8-2014

Everyone Knew He Did It, But He Was Not Condemned! Knowledge and Knowledge Attributions in Legal Contexts

Danny Marrero Avendano
University of Arkansas, Fayetteville

Everyone Knew He Did It, But He Was Not Condemned!
Knowledge and Knowledge Attributions in Legal Contexts

Everyone Knew He Did It, But He Was Not Condemned!
Knowledge and Knowledge Attributions in Legal Contexts

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in Philosophy

by

Danny Marrero Avendano
Pontificia Universidad Javeriana
Bachelor's Degree in Philosophy, 2000
Universidad Nacional de Colombia
Masters of Laws, 2006
Universidad de los Andes
Bachelor's Degree in Law, 2010
University of Arkansas
Master of Arts in Philosophy, 2011

August 2014
University of Arkansas

This dissertation is approved for recommendation to the Graduate Council.

_____
Dr. Jack Lyons
Dissertation Director

_____
Dr. Thomas Senor
Committee Member

_____
Dr. Barry Ward
Committee Member

Abstract

Theorizing about knowledge attributions has revolved almost exclusively around the problem of skepticism and knowledge attributions in everyday conversations. Sutton (2007), however, points out that Epistemic Contextualism seems to settle another field: "[i]t is sometimes suggested that courtroom proceedings provide a context that shows the context-sensitivity of knowledge ascription truth-conditions" (p. 87). This dissertation is devoted to the evaluation of this contextualist suggestion (*CS*). Epistemic Contextualism claims that the correctness of knowledge attributions depends on the salience of error possibilities or the practical states of a knowledge attributor's context of utterance. I interpret *CS* implies that the context of utterance is the context of litigation in which a knowledge attributor is at the moment of the attribution. A counter-example for *CS* is criminal cases in which the conviction of the defendant would meet the epistemic standards of all the knowledge attributors within and without the courtroom (e.g., police officers, the prosecutor, the judge, the jury). However, conviction is not guaranteed because it does not meet the invariant epistemic standards of proof fixed for conviction. My working hypothesis is that knowledge attributions have the purpose of stating that a cognitive agenda has been properly closed. Given that the object of knowledge attributions is cognitive agendas, the conditions under which knowledge is properly attributed depends on the nature of the cognitive agenda claimed to have been properly closed or advanced. This explains why, in the aforementioned cases, conviction cannot be secure, even if everyone within and without the court knows that the defendant is guilty. One of the closure conditions of conviction is the finding of the facts supporting conviction beyond a reasonable doubt. Knowledge is not properly attributed to the trier of facts, and conviction is not secured, until such requirement is satisfied. My working hypothesis is also confirmed studying the function of

knowledge attributions in our cognitive economies instantiated by criminal investigations, in the attributions of testimonial knowledge as the most important source of legal knowledge, in the attributions of specialized knowledge by the trial judge, and in the attributions of group knowledge to juries and multi-agent courts.

Dedication

To my wife. Without her love, patience, and encouragement, this dissertation would not be possible.

Table of Contents

Introduction

In the last two decades, epistemic theorizing about knowledge attributions and denials has revolved almost exclusively around the problem of skepticism and knowledge attributions in everyday conversations.[1] Sutton (2007), however, points out that Epistemic Contextualism seems to settle another field: "[i]t is sometimes suggested that courtroom proceedings provide a context that shows the context-sensitivity of knowledge ascription truth-conditions" (p. 87). This dissertation is devoted to the evaluation of this contextualist suggestion (*CS*). Perhaps, I can make sense of *CS* with the main standards of proof governing civil and criminal law, namely, preponderance of evidence and beyond a reasonable doubt. As I interpret them, *standards of proof* are epistemic thresholds that legal agents are supposed to cross to obtain positive epistemic evaluations. Since "legal deliberations are not private beliefs but public judgments of guilt and innocence, liability or non-liability" (Goldman, 1999, p. 272), legal agents go through such epistemic thresholds publicly justifying their beliefs. The question is, what is the minimum threshold to cross in order to obtain a positive epistemic evaluation? A popular answer is that legal epistemic thresholds vary from one context of litigation to another. For instance, Larry Laudan in *Truth, Error and Criminal Law: An Essay on Legal Epistemology* states that, "[i]n the civil law, that threshold is set at 50+ percent, or 'more likely than not.'" (2006, p. 64). In the criminal context, differently, "we set the bar of proof … higher than the preponderance of the evidence … because we think that falsely convicting the innocent is worse than falsely acquitting the guilty" (Laudan, 2006, p. 65). If this is right, the truth-conditions of knowledge attributions change from civil to criminal proceedings: the former are lower than the latter. Therefore, *CS* seems to be right.

---

[1] Following the relevant literature, I will use the expression "attribution" and "ascription" interchangeably.

I have different motivations to adopt legal contexts as a field of philosophical study for knowledge attributions. First, in legal proceedings, knowledge attributions and denials seem extremely volatile as it is shown by direct examinations and cross-examinations where skillful attorneys influence the fact-finder to change knowledge attributions for denials. Second, in recent debates, knowledge is not only attributed to individuals, but also to groups. So Goldman (2004) states: "In common parlance, certainly, organizations are treated as subjects for knowledge attribution. In the wake of 9/11, there has been much commentary on what the C.I.A. and the F.B.I. did or didn't know about terrorist plans before the event itself" (p. 12). Given that in legal proceedings both individuals (such as attorneys or witnesses) and groups (such as juries or tribunals) intervene, legal contexts provide a vantage point to study both sorts of knowledge attributions. Third, along with the discussions about knowledge attributions, contemporary epistemology is concerned with the different relations between knowledge and action (Fantl & McGrath, 2002; 2007; 2009; Hawthorne, 2004; Hawthorne & Stanley, 2008; Stanley, 2005). I want to explore these connections in one field where having or lacking knowledge has important practical consequences such as a verdict of conviction or acquittal. Finally, one of the main purposes of knowledge attributions is the evaluation of actions because we criticize and defend actions ascribing and denying knowledge. I submit that a natural scenario for these types or evaluations is the judgments of legal responsibility.

The main incentive to incorporate philosophical accounts of knowledge attributions to the field of law is legal security. In legal proceedings, verdicts are the consequence of two main elements, specifically, the knowledge of facts under litigation, and the legal material (e.g., status, legal precedents, canons of interpretations) interpreting such facts (Goldman, 1999, p. 273). Broadly speaking, if the evidence at trial leads to the knowledge of the facts legally relevant, and

there is a legal consequence for those facts, then a verdict should follow. As a result, there would be a justified expectation of a specific legal decision when it is possible to correctly attribute knowledge to the legal agent deciding. In this resides the importance of correctly attributing knowledge in legal contexts: they allow for the justified anticipation of legal decisions.

I want to be precise in that I will not focus on one specific legal system. Rather, I will understand legal proceedings as a general structure that defines roles, goals and actions to be performed in legal contexts. This methodological decision is inspired by John Rawls's (1955) differentiation between "justifying a practice and justifying a particular action falling under it" (p. 3). From his view, the following two questions asked by an inquisitive child to his father illustrate the point.

(1) "Why was *J* put in jail yesterday?"

(2) "Why do people put other people in jail?"

While the answer for (2) would justify the institution of punishment itself, the response for (1) would provide reasons for a specific penalty inflected on *J* through a specific criminal procedure. If Rawls is right, then it is possible to differentiate concepts such as the adversary process (i.e., a procedural structure where the handling of evidence is a responsibility of the parties under litigation rather than an official's obligation) from practices falling under it such as the American criminal procedure. I will devote this dissertation to concepts such as the former and not to specific applications such as the latter.

Chapter 1 evaluates *CS*. I am going to start by clarifying the main concepts and motivations for the problem of knowledge attributions. Given that the debate around knowledge attributions does not take place in legal contexts, I will reconstruct such debate as if it would have taken place in legal scenarios. From my perspective, the main approaches to knowledge

attributions, Epistemic Contextualism (*EC*) and Subject-Sensitive Invarianism (*SSI*), do not account properly for the practice of knowledge attributions in legal contexts. That is why I propose my agendivistic view. The word *agentive* refers to the performer, or agent, of an action. Given that my view is concerned with the agendas determining the actions agents are disposed to perform, I will name it *Agendivism*. Given that in Chapter 1 I present the philosophical debate anteceding this dissertation and the main concepts of my theory, this chapter sets up the rest of the dissertation.

Chapter 2 will be devoted to the problem of the function of knowledge attributions in our cognitive economies. First, I will reconstruct the most influential response to the problem of the function of knowledge attributions in our cognitive economies: Edward Craig's idea that the purpose of knowledge attributions is to flag approved informants (1990, p. 11). Second, I will study some counter examples and alternative accounts showing that it is possible to find knowledge attributions without approved informants, and approved informants without knowledge attributions. With this in mind, I will propose an agendivistic account of the function of knowledge attributions in our cognitive economies. Such account will be corroborated by the ways in which criminal investigators advance or close the agendas of their investigations, attributing knowledge to witnesses, victims, undercover agents, and any other collaborators.

Given that testimonial knowledge is one of the most important sources of knowledge in legal contexts, in Chapter 3, I will study the ways in which *EC* and *SSI* face the challenges posed by the dilemmas of epistemologies of testimony. Without being specific here, John Greco suggests that "[i]t can seem that any theory must make testimonial knowledge either too hard or too easy, and that therefore no adequate account of testimonial knowledge is possible" (forthcoming, p. 1). I will show that *EC* and *SSI* make testimonial knowledge too easy. That is,

they allow for incorrect knowledge attributions of testimonial knowledge. After this, I will provide an agendivistic account of testimonial knowledge dissolving the dilemmas of the epistemologies of testimony.

In Chapter 4, I will focus on a specific problem of knowledge attributions in legal contexts, namely, the problem of expert testimony and knowledge attributions. Broadly speaking, according to the American law of evidence, the jury can only listen to the testimony of an expert at trial once the trial judge has decided if the expert has the specialized knowledge required for the clarification of the matter at issue. The problem is that, *ex hypothesi*, the trial judge does not have specialized knowledge to properly attribute knowledge to an expert. I will start explaining the legal context from which this problem arises. Second, I will reconstruct and evaluate the main theories accounting for the problem of expert testimony and knowledge attributions: the Deference-Education Account by Ronald Allen (1993; 1994; 2012), and the Epistemic Legal Contextualism by Alani Golanski (2001). Finally, I will propose an agendivistic theory of knowledge attributions of specialized knowledge for legal contexts.

One important feature of knowledge ascriptions is that they attribute knowledge to individuals and to groups. The final chapter of my dissertation deals with two problems of group knowledge attributions in two legal groups. First, given the exclusionary rules of evidence, juries are supposed to exclude any irrelevant, potentially confusing, or illegally obtained evidence from their deliberations, but the jurors can individually take the excluded evidence into account. This could produce cases in which a jury is not epistemically justified in believing that *p*, but its individual jurors would be epistemically justified in believing that *p*. Second, groups using majoritarian procedures as a means to fix their collective beliefs, such as multi-agent courts, want to satisfy two conditions. On one hand, they want to be sensitive to the beliefs of their

members. On the other hand, they want their own sets of beliefs to be rational (List & Pettit, 2002, p. 91). However, these desiderata are not always achievable because the majoritarian rules do not necessarily preserve group rationality. The problem is how to preserve group rationality without sacrificing the beliefs of the court's members. My agendivistic view will also show its explanatory power for group knowledge attributions properly dealing with these cases.

Chapter 1: Knowledge Attributions in Legal Contexts

1. Introduction

I disagree with *CS*. To recall:

> *CS*: Courtroom proceedings provide a context that shows the context-sensitivity of knowledge ascription truth-conditions.

