



Universidade de Lisboa

Faculdade de Letras

***An a priori* Shift in Non-Reductionist
Accounts of Testimony**

Mestrado em Filosofia

Gabriel Lucas Marques Malagutti

2023

Dissertação especialmente elaborada para a obtenção do grau de Mestre, orientada por Professor Doutor Ricardo Santos e coorientada por Professor Doutor Domingos Faria

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Abstract:

Non-reductionism is the main framework in the epistemology of testimony. It states that absence of negative evidence is sufficient to justify testimonial acceptance. Lackey (2006; 2008) has put forward the strongest objection to non-reductionism. A case where in the total absence of negative evidence, one is still unjustified in accepting the speaker's testimony. The goal of this research is to assess if, and how, non-reductionism can reply to the case. I will argue that most non-reductionist accounts appeal to background information to enable *prima facie* entitlement. I will argue that this is a structural flaw of *a posteriori* non-reductionist accounts, falling under Faulkner (1998)'s description of reductionism. Given the appeal to background information, such accounts are unable to successfully reply to the alien case. I will argue that the only account that is able to avoid both the charges of reductionism and to successfully reply to Lackey's case, is Tyler Burge (1993)'s *a priori* account. I will argue, additionally, that *a priori* non-reductionism, exemplified by Burge, is the only kind of non-reductionism available to proponents of non-reductionism. An *a priori* shift in non-reductionist accounts of testimony must take place.

Keywords:

Alien case, entitlement, justification, non-reductionism, reductionism, testimony, warrant.

1. Introduction

Testimony plays a major role in our epistemic lives. A vast majority of our knowledge and beliefs are acquired from testimony. Whenever you ask for directions, the time, or even someone's name, you acquire new and reliable information through the speaker's say-so. Testimony, as a phenomenon, has been studied extensively, being subject of a vast amount of literature. Normative frameworks have been established to understand the source of justification in testimonial acceptance, conditions of acceptance, reasons, motivations to tell the truth, etc.

One of such frameworks is non-reductionism. Non-reductionism, simplified, is the view that all the hearer needs to accept speaker's say-so justifiably and rationally, is the absence of defeating defeaters, or negative evidence. That is, one is *prima facie* entitled to believe speaker's testimonies.

Jennifer Lackey (2006; 2008), has put forward a counter-case to this kind of framework, the alien case. This is a case that attempts to falsify the claim that absence of defeaters is sufficient to justify testimonial acceptance. Despite the widespread recognition that the case is the strongest challenge to non-reductionist accounts in the epistemology of testimony, surprisingly little has been published as a reply.

The purpose of this dissertation, as such, is to look in depth into the alien case and how it interacts with the available replies to it, and the available non-reductionist accounts. The goal is to see if non-reductionism can successfully reply to the case, as well as to provide a diagnosis for why the case is so destructive. After the diagnosis is made, I will provide a solution to it. Importantly, I will not argue for non-reductionism. I will assume it to be at least plausible and restrict the discussion to defending non-reductionism against the alien case. For this purpose, the dissertation will be split in the following chapters.

Chapter 2. Testimony is intended to showcase the state of the art within the literature. I will showcase the difference between reductionism and non-reductionism as the two main frameworks and include a brief introduction to hybrid accounts such as Jennifer Lackey (2006; 2008)'s and John Greco (2015; 2020)'s¹.

¹ Greco's account is frequently taken to be a non-reductionist account. Here I will consider it a hybrid one. Justification for this distinction will be made clear in Chapter 2.3. Hybrid accounts.

Having introduced the frameworks, Chapter 3. will introduce Lackey's alien case. I will showcase it, the justification, and reasoning behind it, as well as possible ways one could reply.

Chapter 4. will be dedicated to review and introduce possible replies to the case. I will start by reviewing Timothy Perrine (2014)'s reply. I will argue that his solution is ultimately flawed. Facing this result, I will advance to reviewing and replying to the case according to the answers available within each non-reductionist account. Each account will be given a section to better differentiate between accounts and replies. In section 4.6. I will diagnose a structural problem in most non-reductionist accounts, one that the alien case picks out. I will argue that the issue lies with the appeal to background information, that makes the accounts *a posteriori*. I will thus introduce a distinction between *a priori* and *a posteriori* non-reductionism, arguing for the need of an *a priori* shift, abandoning *a posteriori* accounts.

Chapter 5., following the diagnosis, will review objections to Burge's account. The focus will be on Burge's for his is the only *a priori* account available. As such, the success of non-reductionism as a framework, hinges on the success of his account. I will showcase objections made in three papers: Christensen & Kornblith (1997)'s, section 5.1.; Mona Simion (2020)'s, section 5.2.; and Elizabeth Fricker (2006)'s, section 5.3. Each paper focus on a different aspect of Burge's account. Respectively: the role of memory and perception as undermining *a priority*; the function of reason; and the usefulness of upholding an abstract account of testimony.

Finally, Chapter 6. will sum up the conclusions of each chapter. I will argue that Burge's account is the only available account that can reply successfully to Lackey's alien case. This is due to being the only *a priori* non-reductionist account of testimony. The issue that Lackey's case picks out on, is the *a posteriority* of the accounts, falsifying them. Additionally, objections made against Burge's account are insufficient to prove the falsity of his account. Burge's account is thus plausible and consistent, being the best bet for proponents of non-reductionism. An *a priori* shift in non-reductionist accounts of testimony must take place.

2. Testimony

A vast majority of our beliefs are acquired via testimony². Whenever we are told something, and form the corresponding belief, we acquire beliefs, or even knowledge, through testimony. Without such a valuable source of information, our epistemic life would be significantly impoverished. Given the importance of such a phenomenon, it is of no surprise that a vast literature has been developed around it. Is testimony, as a source of knowledge, reducible to perception or memory? Under what conditions true beliefs acquired through testimony amount to knowledge? Is positive evidence required to justify testimonial acceptance? What makes testimony a reliable source of knowledge? These are just a few of the questions that are relevant to understand testimony, and that have been the focus of epistemology of testimony.

On the following sections, I will introduce the two main frameworks in the literature: reductionism, and non-reductionism. Followed by a brief introduction to alternative hybrid frameworks.

2.1. Reductionism

Reductionism can be traced back to David Hume (1777)³. This is the view that testimony, as a source of knowledge, is reducible to other more basic sources such as perception, or inductive inference. According to Hume, the way this reduction is made, is by observing the veracity of human testimony and the respective conformity of the world/facts and the testimonial content. Since this conformity can only be derived from human experience, the experience itself amounts to a positive reason as to accept particular instances of testimonies.

From this, we can establish the two principles that reductionists hold:

- 1) Testimonial knowledge is reducible to other sources.
- 2) Positive reasons are required in order to warrant testimonial acceptance.

² For discussion and introduction to the main issues in the epistemology of testimony, see, for instance: Leonard, N. (2023).

³ Note: Hume does not provide a theory of testimony. The information we have regarding Hume's view on the issue comes from a few remarks made regarding testimony about miracles. These remarks were made in the section "Of Miracles" in *An Inquiry Concerning Human Understanding*. For a reconstruction of Hume's view, see: Faulkner, P. (1998).

More needs to be said regarding positive reasons. First and foremost, what amounts to be a positive reason varies according to different accounts of reductionism. Additionally, the amount of evidence, that is, positive reasons, varies according to the accounts.

A particularly strong account of reductionism is called global-reductionism, which is associated with Hume. According to this view, one needs to withhold belief to all previously acquired beliefs that depend one way or another on testimony, reconstructing, in turn, warrant to the corresponding beliefs through general, non-testimonial, principles.⁴ It is generally agreed upon that such an account is too demanding. Notice scientific knowledge for instance. It would be impossible for every single scientist to reproduce the scientific experiments made throughout the centuries in order to justify their beliefs. One could not build upon previous work for that work is passed on testimonially, either through teaching, conferences, books, or papers.

A more modest account was thus established: local-reductionism⁵. According to this view, the hearer is only required to have sufficient positive evidence to believe *this* speaker, on *this* occasion, on *this* topic. Although this version is much less demanding, there is still a lot of skepticism towards its feasibility. The main concern is that in a lot of scenarios one does not need positive evidence to support a given testimony. Take, for instance, cases where one asks a stranger for the time, directions, or even someone's name. A more pressing worry concerns children's testimonial justification. It's very dubious that children, especially infants, are cognitively able to assess testimonies by inquiring into reasons. Take the case where a father tells his child that there is milk in the fridge. It seems clear that the child forms the corresponding belief without the need of positive evidence, and she does so justifiably. Reductionism, as such, seems too demanding.⁶

⁴ For a reconstruction and discussion of global reductionism, see, for instance: Fricker, E. (2017); Lackey, J. (2006; 2008).

⁵ Again, for more information on local reductionism, see: Fricker, E. (2017); Lackey, J. (2006; 2008).

⁶ For proponents of reductionism, see: Fricker, E. (1995; 2015; 2017;) Lipton, P. (1998); Hume, D. (1777); for a reconstruction of Hume's account: Faulkner, P. (1998). For discussion on reductionism, see, for instance: Greco, J. (2015; 2020); Lackey, J. (2006; 2008).

2.2. Non-Reductionism

Non-reductionism⁷ is the dominant view in the epistemology of testimony, being first put forward by Thomas Reid (1764). It can be understood as the denial of reductionism; that is, whilst reductionism holds that:

- 1) Testimonial knowledge is reducible to other sources.
- 2) Positive reasons are required in order to warrant testimonial acceptance.

Non-reductionism negates these two points, stating that:

- 1) Testimonial knowledge is irreducible.
- 2) Positive reasons are **not** required in order to warrant testimonial acceptance.

As such, non-reductionism - unlike reductionism -, takes testimony to be a basic source of information, akin to perception, memory, or inductive inference; thus, being irreducible. The second thesis can be understood as the claim that lack of defeaters⁸, or negative evidence, is *sufficient* for warranted testimonial acceptance. One is *prima facie* warranted in accepting speaker's say-so.

As for what amounts as a defeater, I will follow Lackey (2008). Defeaters can be psychological, pertaining to a doubt or belief an agent *has*, that points to the falsity or unreliability of the formation or sustainment of a given belief. Or normative, a doubt or belief that an agent *ought* to have that indicates that a given belief is either false or unreliably formed or sustained. In addition to this, defeaters may vary in strength. An undercutting defeater is a defeater that lowers one's credence, without - necessarily - stripping the subject from holding said belief justifiably. Depending on the strength of the undercutting, or undermining defeater, one might still be justified in holding said belief. Alternatively, one might have a rebutting defeater, that is, evidence that falsifies one's belief. When a belief faces a rebutting defeater, one is unjustified in holding said belief. Now, defeaters can interact with one another. Perhaps one undercutting defeater is not enough to make our belief unjustified, but when faced with multiple undercutting defeaters, then the belief might be unjustified. It is also possible for defeaters to defeat each other. An example might be useful here. Suppose that you acquire undercutting defeaters towards the reliability of Sam as a

⁷ For proponents of non-reductionism, see, for instance: Reid, T. (1764); Graham, P. (2010); Burge, T. (1993); Simion, M. (2020); Goldberg, S. (2010).

⁸ For more information regarding defeaters, see, for instance: Pollock, J. & Cruz, J. (1999); Lackey, J. (2008).

testifier. Perhaps you believe him to be a frequent liar, or a jokester. Sam, nonetheless, testifies to you that *p*. Since you have strong undercutting evidence, you fail to form the corresponding belief. But suppose now that you learn that Sam, when he testified to you, was hooked up into an extremely reliable polygraph that “diagnosed” Sam’s utterance to be truthful. This newfound evidence is a defeater towards your previously held undercutting defeaters, meaning that you are now justified in accepting Sam’s testimony that *p*.

Given the nature of defeaters, non-reductionism states that one is *prima facie* justified in accepting a speaker’s testimony, absent undefeated defeating defeaters. That is, defeaters, either undercutting or rebutting, that defeat justification and are not, themselves, defeated.

There is one major issue with non-reductionist accounts of testimony. It is of no surprise that people are sometimes mistaken, believing falsehoods, believing with insufficient or unreliable evidence, or simply lie. How come, then, that justified acceptance comes so easily? Isn’t *prima facie* justified acceptance a recipe for gullibility? This issue is known as the source problem, the issue of justifying testimony as a source of knowledge, warranting belief on mere say-so.

One way to understand the source problem is as a problem of cooperation⁹, a variation of the Prisoner’s Dilemma¹⁰. According to Faulkner, the speaker and the audience have different interests in communication. The speaker wants to be believed, whilst the audience wants to acquire true beliefs. Importantly, the best scenario for the speaker is to be believed regardless of telling the truth or not. A commitment to telling the truth isn’t the best for the speaker. If this is the case, the default position of speakers has no commitment to telling the truth, entailing that hearer’s default position is not one that entitles belief. The challenge for non-reductionists, as such, is to give an account that commits the speaker to telling the truth, allowing for hearer’s default entitlement to believe.

This is where non-reductionist accounts diverge. Each non-reductionist account replies to the source problem differently. Burge (1993) does so on *a priori* ground; Simion (2020), Graham (2010), and Goldberg (2010) do so by appealing to social grounds. I’ll go over each account on chapter 4.

⁹ This interpretation is put forward by Faulkner, P. (2011) and endorsed by Simion, M (2020). In this paper, Simion does a review of different ways to interpret the problem.

¹⁰ For an overview on the Prisoner’s Dilemma and its history, see: Khun, S. (2019).

2.3. Hybrid Accounts

Facing these two frameworks, critics have argued that whilst reductionism makes testimonial knowledge too hard, non-reductionism makes it too easy. Something in the middle is the right way to go; a hybrid account¹¹. Greco showcases this idea in the form of a dilemma:

- «1. Either testimonial knowledge requires good inductive evidence on the part of the hearer, or it does not.
2. If it does not, then testimonial knowledge is too easy. There will be cases counted as knowledge that should not be.
3. If it does, then testimonial knowledge is too hard. There will be cases not counted as knowledge that should be. Therefore,
4. An adequate account of testimonial knowledge is impossible: a given account must make testimonial knowledge either too easy for some cases or too hard for others.»¹²

To tackle this issue¹³, Greco appeals to two functions of testimony. Generation and transmission. He argues that cases where one needs positive reasons to justify acceptance, are cases of generation of knowledge. Whereas cases where one doesn't need positive reasons, are cases of transmission of knowledge. The criteria to justify testimonial acceptance is thus dependent on the relevant function of any given testimony. This is why I consider Greco's account to be pluralist instead of non-reductionist. There is no unified criterion for acceptance, the criteria are plural. Though there are authors, like Mona Simion (2020:8), that consider his account as a moderate form of anti-reductionism, for the purposes of this dissertation I will disregard his account. This should not affect the overall reasoning nor conclusions of this study for, as will be made clear on chapter 4., Greco's account, even if taken as non-reductionist, ultimately falls under Faulkner (1998)'s reductionist syllogism.¹⁴

Jennifer Lackey, in turn, argues that reductionism and non-reductionism have attempted to place all the epistemic work on only one of the participants in testimonial

¹¹ For proponents of hybrid accounts see: Lackey, J. (2006; 2008); Faulkner, P. (2011); Greco, J. (2015; 2020).

¹² Greco, J. (2015:279).

¹³ For replies to Greco's dilemma, see: Simion, M. (2020); Croce, M. (2022).

¹⁴ See chapter 4.1.2. Perrine's reply. Testimonies from within a given community - transmission cases - are, for instance, testimonies of type-community-a, which have been established to be credible. Whilst testimonies from outside the community - generation cases - are testimonies of type-not-community-a.

exchanges. Reductionists place it upon the hearer, non-reductionists place it upon the speaker¹⁵. This is why, according to Lackey, the epistemology of testimony has gone wrong.¹⁶

«[I]t takes two to tango: the justificatory work of testimonial beliefs can be shouldered exclusively neither by the hearer nor by the speaker. To put it somewhat crudely, the speaker condition ensures reliability while the hearer condition ensures rationality for testimonial justification. Thus, we need to look toward a view of testimonial justification that gives proper credence to its dual nature, one that includes the need for the reliability of the speaker (from non-reductionism) and the necessity of positive reasons (PR-N from reductionism). Accordingly, an adequate view of testimonial justification needs to recognize that the justification of a hearer's belief has dual sources, being grounded in both the reliability of the speaker and the rationality of the hearer's reasons for belief.»¹⁷

Lackey thus proposes a dualist account of testimony¹⁸. Given that testimonial justification involves two parties, the speaker, and the hearer, both parties must do some epistemic work. Her dualist account takes testimony to be an irreducible source of knowledge and requires hearers to have positive reasons. This framework, she argues, allows one to avoid the main objections present against reductionist and non-reductionist accounts. A formalized account of dualism is provided by Lackey (2008:177-178):

«D: For every speaker, A, and hearer, B, B knows (believes with justification/warrant) that p on the basis of A's testimony only if:

(D1) B believes that p on the basis of the content of A's testimony,

(D2) A's testimony is reliable or otherwise truth-conducive,

(D3) B is a reliable or properly functioning recipient of testimony,

(D4) the environment in which B receives A's testimony is suitable for the reception of reliable testimony,

(D5) B has no undefeated (psychological or normative) defeaters for A's testimony, and

(D6) B has appropriate positive reasons for accepting A's testimony.»

¹⁵ Lackey, J. (2006:170-171).

¹⁶ For the rational of this diagnosis see: Lackey, J. (2006).

¹⁷ Lackey, J. (2006:170).

¹⁸ See Lackey, J. (2008) for an extensive presentation and defense of the account.

It should be noted that arguing against reductionist and hybrid views goes beyond the scope of this research. As ways of defense, I will simply state that a unified account of testimony, be it reductionist or non-reductionist, is simpler than any hybrid account. As such, if any is plausible, then it will be more desirable than hybrid accounts. Though I won't argue for it here, I do believe that non-reductionist accounts are able to survive objections against it, namely, to escape Greco's dilemma and charges of gullibility. A proper defense of non-reductionism will thus be postponed for future work. For the remainder of this work, I will assume that non-reductionism is, at least, plausible.

3. The Alien Case

The Alien Case has been introduced by Jenifer Lackey (2006; 2008) as a counter case against non-reductionism; amounting to the greatest challenge against the framework. The idea behind the case is to tackle the non-reductionist's second tenant, the sufficiency claim. That is, that the absence of negative reasons is *sufficient* for justified acceptance; or, that positive reasons are *not* necessary to justify testimonial acceptance. As such, Lackey's case purports to showcase a scenario where, in total absence of defeaters, one is unjustified in accepting the testimony, being even irrational in doing so. If her assessment of the case is correct, then non-reductionism has been falsified. The case goes as follows¹⁹:

«ALIEN-2: George, an average human being, is taking a walk through the forest one brisk afternoon and he sees someone in the distance. Although the individual's physical appearance enables George to identify her as an alien from another planet, he does not know anything about either this kind of alien or the planet from which she comes. When George catches up to the alien, she turns to him and immediately says in what sounds like English that she had oranges for breakfast. Without hesitation, George forms the corresponding belief. It turns out that the alien does, in fact, communicate in English, she did have oranges for breakfast, and she is a reliable testifier, both in general and in this particular instance. Moreover, George is not only a properly functioning recipient of testimony, but he is also situated in an environment that is suitable for the reception of reliable reports.»²⁰

¹⁹ Note: Lackey proposes two versions of the alien case. Alien-1 (Lackey, J. (2006:167)), where the testimony is given through what seems to be a diary; and Alien-2, where the testimony is transmitted orally. I will focus on Alien-2 since I believe it to be the strongest case against non-reductionism and has fewer distracting features, namely: whether it is or not a diary, the nature of written testimonies, etc.

²⁰ Lackey, J. (2008:184-185).

Lackey argues that in such a case, the hearer lacks any sort of evidence towards the alien testimony, both positive and negative, for he has:

«no common-sense alien-psychological theory, (...) no information about the general reliability of aliens as testifiers, (...) no reason to think that signs of competence and sincerity on the planet in question correspond to these signs on Earth, and so on.»²¹

For this reason, Lackey argues that one is unjustified in accepting the testimony, for despite the alien's report being truthful and reliable, there are a series of skeptical concerns, or scenarios, that are, nonetheless, possible. And, most importantly, George is unable to discriminate between them, making acceptance irrational.

To understand the pull of the skeptical scenario in making acceptance unjustified, its useful to understand the concerns Lackey expresses. Her skeptical concerns can be summed up into two kinds:

- I) unknown alien reliability
- II) possibility of *Twenglish*.

The former concerns the epistemic status of the alien and its species/society, that is, refers to the lack of information regarding their epistemic functions and/or social norms; the latter refers to a more general concern regarding the content of the testimony, regardless of alien reliability. When faced with these concerns, Lackey concludes that the appropriate response is to withhold belief.

«[A]ccepting a testimony in the complete absence of positive reasons can be just as epistemically irrational as accepting such a report in the presence of an undefeated defeater – indeed, perhaps even more so»²²

Let's pursue this idea further. The worry Lackey expresses through I) is that aliens may very well be pathological liars. Perhaps, the social norm in alien society isn't the knowledge norm but a falsehood norm²³, or it might be the case that alien psychology in normal conditions simply is what we would consider psychosis.²⁴ If any of these turn out to

²¹ Lackey, J. (2008:173).

²² Lackey, J. (2008:170).

²³ Say, for instance: assert that p iff $\sim p$.

²⁴ For these concerns see: Lackey, J. (2008:169).

be true, then everyone would agree, one is unjustified - irrational even - in accepting alien testimony. Concerning worries of type II), there is a doubt of whether the alien is in fact communicating in English, or if it simply is an undistinguishable language called *Twenglish*. *Twenglish*, as Lackey conceives it, may use the negation sign to affirm propositions, so whenever the alien asserts p , it's in fact asserting $\sim p$, and vice versa. Perhaps, words have different meanings altogether. It may very well be the case that when the alien utters: "I had oranges for breakfast"; it means: "You seem to be not dead", and there is no way to exclude these doubts and concerns, which is precisely the issue. No matter if these doubts turn out to be true or false, the mere possibility is enough to strip us from justified acceptance. When faced with this situation, we *must* withhold belief.

Faced with all these concerns, it seems natural to ask: aren't these concerns defeaters? And if so, doesn't non-reductionism predict correctly that we must dismiss the alien's testimony? That is indeed a very tempting route to take, but Lackey warns us against it. After all, the likelihood of any of these skeptical concerns is just as likely as the case that the aliens are reliable testifiers who in fact speak English. By accepting the alien's testimony, we would be playing some sort of epistemic Russian roulette. Whether we acquire a true belief, or not, would be mere luck of the draw and that is incompatible with knowledge acquisition or justified belief. As Lackey states: «in the absence of any way to discriminate among these possibilities, it seems clear that the appropriate epistemic response is to withhold belief»²⁵. Possible defeaters are quite different than actual defeaters. We have the former, but not the latter.

