵ This thesis is aimed at arguing that understanding provides us with a way of comprehending these structures in a way that knowledge is simply not able to. In the next section I am going to clarify the term understanding and explain what it pertains to in this thesis.

Grammatically, understanding can be used as a noun, verb, or adjective – but these terms don't really help explain its uses or why we would want to talk about it in an epistemological sense. Understanding can take a variety of objects, corresponding to the variety of grammatical terms that are available to the verb “understands”. For example; Jay understands that WWII was won by the allies or Jen understands that Sydney is a city in Australia. In cases such as these ascriptions of understanding seem to be synonymous with the corresponding ascriptions of knowledge. So one could quite easily replace “Jen understands that Sydney is a city” with Jen knows that Sydney is a city and subsequently the phrase appears to lose almost no meaning. At most, one could take the verb to mean some kind of hedge – so for example when I could state that I understand that you're angry with me, I might not actually understand anything about why you're actually angry with me and I'm just assuming this is the case. This point is quite important because it indicates that when understanding is sloppily used as a single proposition, it is basically being used as a synonym for knowledge. But, when understanding is used as a synonym for knowledge in this sloppy way, as it so often is in conversational dialogue, it simply does not count as the strong kind of understanding that we are after. Why? Because there is a lot more to understanding than what a single proposition entails. Furthermore, understanding should not be reduced down to a proposition because we tend to require more from our agents as understanders than singular propositions to explain their understanding otherwise we might as well just point to it as knowledge. . The kind of achievement that we generally attribute to one having obtained understanding requires a lot more than a simple proposition.

I can understand a proposition in that the proposition is the object of my understanding, so when I come across the proposition P: the sky is blue, I can understand the sentence in the sense that I grasp what it means. This is just not the kind of understanding that is focussed on in the current literature as well as in this thesis. When referring to understanding I will mean it to be related to understanding an object or a subject of study. The object can be represented propositionally but I am interested in the much broader object and claims that go along with it. I will borrow a term from Jonathan Kvanvig here and refer to this as objectual understanding. According to Kvanvig objectual understanding occurs when understanding is grammatically followed by an object, such as understanding maths or understanding the president. However,

¹⁵ Linda Zagzebski “Recovering Understanding” *Knowledge, Truth, and Duty: Essays on Epistemic Justification, Responsibility, and Virtue*. Ed. Matthias Steup p242

this kind of understanding is not straightforwardly factive - this is to say that it is not something that is either true or false as is the case with a proposition – such as knowing who the president is, or knowing that $2+2 = 4$. To understand maths is to have beliefs about it and those beliefs can be straightforwardly factive while my broad understanding might not be simplified into statements that are true or false. But for Kvanvig, objectual understanding requires that my beliefs related to (or peripheral to) maths are true in order for understanding to obtain¹⁶.

Typically, when an agent has objectual understanding she possesses certain facts about the object of her understanding, but, importantly, she also has the ability to apply those facts in a meaningful way. For example, there is a marked difference between someone learning physics theories by rote and someone who is actually able to apply those theories. If Jen is not able to answer the questions on her physics exam in spite of learning all the theories in her textbook then it would seem reasonable to assume that she does not understand them. When an agent does hold an understanding of something they are generally able to reason counterfactually about the object of their understanding. So, when Jay understands WWII he does not just possess numerous facts or propositions about it, but he can reason about outcomes that might have been different if one side hadn't lost a particular battle, or what would have happened if the Enigma code had taken longer or shorter to break – or perhaps if the situation had been handled differently by some important general or another.

To understand an assertion is to also appreciate and recognise that the acceptance of that assertion would commit you and what counts as a reason to accept the assertion in question¹⁷. Someone who just knows trivial facts by rote – even if they are in some kind of chronological or systematic order – does not actually grasp the content, nor do they show an appreciation for the fact as it fits in with the bigger picture. This is not to say that someone who engages in learning many individual bits of trivia is actually doing something trivial, rather they are simply not engaging in the type of cognitive behaviour and effort that understanding requires and this point will be clarified in chapter 3.

Knowing about something – that is, being in possession of certain facts about the object of my knowledge which I can express propositionally – is thus, quite distinct from my understanding of something. To understand something I must be able to do more than simply make propositional statements or expressions about the object of my understanding. This requires that my knowing something and my understanding something constitute two different, though complementary, epistemological states which I can occupy. But how does an agent come

¹⁶ It is important to mention again that I will not be endorsing this view but it is important to Kvanvig's account and does provide us with a good description of what understanding entails in a broader sense.

¹⁷ Catherine Elgin "Epistemology's Ends; Pedagogy's Prospects" *Facta Philosophica* (1999) p47

to understand something, what has an agent done when they have understood something, and what exactly is the relationship between knowledge and understanding such that they bring about two different epistemological states in agents? Following Catherine Elgin, understanding is going to require at least some kind of coherence-making relationship that will properly distinguish it from knowledge. Elgin in *Considered Judgement* (1996) says the following about understanding:

We understand rules and reasons, actions and passions, objectives and obstacles, techniques and tools, forms, functions and fictions, as well as facts. We also understand pictures, words, equations and patterns. Ordinarily these are not isolated accomplishments; *they coalesce into an understanding of a subject, discipline, or field of study*¹⁸ (own emphasis).

According to Elgin, one can see that what is primarily distinct about understanding is not only the sheer number of things that we can understand, but that when we do come to understand something we are essentially drawing together numerous beliefs or propositions to form a coherent web that we can call understanding. In the current literature, this act of drawing together is often called a *grasp*.¹⁹ What is essential to the nature of understanding is that the object of that understanding is grasped by the agent. Grasping thus refers to seeing how various parts of the object of understanding fit together. We can see the underlying structure or structures - we see how the different elements of the information web hang together and how they interact. The primary difference then, between understanding and other kinds of epistemological pursuits such as knowledge or truth or justification, is that when we understand, we demonstrate a coherence among our beliefs and a grasping of the relationships between them. Furthermore, this is something that all theorists seem to agree on as a necessary condition for having understanding.

So, one can see now that understanding as an epistemic goal entails that the agent has managed to cohere their beliefs together to form a kind of web of information and as far as we can currently tell, grasping is the only component of understanding that all theorists seem to agree on. The chapter that follows will be a discussion of two different accounts of understanding as they disagree on what the requirements are for understanding to obtain. In

¹⁸ Elgin *Considered Judgement* (1996) p123

¹⁹ I too will be using this term to describe what pulling ones beliefs together is. I will discuss it fully in a later chapter. But it is important to note that every theorist seems to have a different idea of what the grasp entails, so there is no concrete unifying theory.

offering these accounts up for evaluation I hope to point out how varied the debate currently is and the problems that are encountered for both accounts.

Chapter 2: Two Contrasting Accounts of Understanding

This chapter is an exploration and evaluation of two accounts of understanding that are available in the current literature. I will contrast Stephen Grimm's factive account with Catherine Elgin's non-factive account to show that the debate around understanding while still growing, is also vast in approaches and disagreement about what the nature of understanding actually is. There is a general acceptance among epistemologists working in this area that understanding does hold at least some important value but there is little agreement about what one needs in order to obtain it and the kind of value that accompanies it. I think it is necessary to show these differing accounts because they highlight not only the different approaches towards understanding but also the differing intuitions that one might follow when trying to come up with an account of understanding. I would like to note here that I will only look into these two accounts because they are on the extreme ends of the current research landscape. Grimm argues for an understanding that is a kind (or species) of knowledge and Elgin argues for an understanding that is quite different from knowledge and does not require either luck-proofing or truth. While I acknowledge that there are other theorists that fit between these two extremes – such as Duncan Pritchard, Jonathan Kvanvig, Kareem Khalifa, Wayne Riggs and Linda Zagzebski, as well as several theorists working in the Philosophy of Science on similarly related topics such as explanation, see: Wesley Salmon and Philip Kitcher – I do not have space in this thesis to deal with all of them and the points that I make about Grimm's account are easily applicable to positions that are on the middle-ground (such as Kvanvig and Pritchard as well as accounts coming from the Philosophy of Science) and accounts like Zagzebski's and Riggs' are much closer to my own account.

2.1 Grimm's Account: Understanding is a Species of Knowledge.

Stephen Grimm offers an account of understanding that is focused on its nature and not necessarily its value²⁰.

²⁰ I want to paint a basic picture of what Grimm's account of understanding entails. Firstly, his account is restricted to the nature of understanding and relates only to understanding the natural world – I take it that he is talking here about understanding specific propositions or situations such as understanding why my car didn't start this morning, or how my house burnt down in a fire or scientific questions such as how the moon's gravitational force affects the tides. I think it should be noted here that this seems to me to be a specifically narrow view of understanding. I suspect that he does mean it to apply to spheres of understanding that have larger objects where there are a lot more beliefs to link together; such as understanding politics or history, but he does not really deal with these bigger examples possibly because they closely resemble concepts or more abstract notions that are not reducible to natural phenomena. More so, he states that he specifically is not dealing with the understanding of human actions or

There are two things that are required for understanding to obtain for Grimm's account: (1) that what is understood is true (i.e. that the relevant beliefs and propositions are true) and (2) that the agent has adequately grasped the connections between those propositions. Since Grimm states that understanding is a species of knowledge, then that one's propositions are adequately grasped and true implies that the understander has knowledge.

This point is important primarily because it entails that (1) understanding is not transparent and (2) can be Gettiered – here, “Gettiering” entails that we might have something that we take to be understanding and it might turn out to not be understanding because it is only accidentally true. So the possibility of Gettiering understanding in this way then indicates that not only is it not transparent whether we understand why p leads to q , but it also is not transparent whether we grasp why p leads to q either. For Grimm then, neither understanding nor grasping are transparent to us. As far as transparency goes I just want to be clear that Grimm's point here is a reply to Zagzebski, from Zagzebski:

“Understanding has internalist conditions for success, whereas knowledge does not... it may be possible to know without knowing that one knows but it is impossible to understand without understanding that one understands... Understanding is a state in which I am directly aware of the object of my understanding, and conscious transparency is a criterion for understanding.²¹”

Grimm's main point is that our understanding of the world and thus natural phenomena seems to be conspicuously *factive*²². When we understand something, or when we attempt to understand we are attempting to grasp how things stand in the world and there is little reason to think that how things stand in the world is consciously transparent to us. This is not to say that transparency commits us to say that when one takes oneself to understand, one does in fact understand. Rather, the transparency claim here is not a claim about infallibility, it is just to say that we may become aware that we are in a state of understanding – something like an “aha” moment perhaps – but this does not entail that we are actually right about what we understand.

Grimm's problem here is that Zagzebski is arguing for an internalist-friendly sort of understanding, one that appeals to internalist notions for success. However, he does not think that this sort of transparency is sympathetic to internalist claims. So we can grant that there is at

behaviours, however he acknowledges that this does need to be dealt with, though, not by him and not in this particular paper (Grimm, *Understanding* Draft (10-19-09) p19).

²¹ Zagzebski “Recovering Understanding” p246-247

²² Grimm “Is Understanding a Species of Knowledge?” *British Journal for the Philosophy of Science* 57: (2006) p518

least something that is open and evident to us when we take ourselves to have understood something. More so, it seems that we can at the very least generally explain what it is that we understand. But it does not entail that understanding in general is transparent, rather that there are cases of transparency. Furthermore, he claims that when one grasps that a broken vase was caused by it being nudged off the table, then that entails that I have considered that the spill would not have occurred had things been different. He regards this type of seeing as an action that does not require any meta-cognitive abilities merely the ability to reason counterfactually²³.

Grimm admits that there is some kind of connection that is open to view when we think that we understand and it seems to be that when we have this understanding we can generally articulate what it is that we take ourselves to understand – or articulate our apprehension of the thing that is understood. Furthermore he thinks that there are possibly types of understanding that can allow the kind of transparency that Zagzebski seems to be articulating, but, that does not hold for *all* understanding in general.

Remember, Grimm is restricting his account to understanding natural phenomena or understanding the natural world and so he is likely not interested in cases of understanding concepts or behaviours that *would* be susceptible to transparency²⁴. In particular, he thinks that understanding natural phenomena is just not going to allow for complete transparency at all²⁵. To illustrate this point, Grimm supposes a case where your refrigerator has gone off, it isn't making any sounds, the inside light is not on and the inside feels warm. While trying to figure out what has happened, you notice that the cord has been unplugged. So you naturally take it that you've figured it out and thus understood why the refrigerator stopped working. Grimm thinks it is obvious that you might be mistaken in your understanding. It might have been that the refrigerator broke down because of a short circuit and the cord was unplugged in fear of fire breaking out. In this case, you haven't understood despite your sense that you have and you've mischaracterised how things stand in the world²⁶. The point of this is to demonstrate that while one can take oneself to understand, one might in fact not actually understand. So while Zagzebski has articulated that if one understands then one takes oneself to have understood, it denies the conditional that if one takes oneself to understand then one really does understand. So the question here is really whether transparency is only a one way direction – so when I

²³ Grimm "Understanding and Transparency" p16 (forthcoming in *Explaining Understanding: New Perspectives from Epistemology and Philosophy*)

²⁴ I think it can be the case that it is clear to me when I am feeling anger that I am feeling that way for a reason or reasons. Our emotions are often transparent to us in this way, more so our general behaviours towards others are often transparent to us at least in a one-directional sense. It also seems to be the case that my understanding of a concept is often transparent to me in at least some sense.

²⁵ Grimm "Is Understanding a Species of Knowledge" p517

²⁶ Grimm "Is Understanding a Species of Knowledge" p518

understand I actually do understand- or whether it can go both ways. I'm not going to attempt to answer this question here but I think it is worth noting that Grimm thinks that understanding is not transparent like this.

So Grimm comes to the conclusion that our understanding of natural phenomena must be necessarily factive because what we are attempting to grasp is how things stand in the world and there is no reason to think that how they stand is consciously transparent to us. The agent in the refrigerator example does not possess understanding because they get the facts wrong, the mischaracterisation occurs because the agent does not have access to the full range of facts that would allow for understanding and so in this way, the situation is not actually transparent to them. Because of this possibility, transparency is not a part of understanding as there are simply too many things not available to the agent on the outset and any internal conditions for success do not seem to hold as often as they ought to. Thus, transparency is an unreliable indicator of understanding and is therefore not a necessary condition for understanding.

Going back to (2), to say that understanding can be Gettiered is to admit that understanding is susceptible to the same Gettier-type luck problem that knowledge is also susceptible to. To elaborate on this a bit more, as shown earlier, the Gettier problem calls into question how you came to hold your "knowledge" and it influences the state of that knowledge as well. If you just happen to be right about something based on situational factors then it seems that your so called knowledge can be called into question²⁷. If you have stumbled into a Gettier environment where there is a large amount of epistemic luck present then the luck upon which your knowledge is based seems to diminish that knowledge into something akin to a true belief. Once you can see how easily your beliefs can be false, then you can no longer hold on to knowledge because it makes it just lucky that you have come to be right about what you know. So it seems that we might land up giving up believing in certain things out of fear of them only being true by luck, or rather that we would be far more cautious believers in general which might not serve us well.

Grimm's main claim is that understanding is a species of knowledge, so when you come to understand something through similarly lucky circumstances he holds that (following Gettier) you don't have knowledge or understanding. This claim is also an objection to Jonathan Kvanvig's account (which I will elaborate on later in this chapter). Kvanvig claims that:

Understanding does not advert to the etiological aspects which can be crucial for knowledge. What is distinctive about understanding, once we have

²⁷ The term for this type of Gettier luck is environmental luck and I will pick up on it a bit later on in this section.

satisfied the truth requirement, is internal to cognition. It is the internal seeing or appreciating of explanatory relationships in a body of information which is crucial to understanding. When we think about knowledge, however, our focus turns elsewhere immediately, if we have learned our lessons from the Gettier literature: we think about the possibility of fortuitousness, of accidentality, of being right only by chance. We focus, that is, on what kind of further external connections there are between mind and world, beyond the fit required for the belief to be true. The basic idea here is that, though knowledge is incompatible with a certain kind of epistemic luck, understanding is not. Upon learning of the disturbed aetiology of beliefs in cases imagined here, we might say that an agent has true beliefs or even true justified beliefs, but no knowledge, if we have heeded our lessons from Gettier. We would not, as least we should not, say that because of these factors the agent is lucky to have the knowledge she has, for knowledge rules out this kind of luck. But we needn't say the same thing about the claim of understanding. If the aetiology were as imagined, one would be lucky to have any understanding at all. So such understanding would count as understanding not undermined by the kind of luck in question²⁸.

Grimm thinks that understanding based on this kind of internalism with a disregard for aetiology is misguided²⁹. The point that he is pushing for here is that aetiology matters greatly to understanding and because of that, it should give us reason to suspect that understanding is not just an internal affair that relies on grasping. The crucial difference between Grimm and Kvanvig is that for Kvanvig grasping is luck resistant – so whether or not one grasps a connection is going to remain unaffected by luck. Grimm denies this point, he thinks that neither grasping nor understanding are luck resistant in *any* way and this is largely due to his picture of understanding as a species of knowledge. He is thinking here specifically of cases where the evolution of one's beliefs to understanding isn't quite sound. I'm going to go into a bit more detail on this in a moment, but for now simply think of typical Gettier or fake barn cases. We need to have true propositions because if and when they are grasped then we cannot have the risk of them calling our understanding into question. The propositions grasped must be true in order for the agent to have knowledge and thereby have understanding because understanding on this account is a species of knowledge and thus the same rules that apply for knowledge to be acquired must

²⁸ Kvanvig "The Value of Knowledge and the Pursuit of Understanding" p198

²⁹ Grimm "Is Understanding a Species of Knowledge?" p520

apply for understanding too.

Grimm's thinking is something along these lines: In cases where there is a Gettier element at play you form true beliefs on the basis of trusting a source; and either that source is unreliable or the source is reliable but exists in an unreliable environment so you may have easily gone astray. Let's say that you're reading a book on the battle of Normandy, and you come to understand what occurred and why the battle turned out the way it did. But suppose that while the book you have is accurate, there are many others on the same shelf so you could have picked up that would have been inaccurate. So your understanding would have been entirely false. Grimm thinks that the intuition here is that the status of your beliefs about Normandy do not amount to knowledge and thereby they don't amount to understanding because of the Gettier environment that you have found yourself in. How you came to hold your beliefs about the battle of Normandy does not amount to knowledge so following the aetiology, you cannot have understanding. Even though you got lucky enough to find a book with the right information, the good luck by itself is disqualified as knowledge and thus, it is disqualified as understanding because of the conditions on understanding – that your propositions must be knowledge first.³⁰.