In this chapter, I will present my arguments against *CS*. I intend to accomplish three objectives. First, I am going to reconstruct the main intuitions about knowledge attributions as if they were raised in legal contexts. Second, I shall show that the main theories of knowledge attributions, namely, Epistemic Contextualism (*EC*) and Subject-Sensitive Invariantism (*SSI*), do not explain accurately knowledge attribution behaviors in legal proceedings. Finally, I aim to show that a theory centered on the agendas that agents try to close or advance is a better account of knowledge attributions than *EC* and *SSI*. The agenda I am going to advance in this chapter is the following. First, I will present the relevant contexts and the main motivations of the debate *EC* vs. *SSI*. Second, I will reconstruct *CS* as strongly as I can. Third, I will present a criticism against it along with a theory that accounts for knowledge and knowledge attributions in legal contexts better. Without more preamble, I will start clarifying the main concepts under debate.

2. Epistemic Contextualism Vs. Subject-Sensitive Invariantism: What Is All This About?

Given the increasing and complicated terminology around the problem of knowledge attributions, I want to start clarifying the relevant concepts and the main motivation for this debate. As I take it, there is a *knowledge attribution* when an agent, the attributor (*A*), asserts that another agent, the putative knower (*K*), knows that *p*. By the same token, there is a knowledge

denial when *A* asserts that *K* does not know that *p*. *The problem of knowledge attributions* is, then, whether *A* correctly asserts that *K* knows (or does not know) that *p*. Knowledge attributions and denials differ from other knowledge relations such as having or lacking knowledge, getting or not getting knowledge, detecting or not detecting knowledge, and so on. For this paper, it is important to differentiate the problem of knowledge attribution from the *problem of knowledge possession*, which is whether *K* knows that *p*. While the latter is a first-order knowledge relation, the former is a second-order (or meta-) knowledge relation. That is, the object of a knowledge attribution is a knowledge possession. In one sentence, the problem of knowledge attribution is not whether *K* knows that *p*, but under which conditions it is correct to assert that *K* knows that *p*.

For instance, imagine my wife and I taking a childbirth preparation class before having our first baby. One of the topics covered in that class was the importance of immunization for newborn babies. Jones, who was also taking the class, vehemently argued that we should not vaccinate our future babies because vaccines are promoted to generate profits for pharmaceuticals. Someone challenged him assuring that illnesses, such as polio, rubella or diphtheria were not produced by pharmaceutical companies. Jones agreed, but replied saying that children's immune systems could deal with most illnesses naturally. I thought this discussion was going to take forever, but luckily the class's instructor cordially invited Jones and his opponent to continue their conversation at another moment. Driving home after class, my wife and I got stuck in a traffic jam. Not having anything better to do, we talked about Jones's reasons against kids' immunizations. One of my assertions during that conversation was:

(1) Jones knows that polio is produced by a virus.

I thought that that was something everybody with an average level of education should know. My wife replied asserting:

(2) Jones does not know that polio is produced by a virus.

For her, (2) was the only way to explain Jones's extreme position. The problem of knowledge attributions is to assess assertions such as (1) and (2).

Traditional theories of knowledge (*TTK*) tackle the problem of knowledge attributions fixing a set of epistemic criteria that particular knowledge attributions must satisfy. These are the *traditional factors for knowledge* and include elements such as whether *K* believes that *p*, whether *p* is true, whether *K* has good evidence for *p*, the strength of *K*'s epistemic position, and so on. With this in mind, *TTK* establish three tenets for the evaluation of knowledge attributions.

Exclusivity: The correctness of knowledge attributions only depends on traditional factors for knowledge.

Incompatibility: Statements such as (1) and (2) cannot be correct at the same time if they refer to the same traditional conditions for knowledge.

Supervenience: If two putative knowers K_1 and K_2 satisfy the same traditional conditions for knowledge, then if it is right to attribute knowledge to K_1, it is right to attribute knowledge to K_2 as well.

For instance, having evidence is sometimes required for a correct knowledge attribution. This means, without referring to a specific evidentialist theory, that *A* correctly asserts that *K* knows that *p* when *K*'s evidence supports *p*. Practically, if Jones's evidence supports the claim that "polio is produced by a virus," then (1) is correct and (2) is incorrect. If the evidence condition does not hold, then (2) is correct and (1) is incorrect.

Some challenging theories suggest that *TTK* do not capture our intuitions about knowledge attributions in cases as the following.

> JONES
>
> Suppose we are interested in whether Jones, an ordinary non-medically trained person, has the general information that polio is caused by a virus. If his response to our question is that he remembers the [newspaper] reporting that Salk said it was, then this is good enough. He has performed adequately given the issue-context. But suppose the context is an examination for [Smith's] MD degree. Here we expect a lot more. If [Smith] simply said what Jones did, we would take him as being very deficient in knowledge. Thus, relative to one issue-context a person may be justified in believing *h,* but not justified relative to another context. (Annis, 1978, p. 215)

In JONES, statements such as (1) and (2) seem to be compatible. In quotidian conversations, the memory of having read a newspaper stating something true provides enough justification for our knowledge, therefore (1) is right. However, the same source of information is insufficient for specialized domains, in which case (2) is right, as well. Therefore, *Incompatibility* is wrong. Additionally, JONES shows that it is possible to attribute and deny knowledge to two different putative knowers, even when they satisfy the same epistemic conditions. Jones and Smith have the same evidence for *p*, but while it is correct to attribute knowledge to the non-medically trained person, it is incorrect to do it to the MD student. Consequently, *Supervenience* is false. Finally, these variations in knowledge attributions do not depend upon purely epistemic factors. In JONES, the difference of knowledge ascriptions is a consequence of the change between an ordinary situation to a specialized domain, and, according to *TTK*, that is not a traditional epistemic factor. Then, *Exclusivity* is defeated.

Shifty epistemologies claim to account better for these intuitions than *TTK*.[1] Broadly speaking, they allow for the consistency of statements such as (1) and (2) in cases like JONES because, for them, knowledge ascriptions not only vary due to modifications of the traditional

[1] I borrow this expression from (Fantl & McGrath, 2012, p. 55).

factors of knowledge, but also for the change of *non-traditional factors* such as salience of error possibilities and practical stakes. *EC* and *SSI* compete for being the best explanation for these contextual variations. I am going set up a general notion of these theories before presenting their relevant specificities. *EC* holds that the truth conditions of knowledge attributions and denials change according to the context in which these sentences are uttered. The reason for this is that the verb "to know" adopts different meanings according to the contexts in which this expression is used. In a non-trivial sense, "to know" is similar to adjectives such as "tall" or "flat." In a regular conversation, we properly assert that a person who is 6 feet is tall, but when we are talking about NBA players we do not rightly assert that that person is tall anymore. In this case, the context of use fixes the standards of height establishing when a person is correctly asserted to be tall: while 6 feet is enough to be a correct tallness attribution in normal contexts, it is not enough for an NBA player to be described as tall. The reason for this is that, for the attributor of tallness, different factors are salient in an everyday conversation and in a conversation about NBA players. Practically, while assessing the height of a group of regular people, someone who is 6 feet meets the standard of tallness for the evaluator, yet this very same person seems not to be tall anymore if what is under evaluation is a group of NBA players because the standard is more demanding in this context of use. To emphasize, from this view, the context of attribution does not affect height itself, but the standards under which it is attributed. By analogy, the context of use for "to know" fixes the standard of knowledge establishing the correctness of a knowledge attribution. For instance, in JONES, the evidence Jones has for *p* is enough to rightly attribute knowledge to him in an everyday conversation, but not in a specialized one. As in "tall," the reason for this is that what is salient for *A* is different in an everyday conversation and in the examination for an MD degree.

SSI, alternatively, denies that the meaning of the expression "to know" varies according to the context of use. This is why this view is *Invariantist*. It is "*Subject-Sensitive*" because, unlike *EC*, it locates the factors determining the correctness of a knowledge attribution in the subject, or putative knower, and not in the attributor. For example, in JONES, while the evidence held by Jones is enough for *p*, the evidence that Smith has is not enough. This is not because of the variations of meaning of "to know," but because of the higher practical stakes of the MD student taking his exam. In this case, it is expected that Smith, as the subject of the attribution, rules out error possibilities that are not salient for Jones. For instance, as an MD candidate, Smith must know that secondary sources of information, such as newspapers, could be wrong, or whether Salk's theory has been succeeded by another better account. This explains why, for *SSI*, it is right to attribute knowledge to Jones, but not to Smith.

Shifty epistemologies justify their views proposing *stakes-shifting cases*.[2] These are a pair of cases, usually identified as LOW and HIGH, in which the traditional factors for knowledge remain the same, but the non-traditional factors vary from one to the other. Specifically, Keith DeRose suggests a pair of bank cases where the strength of *K*'s epistemic position remains the same, but the practical interests at stake change (1992, pp. 913-914; 2009, pp. 1-2). Stewart Cohen designs an airport case (1999, p. 59) and Jeremy Fantl and Matthew McGrath a pair of train cases (2002, pp. 67-68) where *K*'s evidence for *p* does not change, but the salience of error possibilities vary. *EC* and *SSI* interpret these cases in two different and antagonistic ways. Below, I am going to present their interpretations pairing particular theories as they have been developed in relevant literature. The opposing accounts to be juxtaposed are Cohen's *EC* vs. John Hawthorne's *SSI* and DeRose's *EC* vs. Jason Stanley's *SSI*.

[2] This term was suggested by (Schaffer, 2006, p. 87).

The first two theories interpret Cohen's airport case.

> AIRPORT
>
> Mary and John are at the L.A. airport contemplating taking a certain flight to New York. They want to know whether the flight has a layover in Chicago. They overhear someone ask a passenger Smith if he knows whether the flight stops in Chicago. Smith looks at the flight itinerary he got from the travel agent and responds, "Yes I know it does stop in Chicago." It turns out that Mary and John have a very important business contact they have to make at the Chicago airport. Mary says, "How reliable is that itinerary? It could contain a misprint. They could have changed the schedule at the last minute." Mary and John agree that Smith doesn't really know that the plane will stop in Chicago. They decide to check with the airline agent. (Cohen, 1999, p. 58)

This case is designed to show that even though *K* has the same evidence for *p*, contextual factors such as the salience of error possibilities produces changes in knowledge attributions. Three elements are important for the competing interpretations of this case. First, Smith's self-attribution of knowledge is represented by the following proposition:

> (3) Smith knows that the flight stops in Chicago.

Second is Mary and John's denial of knowledge:

> (4) Smith does not know that the flight stops in Chicago.

Third, Smith's evidence for the belief that the flight stops in Chicago is the same: the information written in Smith's official flight itinerary.[3]

---

[3] Fantl and McGrath believe that in AIRPORT, it is not clear that Smith holds the same evidence that Mary and John had before talking to the airline agent (2002, p. 68, footnote 2). This inspires them to propose a new version of Cohen's case. I am not including this case in my presentation in this section because most of the main debates about knowledge attributions include Cohen's case. For future reference, I am quoting Fantl and McGrath's case below.

> TRAIN CASE LOW
> You're at Back Bay Station in Boston preparing to take the commuter rail to Providence. You're going to see friends. It will be a relaxing vacation. You've been in a rather boring conversation with a guy standing beside you. He, too, is going to visit friends in Providence. As the train rolls into the station, you continue the conversation by asking, "Does this train make all those little stops, in Foxboro, Attleboro, etc.?" It doesn't matter much to you whether the train is the "Express" or not, though you'd mildly prefer it

This sameness of evidence, and the difference between (3) and (4) lead *TTK* to suggest that in AIRPORT there are two alternative possibilities. On one hand, (3) is right and (4) is wrong, and the standard for knowledge is low because it allows for Smith's itinerary to be enough evidence for the belief that the flight stops in Chicago. On the other hand, (4) is right and (3) is wrong, and the standard for knowledge is high since it does not certify Smith's itinerary as enough evidence. Regardless, the bottom line is that it cannot be the case that (3) and (4) are right at the same time.