If one is to insist on this route - that there are defeaters that enable the non-reductionist to dismiss the testimony -, the only thing one can appeal to, Lackey argues, is the lack of positive reasons. However, this would undermine non-reductionism, for it concedes that positive reasons are necessary in order to justify testimonial acceptance.

If Lackey's assessment of the case is correct, that is, that we are unjustified in accepting the testimony and that we lack defeaters, then non-reductionists are forced to accept a testimony when it is irrational to do so. If this is the case, again, non-reductionism is in big trouble. From here, there are two replies available to the non-reductionist. Either accept that one is justified in accepting the alien's testimony, but that isn't irrational, and in that case, a reason to dismiss Lackey's skeptical concerns must be put forward; or, alternatively, accept

²⁵ Lackey, J. (2008:170).

the irrationally of accepting the testimony, but deny the lack of defeaters, that is, one ought to find a defeater to enable the hearer to dismiss the alien's testimony.

4. Replying to the case

On the following sections I will investigate Perrine (2014)'s solution, an attempt to pose a defeater, and will assess whether it is successful in doing so, or not. Perrine's solution is a general one. That is, makes use of whatever tools are available to non-reductionism as a framework, being compatible with any account one might endorse. Ultimately, I will argue that his proposal fails. Following this result, I will look into particular accounts, namely: Mona Simion (2020)'s, Sanford Goldberg (2010)'s, Peter Graham (2010)'s and Tyler Burge (1993)'s. I will assess whether their proposed solutions (if available) do the trick in solving the case. When no solution has been put forward, I will attempt to provide a solution, attempting both venues, justifying acceptance, and posing a defeater. In the last section of this chapter, I will do an overview of the success, or failure of the accounts and offer a diagnosis as to why Lackey's case is so destructive, and how non-reductionism can deal with it.

4.1. Perrine's solution

Perrine (2014) published a paper where he attempted to pose a defeater in the alien case, solving the challenge put forward by Lackey. Very briefly, he attempts to do it via a conjunction of background information and a radically new source of information. I will argue that Perrine's strategy ultimately fails, for there is an unwarranted asymmetry in his reply. This asymmetry cannot, I argue, be justifiably held without circular explanations, or falling under reductionism. The asymmetry cannot be corrected either, for a symmetric response would either fall under reductionism, again; or provide the wrong diagnosis to the alien case. As such, I will conclude: Perrine's attempt is unsuccessful.

Perrine argues that the non-reductionist isn't committed to the acceptance of alien's testimony, because the hearer holds a defeater for the relevant belief.²⁶ He does this by stating that humans have «a wealth of experience in giving and receiving testimony and hold a large number of beliefs about it».²⁷ This information and experience allows epistemic agents to understand the ways in which testimonies may go well, acquiring justified true beliefs; and the ways it can go bad, acquiring unjustified or false beliefs. Perrine considers this as

²⁶ Perrine, T. (2014:3230).

²⁷ Perrine, T. (2014:3230).

“background information”, which he uses as a tool to dismiss Lackey’s skeptical concerns in human testimonies. That is to say, we don’t take Lackey’s concerns seriously, at least, concerning human testimony. We are allowed to dismiss those sorts of concerns because we know the likelihood - or unlikelihood - of them being true in human testimonies. Regarding this point, Perrine quickly states that this background information provides us with entitlement to dismiss skeptical hypotheses, but it doesn’t equate to the inductive evidence a reductionist requires. In short, Perrine is trying to distance himself from falling under reductionist territory. He grounds this statement by stating that background information isn’t necessary for justified testimonial acceptance, exemplifying it with young children and infants who lack this kind of experience, whilst still acquiring justified beliefs through testimony.

Here’s Perrine’s reply: the human agent will form the belief that «he has never faced the testimony of an alien before; he is facing a radically new source of testimony»²⁸. This is not to be read as a higher order belief, but as a conjunction of several beliefs, namely: “George believes the testifier had oranges for breakfast” and “George believes he has never interacted with an alien before”²⁹. Now, according to Perrine, these beliefs, namely the conjunction that we are facing a radically new source of testimony and the background information of how testimony may go awry, amount to a defeater.

This defeater comes about in the form of Lackey’s skeptical concerns. Since we lack the background information concerning the probability of skeptical scenarios in non-human testimony, coupled by the fact that we are interacting with a radically new source of testimonial information, the weight of the skeptical concerns are much bigger, amounting to a defeater. These aren’t concerns one *might* have; these are concerns one *ought* to have. Here’s Perrine:

«if Sam [in our case George] should have these doubts, then his belief (...) has a defeater – a belief or doubt a person has (or *should* have) that disqualifies the relevant belief as knowledge. (...) So, in this case, because Sam has a defeater, the non-reductionist is not

²⁸ Perrine, T. (2014:3231).

²⁹ Note: regarding the beliefs possessed by the hearer, Perrine (2014:3231) is addressing Alien-1, the diary case. As stated previously I am handling the discussion focusing on Alien-2. This difference is negligible for the most part since what Perrine says regarding Alien-1 can easily be adapted to Alien-2 without any detriment to the reasoning nor coherence of the argument.

committed to Sam's belief constituting knowledge. (1) is false. So, the Main Objection fails.»³⁰

Perrine proposes two possible replies to his account in the form of a dilemma: either reject these concerns are an “ought”, amounting to a normative defeater³¹, in which case one must (wrongly) accept the alien's testimony; or accept the “ought”, and thus the normative defeater, but falling under reductionism. I'll start with the first horn.

The rationale for rejecting the “ought” interpretation is due to the lack of concrete evidence neither for the reliability (which would entail an ought to accept), nor the unreliability (which would entail an ought not to accept) of the alien's testimony. Since the strength of Lackey's case is due to the testimony falling exactly in the middle, - by absence of evidence either for, or against, - the “ought” must be misplaced and should be replaced by a more flexible notion such as “might”.

Perrine agrees about the indeterminacy of the evidence but rejects that this is enough to undermine the “ought” of the occasion. He references Lackey (footnote 31) in establishing that all a normative defeater requires is that one should have a *doubt* regarding the reliability of a testimonial source. According to Perrine, then, the lack of background information means that the hold of the skeptical concerns are stronger, and for this reason, we *ought* to doubt the reliability of the alien's testimony. This would amount to a normative defeater, granting the non-reductionist a way out of Lackey's case. As such, Perrine considers this horn to be dealt with. But what about the second?

The second horn attempts to show that adopting the ought interpretation towards the doubt, undermines non-reductionism. Using a normative defeater in the way Perrine intends to, amounts to requiring of the hearer to hold a set of inductive evidence regarding the

³⁰ Perrine, T. (2014:3232). Straight brackets added by me to adapt the diagnosis from Alien-1 to Alien-2. Additionally, the “Main Objection” Perrine is mentioning is the formalization he proposes of Lackey's objection against non-reductionism. (1) refers to the first premise: « (1) If maximal strong non-reductionism is true, then in Alien Sam knows (by the alien's testimony) that tigers have eaten some of the aliens who were exploring earth. » (See: Perrine, T. (2014:3230)); again, this can be adapted as: (...) in Alien-2 George knows that the alien ate oranges for breakfast.

³¹ Lackey defines a normative defeater as follows: «a normative defeater is a doubt or belief that S ought to have and that indicates that S's belief that *p* is either false or unreliably formed or sustained. Defeaters in this sense function by virtue of being doubts or beliefs that S should have (whether or not S does have them) given the presence of certain available evidence» (Lackey, J. (2008:45)).

reliability of the testimonial source. That is, the background information that Perrine accepts is lacking in the Alien Case. If this reasoning is correct, non-reductionism is incompatible with the claim that a normative defeater is present in Alien.

As hinted previously, Perrine rejects this conclusion, for it doesn't state that George has a defeater due to the absence of inductive evidence regarding the alien's reliability. That is what is required for it to be inconsistent with non-reductionism. Perrine's claim is that the defeater comes about as the result of a conjunction of two facts. Firstly, the belief that one lacks inductive evidence regarding alien reliability; and secondly, that George has rich background information regarding testimony. To see why this conjunction is compatible with non-reductionism, Perrine showcases it through two study cases: Alien*, where only the second claim holds, hence it lacks a defeater; and Alien**, where only the first obtains and likewise a defeater is lacking.

«Alien*: Sam, an average human being, is taking a walk through the forest one sunny morning and, in the distance, he sees a book. Upon opening it, he immediately notices that it appears to be written in English and looks like what we on Earth would call a diary. Moreover, after reading the first page of the book, Sam forms the corresponding belief that tigers have eaten some individuals during their exploration of some portion of Asia. As a matter of fact, the diary was written by an alien, who was recently exploring earth.»³²

Here, the first claim fails to obtain because Sam lacks the knowledge that the diary was written by an alien. Given that it's written in what seems to be English, Sam has no information that would induce doubt, for he assumes that the diary is written in English and was written by a human. Given that the second claim holds for presumably human testimony, then the correct epistemic response, given Sam's beliefs is to accept the diary's testimonial content. At least, it isn't irrational (as Lackey claims in the Alien case) to accept it. As such, Alien* shows that the second claim, by itself, is insufficient for a normative defeater. Let's see if the opposite holds:

«Alien**: Sam, a four year old, is playing in a forest one sunny morning and, in the distance, he sees someone drop a book. The individual's physical appearance resembles aliens that Sam sees on his television programs, and he believes this individual to be an alien. Although Sam eventually loses sight of the alien, he is able to recover the book that she dropped. Upon opening it, he sees it is written in English and is a diary. Moreover, after reading the first page

³² Perrine, T. (2014:3233).

of the book, Sam forms the corresponding belief that tigers have eaten some of aliens who were exploring earth.»³³

Here, Perrine claims that, again, the correct diagnosis to the case is to say that Sam does in fact know the relevant proposition: «lacking the wealth of experiences and beliefs that adults possess, Sam is not familiar with all the ways that testimony can go awry and so does not need to consider and eliminate them.»³⁴ If this is correct, it shows that the first claim, by itself, is not sufficient for the normative defeater to come about. It's only when the conjunction of the two claims holds true that the normative defeater is enabled, which, in turn, ought the hearer to withhold belief. This is Perrine's picture on how to solve the case, by attempting to provide the hearer with a normative defeater which is not the lack of positive evidence, but a conjunction of knowledge regarding testimony and the ways it can go awry, allied with the knowledge that the testimonial source is radically new.

I have serious doubts regarding the effectiveness of this strategy. As such, I will spend the remainder of this section persuading the reader that this strategy ultimately fails.

4.1.1. Perrine's Asymmetry

Notice that background information has two sides to it: one negative, which is reducible to the source problem; and one positive, which warrants a dismissive attitude towards Lackey-type skepticism and the source problem. Now, I find it extremely convenient for there to be an asymmetry in scope between the two parts of the background information. How come the positive aspect pertains only to human-type testimony, whereas the negative side encompasses testimony *simpliciter*? I see no reason, or justification, to suppose this scope distinction. The asymmetry, being *ad hoc*, must be corrected. Either background information refers exclusively to human-type testimony, in which case the background information is irrelevant to alien-type testimony, warranting the same diagnosis as Alien**; or both aspects of background information refer to testimony *simpliciter*, in which case, if human-type testimony enjoys justification, then so does the alien. Either way, Perrine's reply fails if we reject this *ad hoc* scope asymmetry.

In order to ground my claim of asymmetry, here are some quotes where this scope difference is brought closer to light (bold added for emphasis):

³³ Perrine, T. (2014:3234).

³⁴ Perrine, T. (2014:3234).

«To be sure, he has a wealth of testimonial experience and beliefs, but **those are all with human testifiers. He can rely on these experiences and beliefs to reject Lackey’s skeptical scenarios in the case of human testimony, but in Alien he is not facing human testimony.** Thus, he should (even if he does not) take more seriously these skeptical hypotheses and be in doubt as to whether they obtain.»³⁵

«Sam has a **defeater because (A)** he believes the diary was dropped by an alien and **lacks any inductive evidence one way or the other regarding the truth-aptness of alien testimonial practice, and (B)** Sam has a **wealth of background beliefs and experiences regarding testimony and the ways in which it can go wrong.** If we were to modify the case so that one of these did not hold, I hold that Sam would know the relevant proposition.»³⁶

As such, Perrine is appealing to an asymmetric application of background information. Whereas we acquire positive experience regarding human’s testimonial practice, by interacting with humans, we have the strange capacity to generalize how human testimony can go awry to testimony *simpliciter*, and I see no reason as to why make this distinction.³⁷ The asymmetry, being *ad hoc*, must be corrected. I will now explore possible options by applying this framework into a symmetrical application: either background information is restricted to human-type, or it falls under testimony *simpliciter*.

4.1.1.1. Restricting to human-type

The negative aspect of background information is only regarding the source problem, that is, there is a possibility that the testifier is lying, not being truthful, manipulating us, etc. Lackey’s skeptical concerns don’t fall under the negative aspect of the background information, they come as an addition to the source problem. To see this, you only need to realize that background information comes about empirically, and there are no empirical experiences that correspond to Lackey’s concerns. That’s why the positive aspect of background information shields human-type testimony from them. The absence of empirical evidence leads to low skeptical risk. Now, if this is the case, and Perrine, biting the bullet regarding the asymmetry issue, concedes that background information isn’t testimony *simpliciter* but human-type, we get into a problem. For now, Perrine can’t justify withholding belief regarding the alien’s testimony, for there are no defeaters he can appeal to. He must

³⁵ Perrine, T. (2014:3231-3232).

³⁶ Perrine, T. (2014:3233).

³⁷ For more information concerning how Perrine makes use of testimony *simpliciter*, testimonial experience, human testimony, and alien testimony, see: Perrine, T. (2014) pages: 3230-3231; 3232; 3234.

accept the testimony, even though he lacks any positive evidence. Recall that the positive aspect of background information in this route is also stripped from the alien-type testimony, not only the negative aspect. From this point, Perrine must make a choice, either bites the bullet, again, and says that one must be justified in accepting the alien's testimony, even though he has no reply to Lackey's skeptical concerns; or falls into reductionism saying that even though there are no defeaters, one ought to withhold belief. Regarding the first route, Perrine is very explicit in saying that the testimony shouldn't be accepted. Now, even if he did change his mind, he can't provide any non-circular reason as to why the skeptical concerns could be dismissed, justifying testimonial acceptance; nor can he counter the skeptical concerns. As such, Perrine has no tools that enable a successful reply using this route. Perrine is now forced into the second one. This route, however, is an immediate rejection of non-reductionism. Since the alien's testimony lacks any sort of defeater, rejecting acceptance is embracing the need of positive reasons, reductionism is the conclusion.

4.1.1.2. Expanding to testimony *simpliciter*

What if we take the testimony *simpliciter* route concerning background information? Then, only three options remain: I) we deny the entitlement; II) we accept defeated-entitlement for both sorts of testimony; or III) we accept undefeated-entitlement for both sorts of testimony. Denying the entitlement, again, would be to endorse reductionism. Accepting defeated entitlement, is to say that the positive evidence in the background information is insufficient to dispel Lackey's skepticism, which Perrine denies. Accepting undefeated entitlement, likewise, seems to go against Perrine's wishes, for he agrees with Lackey: accepting the alien testimony is irrational. As such, Perrine is unable to take this route too. Either we go back to reductionism; or endorse an irrational endorsement of alien testimony or deny the possibility of a dismissive attitude regarding Lackey's skeptical scenarios, even in human-type testimonies. None of which are desirable.

This seems quite an extreme conclusion, so let's take our time. Perrine's argument was that background information + radically new source of information = normative defeater. If one accepts that the background information asymmetry is unwarranted, then as I have shown, Perrine's only choice is to say that background information pertains only to human-type testimony. But now, again, one lacks the normative defeater for the alien testimony. That is, one takes the first part of the conjunction, the negative aspect of background information, out of the picture. All that is left is the radical new source of information that is the alien's testimony. Can this be made into a normative defeater? Apparently, no. As shown in Alien**,

Perrine states that the correct diagnosis of the case is to grant justified testimonial acceptance to Sam. The second part of the conjunction, by itself, doesn't amount to a defeater by Perrine's own account. Now, let's say that Perrine changes his mind. Radically new source of information is sufficient for a normative defeater. Then the result is reductionism. Endorsing this is the same as stating that, for a source of information to enjoy entitlement, we must possess some form of positive reason to ensure reliability.

To make this point clearer, let's turn to Faulkner. Here's how he defines reductionism:

«A reductionist epistemology of testimony could be characterized in terms of the following claims. First, the mere fact that a speaker intelligibly expressed a proposition provides no reason to believe this proposition.»³⁸

&

«justification is conferred by the following syllogism: testimony *t* is testimony of type T; type-T testimony has been established to be credible; therefore testimony *t* is credible. Thus the reductionist could claim that our experience supplies us with prior reasons for judging testimony to be credible and it is on the basis of these reasons that our testimonial beliefs are justified.»³⁹

Applying this notion to Perrine's hypothetical position, the only one he has left, amounts to the exact account that Faulkner describes. For the first part, the mere fact that the alien expressed said proposition, doesn't provide any reason to accept, or believe, that proposition. Again, because we are considering radically new sources of information as the source of the normative defeater. So, this aspect checks out. As for the second part, one can easily replace the variables by terms that I have been using throughout: human-type testimony and alien-type testimony. By adapting Faulkner's account⁴⁰ with these terms, we get:

1. Testimony *t* is testimony of human-type;
2. Human-type testimony has been established to be credible;

³⁸ Faulkner, P. (1998:303-304).

³⁹ Faulkner, P. (1998:304).

⁴⁰ By "Faulkner's account", I mean Faulkner's reconstruction of Hume's reductionist framework. For simplicity's sake, unless explicitly stated to the contrary, when talking about Faulkner's reductionism, I mean Faulkner's reconstruction of Hume's reductionism.

3. Therefore, testimony *t* is credible.

Background information supplies one with prior reasons for judging human testimony to be credible and it's on the basis of these reasons that human testimonial beliefs are justified. Applying it to alien testimony:

1. Testimony *t2* is testimony of alien-type;
2. Alien-type testimony has not been established to be credible;

3. Therefore, one can't say that testimony *t2* is credible.

Our human experience doesn't supply us with prior reasons for judging alien-type testimony to be credible. Again, Faulkner's description of reductionism provides a perfect description of Perrine's hypothetical last resort at addressing Lackey's case. Reductionism walks hand-in-hand with the sort of strategy that Perrine attempts.

4.1.2. Perrine's reply

Perrine has readily rejected this reading⁴¹. He has put forward a justification for the way he applies background information, stating that it should be divided into two parts, yes, but not as I put it. He argues that one concerns possibilities, whereas the other pertains to empirical generalizations and rules of thumb. The first can be summed up in the source problem: such as lying, incompetence, confusion, etc. - general worries concerning testimony. Empirical generalizations, on the other hand, concern how we take politicians to be manipulative, why we take certain venues - such as newspapers - to be more veridical than blogs, etc. According to Perrine, this correction allows one to deny the *ad hocness* of the asymmetry charges, for possibilities do generalize to non-human cases. Since the possibilities are abstract, they are about how testimony *simpliciter* can go awry, not just human testimony. On the other hand, empirical generalizations don't generalize to non-human cases. To see why, it's useful to give the example Perrine provides. He states that we have a lot of generalizations about what is nutritious for a human, but we lack said knowledge about what might be nutritious for aliens. Likewise, it might be the case that alien-testimony goes awry in just the same ways ours do, but it might not. What this amounts to is that we acquire testimonial experience about how testimony can go awry *in general* with human-testimony. And we learn to identify those situations from human testimony, that don't generalize. This is

⁴¹ I would like to thank Perrine both for feedback on an early draft of this section and for the following objection stated in a private conversation.

why the negative aspect concerns testimony *simpliciter*, whereas the positive aspect concerns human-type testimony. So, is this picture correct and does it solve the issue?

I will argue negatively. For this effect, I will provide two independent objections to Perrine's formulation. Additionally, I take that each objection, if successful, is sufficient to rebut Perrine's reply. My first qualm is with the appeal to rules of thumb, which, I argue, endorses reductionism. My second concern is that rules of thumb are too broad a concept, and there are no non-arbitrary ways to restrict it.

We'll start with the former. Perrine assumes "possibilities" to be defeaters that we acquire empirically regarding testimony. This defeater falls under testimony *simpliciter*, functioning as a structural problem of testimony as a source of knowledge. Rules of thumb, thus, are required to enable justified acceptance, functioning as a defeater defeater. Rules of thumb, however, do not generalize, being positive evidence, which is restricted to human testimony. Now, Perrine avoids reductionist charges, for the possibility defeater needs to be acquired empirically. As such, despite having a structural defeater, testimony still enjoys *prima facie* entitlement in its acceptance. I want to argue that this defense can be usurped. Reductionism is very much present under this description. The best way to bring this idea forward is endorsing an externalist account of defeat, allowing us to dismiss higher order beliefs regarding testimony and its possibilities. Since possibilities are a structural problem which undermine testimony *simpliciter*, said possibilities have their defeating power independently of the hearers' mental states, beliefs, or dispositions. Testimony, thus, faces its entitlement defeated right off the bat. For every instance of testimony, positive reasons are required to justify testimonial acceptance. Again, because every testimonial instance faces a defeater. *Prima facie* justification, and thus entitlement, would be lost. If this picture is correct, then the second tenant of non-reductionism: positive reasons aren't required in order to justify testimonial acceptance; is rejected, favoring the reductionist framework. Granted, the irreducible thesis would still hold under this framework. This, however, isn't enough to be a non-reductionist account of testimony. At best, we could argue for a hybrid account. If this picture is correct, Perrine ultimately undermines non-reductionism in favor of a hybrid framework.

This concludes my first objection to the accommodations made by Perrine. Let's tackle the broadness issue. Perrine makes use of rules of thumb to justify the asymmetrical application of positive reasons, which are restricted to human-type testimony. I find this

restriction incredibly odd. Why are rules of thumb restricted exactly at human-type testimony? Why not a broader restriction such as rational agents? Or a narrower restriction? Perhaps to individuals, nationality, age group, etc.? I find this hard limit to be arbitrary and would like a justification for upholding it, despite, of course, the practical reason for fulfilling our needs in this case. I will propose two ways of justifying this level of abstraction, and argue that ultimately, they both fail.