I'd like to bring up somewhat of an objection by Duncan Pritchard here, he claims that understanding is not a species of knowledge and it can survive a certain type of luck, namely environmental luck (such as what happens when you pick up the one good book out of a pile of bad ones). According to Pritchard³¹, understanding survives environmental luck but not epistemic luck and I will outline the differences here:

1. Epistemic luck is typical Gettier style luck that occurs when something intervenes between belief and fact³². Suppose that you are walking past a field and using your cognitive abilities you form the belief that there is a sheep in the field. In fact, while this belief is true and there is a sheep in the field, you happen to be looking at a hairy white dog that simply looks like a sheep and furthermore, is obscuring your view of the actual sheep. In this case, you clearly lack knowledge because it is just a matter of luck that your belief is true and that you are right even though you have formed the belief via your reliable cognitive abilities³³.
2. Environmental luck in contrast is where nothing comes between belief and fact but it is the environment that conspires to take away knowledge. This is demonstrated in the Barn Facade case - imagine that you are driving through barn country and you pass by

³⁰ Grimm "Is Understanding a Species of Knowledge" p519

³¹ Pritchard "Knowledge, Understanding and Epistemic Value" p26

³² Pritchard "Knowledge, Understanding and Epistemic Value" p22

³³ Ibid

many fields and each field has a barn and they all look exactly the same. You point at one and exclaim “this is a barn”. In this case, we have you, an agent, who sees a barn in clear daylight and using your reliable cognitive abilities form a belief that what you are seeing is in fact a barn. More so, you happen to be right, this is a barn but all the other ones you have passed are fakes set up for a film set. This belief is true, and not Gettierised because you really are looking at a barn but you are lucky because you could have easily been wrong³⁴. There is a direct causal path between your belief and the fact but the presence of nearby fake barns makes the fact that you believed the truth seem like a matter of luck³⁵.

So why can understanding survive the one and not the other? Well, simply because there in cases of environmental luck, there is a non-deviant connection between the grasping and what is grasped and in cases of epistemic luck there is a deviant connection. More plainly put, in cases of environmental luck, understanding still holds because there is nothing interfering with the cognitive abilities of the agent. You can still have understanding if you get lucky and read the only history book in the library that happens to have all the right dates and places in it – the fact that you got lucky here does not interfere with your understanding because (at least according to Grimm) you still have factivity and you have grasped the connections. Again, the presence of fake history books close by makes it seem like you got lucky because you hit upon the truth but you still hit it – you may not have knowledge here, but you still come away with understanding. This is unlike cases of Gettierised luck where your “knowledge” is actually taken away from you because of the situation and so your access to understanding is diminished.

Grimm seems unconvinced that these cases proposed by Pritchard show that understanding is not a species of knowledge. And both Pritchard and Kvanvig seem to agree that understanding is not a species of knowledge because of its ability to withstand the Gettier problem though environmental luck³⁶. For Grimm however, this seems to be a case of weak understanding (as it is understanding gained through lucky circumstances) so it is akin to a kind of know-how or some other kind of species of knowledge where the focus is on the ability of the knower and not how they came to know³⁷. It must be remembered that Grimm is heavily concerned with the aetiology of ones beliefs and so is concerned with how they came about. In order for an agent to obtain proper understanding their aetiology must be sound and in cases of environmental luck, it simply is not.

³⁴ Pritchard “Knowledge, Understanding and Epistemic Value” p26

³⁵ Grimm “Understanding” in *Routledge Companion to Epistemology* p92

³⁶ Although it ought to be noted here that Pritchard holds that understanding is *only* compatible with environmental luck but Kvanvig holds that it is compatible with Gettier style luck as well.

³⁷ Grimm “Understanding” (Draft 10-19-09) p19

However, I am not particularly compelled by this view of so called weak understanding. If I gain my understanding from a flawlessly true book in spite of possibility that I could have picked up a false one, I still have that understanding and have performed the cognitive work that is entailed in understanding. The truth property is present, as is the grasp. In typical Gettier cases involving knowledge, knowledge possessed by the agent is called into question because she simply got lucky that she happened to be right, that her knowledge happened to be true. If we go back to the swamping problem from earlier on, what we learned from that example was that we value good coffee regardless of how reliable the machine was that made it – the goodness (i.e. value) of the coffee outweighs anything else. Similarly, if I have done all of the cognitive work required to figure out what happened at the battle of Normandy then it does not seem obvious that I would care whether or not I was lucky enough to pick up the right history book. This links back to my main point that Grimm is more focussed on doing a conceptual analysis of the nature of understanding and he is less interested in why or whether it is valuable. He certainly thinks that understanding is valuable but it is not clear to me that his arguments for the nature of understanding line up with the value that he thinks it holds. If you hold that understanding need not be a species of knowledge then it is no longer open to this problem because while the “knowledge” possessed by the agent is called into question, their understanding is not. Understanding in this case would involve not knowledge but simply truth of ones propositions and cognitive effort. I think that if understanding is to be a species of knowledge then it is much harder to come by than seems plausible.

One possible route to take here is to say that in cases of environmental luck the agent does have understanding but she also has knowledge. Unlike the kind of luck that intervenes between one’s ability and the situation at hand in which there is no knowledge present. It ought to be noted that Pritchard does not seem to have a problem with this kind of environmental luck and will allow it to be called knowledge, but I do not think that Grimm would follow the same line purely because of his reluctance to say that environmental luck cases count for understanding (this is not to say that another theorist arguing for understanding as a form of knowledge could not do this though). I’m going to close off this discussion on luck now and move on to other issues with Grimm’s account, namely the connection between understanding and truth.

One glaring problem that I see with this account is that Grimm does not really do enough justice to the cognitive abilities of the agents he is describing. Our opinions and ideas that are (and I would suggest must be) related to our understanding of things in the world are hardly set in stone. If it were not for a trajectory of understanding that grows from simple to

complex then I struggle to see how an agent is ever to come to understand something unless they only understand what is already true. Let us take the case of a child – Sally – who learns that human beings evolved from apes. While this is not quite correct, it is more correct than a child – Peter – who believes that humans evolved from dinosaurs or plants. Furthermore, it seems that Sally is in a better epistemic position because she at least has something right and at the very least she is on the right trajectory towards understanding. Presumably, when she continues to learn more things about evolution this false belief will be removed and replaced with truer beliefs – this is generally the nature of understanding and indeed knowledge, that false beliefs are replaced with truer ones as one's understanding grows and changes. It is not that Grimm's account cannot handle trajectories – but rather that it cannot handle ones that start out with false beliefs. So Grimm would likely say that the Sally does not have understanding because she is getting it wrong, she does not even have knowledge. But it does seem like she has a better understanding of evolution than Peter who does not believe anything that is even close to the truth.

As is often the case with children and any kind of learning wherein the agent begins at a broad but simple premise (such as human beings evolved from apes or any other kind of over-simplified proposition about a given subject) they definitely do not start out with knowledge. However, as they learn more and encounter more truths and narrow and define the broader premise that they started out with they do get to a place of understanding. So if Grimm's account cannot handle cases where the understander begins with a false or true enough premise then the question is where does their understanding begin? If it is the case that it only begins when they eventually encounter more true propositions then that seems reasonable enough – and I suspect that this is the kind of model that Grimm is going for – but intuitively it still seems that someone who has a vague and not quite true understanding of a topic still understands more than someone who knows nothing about that topic at all. And Grimm's account ought to allow for this kind of understanding because the agent ought to still be credited with the cognitive work that has gone into forming their understanding, troublesome as it may be. One may want to argue here that we could still credit agents such as these for their cognitive work without crediting them with understanding and as such they would still obtain some sort of epistemically valuable state that is not understanding. While I do not necessarily disagree with this line of argument, I think that given Grimm's account and his stringent requirements for both understanding and knowledge, he would not be likely to ascribe the agents in question with either state and as such I wonder if he would be interested in allowing them any kind of epistemic value at all. As much as Grimm believes that understanding is a valuable epistemic state to obtain he has done little to defend the value of understanding and that is troublesome

because it seems like these agents have still latched on to some kind of epistemic value at the very least.

If we see understanding as a project that one undertakes rather than a goal that is to be reached which seems to be a similar way to how we think about knowledge, then what we ought to realise is that understanding requires and relies on an active engagement with ones beliefs in a way that is quite different to knowledge. And so, while one might still hold some false beliefs or have a somewhat vague understanding instead of a fuller one they are still actively engaged with their beliefs and as such they ought to be credited for having some degree of it.

It seems to me that part of our complex behaviour as agents is the ability to change what we think, to allow our thoughts to be altered by new evidence or experience. If one could only ever come to understand something concrete and hang on to it, never allowing that understanding to grow then it is quite hard to explain how scientific thought or even understanding of the self and one's place in the world can change or grow over time. It is part of the natural evolution of ideas and concepts to be susceptible to change and new evidence or thoughts. While there are surely some agents who are stubborn in their thinking and refuse to allow for other evidence to sway their understanding of the world, there are many agents who are not inclined to that kind of stubbornness of thought³⁸. When we come up against information that does not fit with our cognitive picture, be it true or false, we have a reflective ability that calls into question our current information and understanding until we can either disregard the new information or adjust our understanding to fit it. As understanders we are necessarily reflective and our behaviours about understanding demonstrate that. It is problematic to claim that the child does not understand why plants grow only because she does not understand how photosynthesis works because she is demonstrating some kind of understanding and ability in her practical know-how. Grimm cannot address claims that allow for a trajectory of understanding because he isolates his account to only take on cases that involve knowledge of the subject. Here the child does not seem to have knowledge (though perhaps she may have something a little weaker such as a justified belief) but she still has some form of understanding at the very least. I think it would go against our intuitions to say that she has neither knowledge nor understanding when she clearly is demonstrating something of that sort. Her understanding may be somewhat weaker or less evolved than it would be if she did understand photosynthesis but I take it that she is at the very least taking some necessary steps towards understanding. Take it this way, imagine if we took a 24 year old who has been kept in a bunker her entire life so she

³⁸ What comes to mind immediately is someone who is engaging in a strong self-deception such as a conspiracy theorist or a mother who refuses to acknowledge the loss of a child. This strikes me as a case of agents who refuse to acknowledge a change in the world and thus refuse to change their understanding of the world or their place in it.

has no education whatsoever and has a very vague understanding of the world due to her sheer lack of experience. Now if we were to try and educate her on the workings of the world it seems unlikely that we would start with grand claims and explanations. Rather we would likely build up her understanding bit by bit. Education and learning does not seem to be about starting with the big stuff and reducing down, rather it works in the opposite way. Ask any history professor about how best to understand WWII and they will likely tell you that you would have a richer understanding if you first understood what Germany was like after the end of WWI. This is merely a point about trajectories of understanding and how they must be considered and I question whether Grimm thinks of understanding in this way and whether or not it is right. That his cannot account for how understanding can have a trajectory or vary in degrees is problematic because it raises the question of where understanding starts and where it ends. Even if we are to isolate our understanding to minute pockets relating to specific instances and subjects then it seems that what we land up with is more of a reduction and kind of knowledge rather than all-encompassing understanding. I suspect that on Grimm's account this might not be unacceptable as understanding is a species of knowledge. But I think understanding is a bit bigger than that and if we understand that it works on a trajectory then this picture starts to make more sense. If we go back to the value of understanding, it seems to me that the children in the examples I have used have something like the epistemic value that comes from understanding and that is why I am pushing this point in this way. It seems unfair to discredit their cognitive efforts and give them little if any kind of epistemic value³⁹. If we take it that understanding just is a species of knowledge and in order to obtain it, I *must* have this collection of knowledge at my disposal then it seems slightly untenable that I might ever read a full state of understanding given that I must grasp all of the propositions involved. Grimm does not necessarily leave space in his account for degrees of understanding in this way.

I think that this is perhaps why Grimm is so determined to restrict his account to natural phenomena and propositions rather than concepts or behaviours. And I think that is the biggest downside to his account. Part of what makes us human and perhaps what makes us good philosophers is the ability and desire to question and seek explanations. When confronted with contrary evidence or the possibility of having misunderstood I would wager that most agents (and indeed philosophers) would engage in a reassessing of propositions. Understanding seems to me to be a reflective process that grows and streamlines over time and through cognitive effort of the agent – as Grimm cannot account for the trajectory that one's understanding can

³⁹ This is not to say that only understanding has cognitive value or that when you deny that something is understanding whatever that epistemic state is, it has no value. Rather it might have cognitive value of some sort but I think that Grimm would deny that it has cognitive value qua understanding.

have I doubt that he would characterise this reflective process as understanding and even then as a way of coming to understand – which seems to be the case.

Furthermore I think that Grimm seems to be after some kind of infallible account for understanding which simply does not cohere with what I have said above. While an account such as this might work if it interpreted the trajectory of understanding as moving from one truth to another truth or small bits of knowledge to bigger bits of knowledge, it does little to explain why we would need to call this understanding and not simply be chasing after knowledge instead. More so, his account does not characterise understanding as the reflective process that I mentioned above – this seems to me to simply be the process of coming to understand regardless of whether or not that understanding is about a small principle such as understanding how we measure time, or understanding theoretical physics. The point here is that Grimm sees understanding as an endpoint and not a process and I think that is a great misjudgement and mischaracterisation of understanding. It seems clear to me that he views understanding in this way because of its close ties with knowledge. On his account, understanding is a species of knowledge and while it is concerned with understanding objects or natural phenomena it stops there. His account does not leave room for understanding abstract things, like art or pieces of music – and this is mainly to do with his reliance on truth as well as his luck-proofing requirement⁴⁰. I'm not thinking here about how one can understand a piece of music by reducing it down to individual notes and pauses, rather it is about how one can come to have an understanding of a piece of music simply by listening to it. I can think of many classical pieces of music but for examples sake let us take Samuel Barber's "Adagio for Strings" from the film *Platoon*. You can listen to this song and feel that it is about despair and desperation without knowing anything about classical music and without knowing anything about how it was composed or recorded and without ever having viewed it along with the scene that it is paired with. You can still understand what the music is trying to convey, regardless of not possessing any facts about it. You need not even know what the song is called in order to understand it. Furthermore, I am not entirely sure how much my understanding of the song – or any other piece of music – would be able to be reduced to a series of truth claims because they seem not to rely on truths at all because it seems to be the case that I can feel the despair desperation relayed in the music without ever having felt those feelings before for myself. I think there is a certain kind of power in music and art and fiction that allows the reader/listener/agent to be able to

⁴⁰ I do not mean here that music or art are abstract in all that they are – they do have structure and method and are made up of concrete parts. But there is more to an understanding of art than knowing about brush strokes or medium or history of art, while these things are important when it comes to something like meaning and understanding the meaning of a piece (be it art or music) it seems that this might come down to more abstract concepts rather than concrete truths.

experience and understand something that they might not necessarily have access to in their daily lives and I think this kind of understanding is overlooked by factive accounts.

While being so concerned with factivity and understanding needing to be a species of knowledge Grimm alienates the human and cognitive element of understanding that is so vital to how it functions. I think this is a great shortfall because viewing understanding as a species of knowledge just does not explain or reflect how we go about understanding the world.

2.2 Catherine Elgin and Non-factive Scientific Understanding

Catherine Elgin is interested in pursuing a model of understanding because she thinks that epistemology ought to be able to explain what makes good science cognitively good⁴¹. The starting point for Elgin is that understanding must be an epistemic state that has the same kind of value that science affords us and this is particularly interesting given that science tends to aim towards truth and Elgin is offering an account that does not rely on a truth condition. Since science is one of our greatest cognitive achievements and the pursuit of science is seen as a rewarding end we ought to be able to explain why this is valuable and we ought to have a model of understanding that can explain how science embodies and conveys an understanding of the phenomena it concerns.

Elgin thinks that understanding is a kind of epistemic success, where the understander has a claim to epistemic entitlement⁴². To be explicit here, she means that the understander can claim that they have reached understanding. She also agrees that understanding involves a comprehensive body of information rather than a single proposition. In other words she is interested in something akin to what Kvanvig would call objectual understanding. This is because when we refer to a single proposition as something that is understood – such as I understand that Obama is the current president of the United States, I can easily exchange the verb understand for the verb know without losing any important information. But, if I were to say that I understand that I understand the politics of Japan during the American occupation then it is not so easy to substitute ‘know’ in the place of understand. This is because unlike in the Obama example, the term ‘understand’ relates to a collection of propositions and facts and not just a single proposition. For this reason, understanding must be taken to involve a group of collected informational pieces that are all strung together. I simply would not be able to understand the Japanese political atmosphere during the American occupation without also holding propositions that link into other propositions to form a coherent story about the

⁴¹ Elgin, “True Enough” *Philosophical Issues* 14: 113-31 (2004) p116

⁴² Elgin, “Is Understanding Factive?” In *Epistemic Value*. A. Haddock, A. Millar, and D. Pritchard (eds), p322

situation and this is what differentiates understanding from knowledge. So the epistemic status that is understanding is derived from a unified, integrated and coherent body of information.

“Understanding involves a body of mutually supportive cognitive commitments. The elements of understanding must hang together. Moreover, the understander should grasp or appreciate how they hang together.⁴³”

Elgin claims that unlike knowledge, understanding is holistic⁴⁴. To clarify here, she takes it that one can know isolated facts such as “basil grows better in the springtime than in winter”, and “Lewis Hamilton is the winner of the Formula One World Championship 2015” without actually having to know anything else about botany or Formula One racing. But understanding must involve a collection of supportive cognitive commitments that hang together⁴⁵. I’m going to go into more detail on this as this section continues but for the moment its best to think about this holism in these terms: knowledge involves isolated facts whereas understanding seems to involve more than just being in possession of those facts, it involves drawing these facts or propositions together.

Elgin is quite adamant here that coherence is not the hallmark of understanding, this is because one can have coherent delusions or coherent conspiracy theories. Imagine the mental patient who believes he is Napoleon. Or a conspiracy theorist who has a huge web of reasoning that explains why the world is controlled by shape-shifting lizards. In cases such as these, each belief that is held is nestled in a network of mutually supportive other beliefs and so coherence seems to be present even though such notions do not seem plausible. To go into more detail here, understanding is seen as a network of beliefs because of the sheer amount of informational bits and pieces that are involved in understanding a subject or object or even a practical skill. So in order to understand why an event occurred I need more than just a few facts about it – for example let us take an event like the start of World War One and that fact is contingent on Archduke Ferdinand’s assassination (another fact), which is contingent on another fact and in this way, each of those facts or bits of information are mutually supported and held together by a coherent strand – which in this case is a causal link of sorts (although the link needn’t be causal in all cases), linking one fact to another as we are witnessing a telling of history. The intuition here when considering them will be to say that neither person has any understanding even though their beliefs are coherent.