Cohen, endorsing *EC*, departs from this interpretation claiming that "[n]either standard is simply correct or simply incorrect. Rather, context determines which standard is correct" (Cohen, 1999, p. 59). By *context,* he understands "the contexts of ascription" (p. 57). That is, "things like the purposes, intentions, expectations, presuppositions, etc., of the speakers who utter these sentences" (p. 57). Specifically, Cohen suggests that the standard for the correctness of knowledge attributions depends on the salience of error to *A* (p. 61). Then, *A* correctly asserts

---

> was. He answers, "Yeah, this one makes all those little stops. They told me when I bought the ticket." Nothing about him seems particularly untrustworthy. You believe what he says.
>
> Intuitively, in TRAIN CASE LOW, you have good enough evidence to know that the train stops in Foxboro. You are epistemically justified in believing that proposition.
>
> TRAIN CASE HIGH
>
> You absolutely need to be in Foxboro, the sooner the better. Your career depends on it. You've got tickets for a south-bound train that leaves in two hours and gets into Foxboro just in the nick of time. You overhear a conversation like that in Train Case Low concerning the train that just rolled into the station and leaves in 15 minutes. You think, "That guy's information might be wrong. What's it to him whether the train stops in Foxboro? Maybe the ticket-seller misunderstood his question. Maybe he misunderstood the answer. Who knows when he bought the ticket? I don't want to be wrong about this. I'd better go check it out myself."
>
> Intuitively, in TRAIN CASE HIGH, you do not have good enough evidence to know that the train stops in Foxboro. You are not justified in believing that proposition. When so much is at stake, a stranger's casual word isn't good enough. You should check further. (Fantl and McGrath, 2002, pp. 67-68)

that *K* knows that *p* if there is not a salience of error possibilities to *A*. This requirement is satisfied by Smith, but not by Mary and John in AIRPORT. For the latter, the importance of their meeting in Chicago increases the salience of error making (4) right, whereas for the former, no error seems to be salient. This makes (3) right.

Hawthorne (2005), adopting an *SSI* approach, suggests that the salience of error possibilities should be located in *K* and not in *A*, as Cohen suggests. With this in mind, Hawthorne proposes a "subject-sensitive salience constraint" for the correctness of knowledge attributions (p. 159). For him, *A* correctly asserts that *K* knows that *p* if *K* thinks that *p*, and there is not a counter-possibility salient to *K*. Smith correctly attributes knowledge to himself because there is not a counter-possibility salient to him defeating his belief that the flight stops in Chicago. Mary and John, on the contrary, do not correctly assert (3). Justifying this, Hawthorne uses the idea that one cannot correctly assert what we do not know (2005, p. 160). Mary and John, *ex hypothesi*, do not know whether Smith knows that the flight will stop in Chicago, so they do not properly assert (3). Consequently, (4) is right.

The second group of theories interpret DeRose's cases.

> BANK CASE LOW
>
> My wife and I are driving home on a Friday afternoon. We plan to stop at the bank on the way home to deposit our paychecks. But as we drive past the bank, we notice that the lines inside are very long, as they often are on Friday afternoons. Although we generally like to deposit our paychecks as soon as possible, it is not especially important in this case that they be deposited right away, so I suggest that we drive straight home and deposit our paychecks on Saturday morning. My wife says, 'Maybe the bank won't be open tomorrow. Lots of banks are closed on Saturdays.' I reply, 'No, I know it'll be open. I was just there two weeks ago on Saturday. It's open until noon.'
>
> BANK CASE HIGH
>
> My wife and I drive past the bank on a Friday afternoon, as in Case A, and notice the long lines. I again suggest that we deposit our paychecks on

> Saturday morning, explaining that I was at the bank on Saturday morning only two weeks ago and discovered that it was open until noon. But in this case, we have just written a very large and very important check. If our paychecks are not deposited into our checking account before Monday morning, the important check we wrote will bounce, leaving us in a very bad situation. And, of course, the bank is not open on Sunday. My wife reminds me of these facts. She then says, 'Banks do change their hours. Do you know the bank will be open tomorrow?' Remaining as confident as I was before that the bank will be open then, still, I reply, 'Well, no, I don't know. I'd better go in and make sure.'
>
> Assume in both cases the bank *will* in fact be open on the Saturday and that there is nothing unusual about either case that has not been included in my description of it. (DeRose, 1992, pp. 913-914; 2009, pp. 1-2)

These pair of cases is designed to show that even when *K* is in the same strength of epistemic position with respect to *p*, knowledge attributions change from LOW to HIGH. Specifically, BANK CASES LOW and HIGH are intended to show that the following propositions are correct.

(5) DeRose knows that the bank will be open on Saturday in LOW.

(6) DeRose does not know that the bank will be open on Saturday in HIGH.

(7) If DeRose knows that the bank will be open on Saturday in LOW, he knows that the bank will be open on Saturday in HIGH.

Some terminological precisions are required here.

To be in a *strong epistemic position* with respect to *p* is "to have to a high extent the property or properties having enough of which is what's needed for a true belief to constitute a piece of knowledge" (DeRose, 2009, p. 7). (7) does not specify how strong DeRose's epistemic position is, but it claims that his epistemic position in LOW is comparable with the one he is in HIGH in such a way that if his epistemic position is strong in the first case, then it is strong in the second one, too. Now, if this equivalence of strength of epistemic position exists in these cases, why are (5) and (6) right? The general contextualist response is that "the truth conditions of

sentences of the form '*S* knows that *p*' or '*S* does not know that *p*' vary in certain ways according to the context in which the sentences are uttered" (DeRose, 1992, p. 194). DeRose's specific proposal is that "requirements for making knowledge attributions true go up as the stakes go up" (p. 195). This is to say that *A* correctly asserts that *K* knows that *p* if *A*'s practical stakes are low. The relevant differences between the BANK CASES illustrate this idea. While being right in LOW does not carry any relevant consequences, several businesses depend on it in HIGH. Given this, when DeRose's wife mentions the possibility of the bank being closed on Saturday in HIGH, she raises the standards for knowledge attributions. The reason for this increase is that in HIGH, unlike in LOW, DeRose has the burden of ruling out the possibility that the bank changed its office hours on Saturday, and he is aware of that while uttering his knowledge attribution.

Stanley, hoisting *SSI*'s flag, suggests that *A* correctly asserts that *K* knows that *p* if *p* is a serious practical question for *K*, and *K* has evidence that reduces the probability of the negation *p* to a sufficiently low level (Stanley, 2005, p. 91). Two concepts call for clarification. First, Stanley stipulates that a proposition is a *serious practical question* "if and only if its truth or falsity would affect the preference ordering of the actions at my disposal" (p. 95). To illustrate, "[c]onsider the possibility that a large asteroid will hit the earth next week. If I were to discover this, this would have some effect on my plans. I would perhaps choose not to put off apologizing to my brother, and I may decide to shelve my plan to go on a diet. But, intuitively, it is still not a possibility that I need to take account of in my decision making" (p. 93). Second, the *level of sufficiency of evidence* for the reduction of the negation of a proposition is directly proportional to the cost of being wrong (p. 91). That is, when the cost of being wrong about *p* is low, the evidence required for the reduction of the negation of *p* is low, too. If the being mistaken about *p* brings a high rate of negative consequences, the evidence required for the reduction of the

negation of *p* is high. Putting all this together in the BANK CASES, in LOW, the chance of the bank being closed on Saturday is not a practical question for DeRose because it does not change the preference ordering of the actions at his disposal. Furthermore, if he is wrong and the bank is not going to open on Saturday, it does not bring any negative consequences. Therefore, the evidence DeRose needs to squelch the possibility of *p* being false is low. This explains the correctness of (5). Alternatively, in HIGH, the proposition that the bank will be open on Saturday is a serious practical question for DeRose; if it is false, this will change the actions he has at his disposal, for instance, "going to the bank on Saturday instead of Friday" (p. 97). Additionally, given that if the bank will not open on Saturday, DeRose will have to face several negative consequences; then, his evidence for ruling out the possibility of the bank's new schedules is not enough. Therefore, (6) is right.

3. The Contextualist Suggestion

Now that I have clarified the theoretical background to be assessed in this chapter, I want to reconstruct the idea inspiring it:

> *CS*: Courtroom proceedings provide a context that shows the context-sensitivity of knowledge ascription truth-conditions.

I believe that two cases by DeRose clarify *CS*. The first case was designed to show that *EC* deals properly with cases and *SSI* does not. According to DeRose, it seems that *EC* and *SSI* provide equally compelling explanations for their stakes-shifting cases. But *EC* breaks this tie in its favor accounting for third person knowledge attributions that *SSI* does not take into account. In his words,

> Fortunately, then, for the contextualist, we use third-person attributions and denials of knowledge in describing subjects who are no party to our conversation

> in a way that demonstrates the same variation in standards that is displayed by our first-person talk of what we ourselves do and do not 'know', and, because of this, third-person pairs of cases are available that are about as powerful as are the best first-person cases. (DeRose, 2009, p. 61)

Below, I will quote DeRose's third-person-knowledge-attribution case that, from my perspective, illuminates *CS*.

> THELMA AND LOUISE
>
> *Case Set-Up: The Office.* Thelma, Louise, and Lena are friends who all work in the same office. Today is their day off, but, before getting an early dinner together, they decide to walk up to the office to pick up their paychecks. Thelma and Lena are also interested in finding out whether a certain colleague is at work, as they are involved in a small office bet with some other workers over whether the often-absent John would show up today. As they pass the door to John's personal office, they see his hat hanging on the hook in hallway, which, in their long experience, has been a sure-fire sign that John is in fact at work. They also hear one working colleague shout to another, 'Why don't you clear that letter with John quick before you send it off?' Satisfied that John is at work and that Thelma and Lena, who bet that he would be, are in a position to collect their winnings from some other office workers, the three friends pick up their checks, go out to dinner together, and then part company, Thelma going to a local tavern to meet other friends, and Louise and Lena each heading in different directions to go home.
>
> *Thelma at the Tavern*. At the tavern, which is renowned for the low epistemic standards that govern the conversations that take place within its walls, Thelma meets a friend who bet that John wouldn't be at work, and so owes Thelma $2. Thelma says, 'Hey, John was at work today. Pay up, sucker!' When her friend asks, 'How do you know?,' Thelma replies, 'I went up to pick up my paycheck this afternoon. His hat was hanging in the hall outside his office door, and I heard Frank telling someone to quickly check something with John before sending it off.' Satisfied with Thelma's evidence, the friend pays up. Then, wondering whether Lena will know to collect what she is owed by yet another worker, Thelma's friend asks, 'Does Lena know that John was in?' Thelma answers, 'Yes, she was with me. She knows, too.' Meanwhile ...
>
> *Louise with the Police*. Louise has been stopped by the police on her way home. They are conducting an extremely important investigation of some horrible crime, and, in connection with that, are seeking to determine whether John was at work that day. It emerges that they have some reason to think that John was at work and no reason for doubting that (other than the fact that he is often absent from work, which Louise already knows),

> but as the matter has become so important to the case, they are seeking to verify that he was there. When the police ask her whether she could testify that John was at work, Louise replies, 'Well, no, I never saw him. I could testify that I saw his hat hanging in the hall, which is a very reliable sign that he's at work. And I heard Frank Mercer telling someone to check something with John, as if John were in. But I suppose John could have left his hat on the hook when he went home some previous day. And though it would be a bit strange for Frank not to know whether John was at work, especially that late in the day, I guess he could have been just assuming John was there because John was scheduled to work—and because his hat was in the hall. You should check with Frank. He at least seemed to know that John was in.' When the police ask Louise whether Lena might know that John was in, Louise replies, 'No. She was only at the office very briefly, with me, and didn't see John, either. She has the same reasons I have for thinking John was there, but, like me, she doesn't know that John was there.'
>
> Assume that John was indeed at the office; that the police subsequently verify that with Frank and with a couple of other workers; and that, as luck would have it, Thelma's claim at the tavern that Lena 'knows' that John was at work is made at exactly the same time that Louise tells the police that Lena 'doesn't know' that Frank was at the office. And if you're wondering what Lena is up to at that moment, she is walking home, thinking about the basketball game she plans on watching on the television, not thinking at all about her bet, and not even knowing about any police investigation into any horrible crime. (DeRose, 2009, pp. 4-5)

As any other stakes-shifting case, this is meant to explain the consistency of two apparently contradictory propositions, namely,

> (8) When Thelma says at the tavern that Lena knows that John was at work, her claim is true.
>
> (9) When Louise tells the police that Lena doesn't know that John was at work, her claim is true.