One way to justify it is by shortening the scope. “Rules of thumb” can only be applied to individuals we have interacted with. This, however, would be too strong, for it would disallow any sort of generalizations. Every speaker or testimony would have to prove its worth. Again, too close to reductionism. An alternative would be to restrict rules of thumb to a general characteristic. Perrine quickly rejects that generalizations regarding age, gender, nationality, or ethnicity could be appealed to. But why not? Presumably because they aren’t relevant to epistemic concerns. But being rational, truthful, reliable, surely are epistemic characteristics possessed by speakers, why not endorse those? They certainly seem more epistemically apt than “human-type”. The way I see it, every way we shape it, we will inevitably endorse an arbitrary categorical restriction which just as easily could be replaced by a different kind. An additional worry is that defining the restriction to rules of thumb in this way would open doors to Faulkner’s description of reductionism. Categories, general characteristics, are exactly the sort of thing to be inserted into type-t testimony possessing a positive epistemic status, again, endorsing reductionism.

Let’s try something different. We can appeal to the social ground of rules of thumb. Here’s a rough description of what I have in mind:

Rules of thumb apply to agent S *iff* S has had enough interactions with members of a given group.

This means that epistemic evidence regarding S would be available on social grounds. If S holds a positive epistemic status in a community/group, then every member of said group would have positive evidence regarding S and its outputs. Beliefs regarding S wouldn’t be required of any member. The group itself would hold the information regarding S’s reliability. In short, it would take Perrine’s “radically new source of information” and use it to justify the absence of rules of thumb regarding “outsiders”. Since the possibility defeater targets testimony *simpliciter*, alien-testimony would still have a defeater and the asymmetry would be justified. All seems good so far, but there are reasons to be wary of this view.

Firstly, a negative consequence of this is that children's testimony would lose their positive epistemic status. We would not be justified in accepting children's testimony, for, even on social groups, we wouldn't have had enough positive interactions with them to warrant their testimonies with *prima facie* justification. This seems counterintuitive. We could avoid this by stating that the positive epistemic status is inherited from their parents as long as the parents belong to the relevant community. As such, testimonial warrant would pass down from generation to generation. Again, this seems an odd way to warrant epistemic justification.

A second worry is that, again, this falls too close to Faulkner's reductionism. Applying this newfound account to the framework, we get:

1. Testimony *t* is testimony of *type-community-a*.
2. *Type-community-a* has been established to be credible.

3. Therefore, testimony *t* is credible.

And the opposite:

1. Testimony *t* is testimony of *type-not-community-a*⁴².
2. *Type-not-community-a* has not been established to be credible.⁴³

3. Therefore, testimony *t* can't be considered credible.

Yet again, this undermines Perrine's solution. Appealing to positive evidence, be it in the form of positive background information or rules of thumb, leads us right back to reductionism.

A third worry one might have, is that this account implies inflationism⁴⁴ to account for the group belief.⁴⁵ Since we are using the social knowing to allow for members of the group

⁴² Here you can define the *type-t* as not-belonging to the relevant community, not compromising group belonging to the speaker, or you can conjecture a different group to which the speaker belongs, which isn't the relevant kind. Both formulations work for my purpose.

⁴³ Adopting the negative description makes it harder to read premise two, so for this reason, adopting a hypothetical group *b* on premise one should be better. Nonetheless, this could be read simply as: a community which isn't of *community-a-type* hasn't been established to be credible.

⁴⁴ Inflationism in group epistemology is the thesis that the knowledge of a group isn't reducible to the knowledge of any member. This implies that the group might know *p*, whereas no member of the group knows

to inherit justification, without the need of any member to have the knowledge by itself, inflationism is implied. Granted, this could be dealt with by changing the requirement for the social knowing to be deflationist⁴⁶. This, however, would be too demanding. The appeal of an inflationist perspective here is that the burden of knowing can be split amongst members of the community. In a deflationist framework this can't be done. The speaker, say, the alien, must engage repeatedly with the same hearer for her to acquire knowledge which would allow for the formulation of rules of thumb. This, I argue, is excessively demanding; for it's more natural to have multiple short interactions with different people, not to engage in a long interaction with a single person. At least, concerning testimonial exchanges. For these reasons, I believe it to be for the best to abandon this route. I will pursue a different strategy.

I attempted to restrict those under which rules of thumb applied and expand the border as new evidence came by. Here I will attempt the opposite. I will apply the rule of thumb *prima facie* to every individual, entailing every category, group or community that might testify. This *prima facie* belonging to rules of thumb will be defeated by failure to comply with the expected consequences of following the rules of thumb. By applying this method, we would eventually confer justification only to those who comply with rules of thumb.

To better understand this framework, it's useful to look at the consequences. A major one is that alien, being a radically new source of information, now enjoys *prima facie* positive status, conferring justified acceptance to alien-type testimony. Now, remember that Perrine, like Lackey, rejects this conclusion. It's irrational for an agent to accept the alien's testimony. So, if we want to preserve Perrine's intuitions, this won't do.

An additional concern is that there is still an issue of abstraction concerning elimination from rules of thumb. When an individual fails to comply with expectations, to whom should *prima facie* belonging to rules of thumb be removed? The individual itself? The group? How do you define the group? At what level should the abstraction for the elimination be made? Again, like my original concern regarding the implementation of rules of thumb,

p. See, for example: Bird, A. (2010;2014); Hutchins, E. (1995); Mathiesen, K. (2011). For general discussion on group knowledge see: Gilbert, M. (1989;2004); Lackey, J. (2016); Tuomela, R. (2004).

⁴⁵ This is worrisome because inflationism is controversial, which might turn down those who reject it from endorsing this view. If it could be neutral towards these issues, it would be a plus for the view.

⁴⁶ For a group *x* to know *p*, then, at least some member of *x* must know *p*. See: Faria, D. (2020); Peterson, J. (2022).

the level of abstraction is completely arbitrary. No matter the level we chose, a case of equal strength could be made for any other category or distinction.

4.1.3. Overview of Perrine's solution

Perrine's original formulation of forming a normative defeater by appealing to a conjunction between background information and radically new source of information suffers from an *ad hoc* asymmetrical application of the background information, where the negative aspect is applied to testimony *simpliciter*, and the positive part is restricted to human-testimony. I have argued that this asymmetry is unwarranted and demands a justification. I have attempted to correct the asymmetry by stating that background information concerns only human-testimony. This didn't work, for it provides the wrong verdict to the case, granting *prima facie* justification in accepting the alien's testimony. I tried the reverse, to apply the background information to testimony *simpliciter*. This option could be read in one of two ways. Either both sorts of testimony, human and alien, are defeated by the skeptical concerns, or both defeat the skeptical concerns, enjoying justified acceptance. The former won't do for it implies reductionism. As for the latter, it grants, again, justified acceptance to alien testimony, going against Perrine's intuitions. I pursued a third route, dropping the conjunction as a defeater and wondering if "radical new source of information", by itself, could be enough for a normative defeater, again, going against Perrine's intuitions. This, yet again, fails. Despite getting the right diagnosis in the alien case, it does so at the cost of falling under Faulkner's reductionism. As such, appealing to background information is unjustifiably asymmetrical. Attempting to correct this asymmetry leads us either to endorse reductionism, or to accept unjustified acceptance of alien testimony.

Facing this scenario, Perrine attempted to introduce a distinction between possibilities, which generalize to testimony *simpliciter*; and rules of thumb, which are restricted to human-testimony. This is an attempt to justify the asymmetrical application of background information. I have argued against this justification with two independent objections. Firstly, I argued that the appeal to rules of thumb endorses reductionism. Secondly, I have argued that rules of thumb are too broad a concept and that there are no non-arbitrary ways to restrict it. If either objection is successful - I argued -, that's enough to discredit Perrine's attempted justification.

Regarding the former, I have stated that rules of thumb, working as a defeater defeater, endorse reductionism. This is clearer by adopting an externalist notion of defeat.

Since possibilities have their defeating power for testimony *simpliciter*, they don't require, on this version, to be acquired empirically. As such, for every testimony, there is a structural defeater that needs defeating: possibilities. Since every instance of testimony requires positive reasons, then, at best, non-reductionism is replaced by a hybrid framework. This "solution", as it is, undermines the very thing it attempts to defend.

The latter, concerns how rules of thumb are applied. I have argued that there is no reason to suppose that rules of thumb apply only to humans, for an argument could be made for any other abstraction to the rules. There needs to be a reason to stop the abstraction at human-level, and not go broader nor narrower. I have argued for three possible ways to justify the level of abstraction. The first was to deny the rules of thumb to every individual/group/category we haven't acquired positive evidence for. Establishing positive evidence as criterion in order to apply rules of thumb. This doesn't work for it endorses reductionism. The second attempt was to endorse a social ground to establish those affected by rules of thumb. Again, this won't work for it excludes children from the rules of thumb; leads to reductionism; or endorses inflationism in group epistemology which is controversial. The final attempt was to apply the rules of thumb *prima facie* to every individual, eliminating, *a posteriori*, those who fail to comply with expectations. This brings us again to a problem regarding the level of abstraction, but this time at the level of the elimination. Additionally, it seems to provide the wrong diagnosis, for now, the alien's testimony is *prima facie* justifiably accepted, which goes against Perrine's intuitions.

As such, I must conclude that Perrine's reformulation is still unsuccessful. Appealing to background information plus radically new source of information doesn't get us the desired normative defeater, not even with the appeal to the distinction between possibilities and rules of thumbs. Lackey's alien case, thus, is still very much present and troublesome for non-reductionism.

Given that Perrine's general reply has failed, I will attempt to use particular models of non-reductionism. Given that each strategy employed will be restricted to the corresponding account; if successful, it will speak exclusively about the account it was applied for. On the bright side, if unsuccessful, it will have no negative repercussions in subsequent accounts. As stated previously, I will focus on four accounts which are the main ones in the literature. I will start with Mona Simion's.

4.2. Simion's Testimonial Contractarianism

Mona Simion (2020) has introduced a novel non-reductionist account of testimony: Testimonial Contractarianism. Her account makes use of a social contract to explain how and why, testimony enjoys a positive epistemic status, conferring *prima facie* justified acceptance to testimonies. Additionally, Simion provides a brief reasoning as to why one can reject the alien's testimony, posing a defeater. I will argue against her assessment, arguing that Simion's Testimonial Contractarianism is void of tools to successfully do so. It either unjustifiably accepts the alien's testimony; rejects it under *ad hoc* reasoning; or rejects it via an appeal to reductionism, undermining non-reductionist efforts.

Simion's Testimonial Contractarianism is, in essence, an application of Hobbes (1651) contractarianism to social epistemology. Hobbes's contractarianism argues that, from the state of nature, an unstructured social state where individuals have unrestricted freedom to pursue their goals, desires, and self-interests, which includes a permissibility to harm, kill and steal from one another, leads to a war-like state, where conflict is the norm. Facing this scenario, Hobbes argues that it is rational, and in the individual's self-interest, to give up their unrestricted freedom in order to create a social structure which removes participants from the war-like state of nature to a social state where safety is the norm. As such, Hobbes picture is one where free individuals willingly give up some of their freedom, via social contract, to boost their safety. That is, the social contract explains how self-interested individuals comply with social norms rather than defect when doing so would benefit their immediate interests.

Simion takes this picture to solve the source problem, which she interprets as a problem of cooperation⁴⁷. In this picture, the social contract explains why agents comply with social norms. The explanation thus is due to agents being constrained self-interest maximisers. This means that they will disregard their immediate gain, for future, more substantial gain.⁴⁸

In short, a state of nature, in the epistemic setting, is one where testifiers can't be trusted. Agents, then, choose to constrain themselves by establishing social norms through the

⁴⁷ Simion, M. (2020:18).

⁴⁸ Simion, M. (2020:18).

social contract. The epistemic norms thus established - which are also social norms⁴⁹ -, change the utility profile of the situation so as to benefit constrained self-interested agents. There is more to gain from complying than defecting. «Absent substantial payoff for defecting, however, the default rational position within the social contract is social norm compliance.»⁵⁰ Since the default is one of reliability, due to the existence of KNA⁵¹ as a social norm, which has *prima facie* adherence due to the social contract, hearers have *prima facie* entitlement to accept testimonies.⁵²

Due to this picture, in addition to defeaters regarding the speaker or the testimonial content, we can add evidence regarding contract-belonging and contract compliance. That is, evidence that the speaker is not part of the contract strips the entitlement of justified acceptance. Additionally, even if the speaker is bound by the contract, there might be circumstances such that the immediate gain of defection is greater than the future gain.⁵³ Under those circumstances, the *prima facie* justification is defeated. Granted, even though a speaker might not be part of the social contract, that does not imply that its testimony is false. We simply lack justified acceptance, for there is lack of entitlement. Regarding this latter defeater, Simion only says that «the social contract refers to society in general»⁵⁴, dismissing cases like Lackey's alien to be motivated by social norms, which strip us from entitlement to believe that they will comply with said social norms. I'll go back to this further ahead.

4.2.1. Assessing the case

With Simion's framework introduced, I will assess whether her Testimonial Contractarianism has access to any defeater that might do the trick. Namely, defeaters about

⁴⁹ See: Simion, M. (2020:19). Here she argues for a coincidence claim, claiming that some norms are at the same time epistemic and social. Additionally, she provides norms of assertion, like the Knowledge Norm of Assertion (assert that *p* if one knows that *p*), to be an example of this coincidence claim.

⁵⁰ Simion, M. (2020:19).

⁵¹ KNA, or the Knowledge Norm of Assertion states that one should only assert that *p* if one knows that *p*. If you are interested in the KNA, see, for example: Williamson, T. (2000).

⁵² Simion (2020:19) endorses KNA in her account, but you can replace it with a different norm of your choosing, either stronger or weaker.

⁵³ Examples of the latter are provided by Simion, M. (2020:20). She argues that, given strong enough reasons, one might be in a case where compliance to the social norms might be overridden. The example she provides is one where the agent breaks the traffic norms to urgently take their wife to the hospital. Likewise, there can be cases where KNA is overridden.

⁵⁴ Simion, M. (2020: footnote 20).

contract belonging. There are two routes one can pursue to form this defeater, both compatible with the strategy endorsed by Simion. Either by appealing to background information, or through information about the alien. I will pursue both venues.

Before moving to defeaters, I want to reject the possibility of justifying acceptance. Firstly, because that is what Simion argues for.⁵⁵ According to her, non-members of our society, like the alien, fail to be motivated by social norms, defeating the entitlement to believe. To better understand this point, it's useful to go into Simion's work on trust.⁵⁶ Very briefly, Simion takes trustworthiness to be a disposition to fulfil one's obligations. Via social contract, members of our society inherit certain norms, which are taken to be obligations to ϕ . Here is her formulation:

«[W]e have default entitlement to trust someone to ϕ so long as there is an operative norm that requires S to ϕ . At least in such circumstances (and absent defeaters), we don't need any positive reasons to trust S to ϕ .»⁵⁷

By replacing ϕ with KNA, the existence of the social contract would install an operative norm to follow KNA, which explains the entitlement to accept testimonies. Since the alien is not a member of the contract - Simion argues -, there is no operative norm that requires the alien to follow KNA, hence the absence of entitlement. Further on, I will argue that this strategy ultimately fails, for it either must be *ad hoc*, or reject the default assumption of contract-belonging, falling under reductionism.

Now, in addition to Simion's assessment, attempting to justify acceptance is inherently flawed. There is nothing Simion can appeal to that justifies dismissing the skeptical concerns present in the alien case. Since entitlement comes about due to contract belonging, a dismissal of the skeptical concerns would need to argue that the alien is part of the social contract. Contract belonging, must be taken as a (defeasible) default, otherwise the alternative would be to require positive evidence which would be reductionist. This default - absent defeaters - would imply that the alien is part of the social contract and thus that we would be justified in accepting the testimony. But this says nothing about Lackey's skeptical concerns. Arguing that mere contract belonging is enough to dismiss the relevant concerns,

⁵⁵ See: footnote 54.

⁵⁶ See: Kelp, C. & Simion, M. (2023); Simion, M. & Kelp, C. (2023); Simion, M. & Willard-Kyle, C. (2023).

⁵⁷ Simion, M. & Willard-Kyle, C. (2023:3).

seems, at best, wishful thinking. For this reason, endorsing acceptance seems an unfruitful route. In the following sections I will assess whether Simion's reply, rejecting acceptance, has any footing and I will attempt to provide alternative ways to pose a defeater.

It's noteworthy to point out that *a priori* accounts of Contractarianism⁵⁸ have been put forward. If we can judge contract belonging *a priori*, then that might be enough to dismiss Lackey's concerns, or, at the very least, enable different replies. For the purposes of this research, however, I won't take this route into consideration. Firstly, because it seems counterintuitive to suggest that aliens, *a priori*, belong to the same social contract we, humans, do. Secondly, because Simion herself dismisses this view:

«I am rather pessimistic that this picture will go through, however: it seems to me as though it is only rational to enter the social contract given the kind of vulnerable creatures we are, which seems a contingent matter of fact.»⁵⁹

4.2.1.1. Defeat through Background Information

Appealing to background information is one way to justify Simion's dismissal of the alien as a member of the contract. After all, we have a lot of background information⁶⁰ regarding members of the contract. By contrasting the members of which we have information, namely, humans, we can single out the alien as a possible member, thus posing a defeater regarding contract-belonging. That is, since the background information regarding testimony and contract-belonging points to humans as being *the* members of the contract, possessing entitlement in testimonial acceptance, the lack of background information regarding aliens would amount to a defeater. The overwhelming evidence of humans being members would be evidence that aliens, not being human, would not be part of the contract.

This won't work. Appealing to positive information, namely background information regarding contract-belonging conflicts with the default position Simion must endorse. Additionally, it falls, akin to Perrine's strategy, under Faulkner (1998)'s reductionism.

Using background information to pose a defeater fits exactly under the reductionist account Faulkner describes. Firstly, the mere fact the alien expressed said proposition, doesn't provide any reason to accept, or believe, that proposition. The reason to accept would be

⁵⁸ See: Gauthier, D. (1987).

⁵⁹ Simion, M. (2020: footnote 19).

⁶⁰ This strategy is similar to the one used by Perrine (2014).

contract belonging. Secondly, formalizing the argument through Faulkner's syllogism allows the reductionism in the reply to be more evident:

1. Testimony *t* is testimony of human-type.
2. Human-type testimony has been established to be contract belonging.

3. Therefore, testimony *t* is *prima facie* reliable.

Since the alien would not be human-type testimony, it would not have been established as contract-belonging, hence the defeater. Here's the argument in Faulkner's syllogism:

1. Testimony *t2* is testimony of alien-type.
2. Alien-type testimony hasn't been established to be contract belonging.

3. Therefore, testimony *t2* lacks entitlement.

As such, appealing to background information endorses reductionism. A consequence that is counterproductive regarding non-reductionist efforts. For this reason, Simion's strategy of excluding the alien from the social contract conflicts with the necessity to take contract belonging as a default. If we require positive reasons to grant contract belonging to a given speaker, we have fallen under reductionism. Rejecting contract belonging must be grounded in some sort of defeater. And, unfortunately, being an alien is not a defeater in and of itself. In order to deal with this issue, I will put forward a different possible strategy, one that attempts to provide some defeater to contract-belonging.

4.2.1.2. Appealing to Alien Information

In order to tackle the second route, I'll summarize the information we have regarding the alien and see whether any of it can be used as a defeater. We know: the alien's physical appearance, her voice, she seeming to speak English, the content of her testimony *T*, and that she is an alien.

Her voice plays no role in determining contract-belonging; seeming to speak English is what Lackey warns us against, by itself is not a defeater; the content of the testimony by itself is plausible and bears no connection to contract belonging. The appearance of the alien and her being an alien can be conflated into a single point: being an alien. Can this amount to a defeater?

For this information to be used as a defeater, we must consider *being* an alien as a negative reason. Stating this, however, would simply be an *ad hoc* solution. Simion must justify why being an alien amounts to a defeater. Is there anything that might justify this?

As we have seen in the previous section, considering the alien as a defeater due to not being human, would bring us to Faulkner's reductionism. The only alternative we can appeal to is, again, the lack of positive reasons. But again, this undermines our goal, for it endorses reductionism. We face a dilemma: either the negative epistemic value of being an alien, remains unjustified, being an *ad hoc* reply; or we justify it by endorsing reductionism. Neither option seems satisfactory.

4.2.2. Overview of Simion's Testimonial Contractarianism

I have shown how Simion introduces Testimonial Contractarianism as a non-reductionist account of testimony. In addressing the alien case, I have argued, like Simion, that the only defeater that could do the job was one that pointed the alien as not-a-member of the social contract. This defeater, however, needs to be justified. I attempted to do so via an appeal to background information, contrasting those we have information regarding contract belonging - humans -, to those we lack said information: aliens. This route led to Faulkner's reductionism. I then turned to information about the alien, where I argued that the only available evidence that might be relevant to contract belonging, was the alien's physical appearance, that is, *being* an alien. Considering the alien qua alien as a defeater, however, would be an *ad hoc* reply. This route would need to be substantiated, but again, the only thing Simion could appeal to would be either background information, which I had already rejected, or the lack of positive evidence, which leads, again, to reductionism.

For these reasons, we must conclude that Simion's Testimonial Contractarianism is unable to address Lackey's Alien Case, failing as a non-reductionist account of testimony.

4.3. Golberg's Reliabilism

On the following sections, I will introduce Golberg (2010)'s non-reductionist account of testimony, followed by an attempt to reply to Lackey's alien case. Unlike Simion, or Perrine, Goldberg has not replied to Lackey's case. As such, I will do my best to construe an answer given the framework provided by Goldberg. Ultimately, I will argue that every possible route Golberg might take will eventually lead one to endorse reductionism, or provide a wrong assessment to the case.

A different account of testimony is put forward by Sanford Goldberg. He formulates an account deriving from his considerations on Process Reliabilism.⁶¹ He proposes that doxastic justification, and knowledge, come about due to the reliability of the processes through which a belief was formed and sustained. As such, his account of testimonial justification comes about due to reliable processes in testimonial exchanges. There are two features that require our attention here. First, what is it, for Goldberg, to be a “reliable process”; and second, what are the processes involved in testimonial exchanges.