⁴³ Elgin “Understanding Tethers” *Epistemology: Contexts, Values, Disagreement: Proceedings of the 34th International Ludwig Wittgenstein Symposium in Kirchberg* p4

⁴⁴ Ibid

⁴⁵ Ibid

Normally, coherence theories are blocked by a truth requirement, both Grimm and Kvanvig employ this method to ensure that what is understood can only be something that is true (and in Grimm's case, is also knowledge). This is because it is taken as quite obvious that any network of beliefs – even if they are justified and reliably formed – must also be true in order to obtain and make sense. So it seems reasonable for a coherence theory to tether itself in truth to allow for more plausible kinds of understanding and keep out cases where it is clear that very little is understood by the putative understander⁴⁶. The term tether here refers to something that must be held fast or secured, it is simply about being attached to reality or the phenomena that the object of understanding pertains to. So knowledge differs from an opinion because it has a tether i.e. truth and justification (although I suspect that Elgin is more interested in truth as a tether and less so in justification) and that tether holds. But, Gettier cases show us that even a justified true belief is not sufficient for knowledge because the reasons for the justification one has for a belief may have little to do with what actually causes that belief to be true and so it is just by luck that truth and justification line up in such a way as to look like knowledge. In a similar vein, science involves a multitude of idealisations and models that are not true but are central for scientific understanding (these will be discussed in a bit more detail later one) and so our use of them is not hindered by the fact that they are false. A tether, used in the way that Elgin requires is something that will allow the object or phenomena to be linked and held down to understanding in such a way that it is not just a free-floating mix of coherent beliefs. It is something that is strong enough to confer a sense of certainty (of the non-Cartesian kind anyway) and allow us to say that we are sure in that knowledge because it is binding us to that knowledge. While Elgin does not require truth as a condition for understanding, she does still want to be close enough to truth and having some sense of certainty might help her there. So the object of knowledge must be tethered to truth because it is strong enough to maintain it – but if we have learned our lesson from Gettier we also know that this is problematic and truth isn't as reliable a tether as we first thought.

So for a theory of understanding that is based on coherence, using truth as a tether is untenable according to Elgin both because of the problems that knowledge faces regarding the truth condition (see Chapter 1) and because truth is too strong a tether thus excluding kinds of

⁴⁶ I just want to make it clear that I'm using Elgin's terminology here because the focus of this chapter is on her work and as such it would remiss of me to make up my own terms instead of the ones that she has provided. That being said, she is often quite murky in her meaning so while I am going to employ the term "tether" I am not unaware that it is problematic – when we talk about knowledge for example, we can use the term tether to mean justification, so that is what tethers the believer to the truth. But when we call truth a tether, it seems to imply that truth is tying us to something and it is not clear what that thing is because it might be many things, facts or a state of affairs for example. So here I will be employing it as a means of explaining Elgin's account rather than using it as my own term as it is not overall relevant to my account.

understanding that are still necessary and useful to us; for example, many scientific theories rely on models that are false or represent an idealised state of reality – such as the Ideal Gas Law⁴⁷. So if a theory of understanding wants to avoid these problems then truth shouldn't be considered as a tether because there are other tethers available to us that will better suit a coherence theory of understanding and still ground it in reality (I will go into more detail on this in the section that follows). Elgin's main worry here is that having truth as a sufficient condition for understanding will supply too strong a tether that will isolate out kinds of understanding that rely on certain falsehoods and in doing so we rule out scientific or economic theories that are valuable and important to us. So Elgin is after a tether that will adequately tie your coherent beliefs to reality – as coherence is a necessary condition for something to count as understanding but it is not sufficient. In order for something to count as understanding then, I must grasp a body of propositions and they must be adequately tethered to reality and these conditions are necessary and jointly sufficient for understanding.

Elgin's answer to the problem of truth as a tether is to say that understanding consist of a system of cognitive commitments that exist in a reflective equilibrium – although she will preface this later by saying that this isn't sufficient for understanding, her main point is simply that truth does not actually *need* to be a tether, there are others that may be less problematic, for example: exemplification.

These commitments consist of beliefs, methods, standards, perspectives, and so forth. Together they constitute what van Fraassen calls a stance (2002). Some of the commitments are antecedently acceptable. We have good reason to endorse them independently of the system in question. Others are acceptable only because of their role in the system. For example, the scientific community was originally committed to the existence of positrons, not because it had any direct evidence of positrons, but because it was strongly committed to symmetry principles and to the existence of electrons. If electrons exist and symmetry holds, then there exist positively charged counterparts to electrons – that is, positrons. Because the elements of the system are reasonable in light of one another, they are in equilibrium; because the system as a whole is as reasonable as any available alternative in

⁴⁷ The Ideal Gas Law states that: the amount of a gas present is determined by its pressure, temperature and volume. It is an equation that is used to approximate how gasses generally behave across a variety of circumstances and conditions related to temperature, pressure and volume. Because it is just an approximation, it is not quite correct but it is the closest thing to correct.

light of the relevant antecedent commitments, its equilibrium is reflective. It is a system that the community of inquiry can, on reflection, endorse⁴⁸.

This paragraph gives some clarity on Elgin's model for understanding and it spells out her conception of what grasping is – I will go into grasping in detail in the next chapter but for now it is best to think of it as the way an agent binds their various beliefs and propositions about a subject together to form a coherent view. One thing to notice is that for Elgin, understanding requires both grasping and tethering. Your understanding must not only be grasped, but it must also be tethered to reality – although the nature of that tether need not be so strong⁴⁹.

Later on, Elgin states that:

“To deny that modern science affords an understanding of nature would be mad. So epistemology should explain how models and idealisations figure in and contribute to understanding.”

She is right on this I think. Going back to the previous section on Grimm and noticing how his account fails to explain how we can come to understand concepts or fictions and even then can barely explain the natural phenomena that it purports to explain demonstrates that epistemological theories of understanding are missing something vital – explaining how we go about understanding the world. So Elgin's point seems quite apt.

I'm going to go into a bit more detail here about what Elgin's account entails. Primarily, she maintains that understanding can to be non-factive. This is not to say that scientific understanding is completely indifferent to the fact, but rather that its relation to facts is more complex than a factivist theory might allow for. Her theory holds that different elements of a theory or system of thought perform different functions. Some only appear to be true or are not necessarily true, while others are defective if they are not true and their falsity undermines the whole system. For example the Ideal Gas Law is (to use Elgin's term, a felicitous falsehood) in that it is not necessarily true but that does not undermine its usefulness. Although it is not true, the theory or system relying on it is not defective based on that false element and understanding still obtains. So long as the theory or system as a whole is suitably connected the phenomena, the requisite epistemic standards are met and the felicitous falsehood performs its epistemic function

⁴⁸ Elgin “Understandings Tethers” p5

⁴⁹ The next chapter will be focussed on grasping so that ought to make this distinction a bit clearer, but for the moment just keep in mind that grasping is about bringing your beliefs together and tethering is about what has been grasped.

then the system affords an understanding of the domain⁵⁰. Whereas the speed of light or Avogadro's constant must be true in order for the system or theory to work, their being not true would undermine the entire system they belong to and thereby not afford an understanding.

There are obviously some limitations on what counts as a felicitous falsehood and what does not. Science makes use of many kinds of models, equations, diagrams and models. These models and equations are not strictly speaking false but if they are interpreted as realistic representations of their targets they are inaccurate in as much as how false descriptions of objects are inaccurate – for example describing a square object as round. However, many of the models that are employed in science are felicitous falsehoods⁵¹. Actual populations are not infinite or perfect, actual gas molecules are not spherical. What makes a model a felicitous falsehood is that its inaccuracy stems from its targets failure to completely mirror the model⁵². Its felicity consists in its affording genuine insight into the target. So felicitous falsehoods are false in respects that do not interfere with the insight that is afforded about the target⁵³.

This is the case because felicitous falsehoods are useful both in a practical and epistemic sense⁵⁴. They serve a legitimate epistemic purpose in that they allow us access to information regardless of their apparent false status. Something like thought experiments show an interesting case for felicitous falsehoods. We take a series of propositions that are not and do not purport to be true and use them to view a problem in a different perspective, or demonstrate why one idea might work and another might not. Thought experiments are a way of communicating concepts in a way that enables you to understand or realise that concept simply. When we entertain thought experiments, we suspend our disbelief and try out consequences in this fictional scenario. There isn't really a man sitting in a Chinese Room translating random symbols, there are no children tied to different tracks that can be saved by pushing a fat person over a bridge in the trolley problem. But we suspend our disbelief and follow the thought until we get to a conclusion. Sometimes that conclusion leads to an intuition such as in the trolley problem, and other times it leads to a particular concept such as in the Chinese Room.

Going back to the ideal gas laws, temperature, pressure and volume are interdependent

⁵⁰ Elgin "Understandings Tethers" p8

⁵¹ It should be noted here that Elgin is not the first or only philosopher of science to make use of models in explaining scientific understanding although she is the first to use them as felicitous falsehood. As Nancy Cartwright "How the Laws of Physics Lie" (1983), Mary Morgan and Margaret Morrison "Models as Mediators" (1999) have shown, models provide an explanation of the connection between a theory and the phenomena that it purports to explain. As such, a model is generally taken as a representation of the subject that one wants to understand.

⁵² Ibid

⁵³ Elgin "Understandings Tethers" p9

⁵⁴ For example, they have epistemic value because they allow us access to data that would normally be unavailable to us, such as in thought experiments and they are practically valuable because the understanding that we can from using them is often itself practically of use to us in other areas. Something like self-serving delusions for example, while epistemically useful are also practically useful to an agent.

and as the model goes, when the temperature increases, pressure increases to infinity. In reality gasses don't really work like that, increase the temperature of a closed system too much and the pressure will increase until the container bursts. But the model of the ideal gas laws discloses something about the behaviour of gasses that remain constant in spite of the strength of the container. We must imagine that the container is made of indestructible material because it facilitates the model that allows us to understand how gasses behave and how volume, pressure and temperature are interdependent on one another. We admit fictions into the realms of science and philosophy (and I would argue other disciplines as well) because they allow us access to understanding.

Elgin thinks that these incorporated fictions and falsehoods are acceptable as long as they afford us some understanding of the target (and this is why they are epistemically useful). The ideal gas law affords some understanding of the behaviour of gasses but a story about how snakes are legless because they were punished for being bad does not really afford us understanding. However, because of her avoidance of a truth tether, Elgin must come up with a method of allowing "good" kinds of felicitous falsehoods without allowing for plain fictions that do not convey any understanding.

Her answer to this problem is to appeal to exemplification. Effective models and thought experiments exemplify features they share with their targets and make reference to their targets via that exemplification. Fictions and other infelicitous falsehoods do not⁵⁵. For example, when learning logic you are given examples to illustrate the rules and how they apply to different sentences. Politicians use focus groups to determine voter preferences, soil samples are taken to assess soils of specific areas. All of these cases involve using a specific and smaller sample size to find out something more general about a bigger area.

Exemplification involves a representational relationship between a property of a cluster of properties that it instantiates and then extends that to the entire property it belongs to. Sometimes this exemplification can be trivial – such as a graph showing the number of colours of objects in a room, or how many times I've washed my hair this week. But often an exemplar is there to exemplify a cluster of properties. If we take a sample of washing powder, it exemplifies its brand as well as its capacity to remove stains or soften fabric. Nothing differentiates the sample from any other sample of the same brand and type.

Samples, however, can be wrong. In the case of focus groups or any kind of census there is often the chance that what is uncovered is not representative of a larger cross section of the population. For example, the 2008 US presidential campaign relied on polling data registered

⁵⁵ Elgin "Understandings Tethers" p10

telephonically from landlines⁵⁶. This isolated out many of the younger generation who simply do not own a landline because they have no use for one. Thus the polls comprised of mostly older voters and thus the data did not adequately represent the population of voters nor did it accurately predict the winner of the election.

So, exemplars can afford epistemic access to properties of the thing they exemplify but because they are samples and symbols they require interpretation. And because their reference depends on context, interpretation is keyed to circumstances and other background information. Although an exemplar refers to the extension consisting of items that share its exemplified properties that extension can be described in multiple ways. So while an exemplar can be and often is informative, it often relies on fallible background assumptions (such as in the polling case) and although exemplars provide fairly direct epistemic access to the properties they exemplify, this is also sensitive to the adequacy of the background assumptions⁵⁷. I don't think this is a total blow to Elgin's account, and her use of models does seem to help the problems encountered with pure exemplification. I'll explain how this works in the section below.

In many cases, it is difficult to discern properties of a specific phenomenon. Some properties are contingent on others which are contingent on others (and so on) and it can be quite difficult to pry them apart to get what you're really looking for. The distribution of genes among a population is related to mating, migration, natural selection and genetic drift so it is hard to isolate out without any of the other properties it is contingent on. Biologists cannot exactly create their own nature spheres or properly monitor things in a lab. But to measure genetic change they must have a baseline of how genes would distribute if no change other than redistribution was taking place. So, if we bring felicitous falsehoods back and create a model – in this case, the Hardy-Weinberg model – which describes the distribution of genes as infinite and not subject to natural selection, then we are able to pick up how genetic change might work in a closed system. These features would never occur in nature, but they allow biologists the opportunity to have epistemic access that they would not necessarily have without the use of a model.

So models are felicitous falsehoods that exemplify features they share with their targets and they diverge from their targets in unexemplified features. This divergence allows for the ability to manifest features that are normally obscured through the collection of other related properties. But because the features that are divergent are not the features that are symbolised,

⁵⁶ Scott Keeter, Jocelyn Kiley, Leah Christian and Michael Dimock, "Perils of Polling in Election '08", Pew Research Center for the People & the Press (2009)

⁵⁷ Elgin "Understandings Tethers" p15

models are then representative of their targets⁵⁸.

Therefore felicitous falsehoods can show not only that something obtains, but they can also help explain why it is significant. They contribute to understanding by highlighting features that would otherwise be obscured. Furthermore, they exemplify features that they share with their targets, these features can be anything from structural and intricate properties to dynamic and changing properties or simple propositions. They are informative and have strong tethers to the phenomena that they are concerned with.

Now, while the interpretation of the models depends on the background assumptions as is the case with exemplars, what we ought to notice is that we go out on a limb any time we take a target to instantiate the properties its model exemplifies. But that limb is no shakier than when we use a generalised induction from a limited body of evidence⁵⁹. Just as we are vulnerable to *ad hoc* information or misleading evidence in inductive reasoning we are equally vulnerable to poorly designed or misleading models. But what we ought to notice is that if we've learnt our lesson from Cartesian Scepticism, certainty is not really something we can go after anymore. Even accounts that do pursue truth as a tether are open to doubt and misinformation.

“The conviction that understanding is factive rests on the (typically tacit) assumption that truth is the only secure link between theories and the world. The driving idea is that if the terms in a theory denote real things and the claims made by the theory accurately characterize those things and (enough of) the relations among them, the theory embodies an understanding of those things. I have argued that exemplification supplies another strong and secure tether. Because exemplification requires instantiation, an exemplar is guaranteed to instantiate the properties it exemplifies. The tie to real, existent properties is thereby assured. Because exemplification requires reference to the extension of those properties, the exemplar provides an avenue of access to other members of that extension. An exemplar, as we have seen, need not be truth evaluable. Neither the detergent sample nor the diagram of a harmonic oscillator has a truth value. And even if an exemplar, such as the ideal gas law or the Hardy-Weinberg formula, has a truth value, neither its accuracy nor its adequacy need be undermined by its falsity. So long as the properties it exemplifies are properties of the members of the extension it

⁵⁸ Elgin “Understandings Tethers” p17

⁵⁹ Ibid.

represents, an exemplar is accurate. So long as its serving as a representative of that extension promotes our epistemic ends, the exemplar is adequate.⁶⁰”

This quote highlights the thrust of Elgin’s argument, that truth – or rather something like true belief or a factive belief web – is not the only tether available to us and there are other options that ought to be considered before we tie ourselves in logistical knots while trying to avoid Gettier. It might help to note that tethering is a kind of mediator that is separate from the actual state of affairs but links ones web of beliefs to the state of affairs. If we make use of felicitous falsehoods together with exemplification or models then we can come to an adequate understanding that is not undermined by the lack of truth.

Elgin’s account unlike Grimm’s (or any other factive account) allows us to have understanding of not only natural phenomena but also of the kind of fiction that we find in novels or other forms of media, as well as understanding concepts – we often use exemplars and felicitous falsehoods to understand how things work. In terms of tethering, this works as long as there is something to be exemplified within the fiction, something that can be firm enough to supply a strong tether (but I’m going to go into detail on this in the next few paragraphs). I think it should be noted here that Elgin is not exactly specific about whether or not her account does apply to the fictions that are often found in various forms of storytelling – or to be a bit more clear, she does not outright state that her account of understanding is one that can accommodate fictions and so what follows is what I think her account can be taken to mean if we are taking her claims about exemplification and idealisations seriously.

To return to the above, her reason for bringing in exemplification as a tether for understanding stems her from wanting to exclude “just so stories⁶¹”, by this I think she means the kinds of stories that are a narrative explanation for biological traits (such as those found in works by Rudyard Kipling which is where the phrase gets its name from). Just so stories are fanciful in nature and never purport the truth at all so it is easy to see why Elgin would want to isolate them out of an account of understanding because they afford no understanding of the target at all.

Elgin thinks that there are going to be a lot of fictional stories that cannot be exemplified because they afford the agent *no* understanding of the subject. A little understanding is acceptable, but none is not. So Kipling’s stories about how animals got to be how they are, are neither felicitous nor exemplary. In order to stop these kinds of stories from slipping through, Elgin cuts out felicitous falsehoods because they are not strong enough to weed out the bad

⁶⁰ Elgin “Understandings Tethers” p18-19

⁶¹ Elgin “Understanding’s Tethers” p10, p18

kinds of stories (the ones that do not allow us any kind of access to the truth at all). Felicitous falsehoods exemplify features that they share with their targets and as such they allow epistemic access to features of those targets. These features are typically intricately structured and dynamic properties. They allow us to see and as such, grasp the complexities that we typically encounter when we try to come to understand anything. Because just so stories cannot do this, as they afford us no access to the complexities themselves, they are uninformative and thus cannot be used.

It is important to recognise here that felicitous falsehoods can only work if they can also be exemplified. When we present a thought experiment, we know that it is not reporting a true situation, there is no such thing as an experience machine, no Chinese Room, no trolley barreling down the tracks killing orphans who will cure cancer. But, we don't need them to be true in order to understand the concept behind the experiment. So for Elgin as long as there is something felicitous that can be exemplified then I do not see why she wouldn't necessarily allow for an account of understanding that involves fictions, there just has to be both felicity and exemplification working together. It seems clear to me that in order to have a working account of understanding that can explain how we understand all the various parts of the world we live in, it must be able to handle understanding fictions and not just facts.