What is claimed to be true in (8) is Thelma's assertion that "Lena knows that John was at work," and what is clamed to be true in (9) is Louise's denial of such knowledge attribution. Remember that the general contextualist response is that "the truth conditions of sentences of the form '*S* knows that *p*' or '*S* does not know that *p*' vary in certain ways according to the context in which the sentences are uttered" (1992, p. 194). Two contexts of utterance are included in THELMA

AND LOUISE, to be specific, an ordinary conversation in a tavern and a criminal investigation. Thelma properly attributes knowledge to Lena given the low epistemic standards governing Thelma's context of utterance. Alternatively, in the more demanding conversational context of a criminal investigation, Louise properly denies knowledge to Lena.

Given that a criminal investigation is one of the parts of a legal proceedings, if I clarify the context of attribution of (9), I could understand better *CS*. First, *Louise with the Police* is a HIGH case. This means that it raises the epistemic standards of knowledge attributions in such a way that some of the ascriptions uttered in everyday conversations become false. That would have happened if Thelma had said to the police what she said at the tavern. How high are the epistemic standards in *Louise with the Police* raised? DeRose does not provide a specific answer for this question. Instead, he suggests that the raising of standards in HIGH cases depends on the two extreme cases they are departing from. On one hand, HIGH cases differ from LOW cases where a big number of everyday knowledge attributions are true. On the other, HIGH cases are different from skeptical scenarios in which all knowledge attributions are false. To put it slightly differently, HIGH cases have higher standards than the LOW ones, but lower standards than skeptical scenarios. This is confirmed by DeRose when he differentiates his stakes-shifting cases from Peter Unger's case in which John (the main character) has the supposed knowledge that there is milk on the rug is challenged by the possibility of an evil demon deceiving him into the false belief that there is milk on the rug (Unger, 1984, pp. 50-51). For DeRose, "[t]o make the cases less philosophical and hopefully more convincing, my 'high-standards' … cases involved a more moderate hypothesis, the taking seriously of which seemed reasonable given practical, nonphilosophical concerns not present in the 'low-standards' case" (DeRose, 2009, p. 1, footnote 1). Similarly, in talking about the importance of the correct design of HIGH cases, he states that

such cases "are still far more moderate than are the ethereal possibilities on which philosophical skeptics base their hyperbolic doubts (brains in vats, or whatnot), and do seem worth considering under the somewhat heightened scrutiny appropriate to HIGH" (DeRose, 2009, p. 56). If my interpretation is right, *CS* claims that legal proceedings impose higher epistemic standards for the utterance of truth knowledge attributions than the ones governing everyday conversations. In THELMA AND LOUISE, this is confirmed by the way in which the knowledge attribution to Lena is true in the tavern conversation, but not in the criminal investigation. Furthermore, for *CS*, legal epistemic standards are lower than the ones created in skeptical scenarios because in legal proceedings some knowledge attributions conveyed in ordinary conversations are true: the ones matching the standard of proper knowledge attributions in legal contexts. The result of this is that, according to *CS*, more knowledge attributions are true in legal proceedings than in skeptical scenarios. However, fewer knowledge attributions are true in legal proceedings than in everyday conversations. This legal increase of epistemic standards illustrated by THELMA AND LOUISE also occurs within legal proceedings. As in *Louise with the Police,* the epistemic standards are raised by the context of utterance of a criminal investigation, similar to the way that other procedural stages raise the epistemic standards making what is needed for uttering a truth knowledge attribution harder and harder. As an illustration, what an official attributing knowledge to an eyewitness requires for opening a criminal investigation is lower than what a prosecutor demands when he/she attributes knowledge to the same witness in drafting information for formulating criminal charges. In the same way, the knowledge attributed to a prosecutor making his opening statements at trial is lower than the one done by the fact-finder as a reason to convict the alleged defendant.

There is another possible interpretation for *CS* exemplified by the following case.

DEROSE UNDER CROSS-EXAMINATION

Lawyer: Were there any zebras in the zoo on April 23?

Me: Yes

L: Do you know that?

M: Yes.

L: How do you know?

M: I saw some there.

L: So, you knew that they were zebras?

M: Yes.

L: Could you rule out the possibility that they were only cleverly painted mules?

M: No, I suppose not.

L: So, you knew that they were zebras?

M: Is there any reason to think that they were painted mules, of all things?

L: Just answer the question!

Well, how should I answer the question? If there is no special reason to think they were painted mules then *I* certainly wouldn't want to admit that I didn't know they were zebras, but maybe I am just stubborn. Suppose I do admit it:

M: I guess I didn't *know* that they were zebras.

L: Aha! The witness has contradicted his earlier claim. First he says that he knew; now he says he didn't. Now which is it, Mr. DeRose? (1992, pp. 925-926)

This conversation is meant to capture one objection against *EC*: if someone challenges the claim that *K* knows that *p* and *K* does not respond properly to this challenge, then the previous knowledge attribution was false. Practically, in DEROSE UNDER CROSS-EXAMINATION, given that the witness could not rule out the possibility of the alleged zebras to be cleverly painted mules, then the claiming that "DeRose knew that there were zebras in the zoo on April

23" is false. Similarly, in BANK CASE HIGH, if DeRose does not know whether the bank closes on Saturday when his wife reminds him that they would be in a very bad situation if their paychecks were not deposited into their checking account before Monday morning, then he did not know before this reminder. The reason for this is, as it is pointed out for the lawyer in DEROSE UNDER CROSS-EXAMINATION, there is a contradiction between the knowledge attribution before the challenge and its denial after the challenge. The objection accounts for that contradiction claiming the falsehood of the previous knowledge attribution.

DeRose responds to this objection denying that the knowledge attribution before the challenge was false. If the verb "to know" has different meanings in "*K* knows that *p*" before the challenge and in "*K* does not know that *p*" after the challenge, then they do not contradict each other. Clarifying his idea, DeRose analogizes "to know" with "here." The second expression has a meaning when, at 9:00 am, I say "I am here" and I am in my house, and another meaning when, at 10:00 am, I say "I am here" and I am at the university. The former sentence does not contradict the latter because "here" in the first one means "my house" and here in the second one signifies "the university." By the same taken, the statement "I am here," when I was in my house does not become false when an hour later I say "I am here" and I am at the university. By analogy, "to know" adopts different meanings according to the context where knowledge attributions are uttered. When the possibilities such as cleverly painted mules, in DEROSE UNDER CROSS-EXAMINATION, or the raising practical stakes, in BANK CASE HIGH, are posed, the meaning of "to know" changes. Therefore, the previous knowledge attribution and the posterior knowledge denial do not contradict each other, and the previous knowledge attribution is not false. DeRose reinforces this idea with his interpretation of DEROSE UNDER CROSS-EXAMINATION.

DEROSE UNDER CROSS-EXAMINATION*

> While standing in a bright yellow room, I said, "This room is yellow." The lawyer then dragged me by the ear into a room in which all was gray and got me to say, "This room is gray," and now he jumps all over me: "First he says, 'This room is yellow;' then he says, 'This room is gray.' Which is it?" The contextualist maintains that something very much like this has happened in my original dialogue with the lawyer (p. 926)

Going back to my interpretation of *CS*, DEROSE UNDER CROSS-EXAMINATION and DEROSE UNDER CROSS-EXAMINATION* shows how contextual changes of epistemic standards operate with the interventions of legal agents. To clarify, what is expected in adversarial legal proceedings is that the parts under litigation, with the incentive of winning the case, look for all the relevant information for their legal inquiry and present such information in an argument justifying their point. Additionally, they might be able to undermine their counterparts' position. According to DEROSE UNDER CROSS-EXAMINATION, one of the ways of attacking the counterpart's alleged knowledge is raising the epistemic standards with the introduction of, so far, unconsidered counter-possibilities. This makes their counterpart's allegations fall short in knowledge because the epistemic standards are raised with the new possibilities suggested.

3.1 Stakes-Shifting Cases for Legal Contexts

Shifty epistemologies justify their intuitions with stakes-shifting cases. Consequently, if my interpretation of *CS* is right, I might be able to provide some stakes-shifting cases for legal contexts. The challenge here is to transplant the intuitions about knowledge attributions from ordinary conversational contexts to legal ones. To recall, the intuitions under assessment started out in specific pair cases where knowledge ascriptions differ in their true values due to the variation of specific factors (i.e., either practical stakes or salience of error possibilities) that are

relevant for specific agents (i.e., either the knowing attributor or the knowing subject). These cases aim to capture the ordinary knowing-attributing practices. This is recognized by Cohen when analyzing AIRPORT states: "On the contextualist view, we explain our confidence in the truth of our everyday knowledge ascriptions … by supposing that our reasons are sufficient for us to know, relative to the standards of everyday contexts" (1999, p 65). DeRose does the same talking about the advantages of *EC*: "The best grounds for accepting contextualism concerning knowledge attributions come from how knowledge-attributing (and knowledge-denying) sentences are used in ordinary, non-philosophical talk: What ordinary speakers will count as 'knowledge' in some non-philosophical contexts, they will deny is such in others" (2005, p. 172; 2009, p. 47). If the stakes-shifting cases are meant to explain our intuitions of knowledge attributions in everyday, non-specialized, contexts, how can I extend stakes-shifting cases to legal contexts?

Fantl and McGrath (2012) in "Arguing for Shifty Epistemology" suggest a method that could be useful here. Briefly, they propose that accounts concerned with knowledge attributions "should look beyond intuitions concerning the truth-value of knowledge-ascriptions in particular stakes-shifting cases, to see if there are general principles at work behind the scenes" (2012, p. 57). The idea is to change the strategy of arguing from instances, to a new one centered on arguing from principles. From their perspective, this "argument-from-principles strategy," as they called it, has shown good results in examining Gettier's cases *a là* Zagzebski (1994). She, instead of wondering if Smith is justified in believing the relevant proposition, reveals the principle constituting all Gettier-type cases:

> [S]tart with a case of justified (or warranted) false belief. Make the element of justification (warrant) strong enough for knowledge, but make the belief false. The falsity of the belief will not be due to any systematically describable element in the situation, for if it were, such a feature could be used in the analysis of the

> components of knowledge other than true belief, and then truth would be entailed by the other components of knowledge, contrary to the hypothesis. The falsity of the belief is therefore due to some element of luck. Now emend the case by adding another element of luck, only this time an element which makes the belief true after all. The second element must be independent of the element of warrant so that the degree of warrant is unchanged. The situation might be described as one element of luck counteracting another. We now have a case in which the belief is justified (warranted) in a sense strong enough for knowledge, and the belief is true, but it is not knowledge. (Zagzebsky, 1994, p. 69)

This strategy not only shows that true belief is not sufficient for knowledge in a stronger way than theories imbued with the Gettier's casuistry, but that it is possible to reproduce the problems in different scenarios associated with Gettier's cases and the tripartite concept of knowledge. For example, Michael Pardo (2005), following Zagzebski's principle, creates the following case:

> COCAINE
>
> Two officers plant cocaine on an automobile driver, and they then give unrebutted testimony at the driver's trial that they found the cocaine after a consensual search of the car. The driver, concerned about his prior record coming out on cross-examination, does not testify and offers no real defense. The fact-finder convicts after finding the officers credible. Now, unbeknownst to everyone save the defendant, he really did have cocaine in the car that never was discovered. (Pardo, 2005, p. 322)

As any other Gettier case, COCAINE shows that the fact-finder does not know that the defendant had cocaine. However, the fact-finder's belief that the defendant had cocaine is true, and the fact-finder is justified in believing that it is true, provided the two officer's "unrebutted" testimony. In other words, COCAINE shows that the fact-finder did not know that the defendant had cocaine; this finding was true, but just as mere coincidence. According to Pardo, in modern legal proceedings, fact-finders are expected to sentence based on the knowledge of the facts under litigation and not on coincidentally true findings.