Regarding the first question, reliability is understood as providing a sufficient high degree of true belief given a certain process. This number is given both by local and global kinds of reliability. Here’s Goldberg:

«A process or method is globally reliable if and only if it produces (or would produce) a preponderance of truth over falsity, as used across the variety of circumstances in which it is standardly employed. A process or method is locally reliable in a given context C if and only if it produces (or would produce) a preponderance of truth over falsity in circumstances that are relevantly like C.»⁶²

The purpose of this distinction is best understood through some examples. Suppose that people are generally truthful and whenever they testify, they do so knowledgeably. By accepting testimonies where we lack negative evidence, we will acquire a high degree of true beliefs. This criterion for testimonial acceptance would produce a preponderance of truth over falsity, being globally reliable. Now suppose, additionally, that we face a speaker that, unbeknownst to us, suffers from a condition where she only testifies falsities. Our globally reliable method would be totally unreliable under this scenario, generating exclusively falsities. As such, a globally reliable method can be locally unreliable, and the reverse is equally true. A hearer who always forms the negation of whatever was testified, would endorse a method which would be highly unreliable globally, but extremely reliable when faced with the local scenario of our only falsities speaker. As such, a process must be both globally and locally reliable to form justified true beliefs.

Applying this to beliefs acquired testimonially, gives us the result that whether it amounts to knowledge, will hinge on whether the testimony was reliable in the first place,

⁶¹ See: Goldberg, S. (2010).

⁶² Goldberg, S. (2010:12).

which will hinge on whether the cognitive processes in the speaker themselves were reliable. This picks out the garbage in, garbage out, picture. If the belief formed by the speaker was unreliably formed, then when the belief is testified to the hearer it will continue to be unreliable.

Goldberg formulates this idea through Epistemic Reliance in cases of Testimonial Knowledge; he says:

«ERTK Whether a testimonial belief amounts to testimonial knowledge depends on the reliability of cognitive processes implicated in the production of the testimony. (...) Whether a testimonial belief counts as knowledge depends on the reliability of the testimony on which it was based, which in turn depends on the reliability of the cognitive processes implicated in the production of the testimony.»⁶³

We are finally in a position to answer the second question. It should be clear by now that the processes involved in testimonial exchanges goes from the processes of the testimony itself, including the processes employed by the speaker in whatever justifies her testimony. Be it perception, inferences, deductions, etc. This inclusion of the speakers processes in testimonial justification is what Goldberg calls the “extendedness hypothesis”: «it asserts that testimonial belief-formation is an interpersonally extended process»⁶⁴.

Does this mean that one is justified in accepting whatever testimony was reliably produced? Not at all. It’s on this point that Goldberg introduces *de re reliance*. *De re* reliance is a kind of reliance which Goldberg describes in terms of a supposition on which one is prepared to act:

«[W]here R is a person, artifact, or natural process, and ϕ is an action, behaviour, or process, to rely on R to ϕ is to act on the supposition that R will ϕ .»⁶⁵

As such, *de re* reliance, is a kind of reliance where R is a person, denoting a situation where the subject relies on person R to bring about a result on a given occasion. This reliance, in turn, has degrees of vindication. If I, S, rely on you, R, to turn the lights off, to ϕ , and you do turn the lights off, then you have succeeded in ϕ ’ing. In such scenario, my supposition has been completely vindicated. If you did not turn the lights off, then you have

⁶³ Goldberg, S. (2010:13).

⁶⁴ Goldberg, S. (2010:79).

⁶⁵ Goldberg, S. (2022:4).

failed in φ 'ing; S's reliance was not vindicated in the least. There are, additionally, intermediate levels of vindication. When R succeeds partially in φ 'ing, say, when S relies on R to clean the dishes and R cleans most of them but not all, S's reliance has been partially vindicated. As such, the degree of vindication is a matter of the *de facto* goodness of the performance of R on φ 'ing, determined in terms of the evaluative standards governing the type of performance R was relied to. Importantly, these standards vary according to different tasks and may not even be explicit. That is, for some φ 's, the evaluative standards can be explicit and clear for both S and R, whilst in other tasks those standards might be beyond one's capacity to articulate, or even recognize them. Nonetheless, Goldberg assures us that this does not put into question the existence of those standards, nor the evaluation of R's performance. Vindication does not require knowledge of vindication.⁶⁶ Applying the picture so far into testimony, we get:

«When an audience A accepts a speaker S's testimony, A is relying on S to give A knowledge regarding whether p . The relevant standard for assessing the success of S's testimony-constituting performance, then, is a standard which requires that this performance provide A with the knowledge that p .»⁶⁷

All that's left is to provide a criterion under which one is justified in relying on S to testify whether p . On this point, Goldberg states, correctly, that the goodness of the hearer's reliance on the speaker is a function of two distinct factors. One, determining whether the audience's reliance was rational; and the second determining whether the speaker was successful in φ 'ing (providing the hearer with knowledge on whether p), that is, whether the reliance was vindicated. Importantly, these two factors can come apart. One can be justified in relying on R to φ and fail to have that reliance vindicated, just as one can irrationally or unjustifiably rely on R to φ and have the reliance vindicated.⁶⁸ Remembering the case of global and local reliability is useful in understanding how the factors can come apart in assessing the goodness of any given reliance.

⁶⁶ See: Goldberg, S. (2022:7-8).

⁶⁷ Goldberg, S. (2022:8). Note: Goldberg is not committed to KNA here, he states that one can switch the standard of evaluation to whatever norm one prefers: be it one of knowledge, one of justified belief, etc.

⁶⁸ See: Goldberg, S. (2022:17).

In order to assess this final point, Goldberg appeals to normative expectations. That is, our moral, social, and political values play an epistemic role.⁶⁹ They not only provide a predictive expectation, what one is likely to do or know, but a normative one, where one is accountable when one fails to correspond with the corresponding normative expectations. Let's take our time here. To better understand Goldberg's picture, we ought to understand how our moral, social, and political values play a role in shaping our epistemic environment.

Our moral lives, namely the law, shape our expectations related to various professions. The existence of legal requirements of knowledge, for instance - a doctor must know certain things to graduate and work as a doctor -, ground our expectations that when we go to the doctor, we expect to be properly diagnosed and treated. Failure to meet our expectations warrant charges of negligence or even legal action. Other norms are social in nature; take, for instance, your family, coworkers, or group of friends. They certainly have expectations about who knows what, the responsibilities of each of them, holding mutual expectations of one another, or even ways on how to exchange information and to whom. Maybe the kids hold their parents responsible for books they must read for school, hence share the information of what books they need to their parents, expecting them to provide them. Maybe your family as a to-do list, or a list of groceries in the fridge so that everyone in the household knows what to do or buy. These are all norms that shape our epistemic environment and warrant certain expectations of each other.⁷⁰ Here's Goldberg in a more concise manner:

«In these and so many other humdrum cases, we expect certain things of one another, and among these expectations are ones whose content is epistemic: they concern what others know, what evidence they have, what evidence-collecting responsibilities they bear, what reporting procedures they follow when they acquire relevant new information, and so forth. What is more, the expectations in question are normative (as opposed to merely predictive) in nature.»⁷¹

To understand how this plays a role in cases of testimony, we ought to turn to Goldberg's examples of how different political systems influence the proper epistemic methods one ought to adopt. He provides two such political systems in order to enable a

⁶⁹ See: Goldberg, S. (2012); (2020).

⁷⁰ See: Goldberg, S. (2020:4411-4413).

⁷¹ Goldberg, S. (2020:4413).

contrast between the two. First, a technocritical one⁷², which values experts' opinions highly. Under such a system, experts' opinions will be accorded a high degree of credence, and members will take each other to be entitled both to defer to the experts' opinion and to hold normative expectations of the experts' authority in the relevant matters. The epistemic consequences of such a community, according to Goldberg, affects both the members disposition to accept the opinions of recognized experts, affects their expectations as to what experts "owe" them, and the expectations members have of one another to rely on the opinion of the experts:

«Recognized experts "owe it" to non-experts to weigh in on matters that fall within their expertise when and only when the experts themselves have competently arrived at reliably formed belief. Non-experts "owe it" to recognized experts to accord greater weight to their say-so when it is on a matter that falls within their expertise. And finally, non-experts "owe it" to each other, as well as to the recognized experts, to form beliefs on matters on which they have access to a recognized expert's (expert) opinions by assigning great weight to such opinion (and accepting it except when they have compelling reasons not to do so).»⁷³

A libertarian system, in turn, will not value experts' opinions as highly, valuing self-reliance and autonomy. In turn, this evaluation implies that members wont regard each other as entitled to substantial expectations of each other's epistemic conditions.

It should be clear by now that the sort of system we are a member of, affects not only our epistemic expectations, but also our epistemic norms and entitlements. Which bring us to our question: what are the norms, entitlements, and expectations, we, as a matter of fact, have? Goldberg asks us to consider the sorts of expectations one has of one's friends, family, and colleagues, to consider the expectations we have of ourselves as members of our culture; expectations which come about due to our social identity; our gender, our ethnicity, religion, racial identity, socioeconomic status, profession, etc.⁷⁴ Though not all of them are legitimate⁷⁵, they still shape our epistemic environment. But how do they shape testimonial exchanges?

⁷² See: Goldberg, S. (2020:4416).

⁷³ Goldberg, S. (2020:4416-4417).

⁷⁴ See: Goldberg, S. (2020:4418).

⁷⁵ For the purposes of this research, I will not address Goldbergs remarks on legitimacy, but if interested, see: Goldberg, S. (2020).

On this point, Goldberg states that human testifiers are answerable to normative standards, such as norms of rationality, norms of assertion, epistemic norms, etc. Unfortunately, Goldberg is not explicit on the norms he has in mind⁷⁶, but he states that those norms are «mutually familiar to all cognitively mature, healthy epistemic subjects»⁷⁷, familiarity such that enables one to distinguish between warranted and unwarranted assertions.

Given the mutual recognition of such norms, testimonial standards are set in place. These standards guide expectations both of hearers and speakers, and a failure to comply with the expectations warrant criticism to the offending party. The hearer thus relies on the speaker to testify in a manner that satisfies the epistemic standards. A successful testimony in this way will result in the hearer's belief enjoying full epistemic goodness.

Here's the full picture of Goldberg's framework. One's doxastic justification comes about due to the reliability of the processes involved in testimonial exchanges. These processes include both the speaker's processes in acquiring the belief, and the testimonial act from the speaker to the hearer. Testimonial exchanges are guided by mutually recognized norms which come about due to social, political, and ethical considerations of whatever community the epistemic agents belong to. The existence of these mutually recognized norms justifies the audience's reliance on the speaker to testify according to those norms. The *de facto* goodness of the performance, in conjunction with justified *de re* reliance, make a true belief testimonially acquired, justified. This framework is non-reductionist for the existence of the norms entitle the hearer to form the corresponding belief without the need of posing any sort of positive evidence. This is Goldberg's framework; can it reply to Lackey's case?

4.3.1. Assessing the alien case

For this section, I will continue to attempt both possible venues of reply. First, I will attempt to justify acceptance, dismissing Lackey's skeptical concerns. Second, I will attempt to justify a rejection of the alien's testimony, in which case I must appeal to possible defeaters. Ultimately, I will argue that both venues fail. They either ultimately endorse reductionism, or provide an unwarranted assessment of the case. I will start with the former.

⁷⁶ Though he is not explicit here, he often quotes Grice when discussing speech act norms (See: Goldberg (2006; 2012; 2016)), presumably, what he has in mind here are the norms of quality, quantity, etc. See: Grice, P. (1968/1989).

⁷⁷ Goldberg, S. (2012:191).

4.3.1.1. Rejecting the testimony

There are two ways one can form a defeater given Goldberg's account. As we have seen, what makes a belief justified is a conjunction of *de facto* goodness of the testimony and justified *de re* reliance on the speaker. If either of the two fails, then the belief is unjustified, enabling a defeater.

Starting with the former, we can ask whether George's reliance was vindicated. Here we can turn to Lackey herself in her description of the case. She says:

«[T]he alien does, in fact, communicate in English, she did have oranges for breakfast, and she is a reliable testifier, both in general and in this particular instance.»⁷⁸

Tackling the *de facto* goodness of the alien's testimony, thus, is of no avail. The alien is reliable both globally and locally (using Goldberg's terminology), enabling justified belief. If we want to pose a defeater, we must do so in terms of unjustified reliance.

So, is George's reliance on the alien justified? To find an answer, we must look back at what entitles one to rely on a speaker. In Goldberg's framework, that is the role played by expectations warranted by political, social, and ethical norms, which influence the epistemic norms. We saw that there is a mutual recognition of said norms which warrant the expectation that testimonies are reliable, enabling one to justifiably rely on the speaker's say so. There might be two ways to form a defeater here. Either by appealing to an expectation that the alien will **not** fulfil the norms, or by stating that one lacks expectations of norm fulfilment, that is, one doesn't know whether the alien will follow the norms or not. I'll start with the former.

Arguing that one expects the alien to not follow the norms requires one to pose negative evidence towards norm fulfilment. The most intuitive and straightforward way to do so is to argue that we are entitled to expect humans to follow them due to being members of the same community we do. The alien, not being a member, will presumably not follow the same norms, which warrants one to expect norm unfulfillment by the alien. This seems a promising start, but does it work?

I will argue it does not. Remember how I have employed Faulkner (1998)'s reductionism so far. Contrasting members of a given community with non-members to pose a

⁷⁸ Lackey, J. (2008:184-185).

defeater is the same as stating that human-type testimony, qua members of a given community, enjoy a positive epistemic status. Non-members would thus enjoy a negative status by **lacking** said positive status. It's not that not-being a member is playing a role of negative evidence, it's that being a member plays a positive role. To better illustrate this, remember the example provided by Goldberg regarding the effects of different political systems in epistemic norms. In order to understand the kinds of norms that are in place in our community, we must have background knowledge of the kind of community we are a member of. The entitlement for *de re* reliance only comes about due to contingent features of our community, features that must be captured empirically through our experience as a community, forming the background information for their members. This implicit appeal to background information should be a clear sign of the lingering reductionism in the picture, as I have attempted to showcase so far, both in Perrine's and Simion's reply to the alien case. Applying this background information into Faulkner's reductionist framework, we get the following syllogism:

1. Testimony *t* is testimony of belonging-member-type.
2. Belonging-member-type testimony has been established to be reliable.

3. Therefore, testimony *t* is *prima facie* reliable.

Again, it's this *prima facie* reliability that entitles one to justifiably rely on the speaker's testimony. But this entitlement only comes about due to positive information warranted by background information. Since the alien's testimony would not be belonging-member-type, it's testimony would not warrant one to expect their reliance to be vindicated, hence the defeater. Here's the argument in Faulkner's syllogism:

1. Testimony *t2* is testimony of not-belonging-member-type.
2. Not-belonging-member-type testimony hasn't been established to be reliable.

3. Therefore, testimony *t2* lacks entitlement.

By lacking entitlement, one is unjustified in expecting their reliance to be vindicated. But again, this does not come about due to negative evidence, but due to absence of positive reasons. It's not that non-members' testimony has a negative epistemic status; it's that members have a positive epistemic status due to positive reasons warranted by background information. Expectations, which entitle one's *de re* reliance, are grounded on positive evidence, not the absence of defeaters. Goldberg's framework, thus, is grounded on reductionist conditions.

One way to avoid this fate is by granting expectations of vindicated *de re* reliance to be a default. But this “solution” is short lived. For one, besides being completely unintuitive and unwarranted, it goes directly against Goldberg’s remarks on what grounds those expectations. Namely: social, political, and ethical norms, which are contingent. Second, taking expectations in this default manner would strip one of posing the desired defeater. As such, Goldberg’s account is forced into a deadly dilemma: either he keeps expectations as grounded in background information, which in turn bring his account into reductionist territory, or grants the relevant expectations to be a default, in which case he must provide substantial reasoning for endorsing such a view, revising, inclusively, his remarks on the effects of social, political and ethical norms in the epistemic realm, and losing the only possible defeater towards the alien’s testimony.

There is one alternative, nonetheless. Instead of arguing for negative expectation, one could argue for a lack of expectation. By lack of background information, we are unsure as to whether the alien will, or not, satisfy the relevant norms. However, one must notice that this route is equally flawed. This is exactly the scenario that Lackey is pushing. Since we are unsure as to the alien’s reliability, Lackey argues, we ought to reject the testimony. But again, this is only so because we lack background information, we lack positive evidence towards the alien and its reliability. This lack of positive evidence cannot be the same as having negative evidence, for that is abandoning non-reductionism all together, endorsing a necessity for positive evidence.

For these reasons, I ought to conclude that expecting Goldberg’s framework to pose a defeater in the alien case, is a task that cannot be vindicated. Justifying acceptance is the only hope Goldberg’s account has left to succeed as a non-reductionist account of testimony.

4.3.1.2. Justifying acceptance

The only way to justify acceptance is to argue that one is justified in relying on the alien’s testimony. Again, there are two ways to do so. First, by endorsing the previous view, that one’s expectations of vindicated *de re* reliance are taken to be a default. Again, this means that, *prima facie*, one is entitled to assume that the speaker will satisfy the relevant norms, being a reliable source of information. However, by reasons noted above, this route is underwhelming. It goes against multiple points made by Goldberg; is unintuitive; lacks supporting evidence and reasoning and is plainly *ad hoc*. As such, I will disregard this route.

The alternative is to argue that, as a matter of fact, we do have background information that the alien will comply with the expected norms, justifying reliance. However, this is equally unlikely. There is a possibility that the alien's community do follow the same norms we do and are equally or even more reliable than we are. But we have no evidence nor background information to suggest that this might be the case. Assuming justified reliance on the mere - slim - possibility of this being the case, seems irrational. Without a proper argument to support why one could assume that the alien follows the relevant norms, this route is blocked.

4.3.2. Overview of Goldberg's solution

Throughout this section I attempted to formulate a reply to the alien case, given the tools available in Goldberg's framework. I have done so, firstly, by attempting to pose a defeater, and secondly, by attempting to justify acceptance. I have argued that both venues fail, ultimately endorsing reductionism; or being *ad hoc*, requiring extreme revision on the framework established.

The first route as failed for expectations are grounded in empirical data, consisting of background information. Attempts to use this information to contrast human agents, members of our community, with the alien, a non-member, opens way to Faulkner's reductionism. Being a member of the relevant community justifies one's reliance on their testimony for there are positive reasons in the shape of background information which warrant such reliance. The alien, in turn, either by having a negative or neutral expectation of norm satisfaction, would pose a defeater, for reliance would not be justified. This picture thus brings Faulkner's reductionism into the forefront, undermining non-reductionist efforts.

The alternative route ought to take expectation of vindication in *de re* reliance to be default. However, this assessment is unintuitive and lacks both empirical as well as reasoning support. Without a proper argument to justify this assessment, this route must be discarded. The other option in this route is to argue that we do, in fact, have justified expectations to rely on the alien's say-so, without taking such expectations to be a default. This, however, is equally unpalatable. Expecting the alien, or any epistemic agent to reliably satisfy the relevant norms seems wishful thinking, lacking, again, any sort of empirical or argumentative backing.

By failing in both possible ways to reply to the case, I must conclude that Goldberg's account ultimately fails in providing a satisfactory reply to Lackey's alien case, failing as a non-reductionist account of testimony.

4.4. Graham's Functionalism

Peter Graham (2010) has put forward a functionalist non-reductionist account of testimony. His account has been incredibly successful, being one of the main models available in the non-reductionist literature.

I will introduce Graham's account, and then assess whether Graham's account is, or not, able to reply to Lackey's objection. Ultimately, I will argue negatively. Graham's account is unable to do so. Attempts to reply to Lackey's case, I argue, ultimately leads to reductionism or are plainly *ad hoc* and unwarranted.

Graham's account is non-reductionist, thus holding that all one needs to justify testimonial acceptance, is the absence of negative reasons – defeaters. We are entitled to *prima facie* accept testimonies. To uphold this kind of account, one needs to justify why testimony enjoys such a positive epistemic status. Graham addresses these concerns via a functionalist route. He appeals to the etiological function – henceforth e-function, for short - of assertions, in addition to comprehension-with-filtering.

E-function⁷⁹ can be understood through the explanatory features of an object's history. That is, why a certain item has been replicated, and why it exists now. The e-function of said item is the reason for its selection, a selection that can be either natural, cultural, or artificial. Take the heart, for instance. The heart has been replicated throughout history, and exists now, due to its ability to pump blood reliably. Pumping blood explains why the heart, as it is, has been evolutionarily selected. Pumping blood is the heart's e-function.

To see the role played by e-functions in Graham's account, one must bear in mind that, for him, if a belief is «based on a normally functioning belief-forming process that has forming and sustaining true beliefs reliably as a function»⁸⁰, then it enjoys *prima facie pro tanto* entitlement.⁸¹ That is, one enjoys *prima facie* justified acceptance in said belief. From this

⁷⁹ See: Graham, P. (2010, 2012a, 2015).

⁸⁰ Graham, P. (2010:149-150).

⁸¹ To see more on the way Graham conceives function fulfilment as an epistemic success, see: Graham, P. (2012a)

point, Graham argues that assertion has as an e-function, «causing and sustaining true hearer beliefs»⁸². Given that testimonies are transmitted through assertions, testimonies would inherit the same function. Testimony, thus, has causing and sustaining true hearer beliefs as its function.

To argue for this, Graham makes use of Millikan (1984; 2005)'s "stabilizing function". The idea is that assertions are only useful to speakers in so far as the hearer believes and forms the corresponding belief. Hearers, in turn, would only accept assertions if they get something out of it. If hearers stop forming the corresponding beliefs, speakers have no incentive to keep using assertions. Therefore, for assertions to be in play, it must benefit both speakers and hearers. The stabilizing function comes about due to encouraging speakers to use assertions and hearers to keep accepting them. Graham concludes: «truth is a price speakers pay that keeps assertion in play»⁸³.

So far, Graham has argued, *a priori*, that the function of assertion is to cause true beliefs. This, however, is only half of the picture. Graham now introduces comprehension-with-filtering as a defeat detector. This second aspect is also used to avoid charges of gullibility.

Akin to assertion, Graham argues that comprehension-with-filtering has forming true beliefs reliably as an e-function, thus granting entitlement to beliefs formed through said comprehension, that is, *prima facie* justified acceptance.⁸⁴ He justifies this step by saying that assertions produce true beliefs by triggering comprehension states. Therefore, given that assertions have causing true beliefs as an e-function, comprehension states would also induce true hearer belief. Again, if not enough beliefs formed through comprehension were true, hearers would stop going from comprehension to beliefs. This being the case, the fact that we acquire true beliefs through comprehension explains why comprehension exists, forming true beliefs can be understood as its e-function. Both assertion and comprehension-with-filtering have producing true hearer beliefs as e-functions. Assertions acquire their function due to the stabilizing function which motivates hearers and speakers to use them reliably, causing true belief. Comprehension, in turn, acquires its function to cause true hearer belief by transitioning the doxastic state from comprehension to belief. The role of the filtering would

⁸² Graham, P. (2010:150).