The combination of models and exemplars working together as a tether for understanding seems to be applicable to scientific models or anything that fits under the banner of scientific understanding. However one can see that it sometimes also applies to novels or fiction in films and other kinds of media. Storytelling has long been used as a medium through which children can learn about morals and ideals as well as build their general intuitions about what to value – C.S. Lewis' *Narnia Chronicles* are widely understood as being an allegory for Christianity for example. I think that Elgin would likely agree in saying that examples such as these are indeed felicitous falsehoods – they make use of exemplification to educate and communicate an understanding. When we read or hear a work of fiction we often engage not only with the characters but also with their actions or other elements of the story. Fictions contain falsehoods that are felicitous because they allow us access to ideas and concepts that might be outside of our own sphere of experience. And this is important not only because we value experiences and they form a part of how we engage with the world but also because they allow us to identify with others and the experience of others, which is surely necessary in order to navigate living in the world.

And I think the same can be said for a topic like philosophy or psychology. When talking about understanding something like philosophy, we might want to ask what the object of

understanding is. So if we ask “do I understand Kant’s ethics or Freud’s human nature” then my grasp must proximate that theory and there must be some convergence that demonstrates my understanding. If we are taking the object to be the theory itself then such an account is not problematic to those who subscribe to factivist views as such theories can be reduced down to an isolated set of facts or arguments. But it also seems like this is not a problem for non-factivist accounts either. I can read Freud and come to understand something about human nature even though I think that Freud is wrong or that his account is incorrect. The same can be said for something like understanding works of fiction, the propositions contained within the pages do not necessarily reflect any truths nor do they count as knowledge, but we are able to understand fictive works and often we are able to draw conclusions about our own lives and experiences from them. Looking at something like Freud’s theory of the Ego, it might exemplify something real in our psychology and when we grasp that exemplification it is still epistemically useful to us. I can agree with you and come to understand something about Freud even though his theory is not necessarily true but it is exemplifying something interesting or important. So we can sometimes use exemplars as a tether for subjects that do not have a distinct object, or subjects that are abstract and cannot be exemplified easily unlike the typical sciences.

However, I wonder here how far we can stretch that exemplification. Even though psychologists have long since moved past Freud’s theories and found ones that are more suitable, the theories themselves still exemplify something about the human psyche so we can still gain something from them even though they might be wrong. But, my worry is what happens when we take the exemplification even further than dealing with theories that are no longer in use. If it is the case that we can gain understanding from anything that can be exemplified then I wonder how much Elgin would be likely to give in to claims of exemplification. So just so stories do not exemplify anything because they are too false, but my worry is about children’s stories, or even just general stories that make use of talking animals to point out something about the way humans live. I’m thinking here of *Animal Farm* or a Disney film like *The Lion King* – both examples definitely can tell us something about human behaviour; *Animal farm* is an allegory for the tyranny that revolution can often lead to and *The Lion King* is an allegory for the responsibility that one faces when one grows up and becomes an adult. And perhaps Elgin would allow for something like *Animal Farm* because it tethers itself better to reality where Disney films often do not. But it seems to me both hold equally valuable messages in their stories and certainly allow for understanding to be fostered in their viewers/readers.

Furthermore, there is a worry that once we start using not exemplification but interpretation to tailor a piece of writing into exemplifying something about the world we might

be taking things too far. We can interpret the works of Freud or Nietzsche or anyone else for that matter through a lens of perhaps feminism, or Marxism and in doing so we are taking the original work and using it to exemplify something that perhaps was not intended by the original author (we could do the same with works of fiction too). While this might not initially seem problematic because of course we can often understand one work through the work or lens of another, the worry here is that if we take that exemplification further than the intended use of the work allows for we might be reading too much into the text and exemplifying something that is not there. I'm not sure that Elgin would allow for something like this.

The lesson from Elgin seems to be that there can be understanding of fictions when those fictions function like exemplification – so when there is something that can be exemplified or learnt from the fiction. However I think that the real answer here lies not in exemplification but in grasping. I take it that I could exemplify almost anything through a work of fiction. Be it a weak exemplification or a strong one. I think what we're really talking about here is grasping. That something can be exemplified is an indication that it can be grasped and so we can get at understanding through the grasp and not just the exemplification. We cannot get understanding without the grasping even if something is being exemplified.

I think that the issue with tethering understanding to exemplification, is not that it is incorrect to do so, an account of understanding can make use of such methods. However, I think that what is lacking on Elgin's account is attention paid towards grasping because I think that is what is doing the work here and not exemplification. In the next chapter I will be discussing grasping and the important role that it plays in obtaining understanding.

I realise that I haven't been able to show clearly enough in this chapter that removing the burden of truth from understanding is properly desirable, but I'm going to address that in later chapters.

Chapter 3: The Nature of Grasping and the Act of Cognitively

Achieving:

This chapter will primarily focus on explaining how grasping works. Although it may seem like a simple concept, I will highlight here that it is deceptively complicated and there is little work that has been done to show how it operates as a coherence-making mechanism. It is important that we look into grasping in detail because every account of understanding that is currently on offer has a grasping component – although the degree of focus on grasping varies from account to account. More so, in spite of its necessity for understanding, there has been little work to show both its importance and its nature. Looking into grasping is imperative for a strong account of understanding because, as I hope to show, it requires more cognitive work from an agent than one initially thinks it might and the lack of literature available on grasping itself is damaging to all accounts because it is leaving something vital out. This is a misstep in the current literature and I think it ought to be rectified. So in this chapter I will attempt to provide an account of grasping and explain why it is both valuable and necessary for one to obtain understanding.

3.1 Understanding through Grasping

Typically, when an agent has understanding she possesses certain facts about the object of her understanding, but, importantly, she also has the ability to apply those facts in a meaningful way⁶². For example, there is a marked difference between someone learning physics theories by rote and someone who is actually able to apply those theories. If Jen is not able to answer the questions on her physics exam in spite of learning all the theories in her textbook then it would seem reasonable to assume that she does not understand them. When an agent does hold an understanding of something they are generally able to reason counterfactually about the object of their understanding⁶³. So, when Jay understands WWII he does not just possess numerous facts

⁶² One might ask here, what separates know-how from grasping? Knowledge-how is most often seen a subset or species of knowledge. It is a matter of debate as to whether know-how reduces down to propositional knowledge or knowledge-that with one camp (intellectualism) stating that it does and must involve propositional knowledge, and another (anti-intellectualism) stating that it does not involve propositional knowledge and is rather a skill or disposition. This is obviously not a debate that I can enter into during this thesis, nor do I think it is wholly necessary for me to do so. However, it is important to note that on the anti-intellectualist view it does seem as though grasping is similar to know-how as it is non-propositional (as this section will show). On the intellectualist view then, know-how is not so easily equitable to a grasp. I would argue here that theorists who believe that understanding is a species of knowledge would be more inclined to the intellectualist view due to its close relation to propositional knowledge. It is not my intention to back either side, nor is it my intention to argue that grasping just is know-how. The two might be similar but for the purpose of this thesis I shall be treating them as separate states.

⁶³ See Kvanvig (2003), Elgin (2006), (2004) for something along these lines.

or propositions about it, but he can reason about outcomes that might have been different if one side hadn't lost a particular battle, or what would have happened if the Enigma code had taken longer or shorter to break – or perhaps if the situation had been handled differently by some important general or another. Knowing about something – that is, being in possession of certain facts about the object of my knowledge which I can express propositionally – is thus, quite distinct from my understanding of something. To understand something I must be able to do more than simply make propositional statements or expressions about the object of my understanding. Furthermore, understanding is immune to the same kinds of problems that plague accounts of knowledge. It is not susceptible to environmental luck – as the previous section on Grimm's work showed. But how does an agent come to understand something, what has an agent done when they have understood something, and what exactly is the relationship between knowledge and understanding such that they bring about two different epistemological states in agents?

To recap from the last chapter, what we gained from Elgin is that understanding is going to require at least some kind of coherence-making relationship that will properly distinguish it from knowledge. What is primarily distinct about understanding is not only the sheer number of things that we can understand, but that when we do come to understand something we are essentially drawing together numerous beliefs or propositions to form a coherent web that we can call understanding. In the current literature, this act of drawing together is often called a grasp. What is essential to the nature of understanding is that the object of that understanding is grasped by the agent. Grasping thus refers to seeing how various parts of the object of understanding fit together. We can see the underlying structure or structures - we see how the different elements of the information web hang together and how they interact. The primary difference then, between understanding and other kinds of epistemological pursuits such as knowledge or truth or justification, is that when we understand, we demonstrate a coherence among our beliefs and a grasping of the relationships between them. Furthermore, this is something that all theorists seem to agree on as a necessary condition for having understanding. This is the grasping that I alluded to in chapter one, I'm going over similar ground here but I want to recap and make the vaguely mentioned concept of grasping clearer. So, Kvanvig has remarked that:

The central feature of understanding, it seems to me, is in the neighbourhood of what internalist coherence theories say about justification. Understanding requires the grasping of explanatory and other coherence-making relationships

in a large and comprehensive body of information. One can know many unrelated pieces of information, but understanding is achieved only when informational items are pieced together by the subject in question⁶⁴.

And as Wayne Riggs states;

An important difference between merely believing a bunch of true statements within a subject matter M and having understanding of M (or some part of M), is that one somehow sees the way things ‘fit together’. There is a pattern displayed within all the individual bits of information or knowledge...⁶⁵

The quote from Kvanvig above does indicate that grasping is akin to some kind of internalist coherence that makes sense of the relationships between ones propositions or bits of information. But what is left unexplained by Kvanvig is *how* informational items are able to be pieced together. He is describing the coherentist nature of the grasp but because he does not go into detail, he is under-describing the phenomenon that he is talking about. This is something that he takes to be quite central to how understanding is obtained, however he gives us a sense of what grasping is but because he does not give a full account it looks like grasping and coherence look very similar⁶⁶.

Furthermore, it is not just Kvanvig who does not give a complete account of grasping. While the majority of theorists currently working on understanding all admit that grasping is a vital component of understanding and is necessary in order for understanding to obtain, they each use it in a slightly different way and the importance of its role differs somewhat between each theory. For instance, Stephen Grimm acknowledges that grasping is required for understanding, and at least gives a brief description of it in his paper “Understanding” (2009) and likens it to something akin to know-how, but he does not elaborate on it further or expound

⁶⁴ Kvanvig “The Value of Knowledge and the Pursuit of Understanding” p192

⁶⁵ Riggs “Understanding Virtue and the Virtue of Understanding” p218

⁶⁶ By coherence, I specifically mean a coherence theory of justification for knowledge and not a coherence theory for truth. I’m not going to go into too much detail on Coherentism, but it is worthwhile to expand on it somewhat because of the parallels that can be drawn between it and grasping. Coherentism aims to show that beliefs can be justified if they mutually support each other. So it is not that all justified beliefs must be coherent, but rather that justified beliefs may just be coherent and do not need to be based on any especially secure foundations. This is important because as my account of understanding does not rely on either truth or knowledge and only beliefs and propositions so it is lacking a secure foundation in the sense that both truth and knowledge intuitively seem to allow for such foundations (the Gettier problem aside of course).

its necessity for understanding⁶⁷. Catherine Elgin however gives no account for grasping other than stating that it requires and reduces down to some kind of coherence – see: *Understanding's Tethers* (2004) – and may involve some kind of reflective equilibrium. Even Jonathan Kvanvig seems to only mention it as an aside, a necessary part of understanding that he does not explain further apart from stating that it is useful as a counter-factual mechanism: see: “The Nature of Knowledge and the Pursuit of Understanding”. Wayne Riggs and Duncan Pritchard are the only ones who get remotely close to identifying grasping as something more than just a mysterious quality to having understanding. Riggs talks about it as seeing how things fit together and Pritchard mentions grasping as something akin to an internalist justification but he does not go into great detail on this. I take this as being highly problematic because there is an insistence that grasping is vitally important for understanding to obtain but there is such little work that has been done towards cashing out its importance and its necessity. So while there is not no mention of grasping and its relation to understanding, there is little cashing out of what grasping is. And I would suggest here that each of these theorists is getting something right about grasping, they're picking up on important parts of what it means to grasp and why it is important but none of them are getting the whole picture and I think this is an oversight.

Because although they all recognise its importance, very few provide an account for what the act of grasping actually entails short of describing it as a coherence relationship much as Kvanvig has done. This is not to say that coherence theories of justification for beliefs are in themselves under-described or under-developed, but while all theorists call the action of binding ones beliefs together a grasp that entails some kind of coherence or fitting together of the propositions very few go into detail on whether coherence is separated from grasping in way. If they are the same thing then I wonder why we are interested in calling the action grasping and not just coherence. It seems to me that something has been left out here. In the next section I will give an account of grasping and how it helps explain the intrinsic value of understanding.

3.2 The Value and Nature of Grasping

Looking at the value of grasping is a good place to start the discussion about what the nature of grasping is because it helps distinguish grasping as a topic that it worth discussing in detail and I hope that through the discussion about its value we will be able to get a sense of its nature.

When we talk about flourishing and intrinsic value, we are talking about something

⁶⁷ I would suggest here that based on my above footnote elaborating on the parallels between know-how and grasping that Grimm would most likely be in the intellectualist camp and liken grasping to a kind of know-how that requires propositional knowledge in order to function as a binding mechanism.

whose value is not derivative from the value of something else. So, the challenge here is to find some kind of value that will not be swamped by the value of the truth of a belief. My worry here is that accounts that rely on the truth of one's beliefs in order to obtain understanding cannot explain the full value of understanding without a reliance on truth. So it looks like the cognitive work of the agent does not account for enough of the value given to understanding once it is obtained. I think this is certainly the case for someone like Grimm. If understanding is to be an intrinsic good then its value ought to be explained in virtue of itself and if truth is on the scene then it will swamp the value of the cognitive grasp of the agent which is surely something that does have value⁶⁸.

So, in order to help bring this problem to light, let us imagine an agent who has all kinds of knowledge, perhaps he is a collector of trivia or someone who learns everything by rote. He has all kinds of trivia floating around in his head, but his beliefs lack integration. Intuitively, it seems that from an epistemic perspective, he could be better off. Even though his beliefs are all true, because they are not integrated, he does not reflect on them, and none of them serve as reasons for believing any of his other beliefs. He effectively sees no connection between his beliefs. He has no grasp, his beliefs do not form a connected web. It is necessary for those beliefs to relate to one another in order to form any kind of coherence among the beliefs in question. Given our cognitive limitations, systemised and organised beliefs are better as they allow a richer picture epistemically, allowing us to perceive patterns, connections, which truths are general principles, which facts are more important, how true beliefs link, etc. These things are epistemically valuable. An organised, systematised belief web allows us to reason between different beliefs and draw conclusions for ourselves. An agent who has coherent, connected beliefs does not merely believe isolated facts, but can grasp for herself why they relate to one another.

If one is able to draw an inference alone and see the connections among the web of facts then they can fully grasp the subject at hand. This distinction is illustrated when we consider the difference between, on the one hand, reading a book where we accept each individual proposition in isolation and, on the other hand, actively grasping how the arguments in the book hang together, believing the propositions in part because we see how they follow from previous facts. With the former mode of reading we may believe each proposition seems plausible, or trust the author, and so affirm the proposition with justification. But with the latter mode of reading we actively grasp the relationships among these facts and how the conclusions must

⁶⁸ This is not to say that one cannot have true propositions that are contained within their web of understanding, but rather that truth is not a necessary condition for obtaining ones understanding. But I will cash this out in the final chapter.

follow. We gain the subjective experience of the subject matter making sense and hanging together. Our trivia king may believe truly, but he does not fully understand the subject matter, because he does not grasp how it all hangs together – but at the same time, he does not have knowledge nor does he justifiably believe.

I just want to take a quick detour here and talk about more about the example above. I think a distinction needs to be made between grasping and having causal knowledge. This is an important distinction to make because I can come to have a causal explanation of something without necessarily having understanding. I'm going to use Duncan Pritchard's well known example here⁶⁹. Let's say that my house burns down and the fire inspector informs me that the house burned down due to faulty wiring. I now have a causal explanation and hence causal knowledge of why my house burned down. But this does not yet indicate that I have understanding – or in the case of the previous example, that there is a grasp involved., I can draw a link in my head between the wiring that the house burning down but I don't necessarily understand it if I have no conception of how faulty wiring might cause my house to burn down. This suggests that causal knowledge is something akin to drawing links and perhaps grasping, and I think this is correct. In Pritchard's fire case, an agent or understander has coherence among his propositions. So what is important to note is that causal knowledge is not purely propositional because the coherence that is present cannot be explained by purely propositional clauses. So if I accept the proposition that my house burned down because of faulty wiring then what is causing me to have causal knowledge of the case there, is not only that I have a true proposition but also that the coherence is causing the link to be made. I cannot link the two propositions (1) My house burned down (2) because there was faulty wiring without coherence being present. And so, the point here is that grasping is distinct from causal knowledge because it requires that I have a lot more than just a causal link at my disposal. It is more than just the recognition that they are linked it is explanative of the linking itself. So I may have knowledge of why my house burned down but if I do not know how faulty wiring can cause a fire then I lack understanding. There are more propositions to be grasped and drawn together. This is not to say that knowledge is required for understanding, but merely that in order for a grasp to occur an agent is going to have to do a bit more cognitive work than simply binding some propositions together on a causal or explanative basis.

Relations among beliefs, including both basing relations (such as an agent believing p based on believing q or believing p based on q when q is evidence for believing p) and structural relations (such as 'this truth is an instance of this general rule', and 'this truth is similar to that

⁶⁹ Pritchard "Knowledge, Understanding and Epistemic Value." *Royal Institute of Philosophy Supplement* 64 pp: 19-43.

truth') among a coherent web of beliefs do not reduce to further beliefs. They have a non-propositional element. To draw on Stroud's "Inference, Belief and Understanding" (1979). Stroud argues that structural dependencies among beliefs can never be fully accounted for by adding more beliefs. In other words, the way that beliefs are connected together in the cognition of an agent can never be captured propositionally⁷⁰.

We could write down the further fact that the agent believes *q* based on *p* because of *r*, but as Stroud notes this would be unsatisfactory because it cannot explain what it means to base one belief on another. Rather it simply states that the beliefs are so based, but does not explain how they are connected other than that they are based on one another. In other words, they confer no meaning other than that they are based on one another.