Following Fantl's and McGrath's method, the structuring principle I am going to apply is:

> *Certainty-Actionability*: If *p* isn't absolutely epistemically certain for a subject in

> a particular case C1, and *p* is actionable for the subject in C1, then there is a correlated case, C2, which differs in actionability from C1 merely because the stakes are higher in C2 than in C1. (Fantl and McGrath, 2012, p. 68)

This principle is composed by two sub-principles:

Fallibilism: "Knowledge that *p* does not require absolute epistemic certainty for *p*" (p. 65).

Actionability: "You can know that *p* only if *p* is actionable for you" (p. 65).

In the terms in which it is formulated here, *Fallibilism* captures the idea that it is possible to achieve knowledge even if there is not absolute epistemic certainty of the proposition to be known. This principle is a response to a variation of skepticism demanding absolute certainty for knowledge, and its plausibility resides in the fact we lack absolute certainty for most of the things we claim to know. *Actionability* relates knowledge with action in such a way that if *K* knows that *p*, *K* is justified in acting as if *p*. Practically, in the BANK CASES, if DeRose knows that the bank opens on Saturday, he is justified in going to the bank on Saturday. In AIRPORT, if Mary and John know that the plane stops in Chicago, they are justified in taking the train. *Actionability* is also a tool for evaluating actions: if *K* knows that *p*, one could have criticized *K* if *K* had not acted as if *p*. In the BANK CASES, one could have said, if DeRose knew that the bank opens on Saturday, he should not have waited in the long lines on Friday. In the AIRPORT CASES, if Mary and John knew that the plane stopped in Chicago, they should have taken the plane.

As a way of illustration, I propose a stakes-shifting case for legal contexts applying the *Certainty-Actionability* principle.

BARGAINING LOW

Smith apparently belongs to a criminal organization doing different types of electronic fraud, and he was charged for aggravated identity theft, which is the use of stolen identity to commit crimes. The prosecutors of this case thought that the evidence for the accusation was solid, and, consequently, they wanted to plea bargain. They offered Smith a five-year sentence, accompanied by a threat: If he were to refuse the plea, he would be charged with life in prison. After this bargain offer, and before saying anything to the prosecutors, Smith talked in private to his attorney. The latter assured that it was a tempting offer, but Smith replied saying "I believe the bargain is unfair because if I do not accept it, I will spend all my life in prison. I do not have a real alternative here." Additionally, he states, "I know that the prosecutors do not have strong evidence against me." He was confident about the technology his mob was using in their criminal activities and the loyalty of his accomplices. With this in mind, and with the approval of his attorney, Smith rejected the five-year plea offer, despite the threat.

BARGAINING HIGH

Smith is in the same legal predicament, and he is offered the same plea bargain as in BARGAINIG LOW, but now the conversation with his attorney goes along the following lines. The lawyer assures that it is a good offer, but Smith replied saying, "I believe the bargain is unfair because if I do not accept it, I will spend all my life in prison. I do not have a real alternative here." His lawyer responds: "I understand the bargain seems unfair and maybe it is, but that is better than the risk of being condemned. Are you sure there are not undercover agents in your group?" After a moment of silence, Matthew recognizes: "No, I cannot assure you

> of that. I better accept the bargain for I do not know whether the prosecutors have strong evidence against me."

If *Fallibilism* is true, then it is right to attribute knowledge to Smith in BARGAINING LOW, though he lacks absolute certainty for the proposition: "I know that the prosecutors do not have strong evidence against me." This presumptive knowledge is actionable to Smith. That is to say, it justifies him in rejecting the bargain offered by the prosecutors and taking the risk of going to trial. In BARGAINING HIGH, Smith's attorney raises the epistemic standard, demanding that Smith rule out the possibility of undercover agents being within his mob. Given that Smith is unable to squelch this possibility, it is wrong to say that he knows that the prosecutors do not have strong evidence against him. Therefore, this supposed belief is not actionable for him.

*EC*sts would claim that changes in *Actionability* are due to the contexts of utterance of the respective knowledge attribution. Specifically, Cohen would claim that Smith's self-attribution of knowledge is correct if there are not error possibilities salient to Smith. That is the case in BARGAINING LOW where the proposition, "I know that the prosecutors do not have strong evidence against me," is true. In BARGAINING HIGH, differently, the possibility of being undercover agents in Smith's mob is a salient source of error to Smith. Consequently, his self-knowledge attribution is false. This would be confirmed by DeRose who comparing BARGAINING LOW and HIGH, would have said: "If [the possibility of being undercover agents in Smith's group] has been mentioned, [he] cannot truly claim to know, unless [he] can rule out [that] possibility" (1992, p. 915).

Let me return to the argument-from-instances strategy to verify that my BARGAINING cases are correctly designed. DeRose proposes a list of "ingredients" making a good pair of stake-shifting cases (2009, p. 54). First, the practical situation in LOW should be in fact low, and

the practical situation in HIGH is supposed to be clearly high. When these stages are not unmistakably differentiated, the knowledge attribution's verification conditions (i.e., the conditions making a knowledge attribution true or false) become confusing and, therefore, inapplicable (p. 55). Second, the stakes-shifting case under consideration should not include skeptical possibilities because a skeptic's hyperbolic doubts go far beyond non-philosophical intuitions of knowledge, and the goal of stake-shifting cases is to clarify such intuitions (p. 56). Finally, good stakes-shifting cases avoid any dispute among their conversational characters with regards to the proposition allegedly known. The reason for this is that disagreements about knowledge possession and knowledge attributions pose different issues that deserve a thorough and differentiated analysis (p. 57). I believe my BARGAINING CASES include these ingredients. First, the situation of Smith in LOW is lower than the one in HIGH. The difference of epistemic standards included in one situation and the other comes from the attorney's interventions. When he/she introduces the possibility of undercover agents being in Smith's mob, he/she raises the epistemic standards making it HIGH rather than LOW. Second, clearly in BARGAINING HIGH, there is not a skeptical possibility included, for it is possible to know in this context. Finally, even though there is a disagreement between Smith and his attorney about whether to accept the bargain offer or not, this dispute does not verse on the proposition allegedly known, which is the limitation imposed on good stake-shifting cases. If my analysis is right, then *CS* seems to be justified.

4. Is the Contextualist Suggestion Right?

Despite its initial plausibility, Sutton proposes a counter-example for *CS*:

EVERYONE KNOWS

> In a trial, the cops can know that the accused is guilty. The judge can know it. The jury can know it. Everyone within and without the courtroom can know it. And yet a conviction cannot be secured since knowledge, however widespread, does not entail that legal standards of proof [contextually invariant in the relevant sense] can be met. (2007, p. 83)

Broadly speaking, in criminal proceedings a *conviction* is a verdict consequent on finding a defendant guilty of a crime. The opposite of a conviction is an *acquittal*. To *find* a defendant guilty, the fact-finder is expected to know the facts constituting the action legally classified as a crime. The achievement of this epistemic task is conditioned to epistemic thresholds, or *standards of proof*, imposed by legal proceedings on legal agents. These standards are invariant in the sense that they do not change with the contexts of attribution. Rather, they have to be satisfied by the putative knower disregarding the attributor's epistemic standards. In EVERYONE KNOWS, the standard of proof to be satisfied is *beyond a reasonable doubt*. Explicitly, maybe everyone within and without the courtroom believe that the accused is guilty, but if the jury does not find the accused guilty beyond a reasonable doubt, it does not satisfy the epistemic standard required for knowledge, and conviction does not proceed.

If EVERYONE KNOWS is right, courtroom proceedings do not provide a context that shows the context-sensitivity of knowledge ascription truth-conditions, as *CS* states. To be sure, *EC*sts claim that the truth conditions of knowledge attributions vary according to the legal context of utterance the attributor is immersed in. If this were right, the contexts of attribution would be sufficient for securing a conviction, but that is not the case. In EVERYONE KNOWS, there is not salience of error possibilities to the cops, the judge, the jury or everyone within and out of the courtroom, and the possibilities raising the practical stakes, if there are any, are already ruled out—otherwise, it could not be possible to state that they know that the accused is guilty. Therefore, they could properly anticipate a conviction. Yet, none of these legal agents can do so until the invariable epistemic standard for conviction is satisfied. Consequently, knowledge

attributions in legal contexts do not depend on the contexts of utterance, as it is stated by *EC*, but on the satisfaction of the invariant epistemic standards of proof.

Let me confirm these ideas with a different standard of proof: *Reasonable Suspicion*. This standard was first articulated in Terry v. Ohio (1968). *Prima facie*, it is recognized that being stopped and frisked by the police violates human dignity because it is humiliating, degrading and stigmatizing. However, when an officer believes that his life could be at risk because an individual is armed and dangerous, it seems that stopping and frisking is reasonable. The standard of reasonable suspicion balances these demands imposing the burden of proving reasons for his/her belief that the individual to be stopped and frisked is armed and dangerous on the officer stopping and frisking. In other words, the mere belief that there is an armed and dangerous individual, even if it is true, is not enough for officers to violate human dignity. Such belief has to be justified, and it cannot be the product of a mere guess. In the court's words, "due weight must be given, not to [the officer's] inchoate and unparticularized suspicion or 'hunch,' but to the specific reasonable inferences which he is entitled to draw from the facts in light of his experience."

If my interpretation of EVERYONE KNOWS is right, in legal contexts, one cannot properly state that an official knows that an individual is armed and dangerous unless the former satisfied the invariable epistemic standard of reasonable suspicion. This is right even if for a knowledge attributor, the officer knows that an individual is armed and dangerous. Let me illustrate this idea with the following real-life-case adapted by Craig Lerner (2006) to show how well prepared police officers should be in order to face a cross-examination:

> HUNCH?
>
> While driving home at 3:00 a.m. on a deserted gravel road, Officer Heath saw a Saab that he did not recognize as belonging to anyone in the neighborhood. Lacking a front license plate, the car piqued his curiosity, and Officer Heath

> pulled it over. Alas, the officer's premonition that something was amiss turned out to be correct, and the car thieves tried to flee on foot as soon as the car stopped. Here, however, was the cross-examination at the suppression hearing:
>
> > Q. It was basically your belief that no cars should be on Route 66 at that time in the morning that prompted the stop; is that correct?
> >
> > A. I felt it was very ... unusual ... .
> >
> > Q. But there is nothing in particular about that unusualness that would tie ... this particular car to any particular crime?
> >
> > A. No ...
> >
> > Q. So, more or less, it was just a hunch that you had?
> >
> > A. Well, if that's the way you want to put it, yes.
>
> The court, of course, cast the defendant free, but not before a mocking reference to the police officer's "suspicion."
>
> One wonders if the prosecutor took Officer Heath aside after the hearing and gave him a quick lesson in Testifying 101: Never allow a defense attorney to put words in your mouth. You never pull someone over on just a hunch. The correct answer, of course, was:
>
> > A. Hunch? No, I wouldn't call it that, sir. I would say there were a number of objective factors which, viewed in their totality through my experienced eyes, rose to the level of reasonable suspicion. (422-423)

In HUNCH?, the putative knower is the police officer and the knowledge attributors are, from a third-person perspective, the court, the prosecutor and the defendant, and, from a first-person perspective, the police officer himself. Remember that "legal deliberations are not private beliefs but public judgments" (Goldman, 1999, p. 272). Consequently, Officer Heath was supposed to publicly justify his belief that the defendant's car was suspicious. Everyone in the courtroom could have properly attributed knowledge to the officer: the defendant "tried to flee on foot as soon as the car stopped," the court mocked "the police officer's 'suspicion'," and the prosecutor could have taken "Officer Heath aside after the hearing and given him a quick lesson in Testifying 101." However, the officer did not satisfy the invariant epistemic standard for his

belief to be a reasonable suspicion. Instead, it was a mere hunch, and in legal proceedings mere hunches do not satisfy epistemic standards. Therefore, HUNCH? also confirms that *CS* is wrong.