⁸³ Graham, P. (2010:162).

⁸⁴ Graham, P. (2010:159; 170).

be to produce a sufficiently high ratio of true beliefs. This filtering is thus sensitive to defeaters, that is, evidence that strips entitlement to accept a particular information. Examples of these are coherence checking. The filter, so construed, increases the ratio of true beliefs acquired, and further incentivizes speakers to be reliable and truthful in their assertion usage, «for misleading or untrustworthy assertions often get filtered out»⁸⁵. This last point is further argued on social grounds.⁸⁶

Though there are objections, problems, and criticisms to Graham's account, I will assume that Graham is successful in defending the view. I want to be charitable in this regard and focus exclusively on how Graham can reply to Lackey's objection: the alien case.⁸⁷

4.4.1. Graham against the alien case

Again, there are two routes one can take. The first route, and the most taken, is to reject the absence of defeaters, defeating entitlement. The second route is to agree with Lackey regarding the lack of defeaters but dismiss - and provide reasons to dismiss - her skeptical concerns, preserving justified acceptance. I will attempt both routes, starting with the former.

4.4.1.1. Defeating the case

Graham's account enables *prima facie* justified acceptance through the function of assertion in addition to comprehension-with-filtering. As such, if there is a defeater that comprehension-with-filtering picks out, we have a defeater we can appeal to in the alien case. A different possibility is to find a defeater regarding function fulfilment. If there is some indication that assertion isn't doing its function, or that it lacks the necessary conditions to satisfy its function, then, again, there is a defeater one can appeal to reject the alien's testimony. I'll start with comprehension.

4.4.1.1.1. Comprehension-with-filtering

The role of comprehension-with-filtering, again, is to find possible incoherences or falsities in the testimony. Remember that what the alien has testified is: "I [the alien] had oranges for breakfast". The only possible way one could argue for incoherence would be by

⁸⁵ Graham, P. (2010:173).

⁸⁶ See: Graham, P. (2015).

⁸⁷ If you are interested on the discussion of the account, Graham, P. (2010:162-169) tackles a few general worries one might have against his view. See also, Simion, M. (2020) for a convincing case against comprehension-with-filtering.

knowing that the speaker was allergic to oranges, and even still, it could be the case that she had had oranges for breakfast. Or, perhaps, by knowing that the species of the speaker was unable to eat oranges, or fruits. Or, a last possibility, by knowing that the alien ate something else, or not at all. The first two possibilities argue for the unlikelihood of the event occurring, or, in the last case, directly about its falsity. But they must appeal to background information. Since we lack any sort of information regarding alien's feeding habits, posing a defeater due to lack of positive evidence would be endorsing reductionism⁸⁸. Since there is nothing to filter out in the alien's testimony, this route is of no use.

4.4.1.1.2. Function fulfilment

Graham has argued that assertions have their e-functions *a priori*: causing and sustaining true hearer beliefs. But he has also told us that having a function does not imply that its function is satisfied. To illustrate this, Graham has used the example of a car, which has the function of taking us from point A to point B. To do this, the car must function normally and be in normal condition. If the car breaks in the middle of the road, it is not functioning normally, despite being in normal condition; therefore, the function can't be satisfied. Likewise, if your car is functioning normally, but is lifted in the air by the mechanic, it's unable to move. The car is not under normal conditions.⁸⁹ Applying this to the alien, we can appeal either to lack of normal conditions in the alien usage of assertions, or to some malfunction in its usage, that is, non-normal functioning.

So, what are the normal functions and conditions for assertion? In this regard, Graham says, respectively:

«The standards for normal functioning - themselves natural norms - are thus epistemic norms, for they are constitutively associated with promoting true beliefs and avoiding error, the hallmark of the epistemic; they encode reliably getting things right. Certain epistemic norms - though arguably not all epistemic norms, depending on how we choose to explicate the phrase 'epistemic norm' - are natural norms. »⁹⁰

⁸⁸ Lackey is very explicit about why this sort of strategy fails: «Any residual discomfort that one may have about granting justified belief in this sort of case simply reveals one's intuitions that positive reasons are necessary for testimonial justification. For the only negative reason it is appropriate to say that Sam has with respect to the alien's 'diary' is the absence of positive reasons». Lackey, J. (2006:168-169).

⁸⁹ See: Graham, P. (2012a:449)

⁹⁰ Graham, P. (2012a:463).

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«What counts as normal functioning and normal conditions falls out of the historical, Normal explanation. Normal functioning is the way the item functioned (operated, worked) when it (or the system of which it is a part) was selected for. Normal conditions are those circumstances (and relevantly similar ones) where all of this happened. (...) Just look at the history of the item, the effects that help explain why it gets replicated, how it worked so as to produce these effects, and where it all happened. The historical explanation spells out how it worked, where it did it, and why it was selected»⁹¹

In short, normal conditions and functioning⁹² are those that were present when the object was selected for said function. There are two ways to read this. Either we take normal aspects to be the same for every object that shares the same function, thereby extending human normal aspects to alien's; or, say that each assertion-type has as normal aspects the conditions under which it was selected. Human's and alien's assertions normal aspects would be different, despite having the same e-functions.

The first possibility seems extremely problematic. The way Graham describes the normal aspects of any given selected function is through its historical, normal explanation, thus being a contingent aspect of every item. Taking these conditions to be the same for every kind of function, would be taking the historical aspects to be necessary for every said function. This tension points to the falsity of this necessary aspect. Though they could, by chance, be the same, that coincidence is contingent. Taking them to be so would demand empirical evidence.

This requirement for empirical evidence cannot be understated. Arguing that we have a defeater due to lack of said evidence is, again, falling under Lackey's trap. We would be endorsing a reductionist condition. For these reasons, this interpretation must be wrong.

Let us grant, then, that normal aspects of e-functions are restricted to the particular item of said e-function. Alien's normal aspects thus, could be different than those we are accustomed to. What can we make of this?

⁹¹ Graham, P. (2012a:459).

⁹² Henceforth, I will use "normal aspects" for the conjunction of normal conditions and normal functioning. Whenever I speak of one in particular, I will call it either normal conditions, or normal functioning.

The most intuitive use would be to argue that, given that normal aspects are probably different, one has a defeater towards alien's assertion usage. Therefore, one can appeal to a defeater, rejecting the alien's testimony. However, this won't work. Again, the defeater here would be the lack of background information concerning normal aspects of alien's assertions. And, yet again, Lackey warns us against it. At best, one has a skeptical concern regarding normal aspects of alien's assertion. Unsubstantiated doubts are not defeaters.

Perhaps, a different way out would be to argue that proper assertion usage is the human-type assertion. Alien usage, being not-human, would have a defeater for it fails to comply to the evaluative standards we have.

The issue with this route is that it brings forth Faulkner (1998)'s reductionism (again). This route would be using human-normal-aspects as being established to be credible. Alien's usage, however, by lack of background information, would not warrant ascribing said credibility. To illustrate this point, I'll apply this route's strategy into Faulkner's framework. Firstly, with human-normal-aspects:

1. Testimony t is testimony of human-type⁹³;
2. Human-type testimony has been established to be credible;

3. Therefore, testimony t is credible.

And now with alien-normal-aspects:

1. Testimony t_2 is testimony of alien-type⁹⁴;
2. Alien-type testimony has not been established to be credible;

3. Therefore, we can't say that testimony t_2 is credible.

Appealing to this sort of background information as a contrast does not bring forth a defeater. It brings Faulkner's reductionism to the forefront. In short, the possibility of normal aspects in assertion as a function, does not enable a defeater.

Given the results so far, I will consider the attempt to defeat entitlement in alien testimony to be a fruitless task. I shall now turn my focus into accepting the testimony and dismissing Lackey's skeptical concerns.

⁹³ Read human-type as a kind of testimony that follows human's normal aspects.

⁹⁴ Likewise, read alien-type as a kind of testimony that follows alien's normal aspects.

4.4.1.2. Dismissing skeptical concerns

On this section, I will attempt the opposite strategy. Preserve justified acceptance in the alien case, but in doing so, provide some reason as to why Lackey's skeptical concerns are unwarranted and why they can be dismissed.

In attempting to form a defeater regarding function fulfilment, it was established that the function of assertion is, *a priori*, causing and sustaining true hearer beliefs. Isn't this enough to warrant justified acceptance in the alien case? Since the function is established *a priori*, it will certainly apply to alien's assertions. Since the alien asserts that she had oranges for breakfast, function fulfillment seems a reasonable presumption, especially given the lack of counterevidence, thus justifying acceptance.

At first, this might seem a promising route, but there is a major issue. Even though functions can be attributed *a priori*, their reliability and success need to be established *a posteriori*. To illustrate this point, notice that even if we assume alien's assertion's function to be causing and sustaining true hearer belief, this says nothing about the skeptical concerns Lackey appeals to. It may very well be the case that alien psychology is one of psychosis, they may be pathological liars, and they may even be speaking Twenglish. Mere functions do not dismiss these sorts of concerns. As such, Graham's account success hinges on whether it can, or not, argue for function fulfilment to dismiss Lackey's concerns. I will direct my efforts in that direction.

Looking at human function fulfilment might help clear the picture on this regard. To argue for function fulfilment in human cases, and, in part to individuate normal conditions, Graham appeals to social norms⁹⁵.

«We provide true and relevant information, at least in part, because we positively evaluate truth telling and negatively evaluate providing false or misleading information.»⁹⁶

There are two main features of social norms that push agents to comply. First, reward and punishment. This aspect is quite intuitive. When faced with a choice of whether to ϕ or $\sim\phi$ ⁹⁷, by knowing that you will be rewarded by ϕ 'ing and punished if you don't, you have a

⁹⁵ To see more on how Graham understands social norms see: Graham, P. (2012b; 2015).

⁹⁶ Graham, P. (2015:259).

⁹⁷ Take the disjunction to be: assert truthfully or not-assert truthfully; "truth" can be replaced by different epistemic categories, such as "know", hence knowingly, "belief", etc.

very strong incentive to follow the prescribed course of action. In short, expected reactions to compliance and defection change the utility profile of social norms so as to motivate compliance. The second feature is internalization. We, as humans, internalize social norms through socialization, and this internalization is intrinsically motivating, changing our preferences to possible courses of actions, and or reaction to the courses of action of other people. Social norms, when internalized, play a role in guiding our behavior, a phenomenon described by Graham as follows:

«our commitment to providing true and relevant information in turn drives or at least sustains a good deal of our behavior. We (at least in part) provide such information because we prescribe providing such information. Having internalized the norm, I regularly provide true and relevant information without a second thought.»⁹⁸

Here's the question: can we presume that social norms are present in the same way as human's are in the alien case? I find it extremely unlikely and counterintuitive to assume this. Firstly, social norms are contingent. Different species might evolve in such a way so as to prompt individualistic norms. The fact that humans have historically endorsed pro-social cooperative social norms, has no implication to the norms adopted by other species. Assuming not only the existence of comparable norms in the case, but compliance to them, as a default, is unwarranted. Given the contingent nature of said norms, both the norms and their compliance must be established *a posteriori*, through empirical observation.

4.4.2. Overview of Graham's Functionalist Account

Throughout this section, I have introduced Graham's non-reductionist account of testimony, and have attempted to provide an answer to the alien case. To do this, I pursued two venues, rejecting the alien's testimony, appealing to a defeater, and accepting the testimony, dismissing Lackey's skeptical concerns.

By exploring the first route, two venues have been explored. Firstly, appealing to a possible defeater to pick out by comprehension-with-filtering. Secondly, to no-function fulfilment. The first venue has proven unsuccessful, for the content of the testimony seems coherent. The only possible defeater would be by counterevidence regarding alien's eating habits, or by knowing directly what the alien, as a matter of fact, ate during breakfast. Both possibilities, however, are ultimately grounded in background information that we, as hearers,

⁹⁸ Graham, P. (2015:258).

lack. The second venue is equally fruitless. Defeaters about function fulfillment come about by evidence towards non-normal conditions, or to malfunction. An appeal to normal conditions is unwarranted, for there is no background information about the historical explanation of alien's assertions, and assuming them to be akin to humans in this regard is unwarranted. Additionally, arguing that a defeater is present due to the historical explanation being different than human's is self-defeating, for it implicitly endorses Faulkner's reductionism.

Likewise, appealing to justified acceptance ultimately fails. Even though assertions have their function *a priori*, to argue for function fulfillment one needs to appeal to background information about social norms. Given that we lack said background information about the alien, and that assuming parallel social norms is not only unwarranted but unintuitive, attempts to undermine Lackey's concerns end in no success.

For these reasons, I conclude, Graham's testimonial account lacks the tools to successfully reply to the alien case. Facing this result, Graham's account has failed as a non-reductionist account of testimony.

4.5. Burge's *A priori* Account

Tyler Burge (1993) has put forward a unique non-reductionist account of testimony; an *a priori* one. According to Burge, hearers are *prima facie* justified in accepting a speaker's say-so due to the information coming from a rational source. Rational sources are, *a priori*, sources of truth, providing the hearer with warrant to accept whatever information was put forward, absent defeaters. Before proceeding with the account, a few concepts must be clarified. I'll start by introducing what Burge takes to be: *a priori*, justification, entitlement, and warrant. This will provide the reader with the necessary tools to grasp the intricacies of the account. Here's Burge on the issue:

«I take *apriority* to be a feature primarily of justification or entitlement. A warrant (either a justification or an entitlement), is *apriori* if neither sense experiences nor sense-perceptual beliefs are referred to or relied upon to contribute to the justificational force particular to that warrant. A person's knowledge is *apriori* if the knowledge is supported by an *apriori* warrant that needs no further warrant for the knowledge to be knowledge. Let me highlight some features of this conception of *apriority*. The distinction between justification and entitlement concerns two types of epistemic warrant. Both justifications and entitlements are epistemic warrants with rational justificational force. But entitlements need not be understood by or even accessible to the individual subject, whereas justifications, in my narrow sense, involve

reasons that individuals have and have access to. Entitlement is my partially externalist analog of the internalist notion, justification.»⁹⁹

For Burge, a belief is warranted¹⁰⁰ if it was produced, or acquired in a way that fulfils a standard for being good. The acquisition of such a belief is made through “epistemically good” processes that are conducive to beliefs acquired in such a way to be true or even knowledge. Such a way must satisfy a minimum standard of reliability in normal conditions. This idea is similar to Goldberg (2010)’s global reliability. When a belief is warranted, it must be so either due to justification, or entitlement. Justification requires that the agent hold a reason in her psychology or could easily hold that reason - by an obvious inference, for instance -, and to be able to connect the reason to what it is a reason for. Reasons thus, are the answers one might provide when inquired as to why one holds a given belief. Being entitled to a belief is being warranted in holding it without having reasons. When one is entitled to a belief, one is not required to be able to answer to “why” questions. Examples of such entitlement are provided by Burge. He argues that we are entitled to rely «on perception, memory, deductive and inductive reasoning, and the word of others»¹⁰¹. These sources of information enjoy a positive epistemic status, that is, have their entitlement due to the epistemic goodness of producing warranted states. Entitlement thus, have their status both from psychological and external factors. Psychological in the sense that the agent must be well-functioning and competent. Perceptual beliefs only have their entitlement preserved if the agent is not drunk, for instance. The external factors, in turn, correspond to the reliable production of true beliefs in normal conditions. As such, one can make a distinction between justification and entitlement in the following way: justification is to have warrant with reasons; entitlement is to have warrant without reasons.¹⁰²

A belief is *a priori* warranted when the justification, or entitlement, are themselves *a priori*, requiring no additional justificatory strength to amount to knowledge. That is, if a belief is warranted *a priori* and true, absent Gettier cases¹⁰³, the belief is knowledge. This is not to say that perception never plays a role in *a priori* knowledge. Usually, it is necessary for

⁹⁹ Burge, T. (1998:3).

¹⁰⁰ Burge goes in greater detail on what it is for a belief to be warranted in: Burge, T. (2013; 2020).

¹⁰¹ Burge, T. (1993:458).

¹⁰² For the distinction between the two kinds of warrant see: Burge, T. (2013; 2020).

¹⁰³ Gettier cases are cases where even though an agent has a justified true belief, it still falls short of knowledge. See: Gettier, E. (1963).

the acquisition of understanding or belief, but this dependence, as long as it plays no role in the justificational force of the belief, is irrelevant for the *a priori* of the belief. An example of this is testimonial knowledge. Burge grants that one is entitled to believe speakers say-so. Testimonies, however, must be perceptually captured, either by reading or listening to it. As such, perception is necessary to enable testimonial knowledge. However, this kind of perception does not play a role in the justification of the belief¹⁰⁴. This is not to say that every testimonial knowledge is warranted *a priori*, it just means that at least some can be so warranted.¹⁰⁵

Here's the picture so far. Burge takes testimonial knowledge to be warranted by entitlement. This means that one can accept speaker's say-so, absent defeaters, without the need to justify acceptance, that is, without positive reasons. Absence of defeaters is enough to warrant testimonial acceptance. One is entitled in testimonial acceptance because testimony, as a source of knowledge, is taken to be reliable in the production of true beliefs. Testimony's entitlement derives from its epistemic goodness. What needs to be made explicit now, is *why* testimony enjoys such a positive epistemic status, akin to memory or perception.

Burge starts his account by making an analogy of testimony with memory.¹⁰⁶ According to him, memory plays only a preservative function that plays no role in the force of the justification. Memory simply preserves whatever was picked out by perception, enabling explanations to be carried out. Likewise, perception sometimes plays a similar function in reasoning. In cases of testimony, perception is necessary to acquire beliefs from others, playing both a triggering and preservative role, not one of justification. Since this is so, Burge makes the case that beliefs acquired through testimony need not appeal to sense experiences or perceptual beliefs in their justification. Testimonial justification, as such, would come *a priori*.

Testimonial beliefs, thus, enjoy entitlement, an *a priori* warrant; for neither sense experiences nor perceptual beliefs play a role in their justification. Burge captures this entitlement through the Acceptance Principle, which states:

¹⁰⁴ There is still the further question of when does perception play a justificatory role. Such question goes beyond the scope of this dissertation however, so I will not engage with it. To see Burge's reply to the issue, see: Burge, T. (1993).

¹⁰⁵ For the concept and use of *a priori* in Burge, see: Burge, T. (1993; 1998).

¹⁰⁶ The analogy is fully explored in Burge, T. (1993).

«A person is entitled to accept as true something that is presented as true and that is intelligible to him, unless there are stronger reasons not to do so.»¹⁰⁷

The justification for this principle comes about due to considerations regarding interlocution, rationality, and rational sources. Due to the presence of these features in testimonial exchanges, Burge argues that one is entitled to assume the source's sincerity and justification, absent defeaters. That's the epistemic default of testimonial exchanges.

An important point regarding the Acceptance Principle, is that it's not related to empirical or statistical considerations regarding speaker's reliability. The principle comes about because testimony is:

«*prima facie* preserved (received) from a rational source, or resource for reason; reliance on rational sources or resources for reason – is, other things equal, necessary for the function of reason.»¹⁰⁸

A few points must be clarified. First, the distinction between rational source and resource for reason. The latter are sources that a rational being is *a priori* entitled to rely upon. Examples of these are memory and perception. The latter are sources that are themselves capable of reason, rational beings. Speakers in testimonial exchanges being an example. Second, why is reliance on rational sources on the same level as sources for reason? Memory and perception are reliable under normal conditions, warranting our entitlement to rely on them. But rational sources aren't as simple. Speakers may lie, manipulate or be misleading. Why does the Acceptance Principle extend our entitlement to interlocution?

Burge provides a few arguments to ground this assessment. First, Burge argues that rational sources are, *prima facie*, sources of truth. The reason is that a condition on rationality is that it be a guide to truth. Here's Burge on the issue:

«An epistemic reason for believing something would not count as such if it did not provide some reasonable support for accepting it as true. The same point applies to rational entitlements for belief. The entitlements that I am discussing are epistemic, not matters of politesse. If one has a reason or entitlement to accept something because it is, *prima facie*, rationally supported, one has a reason or entitlement to accept it as true. A source is a guide to

¹⁰⁷ Burge, T. (1993:467).

¹⁰⁸ Burge, T. (1993:469).

truth in being rational. (...) For other things equal, reason can be reasonably followed in seeking truth.»¹⁰⁹

Beliefs supported by reason or rationality enjoy entitlement to accept them as true. If this is so, it's because there is a recognition that reason is a guide to truth. Since speakers present themselves as rational sources, then one is *prima facie* entitled to assume them to be guides to truth. Unless defeaters, it is rational to accept testimonies from rational sources. There is an additional point to ground such entitlement. The connection between rationality and truth is further supported by the message transmitted being presented as true.

«The very content of an intelligible message presented as true does so as well. For content is constitutively dependent, in the first instance, on patterned connections to a subject matter, connections that insure in normal circumstances a baseline of true thought presentations. So presentations' having content must have an origin in getting things right. The *prima facie* rationality of the source intensifies a *prima facie* connection to truth already present in the *prima facie* existence of presented content.»¹¹⁰

The idea, thus, is that when a source intelligibly conveys a message, presenting it as true, one is entitled to assume the interlocutor as a rational source or resource for reason. This final disjunction: a rational source or resource for reason; is important for a parallel argument that anything intelligibly presented as true can be *prima facie* presumed to be rational or made in such a way so as to mimic rationality.¹¹¹ Since rationality is a source of truth, so is something that mimics rationality a source of truth. The important consideration, however, is that when one understands language, one is entitled to presume it to come from a rational source, for intelligibility is an *a priori prima facie* mark of rationality.

To summarize the picture so far, Burge's non-reductionist account grants *a priori prima facie* entitlement to accept testimonies that are intelligible and presented as true. This is so for testimonies are conceptually related with rational sources, which assume rational abilities and entitlements. The entitlement for *prima facie* acceptance, thus, comes about both by intelligible presentations-as-true coming about from rational sources, and the fact that *prima facie* rationality of the source indicates a *prima facie* source of truth. In other words,

¹⁰⁹ Burge, T. (1993:470-471).

¹¹⁰ Burge, T. (1993:471).

¹¹¹ In this way, sources that mimic rationality are ultimately grounded in rational sources, for they are construed by rational agents. See: Burge, T. (1993:472).

rational sources are *prima facie* sources of truth. The intelligible presentation-as-true of a proposition indicates that the content came about from a rational source. Since the testimony comes from a source of truth, one is *a priori prima facie* entitled to accept it as true.