If we were to draw up a list of everything that a person believes, acknowledges or accepts, it still does not follow that this list would explain whether those beliefs are based on others. From Stroud:

Even if God himself looked into our heads and inspected all the members of our beliefs set, He could not thereby determine whether any of our beliefs are based on others. That is not a question which can be settled by any facts, however complex, about what we know, believe or accept⁷¹.

So, if we want to record what it means for an agent to believe one thing based on another we have to add some other kind of non-propositional element. Structure among beliefs cannot be reduced to propositions because it does not actually explain anything about those beliefs. So what binds them together must be something else, such as a disposition or practical capacity. Whatever it is that is captured by an account of belief, is not the content of the belief itself.

I'm going to adapt an example from Georgi Gardiner⁷² here in order to help demonstrate how the non-propositional element works. Let's say that we have two robots, the first – call him Data – has a collection of truths that are recorded in a list. The second – call him Hal – has the same list, but he records the relations among them using some kind of non-propositional element, almost like a hyperlink. Hal uses tools such as subheadings to convey what is important and how the facts relate to one another. His "beliefs" so to speak are structured. In contrast, Data's beliefs are merely a list. It seems that qua some of my previous points, Hal's system has more epistemic value because it gives us more of a head start in gaining understanding from his

⁷⁰ Gardiner, Georgi "Understanding, Integration, and Epistemic Value", (2012) *Acta Analytica* 27 (2): p181

⁷¹ Stroud (1979). "Inference Belief and Understanding". *Mind*, (1979) 86, 179–196

⁷² Gardiner, "Understanding, Integration, and Epistemic Value" p179

list. If we were to use Data's list we would have to grapple through all the unconnected bits of information and draw them together ourselves. The difference between Data and Hal is that those connections form basing relations⁷³ among beliefs and allow those beliefs to be justified by other beliefs and link beliefs together. They are coherence making properties, and Hal is in a better epistemological position because he is in possession of those properties. Remember, there is no difference between Data and Hal's true propositions, so the extra value here cannot be conferred by truth. It is conferred by the coherence making ability (though at this point it must be noted that this is not the same as grasping and I will elaborate on this point later on in this chapter).

Recall that Hal stores data using non-propositional structures that record connections among beliefs. Data stores only a list. If we are to say that understanding does require a grasp, then what needs to be shown is that Hal is in a better epistemic position than Data by virtue of having something akin to a grasp⁷⁴.

If we suppose that Hal stores the following facts,

Fact 1. High temperatures will cause burns (general law).

Fact 2. Placing your hand on a hot stove will cause a burn (instance of law).

Hal can record the relation between these two facts – we shall call this Fact 3. Looking closer at the facts above, Fact 2 is an instance of the general law articulated in Fact 1. But Hal can also store the relation expressed by Fact 3 non-propositionally, as a connection of some kind between Fact 1 and Fact 2. The connection itself (the structure) between Fact 1 and Fact 2 is made available in Hal's system. Now Data can also store Fact 1, Fact 2, and Fact 3. But Data can only record the isolated facts, so actual connection between 1 and 2 is not actually made. We may be able to infer this by ourselves if we read the list, but that does not mean that Data made that inference itself. We may ourselves realise the relation as we read the facts—we may put them together in our minds using our cognitive capacities and dispositions—but Data has not itself stored the relation. Data can then record another fact, Fact 4, which expresses that Fact 3 relates

⁷³ An epistemic basing relation is the relation that holds between a reason and a belief. It will hold if and only if the reason is a reason for which the belief is held. This is closely linked to justification and is generally seen as a condition for one's belief to be justified. So I can reasonably say that my justification for believing that fire will burn is reasonable if I have been burnt by fire before. In this way basing relations are often related to reasons that cause a belief but are not isolated to it and can also be involved in other forms of justification.

⁷⁴ So even though Hal shows no real grasp here, the key part of this thought experiment is to show that having some kind of internal coherence that is akin to a grasp is better than having free floating propositions that are not tethered to anything. The point here is that we see value in holding multiple propositions that are drawn together in some form or another and we value them more than we would were they separate. If I am testing students on WWII history then that they can provide me with a coherent picture of the events is something that is certainly more valuable than providing me with a list of dates and names of battles. The intuition here seems clear to me.

Fact 1 with Fact 2. But, as should be no surprise, this further fact does not establish a connection between the isolated propositions. The facts can be listed, but their relation is not registered⁷⁵. This regress suggests a relation (such as instantiation) between two facts is not stored in the facts themselves, and cannot be stored by a further fact, but instead must be stored by something non-propositional⁷⁶.

So even though Data can store facts and facts about those facts and facts about connections, the regress above suggests that the actual structural relation itself is something that it cannot store. Even if one were able to store huge amounts of beliefs to gain structure among those beliefs, so long as they are only propositional, every connection still needs to be recorded and there is no implication that the connection is actually apparent within the agent. Furthermore, the problem is that such connections cannot in principle be forged with the addition of further mere beliefs. Structure requires some non-propositional element. Data must keep adding propositions to propositions because he lacks understanding – and unlike Hal, he has no ability to hyperlink between propositions. Because he does not possess understanding, or in this case an ability to form a coherence making relationship, he cannot have understanding and must rely on propositions upon propositions. Hal on the other hand has an internalist coherence making ability and so forms coherence relationships between propositions and thus avoids the regress. So in response to the claim that grasping is simply just a coherence making mechanism, I would state that understanding requires not just coherence but a grasp of coherence-making relationships that go beyond what the demands for justification are. Hal might have justification for believing $A \rightarrow B$ on a coherentist conception of justification, but he does not have understanding (I will elaborate on this fully in the next paragraph).

So whatever it is for two propositions to be connected, it seems it is something that Data cannot grasp. And if such relations have value that is not merely instrumental value for gaining more true beliefs, this is problematic for accounts that do not give value to the act of grasping. Coherence among beliefs is a characteristic and necessary feature of understanding. Recall the discussion earlier about propositional understanding and how it does not demonstrate that the agent has obtained understanding, rather it can easily be supplanted with knowledge. When understanding obtains, the various parts of an explanation or subject matter hang together. This is certainly a cognitive act by the agent because as demonstrated, merely holding propositional

⁷⁵ It may strike some that this is similar to Lewis Carroll's work on basing relationships – namely his dialogue between Achilles and the Tortoise. This dialogue demonstrates that in order to use a rule, you need a rule telling you how to apply that rule and so on and so on. But the emphasis here is that there is something that Achilles simply does not understand. If he did, and if he were to grasp at the propositions then he would not be in the infinite regress that he is in.

⁷⁶ Gardiner "Understanding, Integration, and Epistemic Value" p178

beliefs does not entail that there is a grasp present. I can know certain facts about WWII without actually understanding how those facts tie together and relate to one another. When an agent achieves understanding, the agent's beliefs are organised and systemised. I can reason back and forth, one way it another, counterfactually, or suppose what would have happened had things been different or how things might be.

So, to bring everything back together, we have 3 kinds of agents at this point. We have Data who only has possession of propositions that work as such:

1. Q
2. If P then Q
3. Therefore Q

He can only add more propositions to his existing propositions and even if those propositions are aimed at being explanatory, they are still only propositions and there is no causal relationship or coherence making relationship that is present.

Then we have Hal who has both propositions and coherence-making relationship and so he escapes the regress problem. His coherence-making relationships allow him to obtain something akin to causal knowledge (as demonstrated in Pritchard's fire case). I can have hyperlinks like Hal, but what he lacks is the ability to counterfactually reason. So he can tell you that $A \rightarrow B$ but he would not be able to tell you what would have happened if A^2 had occurred instead of A and furthermore, he cannot tell you if both A and A^2 would lead to the same conclusion. So he has the ability to see that A is a reason to think that B is true but he cannot cash it out. Hal has the coherence-making relationships but because he has no grasp he has no counterfactual reasoning ability. However his ability is still non-propositional because he can explain it in terms of those relationships and not propositionally as data would.

Finally we have the real Understander who has propositions, coherence-making relationships and the ability to grasp. Because he has the ability to grasp over and above the ability to tell that there is a coherence between a set of propositions, he is able to reason counterfactually and this is what is missing with a simple coherence-making relationship. To state this in a little bit more detail, the understander is at an advantage because when a subject is grasped and the structural relations between beliefs are realised we also have some form of protection against missing something because we have grasped those relations between the informational bits and pieces within a given topic. If we were rather believing in isolated facts then it seems less likely that missing items would be noticed, due to the individual nature of the beliefs. To reiterate from a previous section, I can have causal knowledge of how a house fire may be caused by faulty wiring, but I cannot reason how things might have been different if I do

not actually understand how faulty wiring might cause a house fire.

I have shown though this section that the nature of the cognitive structure that we call grasping is vital in order to account for at least some of the distinctive value of understanding. And if we cannot have understanding without a grasp, as these examples seem to suggest, then a grasp is a necessary condition. Furthermore, the examples that I seem to show that the grasp is more valuable than having merely true beliefs, in which case it might be that the value of the grasp alone can have an epistemic value that is valuable in its own right, irrespective of the apparent greater value of knowledge or true belief. Because in this case, the truth of the propositions does not confer value and is not necessarily important⁷⁷. The grasping part of the understanding is at the very least a necessary and instrumentally valuable component in that one cannot have understanding without it. Furthermore, the organisation and coherence that characterises understanding comprise of the same kind of relations that are not reducible to the content of a mere belief. What this suggests, is that the distinctive value of understanding lies in the way that our individual beliefs are brought together within the agent, and this action cannot be represented in a propositional way. Because of this, it can remain divorced from issues of truth and this may then explain why understanding is valuable even when some of the believed propositions are false. It explains why, when looking into accounts of understanding that truth must take a back seat. The grasp, the non-propositional connections are at the forefront because they are the things that allow for understanding to occur.

So what remains then, is to show that grasping is inherently valuable. I have so far shown that it is necessary for understanding and I have given some good reasons (hopefully) to show that it is also valuable but this is also not under dispute in the current literature. Everyone agrees that grasping is necessary for understanding and they agree that its somewhat valuable but the challenge for this account is to show that there is something valuable about grasping without truth at all. Even Elgin, with her non-factive account thinks that whatever is grasped, must be properly tethered to reality in order to be valuable, what is false must also be felicitous so it can only remain valuable so long as it is a useful falsehood. But again, I think the worry then still holds - we might actually be getting the value of understanding from the value of the truth of our beliefs and not the act of understanding itself. If what is grasped can only be valuable if it is properly tethered to reality in some way or another, be it on a factivist account or a non-factivist one where the role of truth is somewhat reduced, then what we are actually valuing is the tether (truth is valuable, felicitous falsehoods and exemplification are valuable because they bring us closer to understanding. On all other accounts, grasping is pointless without them, but grasping

⁷⁷ This is not to say that truth has no value at all, but rather that it does not confer the kind of value that I'm interested in here, it is differently valuable. This point will be further addressed later on.

does seem to have some value), not the grasp *itself*. And this seems worrying to me because of the pitfalls of a reliance on a truth condition and the inability to separate goodness (and the value it confers) and value from truth. This makes things sound like truth is the one and only value, and every other virtue or epistemic state is purely instrumental in getting us there. The point that I am trying to make here is that when we have a truth condition that is required in order for understanding (or even knowledge) to obtain we find ourselves involved in some iteration of a swamping problem because the value of truth will always outweigh the value of what it is constituting. But if we can separate goodness from the value of truth then we can have other epistemic values that are valuable in their own right, without truth muddying up the epistemological value waters. Because it seems to me that truth is not the only value we want, intuitively understanding as well as knowledge seem to be inherently valuable epistemic states in their own right.

I want to table this discussion for the moment and I will return to it in the next chapter, I am doing this primarily because I first want to cash out the value of grasping before dealing with why this value is distinct and will remain so without having a truth component. In the next section of this chapter I will explain why grasping is a valuable cognitive achievement.

3.3 The Value of Achievements and How to Cognitively Achieve:

In this section I'm going to segue into talking about cognitive achievements and later on I will link everything back up.

It is a generally accepted claim among theorists that understanding is a cognitive achievement and that may help partially explain its value. However, few accounts have been able to show what exactly the achievement is, or where it comes from. This next section is an attempt to pin down the notion of an achievement and elaborate on how that might impact the final value that understanding seems to hold. The widely accepted philosophical opinion is that achievements are plausibly and distinctively valuable. We tend to hold that the kind of successes that count as achievements are valuable for their own sake because of how they are produced. So they are finally valuable because of their relational properties⁷⁸.

Consider an archer, attempting to hit a target. Let us assume that he is both a practiced archer and that he is not under any kind of Gettier condition – that nothing lucky like a strong wind or a intervening arrow were to knock his arrow either off or on target, nor is he shooting arrows at an imaginary set of targets and just happens to hit the right one. Let us assume further that the archer selects and skilfully hits his target. We would surely say that his success is due to

⁷⁸ Duncan Pritchard "The Nature and Value of Knowledge: Three investigations" p29

his own ability and therefore is an achievement. If it were the case that his success was in some way successful due to a freak gust of wind, or any other form of luck I think we would be less inclined to call that an achievement based on the skill of the archer. Rather we would say that even though he possesses the ability to hit his target, the success is not due to his own ability and is due to an act of luck. So there is somewhat of a case to be made for thinking of achievements as successes due to the ability of an agent.

Let me put this another way, take a scene from the film *Groundhog Day* where the main character Phil Connors is sitting in a room watching an episode of *Jeopardy* with several other people. In the game, the host gives a phrase or a word to the contestants and they must answer back with the question that would have needed to be asked to get to the phrase that they were given in the first place. It is a game typically won by people who are particularly good at remembering a lot of trivial facts. So Phil is sitting with a whole group of people and they're all watching the show and he speaks out every question to the given answer and he gets every single answer right. The people who are watching with him are astounded at his apparent ability to know all the right answers, but of course we know that he only knows the answers because he has seen this episode countless times. Intuitively, I think that we don't want to give him any sort of achievement for his ability to give the correct answer. The reason for this is because he simply does not seem to have put any of the cognitive work into getting to know the answers. The only demonstration of his ability here is perhaps one of memory— this is also an achievement of sorts but perhaps not the kind that we are looking for. Furthermore, for one to actually be good at the *Jeopardy*, one must have a whole variety of facts and trivia at one's disposal, Phil does not have either, and he only has "knowledge" of that particular episode, with those particular answers. This is surely not an achievement of the sort that we are after. He succeeds in getting the answers right but that success cannot properly be attributed to him in the way that we would attribute it to the actual winner of *Jeopardy* and so, it is not the sort of achievement that we would say is required for understanding.

If achievements are due to the ability of the agent – be they cognitive or otherwise – we also seem to think that they are distinctively and intrinsically valuable. So the challenge for this account to is show that connecting one's beliefs together is something that does count as an achievement and I hope to show that through this discussion. A genuine achievement, one that is not Gettiered, seems to be valuable in its own right, regardless of any other value that the success might bring. Take for example two people competing in an obstacle course for a trivial prize, they each move through the course with what seems like great ease, keeping up with one another the entire time and overcoming everything in their path. However one is just a split

second faster than the other and in effect wins the prize. Both participants have met the requirements, they have gone through the course and over and under every obstacle but only one has won. But I think in cases such as these, both participants complete the obstacle course and the prize at the end is instrumentally valuable, but the achievement that comes with completing the course is genuinely valuable regardless of the instrumental value of winning. Intuitively, we seem to think that it is better to succeed because of one's own skill than not, even though there is no instrumental value from exhibiting an achievement in this case. To state this more plainly, I still feel a sense of achievement when I am in a practice session for example and manage to hit my target successfully. There is no other reason for my feeling of accomplishment, I am not winning anything so there is no instrumental value at play, but I am still exhibiting my skill and as such still achieving. And this seems to suggest that achievements are finally valuable⁷⁹.

If this is right then anything that we call an achievement also inherits the value that is generally given to achievements. So the reason why perhaps knowledge is valuable is because it is an achievement to attain it and achievements are distinctively valuable^{80 81}. I think that one particularly strong reason for holding that achievements are valuable is to recognise that they establish the exercising of one's agency on the world⁸². If we take it, as I think we should, that the ability to enact change on the world is important then a life that is lacking in agential power – even if one's goals are regularly attained (such as having a job, or being healthy) – would be lacking in something vital. We want to feel like we have made at least some kind of change on the world around us and that we have not only succeeded in our goals but that we have achieved something. Phil Connors is a good demonstration of this, he is successful in his answers – so he reaches his goal – but we know, and he knows that this is not an achievement that holds final value. It definitely seems to have some kind of value but perhaps it does not hold an intrinsic value. For one thing, he has accomplished a very different kind of achievement that the one he is getting credit for. Here he shows an achievement of memory and not of knowledge of trivia. This is not so much a lack of displayed cognitive ability, but rather a different kind of cognitive ability. Memorising things is useful and perhaps even valuable, but it is just not the sort of value that we are after here. To use another analogy, much like an archer shooting off arrows with a magical bow that is guaranteed to hit its target, we do not want to call his successful hits an achievement simply because we lack reason to believe that it comes from his own ability. Rather

⁷⁹ Pritchard "Knowledge, Understanding and Epistemic Value" p24

⁸⁰ Ibid

⁸¹ I am not necessarily supporting the claim that knowledge is finally valuable, I am simply using it as an example here. Although it should be noted that if cognitive achievements are the kinds of things that are finally valuable and knowledge is in fact a cognitive achievement then the value of knowledge may well be rescued.

⁸² Pritchard "The Nature and Value of Knowledge: Three Investigations" p30

his success is due to the bow and not his own skill or mastery. I think the intuition here is clear, we want achievements, but I think we also need to feel like we are responsible for those achievements. We want to get credit for our own achievements, and not those of others or not due to our own ability. If it is the case that achievements are finally valuable, then actually reaching a goal due to one's own ability and skill is an achievement due to agential power. So, that we are able to reach achievements through our own ability is finally valuable and a necessary part of living a good and fulfilling life because a life lived without such achievements is lacking in value.

I think one excellent example of this is Robert Nozick's famous thought experiment The Experience Machine. It demonstrates that while we want to do certain things, we also want to have the experience of actually doing them. We want to want those experiences and feel ourselves experiencing them, and we want to be the kind of people that are able to experience and change. Someone living in an experience machine has little agential power and I think that is quite important to recognise – they may have the illusion of agential power but since their “real” lives are not impacted there is no actual change occurring in their lived lives. The thought experiment shows that we not only want to feel the experience, but we also want to know that we have had a role in getting that experience. This demonstrates that having agential power is important to us, we feel that we are lacking without it, and that our lives are lacking too. I think that achievements work in a similar way. I want to hit my target successfully due to my own skill as an archer, not because the system has been skewed in my favour. Sure, hitting my target may still count as a success, but I think as agents we would be quite unhappy if we were to come to the realisation that what we thought we had achieved due to our own work we were actually wrong about. Similarly, I think the intuition follows when looking at something like awards or praise. When we get awards, we want to feel like we are deserving, that what we have done is worth the praise and the award even if it is just an instrumental value. Getting a best student of the year trophy when I'm the only person in the class does not feel like an achievement because I'm the only one competing in this case. If I were to be set against other students then perhaps my achievement would actually feel worthwhile. I think the intuition is clear here, part of what makes me successful as an agent is that I am in a sense owning that success and in doing so taking ownership of that achievement because I recognise that it is due to my own ability that it has been obtained.