Does EVERYONE KNOWS also undermine *SSI*? To clarify, EVERYONE KNOWS is not designed to criticize *SSI*. However, given that it is designed to object to the idea that knowledge attributions are sensitive to contexts, and since *SSI* argues for such sensitivity, one may wonder if EVERYONE KNOWS also applies to *SSI*. Remember that *SSI* places the factors allowing for the consistency of stakes-shifting cases in the putative knower and not in the context of the attributor, as it is suggested by *EC*. According to Stanley (2005), a presumptive knower (*K*) knows that *p* if two joint conditions are satisfied. Firstly, the question of whether *p* is a serious practical question for *K*. Secondly, *K* has evidence that reduces the probability of the negation of *p* to a sufficiently low level. In EVERYONE KNOWS, *p* is "the accused is guilty" and *K* is the fact-finder. The question of whether the accused is guilty is a serious practical question for the fact-finder because, by definition, this legal agent has to render a verdict based on his/her knowledge of the facts under litigation. Additionally, in EVERYONE KNOWS, the fact-finder is described as knowing that the accused is guilty. Therefore, *ex hypothesi*, the finder has reduced the probability of negation of the accused to be guilty. But once again, this does not secure a conviction because the standards of proof are not mentined. This result is appreciated with more clarity in HUNCH?. There, *p* is "the defendant's car was suspicious" and *K* is Officer Heath. The question of whether the defendant's car was suspicious is relevant for the officer, and when the defendant "tried to flee on foot as soon as the car stopped," the possibility of *p* to be false was substantially reduced. Therefore, knowledge attributions in legal contexts do not depend on the reduction of error possibilities for the presumptive knower, as it would be stated

by *SSI*.

5. Agendivism

So far, I have shown that neither *EC* nor *SSI* provide an accurate theory of knowledge attribution for legal contexts. In this section, I am going to propose such an account. My working hypothesis is that *A* correctly asserts that *K* knows that *p* when *K* properly closes or advances his/her cognitive agenda. Deploying this idea, first, I am going to introduce the most important concepts of my agendivism. Then, I will propose an agendival interpretation of the most important stakes-shifting cases, namely, AIRPORT and BANK CASES. Finally, I will propose a theory of knowledge attribution for legal contexts and a response for EVERYONE KNOWS.

The conceptual background of my account comes from the notions of agent and agenda. I will use some information inferred from JONES to illustrate these ideas. An *agent* is an entity doing something. Agents can be individuals such as Smith, the MD candidate, or groups such as the committee evaluating him. *Agendas* are plans of action agents are disposed to close or advance, for instance, Smith's plan of getting an MD degree. This agenda depends on *sub-agendas* like Smith's completion of a determined amount of course-work, having a specific GPA, or passing the United States Medical Licensing Examination. In this sense, "[a]n agenda is something like a network of tasks or programmes to be discharged" (Gabbay & Woods, 2003, p. 182). Agendas and sub-agendas have *conditions of closure* determining both the actions an agent is expected to perform in order to achieve his/her objective, and the time range in which he/she should do it. For instance, students enrolled in an MD program are expected to conform to a set of conditions in order to earn their degrees. An *agenda in course is properly closed* when agents deploy their resources in such a way that its conditions of closure are obtained, but agendas are

not closed *simpliciter*. Instead, the agent's matching of the conditions of resolution comes in degrees. An *agenda in course is properly advanced* when some of its closure conditions have been obtained, but not all of them yet (Gabbay & Woods, 2003, p. 215).

"An agenda may involve things an agent desires to know, or would find it useful to know for the transaction of certain tasks, or the making of certain decisions in some contextually circumscribed circumstances or states of affairs he is disposed to realized" (Gabbay & Woods, 2003, p. 183). I refer to this as *cognitive agendas*. A cognitive agenda is, then, a set of questions that a cognitive agent wants, or needs, to answer for the achievement of his/her objectives. Agents pursue cognitive agendas for the sake of knowledge just as Salk's research team understanding polio, or as sub-agendas enable them to achieve other purposes in the same way as Smith knowing about polio to getting his MD degree. Theories of epistemic risk claim that it is possible to differentiate between two types of *cognitive agents* in accordance with their attitude toward epistemic risk taking (Levi, 1962; Fallis, 2007; Riggs, 2008; Mathiesen, 2011). Whereas some agents withhold the acceptance of a proposition until all the information has been obtained, other agents act with less caution and accept propositions with incomplete information. Theories of epistemic risk claim that agents accept propositions with incomplete information because of practical reasons. Think of Smith's Resident Medical Officer teaching him how to deal with clinical emergencies on behalf of admitting consultants in juxtaposition to his professor of biochemistry studying the biochemistry of bacteria resistant to penicillin. Although both the Resident Medical Officer and the biochemistry researcher want a true answer for their inquires, the latter, but not the former, can withhold it until all the information has been collected. Cognitive agents adopting cognitive agendas for the sake of the achievement of a practical goal are *practical doxastic agents*. *Theoretical agents*, differently, pursue cognitive agendas when it

leads to “the truth and nothing but the truth.” Cognitive agents have to use their cognitive resources (i.e., time, information and computational capacity) trying to close or advance their agendas in course. While practical doxastic agents “perform their cognitive tasks on the basis of less information and less time than they might otherwise like to have,” theoretical agents “can wait long enough to make a try for total information, and they can run the calculations that close their agendas both powerfully and precisely” (Gabbay and Woods, 2005, pp. 11-12).

From my perspective, knowledge attributions have the purpose of stating that a cognitive agenda has been properly closed. Given that the object of knowledge attributions is cognitive agendas, the conditions under which knowledge is properly attributed depends on the nature of the cognitive agenda claimed to have been properly closed or advanced. For example, in JONES, the cognitive agendas under account are, first, Jones’s belief that polio is caused by a virus in advancing the agenda of an everyday conversation and, second, Smith’s belief that polio is caused by a virus in advancing the agenda of passing an MD exam. While Jones’s belief that polio is caused by a virus due to the fact that he remembers the newspaper reporting that Salk said it is enough for advancing the agenda on a everyday conversation, it is not enough for the more demanding agenda of passing an MD exam. From my perspective, the changes in knowledge attribution between propositions (1) and (2), above, are not due to the changes in practical stakes or the salience of error possibilities. Instead, they are caused by the conditions of closure of the cognitive agendas involved. In JONES, the MD candidate’s agenda has conditions of closure which are more stringent than the ones of an everyday conversation.

If my intuitions are right, I might be able to confirm them in the main stakes-shifting cases. Firstly, in BANK CASES, DeRose correctly states that he knows that the bank opens on Saturday in LOW, but not in HIGH because the agenda for which that information is important,

can be successfully closed in LOW, but not in HIGH. Remember that an agenda is a list of interconnected activities an agent is supposed to perform in the achievement of his/her objectives. While LOW's main agenda is, *ex hypothesi*, to deposit some paychecks, HIGH's is to honor some economical obligations via depositing some paycheck. Also, recall that cognitive agendas are questions whose answers provide information for the successful closure of advancing of other agendas. In LOW, the way in which DeRose answers the question of whether the bank is opened on Saturday allows for the advancing of the agenda of depositing their paycheck because that activity can be performed either on Friday, Saturday, or any other day of the week. In HIGH, differently, DeRose's answer to the question of whether the bank is opened on Saturday is unsatisfactory because the agenda for which that information is relevant cannot be properly advanced with it: if the paychecks are not deposited by Saturday, their economical obligations will not be satisfied. Secondly, in AIRPORT, Mary and John properly state that Smith does not know that the itinerary stops in Chicago because with that information they cannot close the agenda for which that information is important: to arrive in time to their meeting in Chicago. Unfortunately, Smith's main agenda is not specified because AIRPORT does not give us any information about his plans of action. Adopting a charitable interpretation, I assume that if there is not an extra agenda to be fulfilled, Smith's agenda is satisfied with the itinerary information. If this is right, it is correct for Smith to state that he knows that the train stops in Chicago. This interpretation is confirmed by Fantl and McGrath's TRAIN CASES, which according to them, is an improved version of AIRPORT (2002, p. 68). In TRAIN CASE LOW, the main character is going to see friends during a relaxing vacation. Given that the description of this agenda implies that there are not time constraints, the main character properly states that the guy sitting by him/her knows that the train stops in Foxboro, his/her destination.

If my ideas are right, knowledge attributions in legal contexts depend on the nature of the cognitive agenda under account. To be sure, legal proceedings impose cognitive agendas on its participants depending upon the activities they have to perform in each procedural stage. These agendas include closure conditions for the required actions. When such standards are not met, knowledge attributions are not justified. In THELMA AND LOUISE, for instance, when Louise is with the police, it is not correct to state that she knows that John was in the office because that presumptive knowledge does not meet the conditions of resolution of the criminal investigation in course. Practically, when the police ask Louise if she would be able to testify confirming that John was in his office, Louise's negative response is due to the requirement of witnesses to testify what they saw. These are Louise's words: "I never saw him. I could testify that I saw his hat hanging in the hall, which is a very reliable sign that he's at work" (DeRose, 2009, p. 5). Given the closure conditions of the cognitive agenda in course, Louise is able to testify that John's hat was hanging in his office hall. From this observation, Louise could have inferred that John was in the office, but the closure conditions of the epistemic agenda in course restricts the formation of doxastic states to perception and explicitly exclude the use of inference as a cognitive process. Similarly, in BARGAIN HIGH, it is not proper to state that Smith knows that the prosecutor does not have strong evidence against him because he cannot rule out the possibilities decreasing his chances of being acquitted at trial, which is his ultimate agenda. In EVERYONE KNOWS, the cops know that the accused is guilty because, for example, they caught the accused red-handed. The judge knows that the accused is guilty because, given her previous experience, she knows the accused has a criminal record, leading her to infer so. The jury knows the accused is guilty because they found the prosecutor's opening statements strongly compelling. Finally, "[e]veryone within and without the courtroom" knows the accused is guilty

because before the law enforcement officials took the accused into custody, there was a police persecution that was broadcasted on prime-time national TV. Even with all of this alleged knowledge, conviction is not secure because the closure conditions of conviction demand the trier of facts to find the facts under litigation beyond a reasonable doubt. This confirms that knowledge attributions in legal contexts depend on the closure conditions of cognitive agendas they impose in legal agents and not on their context of utterance, as it is stated by *CS*.

I want to conclude this chapter making explicit the position my theory adopts in the debate between *TTK*, *EC* and *SSI*. My view is invariantist in the sense that it denies *EC*. In other words, I do not believe that knowledge attributions change with the attributor's context. Yet, I am not a *SSI*st, because I do not think knowledge ascriptions change with the knower's context either. From my perspective, knowledge attributions depend on the cognitive agenda the subject of the attribution is disposed to close or advance. This does not make me a *Strict Invariantist*, because I do not believe there is only one standard of knowledge for all cognitive agents and it is high. Instead, I believe epistemic standards are part of the closure conditions of the cognitive agendas to be closed or advanced. Remember the ways in which standards of proof work in legal proceedings: they impose different epistemic standards on legal agents depending on the agenda they want to close or advance. If the goal is to stop and frisk an assumed armed and dangerous individual, the standard of reasonable suspicion should be satisfied. If the goal is to convict someone for a crime, the standard in beyond a reasonable doubt has to be fulfilled.

Maybe this is a type of contextualism but, borrowing MacFarlane's expression (2005a), "not at all the usual kind" (p. 26). Before labeling my view, I want to clarify my concept of context. From an agendivistic perspective, *context* is a general structure where converge specific roles and idealized behaviors that are bound by specific purposes. In it, socio-historic

expectations are set for their participants. Consequently, a context is goal-oriented and imposes specific agendas, or plans of action, to the agents intervening in it.[4] For example, legal proceedings are understood as context because in them, specific roles converge such as criminal investigator, prosecutor, defendant, juror, jury, judge, and the like. Agents performing each of these roles have specific goals and they are supposed to behave according to specific social expectations. A prosecutor at trial is expected to justify that a defendant is guilty, and a jury is expected to hear the evidence presented by the parties and render a verdict. Now, an agent is said to be in a context when, in a specific situation, and according to his/her interests and capabilities, he/she adopts a stipulated role and commands his/her resources in order to achieve the assigned objective. Officer Heath in HUNCH? is a good example of an agent adopting the role of a police officer. The actions to be performed in a context are properly executed if they fulfill the standards stipulated in the respective agenda. Since my view is that *A* correctly asserts that *K* knows that *p* when *K* properly closes or advances his/her cognitive agenda, then, from my perspective, context changes truth conditions of knowledge ascriptions by imposing different agendas.