There is one major concern that is yet to be tackled, however. Even if we accept all of this, one can still ask why it is that one enjoys *prima facie* entitlement to accept testimonies from rational sources, when there are circumstances where lying and deceiving is rational for the speaker. To clear this concern, Burge argues that, absent special information, in the form of defeaters about the context of the speaker, neutrality or even doubt, is a «rationally unnatural attitude toward an interlocutor's presentation of something as true»¹¹². To support this claim, Burge appeals to necessary teleological aspects of reason. One of reason's primary function, according to Burge, is to present truths, regardless of personal interests. As such, whenever a speaker lies, there is disunity between functions of reason. «It conflicts with one's reason's transpersonal function of presenting the truth, independently of special personal interests»¹¹³. To ground this, Burge provides two supporting arguments. First, through an analogy with memory and perception. He argues that reason's function of guiding, presenting, and promoting truth, is independent of individual interests. Epistemic reasons do not relativize to persons or desires. It is for this reason that self-deceived agents are considered irrational, even when said self-deception serves the agents personal interests. Take the case of memory or perception, for instance. One is still rationally entitled to rely on them, even if it conflicts with one's interests. This is why, Burge argues, unless there is reason to think the source as rationally disunified, sources of truth still entitle *prima facie* acceptance. A second argument appeals to communication. Testimonial exchange is a practice of communication, and communication requires the preservation of truth. If every utterance was a falsity, for instance, communication would be severely hindered. Due to this necessity, one is entitled to assume attempts of communication, namely presentation-as-true, to be *de facto* true. This is the general idea of Burge's argument.

Before proceeding, I want to clarify one last point. We have seen how Burge has construed an *a priori* account of testimonial entitlement, have seen why testimony enjoys such entitlement and how the source problem is addressed. But we have not seen under which circumstances a hearer is justified in taking the entitlement to believe speakers assertions. On

¹¹² Burge, T. (1993:474).

¹¹³ Burge, T. (1993:475).

this issue, Burge introduces two necessary conditions on the hearer. One, is that the hearer must be a “reliable linguistic understander”. This means that the hearer must be able to understand events with propositional intentional content in accordance with some pattern to discriminate the intended content and implicatures of the speaker. What Burge has in mind here is language pragmatics¹¹⁴. According to context, the hearer must be able to discriminate between presentation-as-true, questions, irony, sarcasm, etc. The second condition is that the hearer, through her linguistic capacity, must identify an utterance immediately - non-inferentially - intelligible as an instantiation of understood propositional intentional content. The restriction here is on the *immediately*, for Burge wants to avoid inferences and interpretation of the propositional content to preserve the *a priori* of the account.¹¹⁵ Now that we have a grasp on Burge’s *a priori* non-reductionist account, we can finally assess how the framework interacts with Lackey’s alien case.

4.5.1. Burge’s *a priori* non-reductionism against the alien case

As has been the case so far, I will attempt to reply to the alien case via two routes. First, I will attempt to reject the testimony, appealing to possible defeaters. Second, I will attempt to justify acceptance.

4.5.1.1. Defeating the case

Luckily for us, Burge is quite explicit on the conditions under which entitlement is defeated. First, one is warranted in testimonial acceptance when something intelligible is presented-as-true. This is our first condition. If the alien’s utterance fails to be either intelligible or presented-as-true, then entitlement is stripped. Second, the acceptance principle comes about due to testimony being *prima facie* received from rational sources. Given that rational sources are sources of truth, one is entitled to accept their testimonies. This is the second condition. If a defeater concerning the alien’s rationality is possible, then entitlement is also defeated. A third possible defeater might come about due to defeaters concerning the rational support of the utterance, perhaps the alien is rationally disunified, failing to be a source of truth. A fourth and final defeater concerns the hearer. Burge introduced two necessary conditions, the hearer must be a reliable linguistic understander, and must identify an utterance immediately. If either condition fails, perhaps a case can be made to argue that

¹¹⁴ See, for instance: Grice, P. (1968/1989); Austin, J. L. (1962).

¹¹⁵ These conditions can be found on: Burge, T. (1998:17).

the hearer acquired an unjustified belief. These are the possible defeaters available given Burge's framework. I will tackle each in turn.

Let's start with the beginning. Is the alien's utterance presented-as-true, and is it intelligible to George? Let's go back to the alien case. In it, Lackey states:

«[S]he [the alien] turns to him and immediately says in what sounds like English that she had oranges for breakfast. Without hesitation, George forms the corresponding belief. It turns out that the alien does, in fact, communicate in English, she did have oranges for breakfast, and she is a reliable testifier, both in general and in this particular instance.»¹¹⁶

From this description, I believe it to be quite intuitive that the alien's utterance was, in fact, intelligible to George, the hearer. After all, he did form the corresponding belief and he did so immediately, without hesitation. Now, Lackey states, additionally, that «George is not only a properly functioning recipient of testimony, but he is also situated in an environment that is suitable for the reception of reliable reports»¹¹⁷. I'll take it that George, being a reliable recipient, the alien a reliable testifier, and the immediate belief formation by George, to indicate that the utterance was successfully intelligible. This point is, I think, sufficient to dismiss the fourth possible route to form a defeater. After all, George formed the belief immediately and appears to be, even according to Lackey's description, a reliable linguistic understander. George, as such, must be taken as satisfying both of Burge's hearer conditions, blocking the fourth, last route. Now, what about presentation-as-true? Does the alien utter her sentence presenting it as true? Granted, only the alien knows exactly what the intended purpose of the utterance was, perhaps she merely happened to look at George while rehearsing out loud what she wanted to say to her alien brethren, or what the character of a novel said in a dramatic moment, a kind of signature catchphrase. I find this reasoning doubtful. The alien appeared to be asserting something, and appeared to be directing said assertion to George, which formed the corresponding belief. The alien is, additionally, a reliable testifier, so it seems reasonable that she understands how and when to present something as true. Just as it seems reasonable to assume that George picks out said occasions reliably, for he as well is a competent receptor of testimonies. Without anything concrete that might point to a different kind of utterance, one must take the utterance to be sincere, and to be a presentation-as-true of its propositional content. In the absence of said counterevidence, presentation-as-true is the rational, justified,

¹¹⁶ Lackey, J. (2008:184-185). Straight brackets added by me for clarification.

¹¹⁷ Lackey, J. (2008:185).

assumption. I'll take it that this route is unsuccessful, taking care of the first and last routes. Two more are still standing.

The second route attempts to target the rationality of the speaker. If the speaker is not a rational source, then one is not entitled to accept propositional content of the speaker's say-so. To what feature of the alien, or its utterance, could one appeal to for this purpose? It seems that the only possibility would be to argue that rationality is taken to be, as far as our background information goes, a feature unique to humans. The alien, not being human, would be likely not rational, and therefore, not a rational source. There are two issues with this reasoning. Firstly, appealing to background information in this way, as it should be clear by now, ultimately endorses Faulkner's reductionism. Secondly, remember that Burge's account is *a priori*. It makes no mention of "humans" when assessing testimonial entitlement. Additionally, Burge argues that intelligibility is an *a priori prima facie* mark of rationality. I have already shown that the alien's utterance is intelligible to the hearer, so it's not just the case that one enjoys entitlement to assume rationality, one is even justified (in Burge's strict sense) to attribute rationality to the alien, taking her to be a rational source. Note, however, that this justification does not endorse a requirement for positive reasons. The acceptance is done immediately and non-inferentially. One is entitled in testimonial acceptance. Positive reasons merely overdetermine the hearer's justified acceptance. Without anything to push the possibility of irrationality, this route is equally fruitless.

The third, and only possibility left, is an attempt at appealing to rational disunity on the alien. If arguing for non-rationality is off the table, perhaps arguing for an instance of irrationality, in the form of disunity, might do the trick. Remember that, for Burge, reason's primary function is to be a guide to truth. A rationally disunified agent is one where self-interests take precedence, undermining reason's primary function. If one could appeal to possible alien's self-interests at the time of the utterance, then one could undermine entitlement. In order to do so, we ought to establish the kind of self-interest that could motivate the alien's utterance: "I ate oranges for breakfast". I want to argue for two kinds of self-interests that might prompt rational disunity in a speaker: pragmatic and hedonistic considerations.

Pragmatic considerations are quite intuitive. If a speaker believes there might be some sufficient gain by asserting *p*, then the speaker will be motivated to assert that *p*, regardless of whether the speaker believes or knows that *p*. So, the question now is: what could the alien

get by asserting that she had oranges for breakfast? Presumably, not much. Maybe she intended to make George, or humans, believe that aliens are able to eat oranges when, in reality, orange juice is the only way they can be harmed. By making such an assertion, humans would not think to use oranges as weapons. Of course, this is a very farfetched kind of reasoning, so much so that I believe it to be uncontroversial when I say one ought to have much stronger evidence to support such a claim than to simply believe that the alien, as a matter of fact, ate oranges for breakfast. There might be more plausible pragmatic reasons to motivate such an assertion, but I doubt any of them would be more or equally plausible as the hypothesis that the alien did eat oranges for breakfast and testified truthfully.

The other kind of self-interest are hedonistic ones. An example should prove useful here. Imagine that I am a joker and take a lot of joy and pleasure from successfully making you believe a silly “fact”. Let’s say that I assert to you that there is a fairly unknown rule which states: if the Catholic Church goes to war, the current Pope must take charge of the troops.¹¹⁸ Imagine, additionally, that you form the corresponding belief. Upon learning that my lie was successful, I mock you gleefully saying that I was joking. My successful lie was quite pleasurable, and it brightened my day. Now, for hedonistic self-interests the assertion need not be false, the speaker just need not believe it; it must be insincere. The purpose of the assertion is the feeling of achievement, mischief, joy, or what have you, of successfully prompting the belief in the hearer. Could one argue that something like this is plausible in the alien case? There are two issues here. First, there is no evidence to support this kind of self-interest. Honesty is still the presumed default. Second, the alien does know she had oranges for breakfast. Asserting it cannot be a case of rational disunity in this sense, for a necessary condition is that the speaker does not believe the content of the assertion. Given that the alien *knows*, then she also believes it.

To sum up. I have proposed four different ways to argue for a defeater. First, by denying either that the assertion was intelligible or presented-as-true. Second, by posing a defeater toward the alien’s rationality. Third, appealing to rational disunity. And fourth, by denying hearer conditions of reliable linguistic understander and immediate utterance identification. I argued that if any of these were successful, then a defeater could be argued for, enabling a proponent of Burge’s non-reductionism to reject the alien’s testimony.

¹¹⁸ Hopefully this is false. But regardless of the truth value, I don’t believe it, hence the example satisfies the conditions established.

However, none of them were successful. The first possibility fails for the utterance was both presented-as-true and intelligible. Additionally, both the alien and George are reliable and successful in doing their part in the testimonial exchange, which undermines route four as well. The second route lacked motivation. The only thing one could appeal to is background information regarding the uniqueness of human rationality, but again, this would bring about Faulkner's reductionism. The third, remaining route, is equally flawed. Neither pragmatic nor hedonistic considerations were plausible enough given the default assumption of honesty. As such, Burge's, like the previous accounts, is unable to provide a defeater to the alien case, enabling rejection.

4.5.1.2. Justifying Acceptance

To justify acceptance, one needs to undermine Lackey's skeptical concerns. To do this, it's important to remember first, how, and why, Burge justifies *a priori prima facie* entitlement, and second, how Lackey introduces the skeptical concerns. Burge's account grants *prima facie* entitlement to accept testimonies for they are intelligible and presented-as-true. Intelligibility is a mark of rationality, entitling one to judge the source of an intelligible presented-as-true utterance to have a rational source. Rational sources, in turn, due to possessing reason, are taken to be *prima facie* reliable, for a primary function of reason is to be a guide to truth. Rational sources, then, absent defeaters, are taken to be sources of truth. Lackey's skeptical concerns, in turn, are twofold. One concerning speakers' reliability, for the alien, both as a species/community and individual, might be pathological liars, or be in a state of what we would consider psychosis. If these concerns were to be true, then one would be clearly irrational in accepting a testimony from such source. The other kind of skeptical concern tackles the propositional content of the assertion. Lackey introduces the *Twenglish* language, a language superficially indistinguishable from English which has their propositional content to be quite different from what it would be if the assertion was uttered in English. Can the picture established by Burge undermine these concerns?

Let's tackle one concern at the time, starting with speaker reliability. As we have seen, the mere act of testifying is sufficient to warrant rationality to the speaker. Given that a speaker is rational, the default assumption is one of honesty and truthfulness. One needs substantial evidence to the contrary to undermine this assumption. So, it is not the case that Burge needs to provide reasons to dismiss the skeptical concerns regarding reliability, but it is Lackey that needs to warrant her concerns. And towards this end, there is nothing that might

put the default assumption into question. For remember, Burge's account is independent of empirical or statistical considerations. Here's Burge:

«The Acceptance Principle is not a statistical point about people's tending to tell the truth more often than not. Falsehoods might conceivably outnumber truths in a society. The principle is also not a point about innateness, though Reid's claim that a disposition to acceptance is innate seems to me correct. The principle is about entitlement, not psychological origin.»¹¹⁹

&

«Just as the Acceptance Principle does not assume that truth is in a statistical majority, the justification of the Principle does not assume that most people are rational. We could learn empirically that most people are crazy or that all people have deeply irrational tendencies-not just in their performance but in their basic capacities. Human beings clearly do have some rational entitlements and competencies, even though we have found that they are surprisingly irrational in certain tasks. The justification presupposes that there is a conceptual relation between intelligibility and rational entitlement or justification, between having and articulating propositional attitudes and having rational competencies.»¹²⁰

The acceptance principle and its justification do not hinge on our beliefs regarding human testifiers. They hinge on rationality and its connection to being a source of truth. If one buys into Burge's account, then Lackey's skeptical concerns seem nonsensical. Why would the *possibility* that the alien is a pathological liar make testimonial acceptance unjustified? There is nothing, as Lackey concedes, to push positively nor negatively toward alien reliability. Given the information available, namely the intelligible presentation-as-true of the alien's testimony, acceptance is rightly prescribed.

What about the *Twenglish* possibility? Even if we grant that reliance on the alien's say-so is warranted, one can still wonder about how to interpret or understand the alien's utterances. Namely, whether to understand it as English or *Twenglish*. Luckily for us, Burge has said something relevant for our purposes here:

«Once we are in a position to understand, we are entitled to the following presumption apriori, other things equal: We understand what we seem to understand. Or rather, other things equal, we need not use a distinction between understanding and seeming to understand. We

¹¹⁹ Burge, T. (1993:468).

¹²⁰ Burge, T. (1993:473-474).

need not take what we hear as an object of interpretation, unless grounds for doubt arise. Only then do we shift from content preservation to interpretation.»¹²¹

Burge argues that we need not interpret the speaker. We simply understand what she utters. Absent situations where there is doubt regarding the information shared and the preservation of the content, that is, doubt regarding understanding, the default position stands. Understanding is presumed until something goes wrong.¹²² So again, the burden to prove justified acceptance does not fall under Burge, it is Lackey that needs to show that there are reasons to doubt successful understanding. Mere skeptical concerns regarding parallel language, do not, I argue, substantiate a claim of misunderstanding.

Burge's account drastically changes the dialectics surrounding the alien case. Given that entitlement is granted *a priori*, regardless of statistical or empirical considerations, Lackey's skeptical concerns seem weirdly out of place. Proponents of Burge's account can simply disregard the concerns raised by Lackey. Her charges of irrationality and unjustified acceptance seem unwarranted when compared to the degree of *prima facie* entitlement to accept testimonies. To make a parallel with perception, it would be the same as the sceptic raising the evil demon or the brain-in-the-vat concerns, urging us to dismiss our perceptually acquired beliefs. One is entitled to those beliefs, even if one is unable to reject the skeptical concerns.¹²³ Burge, by consequence, can reply to Lackey's case by claiming that her charges are unfounded, one is entitled to accept the alien's testimony and there is nothing in the scenario that might put such entitlement into question. Justified acceptance is the way out. Granted, such a reply will most likely be lackluster to Lackey and her proponents, but it is one way out of her case that proponents of Burge's account, I think, would happily endorse, preserving non-reductionist intuitions.

4.6. Diagnosing the issue

Jennifer Lackey's alien case is the strongest objection to non-reductionism in the epistemology of testimony. It tackles non-reductionist's second thesis, that absence of negative evidence is sufficient for justified testimonial acceptance. She attempts to falsify this thesis by introducing a counter-case, one where one is unjustified and irrational in accepting the testimony, despite the absence of defeaters. It is irrational, Lackey argues, because there is

¹²¹ Burge, T. (1993:488).

¹²² Burge, T. (1993: footnote 25).

¹²³ On the issue of skeptical concerns towards perception, see: Burge, T. (2020).

a total absence of positive evidence to support testimonial acceptance. By introducing skeptical concerns, she attempts to show that positive evidence is, after all, necessary to justify testimonial acceptance.

In order to assess the success of such a counter case, I have reviewed Perrine's broad reply to the case. Broad for it is a reply available to any non-reductionist account. I have argued that it ultimately fails, for the asymmetric appeal to background information is either *ad hoc* or, by attempting to justify the asymmetry, falls under reductionism. Facing this result, I have abandoned the attempt to provide a broad reply, replacing this strategy by replying to the case from the point of view of each non-reductionist account. I have attempted to do so from the point of view of Mona Simion's, Sanford Goldberg's, Peter Graham's, and Tyler Burge's account. I have attempted two ways to reply to the case. By introducing a defeater, justifying testimonial rejection; or, by providing reasons to dismiss Lackey's skeptical concerns, preserving justified acceptance despite the lack of positive evidence. Either of these strategies is sufficient to undermine the alien case as a counter case to non-reductionism.

Simion's Testimonial Contractarianism has failed on both venues. It is unable to dismiss Lackey's skeptical concerns, for one would need to provide some evidence as to why one would be justified in assuming that the alien would be a member of the relevant social contract. Appeals to defeaters fail as well, for one would need to provide evidence towards the alien not being a member of the social contract, which would require an appeal to background information, taking us to reductionism. The alternative, to assume the alien *qua* alien to not be a member to formulate a defeater, would be an *ad hoc* reply. The only route Simion can take towards contract membership is an agnostic one, but that seems insufficient to justify testimonial acceptance, especially when faced with Lackey's concerns.

Goldberg's account faces a similar challenge. Given that expectations, which justify testimonial acceptance, are grounded in empirical data, one is unable to use the lack of background information to reject the alien's testimony, for that would be conceding to the need of positive evidence. The alternative would be to take expectations to be a default, applying equally to the alien and justifying acceptance. However, this route fails, for this kind of default expectation seems unwarranted. There is no argument nor empirical data to suggest such hopeful *de re* reliance. Without proper evidence, in the form of background information, expectations seem nothing more than wishful thinking, which has no justificatory power.

Goldberg's account fails to pose a defeater and fails to dismiss skeptical concerns. His available replies are either *ad hoc* and unintuitive or fall under Faulkner's reductionism.

Graham's functionalism can pose defeaters either through comprehension-with-filtering, or thorough no-function fulfilment. The former fails for there is no negative evidence to be picked out by comprehension. The latter fails for it can only come about due to defeaters regarding normal conditions or normal functioning. By lack of background information, one is unwarranted in assumptions regarding alien's normal functioning or normal conditions. This being so, there is no defeater to be appealed to. Attempts to justify acceptance would need to appeal to normal conditions and normal functioning. But again, by lack of background information, assuming such normal conditions and functioning seems unwarranted. As such, Graham's account faces a similar conclusion to Simion's. By lack of background information, be it positive or negative, the best one can do is to be agnostic. But that is insufficient to justify acceptance. Graham's account too is unable to reply to the alien case.

Finally, Burge's *a priori* account. I have argued that due to the account providing *a priori prima facie* entitlement, by absence of negative reasons, one is unable to dismiss the alien's testimony. Acceptance is mandatory. However, unlike previous accounts, by establishing a default entitlement, one need not provide reasons to dismiss Lackey's skeptical concerns. By instantiating entitlement in *a priori* terms, the dialectics of the challenge change. It's not Burge that must undermine the skeptical concerns, it is Lackey that is required to justify the concerns. However, by absence of negative evidence, appealing to skeptical concerns seems unwarranted. If this is the case, then one can disregard the skeptical concerns without needing to engage with them, just like one dismisses the skeptical concerns in cases of perceptual knowledge. One is entitled to believe intelligible presentation-as-true, for that is a sign of rationality. Reason, being a source of truth, grants us *prima facie* entitlement to accept speaker's say-so. Without actual defeaters, this entitlement is not defeated. Skeptical concerns, like in perceptual cases, aren't strong enough to defeat default *prima facie* entitlement. Justified acceptance is the way to go.

What to make of this? What do Perrine's reply, Simion's, Goldberg's, and Graham's accounts have in common, that Burge's lacks? Clearly, the answer is an appeal to background information. The way former accounts reply to the source problem, are ultimately grounded on background information, which is empirical and contingent. For this reason, such accounts

are *a posteriori*. The alien, being outside the range of background information, falls outside the warranted grounds, where neither acceptance nor rejection seem reasonable in a non-reductionist setting. This is what the alien case picks out. A tension between non-reductionist's thesis of lack of defeaters as sufficient to justify testimonial acceptance, and an appeal to background information. It's this appeal that ultimately brings forth Faulkner's reductionism, undermining the accounts. Burge's, however, makes no such appeal. The account is purely abstract, establishing entitlement *a priori*. Due to the nature of this entitlement, skeptical concerns seem unwarranted, enabling justified acceptance, and preserving the non-reductionist thesis that absence of negative evidence suffices for justified acceptance.

This is the main take away from the alien case. A proper non-reductionist account of testimony *must* be *a priori*. Appeals to background information, being *a posteriori*, ultimately undermine the account. The alien case pushes non-reductionism in a new direction. If non-reductionism is to survive, an *a priori* shift must take place, moving away from background information, to *a priori* entitlement.

Now, proponents of *a posteriori* non-reductionism might object to this conclusion. One could argue that *a posteriori* non-reductionism is not concerned with testimony *simpliciter* but is restricted to human-testimony. As such, non-reductionist accounts explain why the absence of defeaters is sufficient to accept human testimony, but not aliens. It doesn't matter that non-reductionism is unable to provide a satisfactory answer to the alien case, because alien testimony goes beyond the relevant domain of non-reductionism. If one is to endorse this, then establishing an *a priori* non-reductionist account of testimony seems non-essential.