Let's take the case of Phil Connors again; throughout the film he experiences the exact same day over and over again. Nothing he seems to do alters the day permanently and he find himself caught up in a monotonous loop. It seems like he is in his own little version of Nozick's

thought experiment, he is, for all effects, stuck in a simulation and he has no way to get out. He attempts various ways of ending the time loop, he tries committing suicide, which fails to work as he wakes up and begins the day anew, he manages to get the girl (Rita) and even that fails – he falls asleep with her and wakes up again, alone, to start the day all over again. Eventually though, he stops the self-destructive loop and develops his skills instead. He learns French and how to play the piano among other things – he is improving himself. Essentially, he beats the simulation. He truly achieves because these are not false accomplishments like learning the answers to that particular episode of Jeopardy, or memorising the daily motions of the town's inhabitants and various facts about their lives. Instead, he puts that knowledge to use to help the people of the town. He does not manipulate them and the situation as he has done before, he overcomes it and in doing so betters himself and others. It is only when he is able to put his experiences to good use and actually reach an achievement that he can break through the repetition of the time loop. Phil is able to memorise everything that occurs on Groundhog Day and all the movements of the townsfolk in detail, this is an admirable cognitive achievement in its own right because of the difficulty of remembering and memorising so much – but, this is not the kind of achievement that grasping entails. It is just not the right sort of achievement. Perhaps he may have coherence, a good and full picture of everything that is occurring throughout the day but there is no grasp present in the sense that we are looking for. When he finally is able to break out of the cycle and rewarded for his practice and dedication and it is because he does more than just get the girl and learn some skills, he finds a way to actually live in the world – and that is through taking his experience and his experiences and applying them to the world around him. . It is all about him taking responsibility as an agent and so it is genuinely through his own ability that he is able to achieve and finally end the cycle. And I think this is something we all want as agents, we want to achieve and we want to have the kinds of achievements that we think are valuable. And more so, I think we want to feel like we are the ones who are responsible for those achievements. Achievements that are finally and genuinely valuable are not about the instrumental value of being the best or winning a trophy. I think they have a lot more value than that and I think that our intuitions back us up on this thought. I think there is something to be said about truly achieving at something. We try and try and push through the difficulty and the challenges and we keep attempting them because we want to be able to get through it and we want to succeed – and perhaps we even enjoy the sick masochism of enduring the obstacles that must be beaten to get to success. But I also think that sometimes it helps make the success worthwhile and valuable because it has not just been easy.

So far this sounds quite ideal – you overcome some obstacles and put your work in as an

agent and then you have an achievement. But there is a worry here – are we being a little too simple in our description of an achievement? What about achievements that are too easy to attain? If we define achievements as successes that are due to agential ability, then we will be forced to treat some successes as achievements even though they are intuitively not. I'm thinking here of trivial or small cases such as waking up in the morning and taking a shower. As an adult it is expected that I am able to clean myself and take care of myself without being told to. Such a thing should not necessarily count as an achievement even though perhaps I am skilfully achieving my goal – which is to wake up on time and take a shower with German precision and timing. However when we look at this example from the perspective of an autistic child, or a person struggling with depression, it seems that we can and do want to call it an achievement. Much like walking, which we do every day with ease would hardly be termed an achievement, we applaud babies and people who are recovering from an injury for the ability to walk a few steps. We do not seem to want to count easy successes as real achievements because it is contrary to our intuitive conception of an achievement. Achievements involve a demonstration or application of skill or at least some kind of obstacle that must be tackled in order to attain success. When we walk, or get up on time to take a shower, or hold a cup without dropping it we are not exactly demonstrating a skill or overcoming an obstacle, neither of those elements are present. But when we take cases of people or children performing perfectly normal task and overcoming an obstacle in the process we do award the achievement, because it feels deserved. Although there is no great skill on display, their success is deserved because a genuine obstacle has been overcome. I'd like to be slightly clearer on this, these cases show us that these might be achievements for some people but not for others and as such achievements might be best seen in context.

Conversely, we can also talk about an agent achieving something even though no particular obstacle has been overcome – as long as there is a significant level of skill that is present. For example let us imagine Michael Jordan standing alone on a basketball court successfully throwing the ball into the basket every time no matter where he stands on the court. We still count this as an accomplishment because he is demonstrating a practiced skill. Sure, he can place the ball into the basket with apparent ease, but the skill that is on display suffices for an achievement even with the lack of a significant obstacle. Similarly easy cognitive successes may work in the same way. When we are children studying mathematics in school learning the basics of multiplication, addition, subtraction and division are taken as successes because we are coming to understand something that might be seen as quite difficult, but as an adult we tend to easily be able to do simple mathematics in our heads. It hardly seems necessary to say that my

ability to quickly come up with the answer for $12 + 8$ or 4×4 is a finally valuable cognitive success. However, in contrast, let us take look at Sherlock Holmes as an example; he has the ability to accurately and acutely deduce a multitude of things through observation only and he often does so quite quickly. Holmes' trusty sidekick John Watson may well be able to view the same scene and come up with similar deductions but Holmes does it with far more ease. Still, Holmes' success must count as a cognitive achievement in spite of the apparent ease with which he is able to deduce because of the great cognitive skill that he is displaying⁸³. Much like Michael Jordan, though the success might be easy for him, it is not an easy success by any means⁸⁴.

And I think this is one of the biggest things that we need to take away from this is that cognitive achievements by their very nature are not easy achievements at all. Much like Michael Jordan throwing the ball into the hoop, or Tiger Woods hitting a hole in one, such achievements are a product of a significant amount of skill and time spent practicing. I think the same goes for cognitive achievements, the ability to reason or field questions after a lecture or presentation is a demonstration of the culmination of cognitive efforts of the agent.

Remember, achievements of the sort that we are after must have final value. So achievements are successes that arise because of ability, where the success in question either involves overcoming a significant obstacle or the exercising of a significant level of skill and ability⁸⁵. Any weaker claims might omit the final value of achievements. So walking, or raising my arm, or waking up on time do not and cannot count as achievements because of the lack of final value, and I think our intuition backs us up on this. It is not the case that these kinds of easy achievements are lacking in all value, but they are lacking in final value⁸⁶. So cognitive achievements are distinctively valuable when the agent shows either great skill, or the overcoming of an obstacle and that is finally valuable.

However, there is a problem here, what about achievements that are demonstrative of skill but do not immediately seem to have value? I'm thinking here of something like someone learning how to burp the national anthem or memorising every number in the phone book. This is surely not a valuable achievement, at least not in the way that I have described, but it is also not something that was easy to get to. The kind of cognitive achievement or success that we are looking at here is one that does and must have final value.

⁸³ I think this can be applied even to regular displays of cognition. I'm thinking here of a professor sitting with a group of students and answering questions based on a specific topic. The professor is able to perhaps eloquently and easily answer a variety of questions that are thrown his way where the students may ponder as to how he was able to come up with those answers so quickly. The answer here seems evident, he has understanding and as such is able to address each question as it comes his way because of the breadth of his understanding on the topic.

⁸⁴ Pritchard "The Nature and Value of Knowledge: Three Investigations" p69

⁸⁵ Pritchard "The Nature and Value of Knowledge: Three Investigations" p70

⁸⁶ Pritchard "The Nature and Value of Knowledge: Three Investigations" p71

3.4 Bringing Things Together: Cognitive Achievements and the Act of Grasping

Now it is not a contested fact in the current literature that understanding itself is a cognitive achievement, Grimm, Kvanvig, Elgin and Pritchard⁸⁷ among others all acknowledge that understanding does constitute a cognitive achievement with final and intrinsic value. So this point should not really be under dispute. However, I think that the act of grasping, when an agent is able to draw their beliefs together, to form the necessary pathways that will allow for understanding, is a necessity that leads to the cognitive achievement that we call understanding⁸⁸. Firstly, the agent who grasps their subject matter and thereby understands something, has displayed skill in drawing together of their beliefs. This is surely no easy task and more so, I think it is a crucial point for this account of understanding. While all other theorists working in understanding acknowledge that grasping is necessary for understanding, they deny that it is sufficient. Each requires a separate, other condition that will enable to agent to reach understanding. Even Elgin with her non-factive account still thinks that understanding ought to be tethered to reality in some way.

If grasping is the method by which beliefs and propositions are bound together and connected to form the web of understanding then the agential skill is displayed and executed by the agent's cognitive efforts to bring everything together and in doing so, the agent is able to add explanatory power to those beliefs and more so, hold something that is of value. These are then no longer singularly existing beliefs but they are mutually connected and supported. So understanding is a cognitive achievement because the agent has demonstrated great skill in being able to draw all of their beliefs together to form that understanding. It is no easy task to come to understand something, you have to be able to get all the pieces of information to cohere and complement one another. This is more than just seeing the link between one proposition and another, it involves actively assessing each proposition and figuring out how they fit together to form a larger whole. Furthermore, an agent who has understanding is in a good epistemic state because of these connections and is much better off than having no connections whatsoever. Grasping is the non-propositional connection that we were searching for in the previous section.

It is pertinent here to contrast this conception of achievements with the account that Pritchard offered as my own account is somewhat based on his. Pritchard thinks that a cognitive achievement involves a success that results from ability. And success here amounts to *getting to the truth*. So, for him, there can be no achievement without truth. But what I am suggesting above is

⁸⁷ See Grimm (2009), (2011), Kvanvig (2011), Elgin (2008), Pritchard (2013)

⁸⁸ Take note here that my claim is not that Pritchard and the other theorists mentioned have to deny anything specific about their accounts but rather that this account is one that denies truth as a necessary value for understanding.

that what counts as success is not truth, but drawing your beliefs together. And what I have tried to point out here is that this is substantive accomplishment for which you can be credited even if your beliefs are not true because the act of drawing together ones beliefs is not such an easy task. So much like the person coming second in the obstacle race, she still accomplished something even though she does not come first. Understanding does not seem to me to be about winning or coming first, it is not about success in this sense of the word. The analogy to draw between believing and the obstacle course example is that what is lacking here has to with features that are external to what you have done. It is relational features that make coming second in a race a failure, the agent who got second place in the obstacle course still completed the race and finished in time but she just didn't happen to finish as fast as her counterpart. But she has still successfully completed the course. So what I tried to show in the obstacle race case is that achievements can still be reached even though there is an external extrinsic goal for getting there first. This is not to say that truth is extrinsic, but rather external to achievement of understanding. In the case of understanding, if we were to say that you and another person are presented with complex data and you put it all together and come to slightly different conclusions and the other guy happens to be more right than you even though you have still managed to make a plausible case, it still seems like there is an achievement there. So to take this analogy back to Pritchard's conception of achievements, truth is an external value condition on the achievement and it does not immediately seem necessary to me to have truth in order for the achievement to obtain because, as above, grasping is due to your own ability as an agent.

I think one important thing to keep track of here is that while grasping is a coherence forming connection it cannot simply be reduced to coherence alone as coherence does not always indicate that a grasp is present. For example take Searle's Chinese Room⁸⁹ thought experiment. Searle imagines himself alone in a room following a computer program for responding to Chinese characters slipped under the door. Searle understands nothing of Chinese, and yet, by following the program for manipulating symbols and numerals just as a computer does, he produces appropriate strings of Chinese characters that fool those outside into thinking there is a Chinese speaker in the room. The narrow conclusion of the argument is that programming a digital computer may make it appear to understand language but does not produce real understanding. Putting the conclusion aside, we can imagine that Searle while inside the box can figure out which symbols correspond with which other symbols and in doing so form a coherent picture of how the symbols and the box work. But it seems quite obvious that he does not have a grasp – at least not a grasp of what the symbols mean or what sort of effect

⁸⁹ John Searle, 'Minds, Brains and Programs' *Behavioral and Brain Sciences*, 3 pp417-457

he is having outside of the room and I would think that such things ought to be required for a grasp to be present. Much like the case of Phil Connors playing Jeopardy, Searle is able to fool those around him into thinking there is a Chinese speaker in the room, but this is false, and he has not achieved anything other than fooling others. Although again, much like the Jeopardy case, this is surely still some kind of achievement and may in fact even be a worthwhile achievement, but it is not the sort that we are after here. Remember, we are after a finally valuable achievement and memorising while certainly a worthwhile thing does not seem to fit the requirements. If we are to bring up counterfactual reasoning again for example then we can see that while Searle may be able to know which symbol ought to come after another purely through memorisation it does not seem immediately evident that he can counterfactually reason which symbol would follow if he received a slightly different symbol from the one he was used to. He gives us the illusion of having understanding without having understanding. Grasping entails that there is a cognitive achievement more than just building a coherent picture and requires more cognitive work than simply coherence. It seems to be the case that I can have coherence about many things – I can group subjects into coherent categories without them being linked and differentiate a coherent argument from an incoherent argument. But grasping is more than just coherence, your propositions and information must cohere but that is not the end-goal.

I think that what we can draw from this and perhaps what we ought to draw from it is that we are constantly presented with complex informational sets and complex data and this happens on a daily (if not minute-by-minute) basis. In order for us to understand absolutely anything about the world be in our subjects of study or other people, or pets or concepts we must be able to bind our propositions together in order to make sense of the many features of the world. Otherwise we are no better than Data who can only hold propositions and does not even have a basing relationship with which to bind those propositions to others. And even then, I would think that we want to be in a better epistemic position than Hal who at most has some kind of causal knowledge. There is a profound value to being able to grasp one's beliefs

So what I want to claim here is that grasping is the act of overcoming the obstacles of binding those beliefs and propositions together and that will culminate in understanding. And understanding is a finally valuable cognitive achievement because of it. Grasping must be a cognitive achievement and a valuable one at that because it is a success and it can only be a success that is attributable to you. Furthermore, understanding is a success not because it pinpoints a fact, but because allows you to build a coherent picture. And due to grasping, it is because of your own work and ability as an agent, it is an internalist justification so it has to be because of your own ability. This is quite unlike knowledge which is primarily about pinpointing

facts and can be testimonial. Understanding does not seem to work quite the same way. I may understand something that someone tells me but I can never purely gain understanding through only testimony, it has to come from my own internal grasp. If you take the claims of testimonial knowledge accounts seriously then it does not seem reasonable to take the coherentist justification for knowledge because then your knowledge can come from a source external to your own internal coherence. You can hold that coherentism works for private justification but you cannot hold that it works for justification all told. I'm not claiming here that coherentism is false, but I do want to make the point that we can have coherence making relationships and basing relations in a belief set that do not constitute a grasp and this is important because it shows that grasping is distinct from coherence and regular coherence accounts will not cover the ground that grasping seems to. This is because I can have understanding and have a coherentist internalist justification but having a coherentist internalist justification does not entail that I also have understanding. I think this is part of what makes understanding quite distinct as an epistemic goal and why it makes sense to view it as a cognitive achievement. Achievements must be down to the agent's own skill and understanding cannot occur without internal action by and from the agent. There are a lot of things that need to come together in order for understanding to obtain.

If understanding is a cognitive achievement that satisfies the requirements of an achievement of the sort described in the above section then we can say that it is finally valuable because it gains the value that is conferred to it by the achievement. Furthermore, if we are to explain the value of understanding in this way then we can also explain how understanding is not only a fundamental epistemic good but also that its value cannot be swamped by the epistemic value of the cognitive success that is integral to it being obtained. This is because it is finally and fully valuable. I want to reiterate here that the aim of this thesis was to pursue an account of understanding that can explain its value as an epistemic good and I think that nature driven accounts do not allow for understanding to obtain its full value without adding in the value of anything else. It seems to me that if we take understanding to be of great epistemic value then we need to find a way to explain that value through its nature, not the other way around. By looking at an account of understanding that begins with grasping – the most important part of what constitutes understanding, we can explain its cognitive value.

Chapter 4: Conspiracy Theories and Other Issues:

In the previous section I argued that the act of grasping – making ones beliefs cohere – is a cognitive achievement and this achievement constitutes understanding. Furthermore, I have shown that we have good reasons to think that understanding does not require either truth or knowledge in order to obtain. However there are certain problems that one encounters when we remove truth as a requirement for understanding and when we rely solely on grasping and coherence (remember Elgin’s worry that we still need a reliable tether). The main worry is that without truth as a tether an agent may be able to obtain understanding and the value that comes with it even when it is clear that they are blatantly incorrect about that which they understand. In this next section I am going to discuss this worry and tackle the objection that stems from it.

The primary objection that is raised against my account of understanding states that: if understanding is simply just a coherence-making mechanism and does not have a truth requirement then it seems to be the case that a conspiracy theorist who might hold obviously false beliefs can still have understanding and gain the achievement that comes with it.. Intuitively this seems incorrect because we do not want to say that the conspiracy theorist has understanding because what he believes is wrong and I think the intuition here implies that he should not be rewarded for his false belief with a cognitive achievement. If you take believing to be a game of success where you either have a true belief and you win because you got it right or a false belief and you lose in virtue of that belief being incorrect, then on this model it seems a little unfair to allow an agent to have a cognitive success because of his false beliefs. I am not going to outright dismiss this worry because I think that it does hold some weight, however, I am going to try present an account of conspiracy theorists that will demonstrate how they do not have understanding even though they seem to have all the hallmarks of it.