[4] Notice that this does not make me an *EC*st because for this view a "context" is a circumstance of utterance of a knowledge attribution.

Chapter 2: Knowledge Attributions and the Advancing of Cognitive Agendas

1. Introduction

This chapter is devoted to explore the role that knowledge attributions play in our cognitive economies. The most important antecedent of this issue is found in Edward Craig's *Knowledge in the State of Nature*. In this book, he claims that the purpose of knowledge attributions is to flag approved informants (Craig, 1990, p. 11). This has been the inspiration of prominent contemporary philosophical projects. For instance, John Greco, arguing for his virtue epistemology, claims that the concept of knowledge is valuable because of the role it plays "in the lives of information-using and information-sharing being as ourselves" (2011, p. 91). Duncan Pritchard (2010), using Craig's ideas to justify his anti-luck epistemology, claims that "the central importance of the concept of knowledge resides in the practical need to pick-out reliable informants—informants that one can rely on" (p. 62). Similarly, Ram Neta expands Craig's view suggesting "to generalize [it] by claiming that the various terms of epistemological appraisal are designed to flag informants that are creditable to various levels, or in various ways. (2006, p. 267). Craig's account and his legacy, however, have been recently criticized with several counter-examples and alternative theories. Practically, it is argued that it is possible to find knowledge attributions without approved informants, and approved informants without knowledge attributions. Two main alternative views account for these counter-examples. On one hand, Jennifer Lackey proposes that the function of knowledge attributions is to identify or flag reliable sources of information (2012, p. 246). On the other, Christoph Kelp states that the function of knowledge attributions is to identify or flag adequately terminated inquiry (2011, p. 63).

In this chapter, I am going to reconstruct this debate more thoroughly and propose an agendivistic account for the function of knowledge attributions in our cognitive economies. As I am going to explain below, one of the components of Craig's method is to adopt an ordinary situation and formulate a hypothesis of what the concept of knowledge would do for us in that situation (1990, p. 2). Borrowing this idea, I will adopt inquiry in criminal investigations as my field of exploration. To be sure, inquiry is the main activity of the procedural stage of investigation. The goal of an agent (*A*) while inquiring is to come to know whether or not *p*. Achieving this objective, *A* looks for the information useful to advance from his/her preliminary clues to the knowledge of *p*. One of the most important sources of information here is the claims of eyewitnesses and other informants. *A* attributes knowledge to those putative knowers when they provide information allowing *A* to advance or close his/her inquiry. If these general remarks are correct, I would be able to account for the function of knowledge attributions in an agendivistic way: the purpose of knowledge attributions is to identify or flag relevant information to close or advance an epistemic agenda. Since this agendivistic account is the main goal of this chapter, I will proceed as follows. First, I will present Craig's methodology and theory. Then, Lackey and Kelp's counter-examples and alternative accounts will be formulated. This debate will provide the contextual background for the agendivistic view that I will propose in the final part of this chapter.

2. The Approved Informant Account of Knowledge Attributions

As I interpret it, the main objective of *Knowledge and the State of Nature* is to provide an explanation for the concept of knowledge and the practice of knowledge attributions without using the "standard approach" of specifying the necessary and sufficient conditions for each of

them. In his words, “We are asking not so much: when is the ascription of a certain concept correct, but rather, why is it applied?” (Craig, 1990, p. 14). Two reasons justify this alternative approach. For one thing, the standard approach has theoretical issues exposed, for instance, by skepticism and Gettier-type problems, and “if the standard approach runs into difficulties—and the work of the last twenty-five years makes it apparent that it does—it is surely worthwhile to try to think of another [approach]” (p. 1). For the other, even if the standard approach were a successful project “so that agreed necessary and sufficient conditions for the ascription of knowledge were now on the table,” there is another issue worth exploring: “why has a concept demarcated by those conditions enjoyed such widespread use?” (p. 2). According to Craig, the ubiquitous use of “to know”, and all its word forms, shows that this expression serves some purpose in our lives. The problem is to know which one and how.

I interpret Craig’s alternative methodology as a state of nature etiology of the concept of knowledge. For the etiological component of his project, he differentiates the concept of “knowledge” from concepts such as “water” which is bound by the nature of water itself and our perceptions of it. “Knowledge,” differently, was created in response to certain needs, and is used to pursue certain objectives (p. 3). This is why Aristotle’s method of understanding of the origins of an object to clarify its developed form is a fundamental part of Craig’s methodology (Craig, 1990, p. 8). Practically, the concept of knowledge as we use it today is clarified by the study of its origins. Furthermore, Craig understands himself as belonging to the same group of “naturalist” philosophers such as Hobbes and Hume: “We are attempting a ‘state of nature’ explanation of a number of facts of conceptual or linguistic practice. Such explanations work by identifying certain human needs and arguing that the practices are a necessary (or at the least a highly appropriate) response to them” (p. 89). This “‘state of nature explanation” has as its

explanandum human practices and institutions, and as its *explanans* human needs. The idea is that human practices and institutions are an appropriate response to specific needs. In Craig's project, the concept of knowledge and the practice of knowledge attribution are explained by the need of getting accurate information allowing humans to achieve their goals.

For his state of nature explanation, Craig specifies three steps:

> Instead of beginning with ordinary usage, we begin with an ordinary situation. We take some prima facie plausible hypothesis about what the concept of knowledge does for us, what its role in our life might be, and then ask what a concept having that role would be like, what conditions would govern its application. (p. 2)

First, he selects an ordinary situation as a field of epistemological exploration. In the second step, he hypothesizes about the function of knowledge and knowledge attributions within the selected situation. Finally, he specifies the necessary and sufficient conditions for the concept of knowledge and the practice of knowledge attributions.

Selecting an ordinary situation, Craig, adopting a state of nature strategy, invites us to imagine a group of beings, our imaginary ancestors, who are identical to us in all cognitive aspects, but they do not have a concept of knowledge yet. These imaginary cognitive agents, like us, have different needs and desires to be satisfied in order to survive. Consequently, they have to act in favor of their contentment. To illustrate, the need for food demands from our ancestors to develop reliable mechanisms of identification and acquisition of this precious item. Using a more detailed description of Craig's:

> The creature must distinguish between food, here, now, provided it makes the right movement, and food here, soon, provided it waits very quietly for a bit and then makes the right movement. It must distinguish these from food, there, soon, provided it can get there; and cases in which it can get there from ones in which it cannot. Helpful again, as life grows more varied, will be the capacity to distinguish cases in which it simply cannot get there from those in which it cannot get there because of some temporary hindrance, either in the environment or in itself. (p. 81)

In this thought experiment, our imaginary ancestors do not know that this thing is food yet.

Rather, they are inquirers wondering whether this thing is food or not. For this inquiry, the information received is fundamental because it would lead our ancestors to the satisfaction of their needs. Two sources of information are important for Craig. Our ancestors, like us, are equipped with cognitive capacities such as perception, memory and reasoning. Even though this natural equipment is a fundamental source of information, it would also be useful if they can be informants for each other. Consequently, a second source of information is the claims that our ancestors communicate to each other. To illustrate, one of our ancestors could identify food given his perception of an apparent item of food, the memory of eating something similar to the thing he/she is perceiving, and the inductive reasoning relating the food remembered with the apparent piece of food perceived. Granted this is true, but another useful source of information could be a second ancestor who reveals to the first that this thing is edible.

What is the function of the concept of knowledge in this scenario? Moving to the second stage of his methodology, Craig answers in the following terms:

> So any community may be presumed to have an interest in evaluating sources of information; and in connection with that interest, certain concepts will be in use. The hypothesis I wish to try out is that the concept of knowledge is one of them. To put it briefly and roughly, the concept of knowledge is used to flag approved sources of information. (p. 11)

The concept of knowledge, as it is hypothesized in this quote, only applies to one source of information, namely, to informants. To be sure, Craig differentiates between two sources of information, namely, informants and states of affairs. While with the former the inquirer obtains the information that *p* because someone tells him/her so, in the latter the inquirer extracts the information that *p* from the world. However, Craig points out, "[w]e don't speak, even metaphorically, of a tree as knowing how old it is; and if Fred enters dripping wet, although he may well know that it is raining, we don't say that he knows it just because we can tell it by looking at him" (p. 35). Taking this qualification into account, I propose to reformulate Craig's

hypothesis making it explicit that in it he refers to informants and not to any other source of information:

> The concept of knowledge is used to flag approved informants.

How do we use the concept of knowledge to flag approved informants? Let me spell out this re-formulated hypothesis with a case by Craig.

> ONE DAY LATE
>
> Fred is, as I am aware, systematically wrong about what day of the week it is: he is always a day behind. Now I can certainly find out which day it is by asking him: if he says Thursday, I can rely on its being Friday, and so on. But Fred neither knows what day it is, nor is he a good informant; for he does not tell us, or even believe, that it is Friday. (p. 37)

This case shows that even though one can obtain information from Fred, one would not flag him as an approved informant. The reason for this reluctance in flagging is that Fred does not know which day of the week is today. This matters because, as I explained above, for Craig there is a non-trivial distinction between informants and sources of information. Even though Fred is a good source of information, he is not an informant. If this is right, then we attribute knowledge to informants when we want to approve them. From this interpretation, I infer the *Approved Informant Account* for the function of knowledge attributions (*AI*).

> *AI*: The function of knowledge attributions is to identify or flag approved informants.

The final step of Craig's project is to specify the conditions for flagging approved informants (i.e., for knowledge attributions). Without more preamble, such conditions are:

> (1) Either *p* and the informant believes that *p*, or not-*p* and the informant believes that not-*p*. (p. 11)
>
> (2) The informant should be accessible to the inquirer here and now.
>
> (3) The informant should be recognizable by the inquirer as someone likely to be

right about *p*.

(4) The informant should be as likely to be right about *p* as the inquirer's concerns require.

(5) Channels of communication between the informant and the inquirer should be open. (p. 85)

(1) is explained by the plausible idea that someone inquiring about whether or not *p* wants his/her informant to have the right answer for this question. That is, if *p,* the informant should believe that *p*. Additionally, according to Craig, an informant cannot say the truth about *p* if he does not believe that *p* (p. 12). Lastly, ONE DAY LATE also provides support for (1) because part of our reluctance to approve Fred as an informant is that he does not have the right belief about the question of what day is today. A second thing that an inquirer might want from his/her informant is to be available for consultation when the inquiry requires. This is why (2) imposes spatiotemporal constraints on the informant. (3) points out that it does not do any good for the inquirer if he/she is not able to recognize that the potential informant would provide the right information about *p*. (4) demands a tailor-made informant for the specific concerns of the inquirer. To clarify, according to Craig, inquirer's concerns vary due to three main factors (pp. 86-87). First, "the urgency of forming a belief as to whether *p*, in the inquirer's particular situation." While for some inquiries the negative outcomes of not forming a belief force the inquirer to beg for an informant with urgency, other searches, such as the one advanced in Descartes's *Meditations*, do not impose any time constraint. The second factor is "the relative pay-offs of being right and being wrong." In some inquiries, to be wrong does not matter too much. Consequently, an informant with low reliability would supply the required information. The final factor is "[the inquirer's] attitude to risk." Some inquirers can make decisions with less

information than others, so, the type and amounts of informants vary according to the epistemic risk the inquirer is disposed to take. Finally, (5) demands proper ways of conveying information from the informant.