I want to reject such a view. Non-reductionism is presented as a normative account of testimony. Nowhere, as far as I am aware, is made a restriction regarding the scope of testimony. Backtracking when faced with the alien case, making the restriction to human testimony, seems a cheap way to save *a posteriori* non-reductionism. More worrisome, is that making such a scope restriction is the same as endorsing reductionism as a normative account of testimony unrestricted. Notice that restricting the no-defeater sufficiency thesis is the same as applying Faulkner's reductionism to testimony across the board:

1. Testimony *t* is testimony of human-type;
2. Human-type testimony has been established to be credible;

3. Therefore, testimony *t* is credible.

If this is the picture that *a posteriori* non-reductionism is forced to take, then I don't see the reason to endorse non-reductionism in the first place. An account such as Fricker (2015; 2017)'s seems much more intuitive. Positive reasons are *always* required, but one frequently has positive reasons when faced with human testimony due to background information. Such a view seems identical to what *a posteriori* non-reductionists are forced to endorse, but it works as a universal normative account of testimony. Fricker's account can justify testimonial acceptance in between aliens, if they have the respective positive evidence, making sense of testimony across the board. Restricted non-reductionism seems unable to do so, for every claim made is restricted to human's testimonial exchanges.

A posteriori non-reductionism thus faces a dilemma. Either argue that the account is a normative account of *testimony*, in which case it is unable to reply to the alien case; or restrict itself to a normative account of *human* testimony. If one is to endorse the latter alternative, then it seems the framework loses all its appeal. As a normative account of *testimony*, it seems to be endorsing Faulkner's reductionism, and as a normative account of *human* testimony, it pales in simplicity and explanatory power to a reductionist framework such as Fricker's. There is no reason to endorse such a view.

Facing this scenario, the choice is obvious. Non-reductionists ought to make a shift to *a priori* accounts. *A posteriori* accounts are unable to reply to Lackey's case or are forced to make an arbitrary restriction which undermines the appeal and explanatory power of such accounts. *A priori* accounts, on the other hand, can reply to Lackey's case, preserving justified acceptance, and aren't required to make any restriction, preserving the status of being a normative account of *testimony*. Jennifer Lackey's counter case is as destructive as it is due to appeals to background information which grounds the justificatory power of *a posteriori* accounts. The only choice available for proponents of non-reductionism, is to go *a priori*. A shift is necessary.

5. Solution: the *a priori* shift

So far, I have argued that not only is Burge's *a priori* account able to successfully reply to Lackey's alien case, but that his is the only available account able to do so. I have argued that this result is due to Burge's account being *a priori*, unlike alternative accounts which appeal, one way or another, to background information, thus being *a posteriori*.

Burge's, being the only *a priori* account available in the literature, is, then, the only non-reductionist account available. Though this result is better than having no account available, it should worry non-reductionists. After all, the success of Burge's account is only, so far, regarding the alien case. No considerations have been made about the internal coherence or plausibility of the account. As such, the success or likelihood of non-reductionism, hinges on how well Burge's account survives scrutiny. This is the goal of this chapter, to assess if, and how, Burge's *a priori* account can reply to existing objections.

For this purpose, I will look at three kinds of objections made against it in the literature, the first, tackling the *a priori* of the account (Christensen, D. & Kornblith, H. (1997)). Second, tackling the function of reason (Simion, M. (2020)). And third, tackling Burge's usage of the concept of reason and the usefulness and explanatory success of posing an *a priori* account of testimony (Fricker, E. (2006)).

5.1. Christensen & Kornblith against Burge's *a priori*

Christensen and Kornblith (1997) argue against the *a priori* of Burge's account via two routes. One through perception, the second through memory. The main idea is that Burge fails to show that perception does not play a justificatory role in cases of testimony, thus making testimonial acceptance never justified *a priori*. In the case of memory, they argue that memory, likewise, does not play a merely conservative role, influencing justification. If they are right, justified acceptance of testimonies cannot have *a priori* entitlement. Thankfully, Burge (1997) has published a reply paper. Therefore, my job here won't be to defend Burge's view against their objections, but to assess whether Burge's defense is successful.

In arguing for the enabling non-justificatory role of perception in beliefs acquired through testimony, Burge makes an analogy with perception in cases of mathematical beliefs. Burge argues that mathematical knowledge can be acquired *a priori*. Nonetheless, frequently mathematical beliefs, namely in geometry, are only formed when faced with perception of physical properties which trigger the belief formation. The role of perception in such cases is not justificatory, but merely facilitatory, enabling a better understanding of concepts that were already in use: «It is probably necessary that one perceive symbolic expressions to accept logical axioms – just as it is necessary to perceive words in interlocution»¹²⁴. Perception would thus be

¹²⁴ Burge, T. (1993:480).

required to justify belief, despite lacking justificatory force in one's justification. Justification comes about, exclusively, from one's understanding and reason.

Christensen and Kornblith take this to be problematic when applied to testimony. They formulate a case to force a disanalogy between perception in mathematical beliefs and understanding interlocutions. They attempt to show that whereas in the mathematical case, justification comes from the propositional content, triggered by perception; in the testimony cases, the propositional content does not grant such justification.

«Ben's justification for believing this claim would depend on more than simply understanding the relevant proposition. The justification clearly relies, in at least one natural sense, on Mary's act of assertion. Entertaining the proposition that there is a stop sign on the corner does not, by itself, give anyone grounds for believing that it is true.»¹²⁵

To justify this assessment, they claim that if the proposition had merely popped up into his head, or if he had hallucinated it, he would not be justified in accepting such proposition. Whereas if it were instead the proofs for the Pythagorean theorem, he would be justified. This difference, they argue, showcases that in the case of testimony, what grants justification is not understanding, but perception playing a justificatory role.

Burge replies by rejecting the conclusion. The entitlement is *prima facie*, and therefore, can be defeated. By learning that one has not understood a genuine assertion, say, by hallucinating it, such realization overrides the *prima facie* entitlement to believe the assertion. Defeating an entitlement, *a posteriori*, through empirical evidence, does not show that the entitlement is established *a posteriori*. All it does is show that understanding depends on perception, but that is something that Burge recognizes off the bat.

«[E]vidence that one has not perceived anything will be evidence that one has not understood an assertion. Having such evidence can override one's default entitlements. But this fact has no tendency to show that the entitlements do not derive their justificational force purely from understanding, but must draw justificational force from perception as well. It shows only that the entitlements are empirically defeasible, which I already maintain.»¹²⁶

¹²⁵ Christensen, D. & Kornblith, H. (1997:4).

¹²⁶ Burge, T. (1997:27).

Christensen and Kornblith's objection thus miss the mark. The nature of the defeating evidence does not influence the source of entitlement, failing to show that perception has a justificatory role in testimonial knowledge. Burge's defense is thus successful.¹²⁷

The authors' second objection concern the preservative role of memory. Burge argues that preservative memory, memory that «preserves thoughts and their assertive mode, and does not contribute new elements in a justification, or add to justificational force»¹²⁸, is, akin to perception, necessary to enable testimonial knowledge, but does not play a justificatory role, preserving the *a priori* entitlement of testimonial knowledge. Use of preservative memory is thus different from substantive memory, which plays a justificatory role. This kind of memory is present when a given belief is justified, at least in part, by reference to memory. «Substantive memory is an element in a justification; it imports subject matter or objects into reasoning»¹²⁹. This kind of memory, though it may be present in some testimonial exchanges, justifying acceptance, is not necessary, having no bearing in the *a priori* entitlement. The difference thus hinges on their role. Preservative memory is necessary in any reasoning that occurs in time. Substantive memory, however, whether it plays a role or not, depends on the argument, its premises, and the psychology of the agent. This is the distinction that Christensen and Kornblith put into question. Whether explicit invocation and implicit reliance of memory is able to ground the distinction between *a priori* and *a posteriori*.¹³⁰

They provide two reasons to doubt the distinction as the “border of the *a priori*”. First, they argue that this distinction has unacceptable consequences when applied in contexts other than mathematical proofs. The second issue is that even purely preservative memory

¹²⁷ The authors do offer an additional objection concerning perception. The case is put forward as an analogy between testimonial knowledge and standard perceptual knowledge, acquired by looking at a clock. The goal of the case is to show that Burge's disanalogy fails to show a relevant difference in the role of perception in the two cases, failing, additionally, to draw a distinction between *a priori* and *a posteriori* justification. However, I will not address it here for two reasons. First, I don't consider the objection as interesting as the one described above; and secondly, Burge - I believe -, successfully replies to it. Since I don't have much to add to the discussion, I advise the reader to read the original, if interested. For the objection see: Christensen, D. & Kornblith, H. (1997:5-11); for the reply, see: Burge, T. (1997:31-36).

¹²⁸ Burge, T. (1997:37).

¹²⁹ Burge, T. (1993:465).

¹³⁰ See: Christensen, D. & Kornblith, H. (1997:12).

plays a justificatory role in memory-based beliefs, for it introduces empirical elements into justification.

The first, comes about by introducing a case where the agent has done a proof and learned the corresponding mathematical fact. Nowadays, the agent has forgotten not only the proof, but how she acquired the belief. The belief is thus supported only through preservative memory. Christensen and Kornblith, now ask whether the belief is, or not, justified *a priori*. They argue that if one denies *a priori* justification, it would be inconsistent with Burge's view that implicit reliance on preservative memory has no toll on *a priority*; therefore, this must be mistaken. One is thus forced to assume *a priori* justification in such cases. Here is where the issue is raised. Supposing that the original belief was acquired in an *a posteriori* way, by forgetting how the belief was formed, one is now *a priori* warranted in holding it, even if the original was formed *a posteriori*. This result might not seem that problematic in mathematical cases, but the reasoning works just the same for any belief. Say, beliefs about the number of planets in the solar system, her address, who the president is, etc. By forgetting the original formulation and its justification, holding the beliefs due to preservative memory, all of them would be held and justified *a priori*. This result is absurd.

The authors' offer a solution. Perhaps, whether the justification of memory-based beliefs is *a priori* or not, hinges on historical factors. If the acquired belief was originally justified *a priori*, then even if the belief formation was forgotten, the *a priority* is preserved through memory. If the belief's justification was *a posteriori*, then the *a posteriori* justification is preserved.¹³¹ This solution, however, is short lived. The authors argue that this reply suffers negative consequences:

«For it entails that two people could remember the same fact – indeed, they could share all the same present beliefs, reasons, cognitive abilities, and memories – and one of them be justified *a priori* and the other justified *a posteriori*, because one of them had done the proof 20 years ago, while the other had taken a student's word for it after self-consciously considering the possibility that he was lying. *A priori* justification would then be a function neither of the believer's present reasons for belief nor, indeed, of anything else about the believer's present cognitive states and capacities.»¹³²

¹³¹ See: Christensen, D. & Kornblith, H. (1997:14).

¹³² Christensen, D. & Kornblith, H. (1997:14).

This concludes their first objection concerning the role of memory. Though they grant that the argument is not knockdown, especially if one is to endorse externalism regarding justification, like Burge, and myself, do. The issue is nonetheless addressed by Burge.

Burge claims that the authors' objection comes about due to a mischaracterization of his account. Burge does not claim, as Christensen and Kornblith assume, that preservative and substantive memory differ in explicit invoking memory as a premise and implicitly relying on memory, to mark the *a priori* from the *a posteriori* in justification. Substantive and preservative memory differ due to their function, not on how explicit or implicit they are, nor do they mark the split between *a priori* and *a posteriori*. Here's Burge on the difference between the two:

«Preservative memory preserves thoughts and their assertive mode, and does not contribute new elements in a justification, or add to justificational force. Substantive memory refers to events or objects and provides elements in a justification, whether or not the justification is explicit (or conscious)». ¹³³

For this reason, Christensen's and Kornblith's claim that «the distinction between substantive and purely preservative memory can mark the border of the *a priori*»¹³⁴ is a mischaracterization of Burge's view. The objection has no pull. The attempted solution presented by the authors, however, does go in the right direction. Whether a memory-based belief is, or not, *a priori*, hinges on the historical factors of its acquisition. If the acquisition was due to *a posteriori* justification, then the belief is preserved as justified *a posteriori*. If the belief was justified *a priori*, then that is the justification preserved. Whether the agent remembers or not the kind of justification that was in place at the time of acquisition, bears no importance as to the nature of justification. Burge, like me, sees no issue with this picture. Preservative memory preserves the kind of warrant in play, whether it was entitlement or justification (in Burge's restricted sense). One's belief cannot become warranted by forgetting how it was acquired. Preservative memory has no justificational force.¹³⁵

Christensen and Kornblith offer another strategy to undermine Burge's usage of preservative memory. They appeal to advancements in cognitive psychology¹³⁶ regarding

¹³³ Burge, T. (1993:37).

¹³⁴ Christensen, D. & Kornblith, H. (1997:13).

¹³⁵ See: Burge, T. (1997:39-40).

¹³⁶ See: Klatzky, R. (1975).

human memory to reject the “purely preservative view”. They argue that this kind of view takes memory to be a passive recording device. When working properly, events are recorded just as they happened, and can be consulted at future time. A faulty memory, in turn, is one whose “recordings” are inaccurate. The correct picture is an active one, where background concerns, interests, and beliefs, affect memory’s function.¹³⁷

The point they want to make is that background beliefs, given the active function of memory, condition and incorporate themselves into our memories, shaping them. This is why, they argue, «our memories tend to cohere with our background beliefs»¹³⁸. The issue here, is that part of those background beliefs, are constituted by empirical beliefs. This being the case, it follows that empirical beliefs inferentially inform our memories, grating empirical justificatory power to memory. Justifications that rely on memory are, thus, empirically based, being *a posteriori*.

To illustrate this point, Christensen and Kornblith introduce an interesting case¹³⁹. It goes as follows: Sophie believes that Vikings came to North America before Columbus. Her belief was adopted on good reasons, being justified. Nowadays, however, she does not remember how she formed the belief, though she still believes it. Her belief is held exclusively due to preservative memory. There is a caveat in the case, however. It is stated that the only reason Sophie remembers holding that belief, is because it is inferentially connected with other things Sophie believes regarding Vikings. Beliefs that were equally well justified at the time of acquisition. If she did not hold the other Viking beliefs, she would have forgotten that Vikings came to North America before Columbus. A second case is put forward to contrast with this one. Sam also believes that Vikings came to North America before Columbus, and like Sophie, the belief was adopted on good reasons, but he has forgotten how he came about to such a belief, holding the belief due to being inferentially integrated with other Viking related beliefs. The difference between Sam and Sophie, is that the related Viking beliefs Sam holds, unlike Sophie’s, are irrational. They were acquired from an incredibly biased and unreliable book. Now, the book makes no mention regarding who arrived first in North America, Vikings, or Columbus. However, were it not for the inferential

¹³⁷ See: Christensen, D. & Kornblith, H. (1997:15).

¹³⁸ Christensen, D. & Kornblith, H. (1997:15).

¹³⁹ Christensen, D. & Kornblith, H. (1997:16-17).

connections with the book, said belief would be long forgotten. The authors claim that whilst Sophie belief seems to be justified, Sam's does not.

«It is precisely because Sam's remembering that the Vikings preceded Columbus is preserved through integration with his unjustified beliefs about the Vikings that we judge his memory-based belief that the Vikings preceded Columbus to be unjustified as well. Even in the cases involving the purely preservative function of memory, the justificatory status of the beliefs a memory causally depends on must be recognized as playing a role in determining the justificatory status of beliefs based on that memory.»¹⁴⁰

Simplifying the picture, due to the belief being inferentially connected to unjustified beliefs, the previous good justificational grounds get “corroded”, so to speak. Epistemically bad connections, negatively impact the justificatory grounds of every so connected belief. This justificatory difference in Sophie's and Sam's case, shows - they argue - that memory's dependence on inferential integration has epistemic relevance. Empirical considerations influence preservative memory, thus making the justificatory status of said beliefs *a posteriori*. «The justificatory power of a memory cannot, in the end, be divorced from the justificatory status of the beliefs whose inferential connections sustain it».¹⁴¹

Burge accepts Christensen's and Kornblith's appeal to cognitive psychology regarding memory functions but denies that such recognition harms his account of epistemic warrant. He argues that background empirical beliefs do mix and reinforce our *a priori* beliefs, but that does not replace *a priori* justification with *a posteriori*. One can have both. A belief can be *a priori* warranted and be overjustified due to empirical *a posteriori* justification. As long as there is *one* line of justification or entitlement whose justificational force is without sense experience, then said belief is justified *a priori*, even if there are other lines of justification that do appeal to sense experience.

Addressing Sophie's and Sam's case, Burge claims, again, that there is a misunderstanding of his view. Any belief adopted for good reasons, like Sam's and Sophie's belief that Vikings preceded Columbus in reaching North America, will be empirically justified and the belief preserved by memory, will remain empirically warranted. But what about the justification of beliefs inferentially integrated? Does said integration affect the justification? Here's Burge on the issue:

¹⁴⁰ Christensen, D. & Kornblith, H. (1997:17).

¹⁴¹ Christensen, D. & Kornblith, H. (1997:18).

«The prima facie entitlement seems to be present all the way through because of the individual's memory connection to an epistemically warranted acquisition of the belief. Of course, if there remains no causal memory-connection to the period of the original warrant, and the only preservative memory relations are to times when the belief was supported by irrational grounds, then one has no entitlement preserved from one's original warrant. Where one has a prima facie entitlement deriving from a warrant preserved by preservative memory and one also has inferential empirical justifications (good or bad), one has two sources of warrant. These should be epistemically distinguished, regardless of how complex and overgrown the psychological situation is. One source might be a priori and the other empirical. I see no difficulty here.»¹⁴²

As such, Burge shows that Christensen and Kornblith's objections simply do not hold against Burge's view. Mostly because they misconstrue Burge's account regarding the distinction between preservative and substantive memory and misconstrue his account of entitlement. The fact that memory is active and mixes different lines of justification does not burden the *a priori* lines of justification one is entitled to hold. Appeals to memory, or perception, despite the authors attempt, fail to hinder Burge's *a priori* account.

5.2. Simion and diverging functions

Simion (2020) reconstructs Burge's argument, and criticizes premise 6), stating that it lacks support. Additionally, this premise has two issues, which amount to her objections. The first, concerning reason's dual function. The second, concerning reason's reliability in producing true beliefs. These two concerns point to a problem in Burge's view in how one can address the source problem, for even if one grants that reason has the function of generating true content, it does not follow that it does so reliably enough so as to warrant an *a priori* reply to the source problem.

Here's Simion's reconstruction:

«(1) One is prima facie entitled to believe based on intelligible presentations-as-true if they reliably indicate true content in normal conditions.

(2) Intelligible propositional expressions indicate generation by a source endowed with rational abilities.

(3) Intelligible presentations-as-true are intelligible propositional expressions.

¹⁴² Burge, T. (1997:42-43).

(4) Intelligible presentations-as-true indicate generation by a source endowed with rational abilities (from 2 and 3).

(5) Rational abilities have the function of generating true contents.

(6) If something X has the function of phi-ing, then X reliably phi-s in normal conditions.

(7) Rational abilities reliably generate true content in normal conditions (from 5 and 6).

(8) Intelligible presentations-as-true indicate generation by a source that reliably generates true content in normal conditions (from 4 and 6).

(9) One is prima facie entitled to believe based on intelligible presentations-as-true (from 1 and 8).»¹⁴³

Simion's first criticism is that producing true beliefs - what she dubs theoretical function -, is not reason's only function. Reason's second function is practical, or pragmatic. She argues that this latter function, if not reason's primary function, is at least on par with the theoretical. If this assessment is correct, she argues, it's doubtful that when the functions collide, the theoretical function will take precedence. The contrary seems more likely, for it is the theoretical function that seems to complement the practical function, at least in most scenarios.

«[T]he practical function takes precedence over the theoretical one, for reasons pertaining to species preservation. This is just another way to phrase the Source Problem: given reason's dual function, theoretical and practical, why should we believe the former will take precedence over the latter?»¹⁴⁴

However, as Simion, states, Burge is aware of this issue. She reconstructs Burge's reply to it as follows: First, by stating that reason's theoretical function is transpersonal, independent of agent's personal interests. Second, that in normal conditions, dual functions will not conflict with one another, thus producing both true contents, satisfying theoretical function, and doing so in a prudentially beneficial way, satisfying practical function.

¹⁴³ Simion, M. (2020:10-11). Bold added by me to highlight the problematic premise, according to Simion.

¹⁴⁴ Simion, M. (2020:11).

Simion's concern is that this does not seem to hold for all functional traits, for conflicting functions are common in nature. She advances an example related to sexual organ's dual function of excretion and reproduction. Both can't be satisfied simultaneously. If dual function satisfaction is not the norm, then, Simion argues:

«[I]t seems highly unlikely that the Burge derivation will go through on *apriori* grounds: it looks as though, when a trait has two functions, it need not be the case that, in normal conditions, the two do not come in conflict. To the contrary, conflict might be the default state.»¹⁴⁵

If conflict amongst functions is the norm, and reason has dual functions, then it seems that the correct default assumption is not one of fulfilment, but of conflict between them. If this is the case, then one is not entitled to accept intelligible presentation-as-true.

On this critique, Simion seems to be going too fast. She states that function incompatibility is the natural norm, meaning that the default assumption in dual, or more functions, is that of competition between them as to which gets satisfied, for when one is satisfied, the remaining are not. She provides two examples, one related to the elbow, one related to sexual organs, and she generalizes these examples to a function conflict norm. I want to reject this conclusion. Take, for instance, - an oversimplified - function of our legs. Let us grant that our legs have a dual function of running and jumping. Both can't be satisfied simultaneously, but this does not mean that they are conflicting with one another. When you want to jump higher or further, you ought to run to enable such jump. The dual functions work in collaboration, not in conflict. I want to make the same case for the functions of reason. Practical reason is only useful when informed with true propositional content. One's reason can only act accordingly to the environment when reason's theoretical function is satisfied. This is the only connection required for Burge's account. Reason's main function is to form true beliefs, for that is what enables the practical function. Even when lying is the action prescribed by practical reason, such lying must be informed by the theoretical. One can only lie when one knows what the truth is. Granted, this is not enough to dismiss Simion's concerns regarding the source problem, but it should ease her first critique. The possibility of reason's dual function does not bear on the satisfaction of either. If this is correct, then the default assumption, being sensitive to negative evidence, will be one of theoretical function

¹⁴⁵ Simion, M. (2020:12).

fulfilment. Absent defeaters, one is *prima facie* entitled to accept presentations-as-true to be true.