Firstly, I think this objection is somewhat of a mischaracterisation about conspiracy theories, there are some semantic kinks that need to be worked out. So let us look at a few definitions of a conspiracy theory. From Brian Keeley

“A proposed explanation of some historical event (or events) in terms of the significant casual agency of a relatively small group of persons – the conspirators – acting in secret⁹⁰”

And Lee Basham

⁹⁰ Keeley, “Of Conspiracy Theories”. *The Journal of Philosophy*, 96(3): (1999) p116

“An explanation of important events that appeals to the intentional deception and manipulation of those involved in, affected by, or witnessing these events. These deceptions/manipulations involve multiple, cooperating players. While there is no contradiction in the phrase “conspiracies of goodness”, the deceptions and manipulations implied by the term conspiracy theory are usually thought to express nefarious, even insanely evil purposes.”⁹¹

And David Coady

“A conspiracy theory is a proposed explanation of an historical event in which conspiracy (i.e. agents acting secretly in concert) has a significant causal role. Furthermore, the conspiracy postulated by the proposed explanation must be a conspiracy to bring about the historical event which it purports to explain. Finally, the proposed explanation must conflict with an “official” explanation of the same historical event.”⁹²

What ought to be apparent from the above descriptions is that conspiracy theories as per their definition are often not the theoretical workings of a crazed paranoid person who is insisting that the government is out to get him⁹³. Rather they are explanations of events that are filled with deceit and secrecy in an attempt to manipulate a situation and on such a definition something as simple and innocent as a surprise birthday party could be seen as a conspiracy theory. One thing to remember is that conspiracies have consistently occurred throughout history. While it is controversial to state that the United States government is covering up Kurt Cobain’s suicide because he was a Russian sleeper agent⁹⁴, Hitler really did conspire to kill all the Jews in Europe and Cecil Rhodes really did conspire to provoke conflict between the British and Boer’s⁹⁵. The point here is that there have been genuine conspiracies and so some conspiracy theories have been true.

So there is what seems to be a fine line between the kind of conspiracies that stand as actual explanations for events and those that are the workings of people seeking an alternate

⁹¹ Basham, “Malevolent Global Conspiracy” *Journal of Social Philosophy* 34(1): (2003) p91

⁹² Coady, “An Introduction to the Philosophical Debate About Conspiracy Theories” in *Conspiracy Theories: The Philosophical Debate* (2006) p117

⁹³ What should be noted is that agents such as this might in fact be paranoid and suffering from a mental disorder, but that does not disqualify them from holding reasonable beliefs either. People who are not certifiably crazy can still think crazy things and as such someone in a mental hospital could speak the phrase “flowers occur in springtime” and it would still be as correct as anyone else who uttered the same sentence.

⁹⁴ I just want to note here that I’m not making this one up, it is an actual conspiracy theory.

⁹⁵ Clarke “Conspiracy Theories and Conspiracy Theorising”, *Philosophy of the Social Sciences* 32(2) (2002) p132

explanation to the official theory (though these are often based on mistrust and paranoia). Given that we know that conspiracy theories are littered throughout history and indeed seem to influence events, sometimes in no small way, it seems slightly obtuse to disregard their effects and dismiss conspiracy theories by just pointing to the fact that they are conspiracy theories.

It also ought to be noted that there are many examples of conspiratorial activities that may seem outwardly suspicious but are not in fact sinister. I'm thinking here of something like acts of secrecy during the WWII – for example, what occurred at Bletchley Park was largely kept quiet in order to protect those working on the Enigma code and of course to throw German intelligence agents off their tracks. This is certainly a non-sinister action in spite of the necessary secrecy and as such while it has all the features and characteristics of a conspiracy it is not in fact a sinister act.

Another thing that ought to be considered is that conspiracy theories have real and often unfortunate consequences that can (and often do) cause serious harm. Looking at the history of anti-Semitism for example one can see the disruption and damage caused to both social reality as well as the Jewish people. The anti-Semitism that fuelled the Nazi government in Germany even before WWII, began with the *dolchstobledenge* – a right wing conspiracy theory that swept through Germany at the end of WWI. It stated that Germany's loss was the result of Jewish revolutionaries who were cowardly because they did not enter the army and they formed the democratic republic that would eventually become the Weimar Republic. This was not just a silly rumour that most of the population dismissed, it was widely accepted and in fact believed by the majority of the German people because it allowed them to maintain their story as victims of the war. This was key in undermining the government's legitimacy and paving the way for the Nazi Party to take over. And as Hannah Arendt has highlighted, conspiracy theories do a lot of work for manipulative totalitarian movements and their propaganda⁹⁶.

Now arguably WWII was not a direct result of *only* this conspiracy theory, but it did play a key role in dismantling the Weimar government and allowing the wave of anti-Semitism to sweep Germany even before the Nazi's took power. As improbable as such a conspiracy theory sounds it does reflect the truth and does enable one to understand more about WWII because it strengthens the causal explanations that we are given through historic dates and events. To be explicitly clear here, I am not attempting to argue that anyone who understands or accepts the *dolchstobledenge* or any of the other conspiracies surrounding the rise of the Nazi government can understand WWII in general, rather I only mean to say that understanding the *dolchstobledenge* helps explain WWII and enables one to have a better understanding. It is easy

⁹⁶ Hannah Arendt "The Origins of Totalitarianism" (1951) pp 546-47

to map out a causal chain of events to form an explanation of how something came to be when we have concrete events to pinpoint the way. So we can easily point out the trajectory in retrospect through historiography. However, we can also supplement and strengthen this explanation with other non-concrete events or causes, such as background information about the society and this allows us a view into the circumstances that might have allowed for the causal events to occur in the first place and in doing so, it aids in our understanding of the events themselves and the fallout that follows⁹⁷. What should be noted here is that conspiracies and the theories that accompany them are being immune to rational consideration and furthermore they still maintain the ability to fuel political power and subsequent public terror within the communities and societies that they are propagated by.

So, going back to the worry that brought us here – that conspiracy theories are just outright false and imply poor belief systems in agents – this does not really seem to be the case. And when we flesh out this worry it seems to me that we are interested in a different kind of question than we were when the objection was first raised. Initially the claim was that conspiracy theorists cannot have understanding because what they believe does not reflect anything true about the world and thus they have no understanding of the world. So the problem I think needs to be shifted to question of “what about those conspiracy theories that do not inform us about the world in any way?” or rather “what about those conspiracy theories that are blatantly incorrect or unwarranted?”

So the bigger problem here is that we cannot find an account of conspiracy theories that would distinguish unwarranted conspiracy theories from those that we are warranted in believing in – such as Watergate or the NSA spying on people (both of which are true). But we still want to be able to dismiss unwarranted conspiracy theories because we do not have good reasons for believing in them. Conspiracy theories by nature provide us with an explanation of an event that is unified. It contains all the data from the official or received account as well as the data that has been left out by that account (which is generally seen by the conspiracy theorist as reason for mistrusting the official account in the first place). And this is the appeal of conspiracy theories, they offer an account of events that uses all the data at hand, without overlooking the data that has been left out or ignored by the official account. This is not to say that this is a good reason to believe in the conspiracy rather, that this is part of the reason why people often do believe in

⁹⁷ It has been pointed out that the main objection against my account of understanding stems from coherent but plainly false belief sets and even if it were the case that all conspiracy theories were true and justified it would not affect the nature of the objection. While I take this point quite seriously it is not something that I can currently deal with and should any work move forward in this area I will tackle it there.

them⁹⁸. We can see that in trying to create coherence and understand, the conspiracy theorist (of the sort that we are worried about) might be blatantly misunderstanding and this is due to his refusal to accept the official story (you cannot ground it in truth because the believers are equally irrational whether or the believe the truth or not.)

If we refer back to the last chapter, coherence-making is a praiseworthy achievement so it would stand that an agent who is binding a lot of information together ought to also be awarded an achievement for that action. However, I would suggest that there is something different going on with the kind of conspiracy theorist that we generally object to. What we ought to note is that conspiracy theorists do not demonstrate a failure of reasoning because their reasoning does follow; failures of reasoning are the opposite. We need to keep in mind that these theories are built up of large complex interlocking and mutually supportive beliefs – this is certainly indicative of at least some kind of understanding. So it seems to be the case that conspiracy theorists are information rich as opposed to having a lack of information at hand. And it seems that the problem is what they do with the information that they have. These kinds of agents strike me as bad epistemological agents because they're trying to make every single piece of information track and everything cohere because they think that every piece of information has explanatory relevance. For example, the Sandy Hook shooting that occurred on December 14, 2012 has a number of conspiracy theories related to it, such as the fact that the shooting occurred at the same time that President Obama told the United Nations that he would sign the small arms treaty, or more bizarre ones that attempt to link the shooting to references in popular culture. For example, Suzanne Collins – author of the Hunger Games trilogy – lives in Sandy Hook, and in her books 22 children are killed and 20 children were killed in the shooting, or that Sandy Hook can be seen on a map in the film *The Dark Knight Rises* and both of these coincidences are predictive programming⁹⁹. These are clearly cases where the conspiracy theory does not provide credible evidence or a better explanation of the official story and is, by virtue of this, unwarranted. I think that it should be evident that the problem here is that unlike regular believers, you cannot reason conspiracy theorists out of their beliefs by just showing that they're

⁹⁸ One interesting thing here that ought to be noted is that conspiracy theories are not the only kinds of theories that place a lot of emphasis on missing or errant data. We can find many cases throughout the sciences where an investigation begins because of data that does not fit the model or paradigm. And it is through this that we are able to discover other theories or discover that the theory is incorrect. That the current model is loosened by the appearance of errant data is an indication that it may be wrong (Keeley 1999 p120). However, what we also ought to note is that the appearance of errant data alone does not always indicate that there is something wrong with the theory and given the nature of knowledge and indeed understanding, we should come to expect by now that even the most possible theory that we have might not be able to explain all of the data available to us because we (most of us at least) have long since given up on Cartesian certainty.

⁹⁹ I would like to make it clear again that I am not making these up – these particular Sandy Hook examples can be found at this link <http://gawker.com/5969532/the-insane-sandy-hook-conspiracy-theories-that-are-already-flooding-facebook-and-twitter> (retrieved 25/02/2016).

wrong – there is a component of conspiracy theories that protects them from arguments against them, they are unfalsifiable because in any instance where you point to a fact that stands in contradiction to the conspiracy theory the conspiracy theorist will simply answer with “that is what *they* want you to believe” or “that is just what *they* want you to think”. With other believers, when they come to know that what they believe is false, when you show them that it is incorrect, they tend to alter their beliefs in accordance with what is most correct. But due to the unfalsifiable nature of conspiracy theories such an approach is untenable and as such we cannot pursue this path even if it is the case that the conspiracy theorists beliefs are false. In light of this I will return to the question of warranted and unwarranted beliefs.

The inference between the event and the existence of the conspiracy must be warranted and as such must be the best explanation for the event otherwise the conspiracy theory cannot hold¹⁰⁰. So this explains why we can have some conspiracy theories that are de facto warranted and believed and form a part of history and in contrast, we have others which are on the outset unwarranted and not accepted. Like any explanation of an event, we must have good grounds for believing that it is the best explanation. And like any explanation, we tend to be suspicious in general of any evidentiary claims where we cannot check against the evidence ourselves to see if we are actually receiving bad information. A warranted claim of a conspiracy can only be an explanatory theory if it shows that the action of conspiracy is the clear cause of the event in question. So, there needs to be far more work done by the agent to show that the conspiracy theory is both a good explanation and a better explanation than the official story – and perhaps sometimes this will be the case.

So for the conspiracy theorist in question, his belief may in fact not be warranted because he fails to show that his theory is better and perhaps more explanative and clear than the officially accepted story. In this case, he is simply a bad believer and bad epistemic agent because he believes in something that is unwarranted. It is not the cognitive action of binding his beliefs that is in question, but the relative explanatory power. So we can dismiss a conspiracy theorists claims without relying on truth and still allow him somewhat of a cognitive achievement because he still put the cognitive efforts in to come up with an explanatory thesis, but I think it would be a mistake to say that the cognitive effort here implies that he maintains a full understanding of the events. So it would seem that he does have an understanding in virtue of grasping, but this understanding is less than it could be because it is without warrant or proper justification. The

¹⁰⁰ I'm not claiming here that we ought to tether our understanding to justification or explanation – this would almost certainly lead to some kind of swamping problem. Rather, I am suggesting that in the case of conspiracy theories, to get at a warranted belief there must be an appeal to the best explanation for an event otherwise we would struggle to understand.

ties that are binding the beliefs together, the grasp that is occurring is weak at best because he lacks a proper warrant or justification.

Because the wild conspiracy theorist is trying to be hyper-rationalistic and track every single piece of evidence and every single truth every fact becomes consequential and every fact becomes another piece of the puzzle that must fit together. This attitude by itself is not on the outset irrational, given that the agent is trying to bring things together, however in their attempts at trying to solve every piece of the puzzle they might lose sight of what is right and instead pursue threads that best fit their narrative – and their narrative, at its core is highly sceptical of officials and government and the official story. It is necessary to remember that any conspiracy theory, be it a rational or irrational one¹⁰¹, is an attempt to explain something about the world, or explain a particular event¹⁰². And as such, these explanations might be manipulated to better suit the picture that the agents are attempting to paint. If we refer back to the *dolchstobledenge* mentioned above, such a theory only persisted because it suited the needs of those who were retaining it as a narrative and spreading it around – unlike perhaps, a theory that the world is being run by skin-changing lizards. Such a story does not necessarily suit any narrative, at least not on such a grand scale and that could point to why it is not taken as a serious threat (aside from the obvious point that it is entirely irrational, though as is the case with conspiracy theories that means very little). So, in stronger cases it matters very little whether or not such a theory is true, because it does suit the narrative of the period and it still had great consequences due to being a belief that was held by many.

If we take it that conspiracy theories are explanatory hypotheses then we ought to consider the best evidence for believing it before we take it to be the best explanation. And as I have shown, there are in fact cases where the best explanation does involve a conspiracy theory and cases where the official story is also the explanation of a conspiracy. But in cases where this is not true, we ought to take it that those agents who believe the non-convincing, quite improbable explanation of events are simply bad epistemic agents. Their epistemic tools for bringing things together is not wrong because they're still putting in all the work, but their

¹⁰¹ I think there is a difference between an irrational and rational conspiracy theory, for example that women's clothing does not come with pockets because the fashion industry wants us to buy handbags seems to be a rational conspiracy theory to hold because it is quite plausible. But, believing that the University of Cape Town is being run by shapeshifting lizards who were also the authors of Apartheid and they're trying to subvert the future is neither rational nor plausible. .

¹⁰² So if we take it that conspiracy theories are in essence explanatory hypotheses then we can see that such hypotheses are there in order to provide a link between the background information and facts that are pertinent to an event and link these to the event itself. From all of these background factoids there is a huge pool and range of plausible cases to be made that will fit the evidence at hand and these can then be used to add an explanation to the event in order to explain why it occurred.

epistemic justification is faulty¹⁰³. Claims of conspiracy of epistemically interesting because they require the agent to show that all conditions of the conspiratorial activity have been satisfied¹⁰⁴ which is to say that it requires that every piece of information is justified and cannot be untethered.

It seems obvious here is that the conspiracy theorist is missing knowledge, or perhaps even something weaker like a justified belief – and this should make the bullet a bit easier to swallow. This is problematic for my account because I do not require knowledge in order to come to an understanding and so it seems like the conspiracy theorist will be able to obtain the value that comes with understanding when it also seems undeserved because they are getting it wrong. So the worry here boils down to: if the conspiracy theorist can get at understanding something even though they are blatantly incorrect then does that undermine my own understanding as an achievement? I think that this is not the case, understanding requires that you are able to draw your beliefs together to form a coherent web, the conspiracy theorist has completed this action even though his beliefs are wrong. I think that most agents are cognitively inclined to build on their beliefs and reinterpret their position when they come up against propositions that are contrary to the position that they currently hold. We re-evaluate and investigate our propositions and beliefs in order to keep our ideas and beliefs coherent because we do not like to hold two contrary beliefs at the same time. In the case of the conspiracy theorist I think we have an agent who is actively avoiding contrary evidence in favour of evidence that further supports his or her beliefs (and as conspiracy theories are unfalsifiable any evidence that the theorist is presented with yet another reason to continue believing as they do regardless of the content of that evidence). And as such we have believers whose methods of forming beliefs are not only unreliable but are also wrong. . However, in the case of the conspiracy theorist I think we have an agent who is actively avoiding contrary evidence in favour of evidence that further supports his or her beliefs (and as conspiracy theories are unfalsifiable any evidence that the theorist is presented with yet another reason to continue believing as they do regardless of the content of that evidence). But that people do this should not be news to anyone, we are well acquainted with the problems involving evidence resistant beliefs that affect

¹⁰³ I would argue here that even the worst kind of conspiracy theorist still has a grasp if they have managed to bind all their informational bits together. We must remember that this is no easy task, it won't do just to find some theories on the internet about why the moon landing was faked and be immediately convinced by the conclusions you are given, and memorise the counterfactual reasons that help explain why. I take it that this kind of understanding is weak at best, with a very weak sort of grasp, because the agent in question has done very little cognitive effort in the way of making things make sense to themselves. Much like gaining an understanding on WWII from Hitler's perspective, it is not enough to simply memorise some dates and events, it requires a true investigation and inquiry by the agent in order for that inquiry to be satisfied by understanding. I think this stands in contrast with the conspiracy theorist who is actively attempting to work through why the official story does not make sense.

¹⁰⁴ Dentith, *In Defence of Conspiracy Theories*. PhD Thesis (2012) p198

people's views on things such as racism and homophobia – and I would claim here that in some ways conspiracy theories are equally evidence resistant. So that people engage in this kind of belief-forming should not come as news to us.

I think what needs to be considered and noted from this is that aside from conspiracy theories needing to suit a particular narrative there is also something a bit deeper going on. Conspiracy theories answer an intellectual and emotional need to explain a situation that seems to lack one. They give people a sense of insight, they're satisfying because they allow for an explanation of an event that does not involve chance or luck, and they fulfil a need for an explanation that is commensurate with the scale of the event itself. So simple explanations do not hold because they cannot fully explain the gravity of the event (even when they do). It is not that when we reject conspiracy theories we imply that the world is random, rather that it is without broad meaning and significance. Conspiracy theories at their core I think, are the attempt to preserve a human meaning – a rational accounting – for these events that have a huge emotional impact on the world and it allows them to be understood in human terms and not just in terms of brain chemistry and the general feeling that bad things just sometimes happen without cause or explanation. So from Keeley: if we look at conspiracy theories in this way the challenge is to choose between an almost nihilistic degree of scepticism or absurdism. The conspiracy theorist then, chooses to embrace the hyper-scepticism inherent in distrusting institutions and organisations over the absurdism of an irrational and essentially meaningless world¹⁰⁵. And I think that understanding certainly has some space for these kinds of beliefs, especially if we see understanding as a means of navigating and perceiving the world as a whole. For one thing, we want to live a world where we can know that there is at least some reason or meaning behind events that shake and shape our lives.