The second concern target's function reliability, what she calls: "the universality of the reliability assumption". This means that, as Graham (2018) points out, even if reason has the function of producing true beliefs, it does not follow that it does so reliably, or, at least, reliably *enough*. Even if we concede that reason satisfies its theoretical function often enough, most likely, the "enough" will be established by biological thresholds, not epistemic. Here's Simion:

«[I]f that is the case, plausibly, in the case of rationality too, the relevant threshold setter will be biological, prudential rather than epistemic: our rational capacities will generate enough true beliefs to keep us alive and well. Of course, the two may coincide. But then again, they might not. It might be that, for mere survival, much less in the way of ratio of true to false beliefs is needed than for epistemic entitlement. True beliefs about the whereabouts of food and approaching predators need figure in the relevant set. Arguably, true beliefs about the year of the fall of Constantinople, or about the highest peak in the Carpathians need not. In any case, the point is that it is not clear – and even less plausibly available on a priori grounds – that the derivation gives us the relevant, epistemic 'enough' when it comes to true beliefs generated by our rational capacities. If that is the case, though, when it comes to epistemic entitlement, Burge misses support for (1'): if the 'enough' at stake need not be epistemic, one will not be *prima facie* epistemically entitled to believe based on intelligible presentations-as-true if they reliably enough indicate true content in normal conditions. Rather, the entitlement at stake will be non-epistemic.»¹⁴⁶

This is worrisome. Even if we grant that reason's function is satisfied often enough so as to be deemed reliable, this reliability must be understood in a biological, evolutionary sense. Reliable enough, in this sense, is taken to be enough to survive and reproduce. But clearly, that is not the sense we want when assessing epistemic reliability. The standard for sufficiency, for the "enough", must be higher. Of course, we know that reason, at least human's, satisfies this epistemic threshold, but the only reason we are able to know this is due to empirical evidence. We know it *a posteriori*. If the only thing we can appeal to dismiss Simion's critique is empirical evidence, then it seems we are unwarranted in assuming epistemic reliability *a priori*. Background evidence is required after all.

¹⁴⁶ Simion, M. (2020:13).

I believe Simion is correct. Reason's minimum threshold must be instantiated in terms of biological/evolutionary reliability. However, this is only so when talking about reason in a vacuum. Biological reason, in terms proposed by Simion, is deficient in explaining testimony as a phenomenon. If all one can assume in terms of truth function for reason is established in reliable enough for survival, how do you explain the existence of testimonial practice? That seems to be a phenomenon over and above the capacities of reason where its only purpose is to be reliable for survival's sake. The mere existence of testimony is evidence that reason does not respond to a mere survival function, but to something more epistemically advanced. How do we justify the existence of testimony in evolutionary terms? Presumably, because communication is beneficial to a group's survival. Now, there are multiple kinds of communication. All social animals communicate in one way or another, but complex language is restricted to humans. And likewise, testimony, as far as we are aware, is restricted to humans. Language complexity is intrinsically linked with testimony. It is an enabler so to speak. Without a complex enough language, testimony as a social practice wouldn't be beneficial. If all one wants to communicate is the location of food, for instance, one could simply point in its direction, that is all reason requires, in communicative terms, to boost survival to a sufficiently high enough level. The development of complex language can only be justified given the assumption that the communicative content is more abstract and complex. Additionally, to explain the existence of testimonial practices, and language, it is necessary that a high degree of utterances made are made truthfully and reliably. Otherwise, one's species would not benefit from testimonial practices. This point is widely recognized in the literature. For the phenomena of testimony to persist, there must be some gain in maintaining the practice, at least *some* degree of reliability is a necessary feature of testimonial practice.¹⁴⁷

A further point of interest is given by Burling, R. (2005:84), he defines five cognitive prerequisites for language, all of which are cognitive: a rich conceptual system, joint attention, pattern finding, imitation and usage of motivated signs. Without the conjunction of these five cognitive abilities, one would not even be able to learn a language, much less use it. Given that testimony requires language, we can infer from intelligible presentations as

¹⁴⁷ For proponents of such a view, see, for example: Millikan, R. (1984, 2004, 2005); Coady, C. A. J. (1992); Sperber, D. (2001); Graham, P. (2010).

true, that the speaker is a language user. If the speaker is a language user, then we can infer a high cognitive capacity, for that is what is required to be a language user.

Taking this all together, we can infer that a speaker, through the act of testifying something, is a cognitively robust individual. This minimum cognitive requirement, both to be able to learn and use a language, allied by the necessary abstract usages of language to justify the evolutionary tool of developing such a complex kind of communication, are enough, I believe, to justify the assumption that the function fulfillment of reason in such an individual is not for mere survival, but follows a reliable epistemic function. Although I talked a lot about inferences, I am not assuming that the hearer must do, consciously or unconsciously these inferences, nor I am requiring that the hearer ought to be capable of doing them. These steps serve the explanatory purpose of justifying *a priori* entitlement. Entitlement which warrants the default presumption that the speaker is a reliable source of truth.

This result should not be surprising. Testimony is, after all, an epistemic activity. If one is engaging in epistemic activities, then I believe it to be reasonable to assume, absent defeaters, that the individual can satisfy the corresponding epistemic requirements of such an activity. Simion's objection, regardless of the success of my reply, is not enough to falsify an *a priori* account. It does present a very interesting challenge, but I believe I have provided a sufficient degree of evidence to support a default assumption of the relevant reliable epistemic function fulfilment required to warrant an entitlement to accept testimonies.

5.3. Fricker and usefulness concerns

Elizabeth Fricker (2006) offers two main objections to Burge's account. One concerning the use of reason in his argumentation, whilst the second showcases some doubts regarding the usefulness of posing an *a priori* account of testimony. I will go over each one of them, replying along the way.

Fricker starts her paper by stating that the plausibility of the Acceptance Principle, hinges on the truth of PropAPT: «if something is asserted to be so, then it is so.»¹⁴⁸ However, this is clearly false. Speakers are sometimes wrong about what they assert, or simply lie, falsifying PropAPT. Burge, of course, is aware of this, which is why he argues that one is *prima facie* entitled to accept testimonies, for despite the falsity of PropAPT, testimonies are

¹⁴⁸ Fricker, E. (2006:74).

still reliable sources of information. Fricker's worry, as such, is with the justification provided by Burge, namely, towards (ii) and (iii) of her reconstructions of Burge's argument. Here is her reconstruction:

«If you in some manner receive and apprehend what seems to be a message that M, an attempt at assertoric communication of information, then:

- (i) you can presume it really is such a message; hence
- (ii) you can presume the sender is rational; hence
- (iii) you can presume she is a "source of truth".

(...) These three entitled presumptions underwrite the principle: APT In the absence of defeaters, you can just believe what seems to be conveyed in an apparent attempt at assertoric communication.»¹⁴⁹

Fricker's concern is towards the linkage from «an intentional speech act, to: its source is a rational agent; and then from: source is a rational agent, to: source is a "source of truth"». ¹⁵⁰ She argues that the *a priori* linkage between intelligible speech act and rational sources and being rational to a source of truth is too weak to warrant a claim for knowledge when accepting testimonies on the absence of positive evidence. Additionally, she states that Burge's argument hinges on a fallacy, for he makes use of two senses of rationality. The first, thin sense, underwriting (ii), when making the inference from an event being an intentional speech act of assertion, to the agent is rational. And the second, which requires a different, stronger, kind of rationality to warrant (iii), the inference from rational agent to source of truth. She writes:

«what is wrong with the argument offered by Burge to underwrite (i)–(iii), is that it involves an equivocation on the notion of rationality. The thin sense of rationality in terms of which the linkage underwriting (ii) holds, is nowhere near strong enough to sustain the linkage needed to underwrite (iii). Rational = subject of propositional attitudes falls far short of the much richer notion of: rational = wholly impartial and disinterested speaker only of truth.»¹⁵¹

Now, regardless of whether Burge's sense of rationality in (ii) is insufficient to warrant (iii), Fricker's requirement of "wholly impartial and disinterested speaker only of truth" is unnecessarily demanding. All Burge needs for his account to work, is a sense of

¹⁴⁹ Fricker, E. (2006:75-76).

¹⁵⁰ Fricker, E. (2006:76).

¹⁵¹ Fricker, E. (2006:78).

rationality that prescribes a propensity for truth. And in this regard, he makes a plausible case, for remember that rational sources, due to their reason, have a propensity to acquire true beliefs, for that is reason's function. This characterization is sufficient to warrant both (ii) and (iii). Fricker is too demanding on her rationality requirements. A weaker notion, provided by Burge, suffices to warrant his argument for the Acceptance Principle.

Fricker's second concern relates to the relevancy of endorsing the Acceptance Principle. She argues that the principle only plays a significant role if one is sufficiently often enough in a position where one has no positive empirical evidence to trust the speaker's testimony. Here's Fricker:

«If the typical position of a mature adult faced with a piece of testimony is that she has in her cognitive background, and brings to bear, a wealth of empirical knowledge relevant to the assessment of that testimony, then she does not need recourse to a default principle licensing its acceptance in the absence of such relevant empirical information.»¹⁵²

The idea, as such, is that if we are rarely in a position where we lack positive evidence towards the speaker's say-so, then posing an *a priori* entitlement to accept it, is irrelevant. This scenario is one where Fricker has argued extensively for¹⁵³, stating that mature adults do typically have such positive evidence to accept testimonies due to background information. If this is the case, then the need to postulate an "on-no-evidence entitlement", seems superfluous, having little to no significance in contributing to our understanding of everyday testimony. Such a view «is largely irrelevant»¹⁵⁴.

Fricker's critique is twofold. First, that we are never, or at least, not in a sufficient number of occasions where we lack positive evidence to accept testimonies. This means that having entitlement is irrelevant, for we have justification that supersedes it. Second, she argues that Burge's account, due to being *a priori*, makes no appeals to «more embedded, contextual features of our human psychology, individual and social»¹⁵⁵. This is problematic for it fails to illuminate us about *human* testimonial practices. A proper epistemology of testimony, according to Fricker:

¹⁵² Fricker, E. (2006:81).

¹⁵³ See: Fricker, E. (2002; 2017).

¹⁵⁴ Fricker, E. (2006:82).

¹⁵⁵ Fricker, E. (2006:82).

«must start from the actual social institutions of language-use, and the social norms and conventions governing human linguistic exchange; not from an utterly abstract conception of the commingling of rational minds».¹⁵⁶

Burge's account, due to being abstract and *a priori*, fails to tackle the important aspects of *human* testimony. This, according to Fricker, is the goal of epistemology of testimony. For these reasons, Burge's account establishes a superseded entitlement, due to adults' background information, and is uninteresting for failing to account for the specifics of human testimonial usage.

Regarding Fricker's first complaint, that entitlement is obsolete due to being superseded by background information, it comes about due to a misunderstanding of how entitlement works. *A priori* entitlement cannot be replaced. It can be defeated by negative evidence, but the initial positive assessment of any given source still holds despite defeaters. It just so happens that in cases of defeat, the negative evidence is stronger than the positive status provided by the entitlement. An example might be useful. Take belief a) that enjoys *a priori* entitlement, and belief b) that does not. For illustrative purposes¹⁵⁷, let's say that entitlement gives +2 epistemic points, given that each point corresponds to a credence state of barely justified, justified, strongly justified. Let us grant, then, that belief a) is justified due to entitlement and belief b), lacking entitlement, has 0 points. We thus lack warrant to accept b), we ought to be agnostic towards it. Now suppose that a defeater of equal strength towards both beliefs is found, having -2 epistemic points, making acceptance unjustified both for a) and b). The updated epistemic values are, respectively, 0 and -2. Due to initial *a priori* entitlement for a), we ought to be agnostic towards it, whereas in b), rejection seems mandatory. This illustrates how, despite a belief's warrant being defeated, entitlement still holds its justificatory power. The reverse case, where instead of having a defeater we have additional positive evidence, is analogous. Whereas belief a) had +2 epistemic score, adding empirical evidence of, say, +3, belief a) has now +5 epistemic justificatory value. It is not the case that the +3 replaces the +2; different lines of justification are cumulative.

¹⁵⁶ Fricker, E. (2006:82).

¹⁵⁷ This is not intended as a proper view of credence or justification, so I am not committed to such view. I just find it useful to describe it in such a way to more clearly illustrate the role played by entitlement and how it relates to other sources of justification be it negative or positive.

Remember that Burge, when assessing the possible empirical evidence provided by memory, in addressing Christensen & Kornblith's objection, stated that the initial line of justification provided by entitlement is independent of any additional justificatory line. Justificatory lines do not replace each other, they accumulate. This is exactly what happens when one provides a cumulative argument. The purpose is to provide multiple justificatory lines in order to boost the overall plausibility of whatever thesis one is endorsing.

As such, even if we concede to Fricker that adult's often have background information that justifies testimonial acceptance, it still does not show that entitlement is superseded nor that it has no justificatory power, being superfluous. *A priori* entitlement still plays a justificatory role, no matter the existence or absence of empirical evidence, be it positive or negative. Fricker thus fails to show the irrelevancy of *a priori* entitlement in testimonial cases.¹⁵⁸

Her second objection concerns the applicability of an abstract, *a priori* testimonial account such as Burge's, in an understanding or illuminating way towards the purported goal of epistemology of testimony: human testimonial usage.

I want to reject this claim. First, the primary purpose of epistemology of testimony is not to understand *human* testimony. Second, that an abstract account of testimony is illuminating in understanding human testimonial practice. I'll start with the former.

When one attempts to formulate criteria and definitions regarding intelligence or knowledge, for instance, both pertaining to epistemology, one does not do so in a restricted manner, concerning exclusively with human knowledge, or human intelligence. On the contrary. A common critique in epistemology of AI, when attempting to define intelligence, is that working definitions are frequently too anthropocentric¹⁵⁹. It is one thing to inform our attempts with the empirical data we have, which, coincidentally, is mostly restricted to human's; but the goal is to achieve a global definition that can be applied across species. I want to make the same case towards the epistemology of testimony. Restricting accounts to human testimonial usage is to anthropomorphize testimony as a phenomenon. Understanding testimony in abstract is as useful as understanding intelligence in abstract. It is useful both as an intellectual endeavor in and of itself, and as a pathway to understand kinds of testimony

¹⁵⁸ For other possible replies, see: Graham, P. (2006).

¹⁵⁹ See, for instance: Wang, P. (2008; 2019).

such as humans. By understanding the phenomena, one can more easily grasp what makes human testimony unique. The intricacies of human testimony can only be fully grasped when a background to compare it against is fully established. Restricting the domain of epistemology of testimony to the human practice seems an unnecessary constrain, being more harmful than beneficial. There is more than room enough for both endeavors, with potential to complement one another. Fricker's critique fails to make a case of inadequacy towards Burge's account.

Fricker's last concern about the illuminating capacities of an abstract account have been briefly addressed, but I shall develop it further now. In what ways does understanding testimony in abstract help us understand human testimonial practices? First, it needs to be made explicit that human testimony falls under the category of testimony. Therefore, necessarily, understanding the phenomena of testimony, even in its most abstract form, will have some explanatory power in understanding human testimony. Just like understanding about biology helps us understand about the human body. Just like understanding about geology helps us understand about the Earth. Just like understanding about physics helps us understand our galaxy or solar system. Understanding the whole always has explanatory relevancy in understanding the particular. Second, attempts at understanding testimony in its broad sense is not a deterrent in attempts to understand *human* testimony. Both can, and should, coexist. Finally, understanding the full picture of human testimony and its usage, requires understanding of both the particular and the global phenomena. Only by understanding how the phenomena works in abstract, can we understand if, how and why human testimony differs from the general framework. Understanding the global phenomena allows us to identify exceptions. Take the courtroom for example. The epistemic standards for accepting testimony in such cases is not the norm, it's the exception. If one focused exclusively in testimony in its most formal setting, one would conflate the exception with the norm. In everyday usage, testimony does not have the same epistemic requirements to justify acceptance as in the courtroom. In the courtroom positive reasons are required so as to not consider guilty someone innocent. Outside the courtroom and similar environments, the Acceptance Principle is the norm and is applied to testimony across the board. Only by understanding the norm, are we able to understand the exceptions.

For this reason, the endeavor of establishing an abstract *a priori* account of testimony, unlike Fricker's concerns, is, in and of itself, a promising epistemic and intellectual endeavor. Additionally, it helps us understand the intricacies and details of human testimonial usage.

Finally, pursuing a restricted account of testimony, human testimony, is not the primary purpose of epistemology of testimony. Though it is, of course, a substantial and necessary endeavor, it is not the exclusive endeavor available nor is it the *most* important. Focusing our efforts on the abstract account, like Burge, does not strip away the relevancy of focusing on the particular. Both approaches can, and should, coexist, for they complement one another.

5.4. Overview

Throughout this section, I have showcased multiple objections to Burge's *a priori* account of testimony. The objections tackled the justificatory force of perception and memory as undermining *a priori* entitlement (Christensen, D. & Kornblith, H. (1997)); the function of reason and its reliability as a source of truth (Simion, M. 2020); and concerns regarding the usefulness and explanatory power of an abstract account (Fricker, E. 2006). I have argued that none of the objections made are able to prove the falsity of the account, nor are they unanswerable. I have attempted to reply to each of them, or, when available, to assess the plausibility of Burge's reply to the objection. With my replies I attempted to show that objections either come about due to a misunderstanding or mischaracterization of Burge's account, or provide interesting challenges to the view, which, nonetheless, fail to be destructive.

Given my assessment of the view and the existing objections, I argue that Burge's *a priori* non-reductionist account of testimony is not only plausible, being coherent and able to reply to objections, but the only account available to proponents of non-reductionism. I have argued that Burge's *a priori* account is the only available non-reductionist account that is able to successfully reply to Lackey's alien case, whilst preserving non-reductionist intuitions.

I do grant, nonetheless, that Burge's account lacks intuitive appeal, but that is not sufficient ground to reject the view. Lackey's alien case provides a unique challenge to non-reductionist accounts, providing a defeating case to *a posteriori* accounts which appeal to background information. Burge's account thus points us in the right direction. Though I am sympathetic to his view, non-reductionists are not forced to accept it. What I mean is that all Lackey's case shows is the need of an *a priori* account. Coincidentally, Burge's is the only one available. The conclusion is not that Burge's is *the* non-reductionist account, but that his is the *kind* of account one should endorse. The success of non-reductionism as a framework in the epistemology of testimony is thus not reducible to Burge's success. Even if one rejects his

account, different *a priori* accounts are possible. As long as one *a priori* account is plausible, non-reductionism can survive.

The conclusion of assessing the alien case and different accounts of non-reductionism is that a shift must be made. To move away from *a posteriori* accounts and appeals to background information, to an abstract *a priori* account. Burge's is an example of such a view, pointing and taking the first step forward in the right direction, a step that should inspire new accounts to come.

Conclusion

Throughout this dissertation, I have introduced the main frameworks in the epistemology of testimony: reductionism, non-reductionism, and hybrid accounts. I have then showcased how Lackey's alien case poses a challenge to non-reductionist accounts of testimony. By introducing a case where, in the absence of negative evidence, one is still unjustified and irrational in accepting the speaker's testimony.

I have argued that Perrine's reply to the case fails for the appeal to background information is unwarrantedly asymmetrical. Attempts to correct the asymmetry ultimately give the wrong verdict to the case, reject the testimony in an *ad hoc* fashion, or ultimately endorse reductionism. For these reasons, I have argued that Perrine's reply fails.

Following this result, I have attempted to reply to the case from the point of view of each of the main non-reductionist accounts. Mona Simion's, Sanford Goldberg's, Peter Graham's, and Tyler Burge's. I have shown that all the accounts - except Burge's -, akin to Perrine's reply, fail in providing a satisfactory reply to the case. I have diagnosed the issue to be with the way such accounts respond to the source problem. All of them, one way or another, appeal to background information. Background information concerns empirical information, which is contingent, needing to be acquired *a posteriori*. Accounts that appeal to background information ultimately fall victim of Faulkner's reductionism. This is so because the sufficiency of negative evidence that non-reductionism endorses is ultimately grounded on empirical facts concerning human testimony and human's social norms. The alien case is troublesome for those accounts for the alien falls outside human's available background information, losing entitlement to be believed. Tyler Burge's account, however, makes no such appeals. Since his account is abstract of empirical considerations, background information is off the picture. Entitlement is applied, *a priori*, regardless of the speaker's

species, being able to undermine Lackey's skeptical concerns, preserving justified acceptance.

I have thus argued that the alien case is as destructive as it is because *a posteriori* non-reductionist accounts, accounts that appeal to background information, are structurally flawed, fitting into Faulkner's reductionism. The success of Burge's account points to the necessity of *a priori* non-reductionism. That is, for non-reductionism to be a consistent account of testimony, then it must be *a priori*. Given that only Burge's account fits the bill, the immediate success of non-reductionism hinges on the success of Burge's account.

To assess whether Burge's account is plausible, I have introduced multiple objections, targeting all aspects of Burge's account. The possibility of being *a priori*, the function of reason as a source of truth, and the explanatory power of an abstract account of testimony. I have argued that the objections fail to show that the account is implausible. A reply to the objections is available, thus warranting non-reductionism as a plausible and consistent account of testimony.

I have then tackled a possible objection that proponents of *a posteriori* non-reductionism might endorse. The possibility to restrict non-reductionism as an account of *human* testimony. I have argued that such restriction is the same as endorsing reductionism, for restricting the no-defeater sufficiency thesis to human testimony, fits into Faulkner's reductionism, for the only reasons the lack of defeaters is sufficient, is because human-type testimony has been established to be credible, unlike non-human testimony. *A posteriori* non-reductionism then is forced to either remain unrestricted but fail to reply to Lackey's alien case or restrict itself to being an account of *human* testimony, but ultimately endorsing reductionism in doing so. I have thus concluded that if non-reductionism is to survive, then it must do so as an *a priori* account. *A posteriori* non-reductionism is structurally flawed and must be abandoned.

Although Burge's account is the only *a priori* account available. It does not mean that it is the only possible one. What I have argued is not that one must endorse Burge's account, but that one must adopt an *a priori* account of non-reductionism. Burge's is simply a step forward, pointing the way for new non-reductionist accounts. As such, even if one is unsympathetic to Burge's view, one could still endorse a different *a priori* non-reductionist account.

Given the conclusion, and the present lack of options in *a priori* non-reductionism, for future work I want to develop such an account. I have also assumed, without much argument, that non-reductionism is the way to go. For future work I would like to develop my defense of non-reductionism as the desirable framework in the epistemology of testimony. These are a few options available for future research which, unfortunately, I was unable to properly tackle in this dissertation.

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