I think what really needs to be said here is that we need not agree with the conspiracy theorists claims when we grant that they have understanding. To use another example, I do not agree with racism or with racist comments that are directed towards everyone at the dinner table by my grandmother, but I can still come to understand why she acts in the way that she does. I certainly do not agree with her beliefs nor do I agree with her actions but it is not the case that my understanding of those actions implies acquiescence. And I think this goes for a number of things aside from dubious topics like racism, homophobia or even conspiracy theories. To use a previous example, I can have an understanding of Freud without necessarily agreeing with any of his theories. Understanding does not necessarily imply agreement. The racist is wrong in her beliefs, but that does not imply that she has no understanding of why she holds those beliefs or

¹⁰⁵ Keeley, "Of Conspiracy Theories". *The Journal of Philosophy*, 96(3): (1999) p125

no understanding of the beliefs themselves or that I have no understanding of why they might hold those beliefs. Her reasons for holding those beliefs might be wrong (as well as the beliefs themselves), but it is still understanding because it informs her view of the world that she lives in and because she has still grasped all of her beliefs together. To deny her that understanding implies that she is not a cognitive agent, that she has no awareness of her own thoughts or how they fit together. She might not have an objective understanding based on facts, but she does have an understanding as she has completed the necessary cognitive moves for it to obtain. Furthermore, she does still have an understanding of the world, it colours how she behaves and acts in the world – she might be wrong, but we cannot deny that even though her beliefs are incorrect they are still affecting her life and how she perceives herself and others. This might not be an objective understanding of the world the like of which I think we assume truth might get us closer too but I do not see how anyone can claim to have a fully objective understanding of the world given that we all hold biases and prejudices that effect how we perceive things and act as agents. If we are taking the aim of understanding seriously as an epistemic task towards epistemic good then we ought to want to understand both ourselves and others because it informs our behaviour towards the world. This might entail that those who do not engage in this activity are epistemically lacking.

I think this is quite an important point to keep in mind because it seems to me that in trying to come to understand the world that I live in I might encounter a lot of behaviour that I agree with or disagree with, and when looking into understanding where I fit in this strange place that is existence I must also come to understand multiple factors about my situation and my context. We study history and historical events because they inform our understanding of ourselves and our lives. This kind of understanding is vital to my being able to cope in the world and it is vital in order for me to understand where I fit in. Understanding is required if I am ever to satisfy the desire to make sense of the world that I live in. Furthermore, it seems incredibly narrow-minded and self-centred to believe that it is only worthwhile to understand your own views and not the views of anyone else. So it might be the case that the conspiracy theorists object of understanding is his own theory, and this might decrease the value of the achievement because it is easy for me to understand my own theory at times (although I think it is necessary to note here that our own philosophical theories are often not easy to understand even to ourselves, we quibble and argue over minor details, we tease out issues and work through objections – this is not a cognitively easy task by any means) I wonder how we could ever go about fixing the problems of racial injustice if we did not try first understand the views of those we are othering (or any form of injustice for that matter). It seems clear to me that engaging in an act of

understanding is not simply wanting to be right about something, it is wanting to gain a perspective on something and that is what seems to be the most important value that understanding can give us.

Chapter 5: The Positive Side of Non-factive Understanding.

While most epistemologists and indeed philosophers might be turned against this account because of its lack of reliance on truth I think that it ought to be seriously considered because of the many ways that it allows one to have value and meaning in their lives. Furthermore, the other accounts on offer are far too restrictive in what obtains as understanding and in doing so they're leaving far too much out. If we are to have an adequate account of understanding then we must have one that can accurately represent how we understand and what we are able to understand.

One of the upsides of an account of understanding such as this is that without a truth requirement it is no longer subject to the swamping problem, and so, unlike accounts of knowledge it can allow for understanding to have its own special value, which is undoubtedly warranted¹⁰⁶. And this is not to say that truth ought to never be a part of understanding rather that it is not necessary in order for understanding to obtain. One can (and should) still have true beliefs because they are important to us in a multitude of ways – such as when looking at accounts of history or science. If we recall work in earlier chapters then what has been shown is that grasping is by no means an easy task, it takes great cognitive work from the agent in order for understanding to obtain and they ought to be rewarded for it. Truth is not a necessary component of understanding because of the threat that it might pose to the cognitive efforts of the agent in obtaining that understanding. I think we do a great disservice to the cognitive actions of agents to deny them understanding simply because they do not hold enough true propositions or allow that value to be swamped by that of truth.

More so, this account can easily and adequately explain both the trajectory of understanding and the many degrees that it can take. As a quick reminder, Grimm's account fails to do this because of his reliance on knowledge and while Elgin's is certainly more amenable to understanding in degrees her account has other problematic areas. Remember that knowledge is binary and has only two states, you either know or you do not. It is either true or it is false. But the same cannot be said for understanding. My understanding in a topic can grow and change as I learn more, even if I am still accumulating true beliefs it does not seem like there is a similar end point to understanding as there is in knowledge. Indeed, it seems that understanding does not have the same boundaries as knowledge does, when looking at scientific understanding for

¹⁰⁶ To be clearer here, it is not all accounts that are vulnerable to the swamping problem. Rather it is just those accounts that have an implied and necessary truth component such as Grimm's account where understanding cannot obtain unless the agent holds true beliefs. If such accounts were to say that truth and understanding are differently valuable – perhaps by doing something like I have done and showing that understanding is a unique cognitive achievement – then they would be able to separate the values out and thus not be vulnerable to the swamping problem.

example we can see that the trajectory from believing that Pluto is the last planet-like object in our solar system is easily adaptable to change as we realise that it is not in fact a planet and that there are other planet like objects further than Pluto still bound by the suns gravitational force. With understanding, the addition of new information does not require that everything contained in my web of beliefs be set off kilter or thrown out as it would with regards to knowledge.

I think that Grimm would likely argue that this is incorrect, but I would argue that this simply does not reflect how we go about living in the world. For example it is hardly ever the case that two people have the very same understanding of a given topic even if they are in the same field. They might easily agree on one thing or another and disagree here and there but it would seem odd to say that the one has understanding and the other does not. It seems necessary to point out here that it does not work the same way for knowledge. When I know p and you know p we both know the same thing, but understanding does not seem to work this way. Even if we were to agree with Grimm that understanding requires knowledge I still doubt that two people who had the exact same knowledge set would have the exact same understanding of the given subject matter if there was any interpretation towards the matter at all; and this seems to be because of how we go about grasping our beliefs together in the first place. Because grasping is an internal action that is done through the will and ability of the agent, and seeing as how no-one has exactly the same experiences of the world it seems reasonable to hold that one's understanding of a topic can never be quite the same as anyone else's. However, in cases where understanding comes down to the interpretation of scientific data which due to its empirical nature is analysable, I would still hold that it might be similar but never exactly the same even in cases where the available data is not easily open to interpretation. Furthermore, in cases of knowledge being related to historical fact or literature intuitively it seems like I might be able to come to a different understanding than someone else even though we have both read the same material. For example if we both read all of Heidegger's work I doubt we would come to the same conclusions about Heidegger or what his work entails. Similarly we can both read the same series of fictional books – Harry Potter, or Lord of the Rings for example and again I doubt that we would come away with the same understanding of the characters or the worlds that they inhabit. If we take cases such as these seriously – and I think we should – then it seems to me that understanding is quite different from knowledge and is capable of providing a bigger scope. More so, it enables us to emulate how we go about living in the world in a way that is significantly different from that of knowledge. This is not to say that knowledge has no value rather that it is differently valuable from understanding and they are after different things. For example, let us take the case of my understanding someone where the central belief that I

have about that person is false. Suppose that I understand my sister. I can predict her behaviour across many circumstances and I possess many facts about her general dispositions. Included in my set of beliefs about her, is that she suffers a lifelong fear of spiders which is caused by a traumatic incident involving a large spider attempting to bite her on her face when she was a child. She now suffers from a great fear of spiders and goes so far as to inspect a room before walking into it and memorising all the cracks in the walls just in case. As such, it has become an integral part of how she engages with the world. It also effects how I and others engage with her. However, her fear is in fact unfounded because it was my parents who played a trick on her as a child. There never was a spider, but she was so traumatised they did not want to face the consequences – being bad parents – so they left her to believe the falsehood. But this is a defining moment for my sister and explains many of her neuroses and quirks and more so, it informs much my understanding of her and more importantly her understanding of herself. This belief is central to both our understandings and hardly seems peripheral when taken in context. Moreover, if I were ever to ignore it as part of my understanding of her I cannot imagine how I would subtract this one belief from my understanding, especially when it informs many others. If I were to remove it, what would happen to the other beliefs that were connected to it through my coherent web of belief? I'm not certain that they would remain intact or relevant without the central belief that helped pull everything together. My understanding of my sister depends upon this central belief, in spite of it being false. Cutting out such a belief would undermine all the peripheral beliefs related to it. I can still have an understanding where my central beliefs are false and that understanding is still useful to me. It does not become void because my central beliefs are not true. While Elgin might allow for such a case and call it a felicitous falsehood – because it is still a useful belief I do wonder how far she would let us take such an example. Elgin still requires some kind of tether to reality in order for us to maintain that the understanding in question is warranted and I'm not sure where she would draw the line in terms of exemplification. The worry here is that there is little being exemplified or modelled in holding this centrally false belief and as such it is merely felicitously false which just does not seem to be enough for her. More so, while she is eager to allow models and exemplification in areas of science she has not yet shown that her theory is entirely applicable to areas of all areas of fictions. Furthermore, I doubt that Grimm or any other philosopher holding a factivist position would be inclined to take on such a viewpoint either.

Is it not partially in the aim of academic inquiry to understand a given topic and figure out how it works? This would hold both for scientific fields and for the humanities. For example, we can know that light is both a wave and a particle and yet we can also know that it

cannot be both. So how are we to describe this relationship without understanding? Substituting the humanities here, we can think of any of the well-known debates within our own field of philosophy. We argue back and forth between theorists about whose account is better or worse, but unlike arguments of knowledge it seems that we hardly ever reach a conclusion about which one is truer than the other. I'm thinking here of something like the mind-body debate between dualists and materialists (or any theoretical debate for that matter this could work equally well for theories of ethics or free will). I wonder if any conclusion can ever be reached for either side and it seems to me to be a matter of belief depending on which one you prefer over the other and perhaps which story fits your world view better. We simply do not have any knowledge of what is definitively true here and that muddies the water somewhat because we have agents who are reaching for opposite truths – and more so, they're all aiming for truth but that truth differs¹⁰⁷. So while on the outset it might seem like the act of an agent pursuing the truth of the world, that that truth is currently unattainable does not seem to impact on how one would go about picking a side of the debate because that truth is unattainable and the agent is going with their best guess so to speak. So when we look at cases like these in which an agent definitely does have an understanding of the subject matter the truth does not seem all that important. I think what we ought to note here is these kinds of debates are not just random theories that we are thinking about because we think it is fun, they're far reaching and often inform much about how we live our lives – especially in cases of philosophy. So it seems to me that one might be epistemically better off if one began one's philosophical journey in pursuit of understanding as it seems like in this case one's understanding is better at creating an adequate reflection of the world and how the agent sees themselves in it. One can still and surely will still pursue truth as a goal but I question how important it is once we move from the empirical to the theoretical and the practical.

There is of course a place for truth in understanding, I have not attempted to defend the claim that it is entirely the wrong kind of epistemic goal to want to reach, rather I am merely suggesting that it is not a necessary condition on my obtaining understanding and I think that there should be room for this in accounts of understanding. There are many situations in which having truth is important and being right is important. In the scientific fields it is important that theories espouse the truth, this is partially because the pursuit of truth is one of the defining goals of science but also because scientific evidence lends itself to being either true or false and while this might also seem to be true for philosophical evidence, it is a lot harder to establish in philosophy which bits are true and which bits are false. Scientific theories can often be backed up with more than just inklings or models, they purport something real about the world and they

¹⁰⁷ This is not to say that philosophy cannot produce knowledge.

intend to show us something true about it. The changing state of scientific theory and knowledge is a result of this pursuit of truth and I think this should not be overlooked. But what is equally important to realise is that an account of understanding that only takes truth into account isolates other kinds of understanding that we have all the time.

If we are to relate this to philosophy for example, philosophical evidence it is often harder to establish which bits of evidence are true and which bits are false. Furthermore, we often rely on our intuition to figure out where we fall in terms of the debate and this is reliant on many kinds of things that are again, not necessarily related to truth and more related to experience. Going back to what I mentioned earlier about the Mind/Body debate I think we can see that while we are truth seeking, both sides are seeking truth that seems to be contradictory to each other and with little empirical evidence to back either side up it seems neither here nor there which one is most correct when exploring the possibilities and refining theories. Sure one theory might be more right than another, but it's hard to see how we would ever prove that aside from some sort of empirical evidence. If logic solved all of our problems then surely the Free Will Debate would have come to a close decades ago.

Perhaps here is a good place to mention that it should be clear that I have not quite been able to capture the value of understanding in the full way that other theorists seem to be arguing for, and I think that the best response here is to say that understanding just is not the only value that we can have. It is valuable and it is a good that is worthwhile having – and I hope that I have been able to show through this thesis that this is the case.

When I think about why truth is valuable and why understanding is valuable I get two very different answers. I want to suggest here that part of the problem encountered when trying to build an account of understanding is that theorists are trying to bring together two different kinds of values that might not actually be compatible with one another. One reason to think this is that we seem to value truth for very different reasons than we value understanding. Truth is valuable to us because it is a corrective guide, we want to get things right, we want to know that what we believe is true and reflective of how the world actually is and I think it is generally agreed upon that truth is something that is valuable to have. So I do not want to dismiss the value of truth outright because I think that would be a great misstep. I also do not want to be misunderstood here, this account of understanding is one that does not require truth because I think that we often understand things without necessarily having truth at our disposal and being able to understand in this way is vital to how we live our lives. But I still think that truth has a place in understanding, it is just not a necessary component.

We seem to want very different things from our cognitive states and so when you try and bring

together two cognitive states which are both differently valuable then you land up with an account that is inelegant and does not fully capture either value properly. Looking back at Grimm's account one can see that this is the case because he does not manage to explain how anything other than natural phenomena can be understood. The problem with an account of understanding that involves truth is that when you look at why either is worth having you get two very different answers and they can serve each other, but when combined separately and not contained in the same account. They are both distinctly valuable, but they are not distinctly valuable together.

How are we to deal with being in the world without being able to understand another person or their point of view? I hesitate to think of how we might go about living in the world without being able to understand those around us, specifically loved ones. So much of that understanding is built upon being able to grasp aspects of another person and combine each bit of information into a cognitive web. And generally, as good epistemic agents, when we come to learn that something is false we attempt to repair the damage caused to our web in a reflective and conscious way.

I think that the argument I used above for conspiracy theories is equally applicable here. We can still allow the agent who believes that the movements of the planets and the stars inform our lives can have understanding because of all the cognitive efforts that have gone into that understanding. But we can also say that she may be a bad epistemic agent because her beliefs are somewhat unwarranted and she is simply a bad believer. The upside of allowing her to maintain the epistemic status of having understanding is that she is still able to build an understanding of the world and her place in it and more so it gives her an epistemic leg to stand on. I take it that understanding is more than just a characterisation of what is and is not, it is deeply connected to how we go about living our lives. If we were agents that were not interested in coherent beliefs or making the world make sense we would be no better than robots who would strike an error when we came upon conflicting information and be unable to move forward or place the information that we have at hand. . It might be wrong, but it is still going to inform her actions and play a necessary role in how she lives her life. And that has to be worth something because I think we all rely on our cognitive abilities to be able to do this – we need to be able to understand the world and our place in it in order to be good agents and we simply cannot do that without our cognitive abilities. It also seems to me that we gain much by being able to understand the world and ourselves and an account of understanding that is able to allow this value is necessary because understanding is an important epistemic state that needs to gain more recognition. This is not to say that those who deny that understanding is non-factive are saying

that people are not using their cognitive abilities rather than it might be shortsighted to suggest that one can only understand when one believes something that is objectively true.

References

- Arendt, H. (1961). *The Origins of Totalitarianism*. New York: Harcourt.
- Basham, L. (2003). Malevolent Global Conspiracy. *Journal of Social Philosophy*, 91-103.
- Bolyu, A. (2010). How Understanding Makes Knowledge Valuable. *Canadian Journal of Philosophy*, 591-609.
- Clarke, S. (2006). Conspiracy Theories and Conspiracy Theorising. *Philosophy of the Social Sciences*, 131-150.
- Coady, D. (2006). An Introduction to the Philosophical Debate About Conspiracy Theories. In D. Coady, *Conspiracy Theories: The Philosophical Debate*. Hampshire: Ashgate.
- Dentith, M. (2012). *In Defence of Conspiracy Theories*.
- Elgin, C. (1996). *Considered Judgement*. Princeton: Princeton University Press.
- Elgin, C. (2004). True Enough. *Philosophical Issues*, 113-131.
- Elgin, C. (2006). From Knowledge to Understanding. In S. Hetherington, *Epistemology Futures*. New York: Oxford University Press.
- Elgin, C. (2011). Understanding's Tethers. *Epistemology: Contexts, Values, Disagreement: Proceedings of the 34th International Ludwig Wittgenstein Symposium in Kirchberg*.
- Gardiner, G. (2012). Understanding, Integration and Epistemic Value. *Acta Analytica*.
- Gettier, E. (1963). Is Justified True Belief Knowledge? *Analysis*, 121-123.
- Grimm, S. (2006). Is Understanding a Species of Knowledge? *British Journal for the Philosophy of Science*, 515-535.
- Grimm, S. (2010, 09 19). Understanding (Draft).
- Grimm, S. (2011). Understanding. In D. Pritchard, & S. Berneker, *The Routledge Companion to Epistemology*. Routledge.
- Grimm, S. (n.d.). Understanding and Transparency. In *Explaining Understanding: New Perspectives from Epistemology and Philosophy (Forthcoming)*.
- Kvanvig, J. (2003). *The Value of Knowledge and the Pursuit of Understanding*. Cambridge: Cambridge University Press.
- Pritchard, D. (2009). Knowledge, Understanding and Epistemic Value. *Royal Institute of Philosophy Supplement*, 19-43.
- Pritchard, D. (2011). What is the Swamping Problem. In A. R. Steglich-Petersen, *Reasons for Belief*. Cambridge University Press.
- Pritchard, D. (2012). Part I: Knowledge and Understanding. In D. Pritchard, A. Haddock, & A. Millar, *The Nature and Value of Knowledge: Three Investigations* (pp. 17-136). Oxford: Oxford University Press.
- Riggs, W. (2003). Understanding Virtue and the Virtue of Understanding. In L. Z. Michael DePaul, *Intellectual Virtue: Perspectives from Ethics and Epistemology* (pp. 203-226). Oxford: Clarendon.
- Stroud, B. (1979). Inference, Belief and Understanding. *Mind*, 179-196.
- Zagzebski, L. (2001). Recovering Understanding. In M. Steup, *Knowledge, Truth, and Duty: Essays on Epistemic Justification, Responsibility, and Virtue* (pp. 235-252). Oxford: Oxford University Press.