Continuing with Craig's etiology of the concept of knowledge, what we have so far is a bunch of individual inquirers wondering whether or not *p*, and a set of criteria for the identification of approved informants. Now, Craig invites us to imagine our ancestors forming a community of members that collaborate with each other. In this new scenario, the way in which our ancestors individually deal with the satisfaction of their needs should be "objectivized" in such a way that the successful fulfillment of a particular need should overcome the parochial circumstances of the agent whose need was satisfied and become a successful response for all the community members. Craig fleshes out the concept of "objectivization," and explains why we have objectivized concepts with the following example:

> I may well be interested in "something which I can now sit on" (only close and accessible objects need apply). But in due course I shall be interested, since I anticipate wanting to sit down at future times, in objects which I could sit on if I wanted to, or in whether there will be something which I can sit on when I want to (at the end of the walk). This interest will naturally lead to an interest in hearing the opinions of others as to where there are objects which I can sit on if I want to, irrespective of whether they want to sit on them or not; so I shall want them to operate an objectivized concept too. And if I grow a little more altruistic in my outlook I may even be interested in whether there is something which Fred can sit on if he wants to, irrespective of whether I shall want to sit on anything or not. Hence the concept of something which is, in abstraction from what any particular person wants at any particular time or place, or even from whether anyone ever wants to sit down, simply suitable for sitting on. It may right now be out of reach, it may be upside down, it may be folded up in a cardboard box, perhaps no-one will ever want to sit on it anyway; but it is a chair I oversimplify, of course; there is more to the concept of a chair than that. (p. 84)

The next step of Craig's etiology, then, is to objectivize the concept of an approved informant in such a way that it does not depend on the particularities of specific inquirers, but becomes a useful concept for all the community. This is essential because, for Craig, "[t]he

concept of knowing … lies at the objectivized end of [this] process" (pp. 90-91). The issue is that given the subjective character of (2) – (5), reliable informants will not be recognized. To be sure, an informant could fail to satisfy (2) because he/she might not be "here" when the inquirer needs him/her. (3) is hard to satisfy given that different inquirers have different criteria for the recognition of an informant to be right. (4) makes the concept of a good informant arbitrary because it depends excessively on the variety of inquirers' needs and particular situations. Finally, the channels of communication mentioned in (5) could be broken by particular circumstances such as when the informant and the inquirer speak different languages.

How does the principle of objectivization transform conditions (1) to (5), then? Shortly, condition (1) remains the same, (4) is tightened, and (2), (3) and (5) are "diluted" (p. 90). To be sure, condition (1) remains the same because informants having true beliefs matters for a community disregarding the individual inquiries advanced by its members. (2), differently, is weakened because what matters in it is the accessibility of the informant and not if the informant and the inquirer share the same place and time. (3) is mitigated because its original formulation depends on an individual inquirer looking for something than he/she could recognize, ideally, without much effort. But, "what is effortlessly available to him then and there will not be a matter of public interest" (p. 90). Additionally, if an individual inquirer wants to receive some benefits from his/her community, he/she has to recognize that other inquirers have different methods of detection that could be better than his/her own. The more he/she uses the detectability powers of others, the weaker (3) will be. (4) is tightened because the inquirers' individual concerns to which good informants have to accommodate should be adjusted to the general interest of having good informants available for a vast diversity of cognitive enterprises. It is worth mentioning here that (4)'s objectivization justifies strict invariantism because it

demands a concept of a good informant disregarding the inquirer's context. To be sure, in Chapter 1, I defined strict invariantism as the view holding that epistemic standards are fixed (i.e., invariant) and high. Since (4)'s objectivization demands good informants for all sorts of inquiries, if standards for knowledge are low, the high profile cognitive enterprises, such as scientific research, are excluded. This is confirmed by the following quotes:

> All this is going to edge us towards the idea of someone who is a good informant as to whether *p* whatever the particular circumstances of the inquirer, whatever rewards and penalties hang over him and whatever his attitude to them. That means someone with a very high degree of reliability, someone who is very likely to be right—for he must be acceptable even to a very demanding inquirer. (Craig, 1990, p. 91)

And,

> In saying that someone knows whether *p,* we are certifying him as an informant on that question, and we have no idea of the practical needs of the many people who may want to take him up on it; hence a practice develops of setting the standard very high, so that whatever turns, for them, on getting the truth about *p*, we need not fear reproach if they follow our recommendation. (p. 94)

Finally, (5) should be objectivized because channels of communication cannot depend on particular circumstances of inquirers. If our ancestors form a community, as Craig imagines, they might engage in group action. In this case, "it is important to me that someone in the group holds a true belief as to whether *p*, and quite unimportant whether the route by which they acquired it would have been open to me or not" (p. 92).

3. Knowledge Attributions Without Approved Informants, and Approved Informants Without Knowledge Attributions

As I mentioned in the introduction of this chapter, although *AI* has been the inspiration of important contemporary epistemologies, it has also been the target of criticism. Specifically, some counter-examples against *AI*'s necessary and sufficient conditions for the identification of

approved informants have been proposed. These counter-examples show, against *AI*, that it is possible to find cases of knowledge attributions without approved informants, and approved informants without knowledge attributions. These results are the main motivation for proposing alternative theories accounting for the function of knowledge attributions in our cognitive economies. In this section, I will study the counter-examples and the accounts designed by Kelp (2011) and Lackey (2012).

3.1 The Adequately Terminated Inquiry Account of Knowledge Attributions

Kelp, in "What's the Point of "Knowledge" Anyway?," after thoroughly reconstructing Craig's account for the function of knowledge attributions, remarks that there is some "recalcitrant data" that *AI* cannot explain (Kelp, 2011, p. 58). Such problematic data become explicit in two cases meant to defeat *AI*'s conditions (1) to (5). I will start presenting the case against (5). To recall, this condition stipulates that the channels of communication between the inquirer and the informant should be open. However, for Kelp, cases of professional secrecy as the ones required from some doctors, lawyers, accountants, and social workers pose a problem for this condition. Kelp instantiates this with the following case:

> SEAL OF CONFESSION
>
> Don Camillo is the priest at the local parish. The members of his parish, who are all devout believers, regularly come to Don Camillo to confess their sins. As an ordained priest, Don Camillo is bound by the seal of confession. That is to say, he must not divulge information about his confessors' sins in any way or for any reason and cannot be forced to break this obligation even by the authorities. (p. 59)

According to Kelp, we will properly attribute knowledge to Don Camillo because he comes to know different facts about his confessors' sins. However, he is not an approved informant, in Craig's terms, because he "is committed to taking his knowledge of his confessors' sins into his

grave." In other words, his channels of communication are not open to any inquirer. To conclude, what SEAL OF CONFESSION is supposed to show is that there are cases of knowledge attributions without approved informants, and, therefore, *AI* is wrong.

With a second case Kelp shows that there also could be cases in which there is an approved informant to whom it would be inappropriate to attribute knowledge.

> SECRET SECT
>
> Dick is a member of a secret sect and for that reason shares the sect's belief that our planet is gradually warming. However, this belief is held not on the basis of scientific findings but is instead grounded in the sect's belief (also shared by Dick) that global warming is the result of God's decision to punish humanity for the fornicatory practices that in recent times have become so outrageously widespread among his once beloved sheep. Since the sect is secret, Dick is not allowed to assert its beliefs. For that reason, he has adopted a policy of asserting the relevant issues in accordance with what the experts in the field have to say. Fortunately, Dick is a government spokesman on environmental issues and thus particularly well acquainted with expert views on global warming. (p. 60)

Dick satisfies (1) because he tells the truth about global warming and he believes that global warming is actually happening. Additionally, given Dick's familiarity with questions such as climate and habitat, condition (4) is also satisfied Finally, provided his governmental position he is supposed to be available to attend inquiries about environmental issues, he is publically recognized as someone knowledgeable in these areas, and his channels of communication are always open. Therefore, he also meets conditions (2), (3) and (5). Even when Dick would be approved as an informant by *AI*, "Dick's belief that global warming is happening is highly irrational, as it is held for reasons that only the raving mad would conceivably take to support it. In consequence, it does not qualify as knowledge" (p. 61).

Claiming to account for the problems posed by SEAL OF CONFESSION and SECRET SECT, Kelp proposes an alternative view of the functions of knowledge attributions in our cognitive economies: the *Adequately Terminated Inquiry Account* (*ATI*).

> *ATI*: The function of knowledge attributions is to identify or flag "when agents *may adequately terminate inquiry* into a given question" (p. 62).

Showing the virtues of *ATI* over *AI*, Kelp makes a parallel with Craig following his method of objectivization. Here, I am going to present some of the most important aspects of such juxtaposition.

Kelp, unlike Craig, believes that our imaginary ancestors not only need to flag approved informants, but also "to evaluate various inquiries agents undertake" (p. 62). This second need, for Kelp, deals better with the problems posed by SEAL OF CONFESSION and SECRET SECT than the first one. To support this, he wonders "[w]hat properties would our ancestor want himself to have upon terminating inquiry?" To respond, Kelp specifies the conditions governing an adequately terminated inquiry.

> (6) He has formed a belief on whether *p*.
>
> (7) His belief on whether *p* is true
>
> (8) His belief on whether *p* stems from a source that is as trustworthy on the question whether *p* as his concerns require. (p. 62)

Notice that (6) and (7) correspond to (1) in *AI*, which is the condition demanding a true belief. (8), respectively, has parallels with (4). To recall,

> (4) The informant should be as likely to be right about *p* as the informant's concern requires.

However, there is an important difference between (8) and (4): to demand from the source of information to be "trustworthy" instead of "being right about *p*" does not imply that such source knows that *p*. Finally, there is no trace of *AI*'s conditions (2), (3), (5) in *ATI*. These three conditions demand from the informant to be accessible, recognizable, and to have open channels

of communication.

Kelp also imitates Craig reflecting on the principle of objectivization:

> Suppose … that agents in this community traffic in information in the way we do: agents can inquire on behalf of other agents or as members of groups and can enter the results of their inquiries into various databases, from which they may subsequently be retrieved by agents who have access to the databases. In such a community, the pressure towards objectivization of the concept of adequately terminated inquiry only increases. After all, what matters now are not only the concerns of the individual agent at the specific time of inquiry, but also the concerns of other agents and groups of agents, present and future, which may be very different than the ones of the inquiring agent at the time of inquiry. (p. 63)

How does objectivization change conditions (6) – (8)? Conditions (6) and (7) remain the same because to form a true belief is relevant for future and present inquiries conducted by individuals or groups. Differently, (8) has to be tightened. For one thing, the element of trustworthiness could vary depending on the source of information and the inquirer. For the other, to join trustworthiness with the inquirer's concerns includes as many possible variations as the ones that Craig pointed out when talking about the "urgency of forming a belief", "the relative pay-offs of being right and being wrong," and "[the] attitude to risk" different inquirers have (Craig, 1990, pp. 86-87). These reasons motivate Kelp to replace trustworthiness with reliability, obtaining "a very strong reliability condition on adequately terminated inquiry objectively construed," in the following terms:

(8)* "His belief stems from a highly reliable source" (Kelp, 2011, p. 62).

SEAL OF CONFESSION does not represent a threat for *ATI* because, for this account, the fact that an agent does not convey pieces of information does not have anything to do with the issue of whether such agent have adequately terminated his/her inquiry. *ATI* also do well with SECRET SECT. Given that *ATI* does not demand from the sources if information to believe that what they are informing is true, but only to be reliable sources, one does not need to attribute knowledge to them, even though they are good informants.

3.2 The Reliable Information Account of Knowledge Attributions

Lackey in "Group Knowledge Attributions" also proposes several counter-examples against *AI*. She characterized *AI* as a theory holding that "the purpose of knowledge attributions is to identify or flag informants who at least either believe that *p* when *p* is the case, or believe that not-*p* when not-*p* is the case" (2012, p. 247). However, she challenges this belief-dependence account with the following case taken from her epistemology of testimony:

> CREATIONIST TEACHER
>
> Stella is a devoutly Christian fourth-grade teacher, and her religious beliefs are grounded in a deep faith that she has had since she was a very young child. Part of this faith includes a belief in the truth of creationism and, accordingly, a belief in the falsity of evolutionary theory. Despite this, she fully recognizes that there is an overwhelming amount of scientific evidence against both of these beliefs. Indeed, she readily admits that she is not basing her own commitment to creationism on evidence at all but, rather, on the personal faith that she has in an all-powerful Creator. Because of this, Stella does not think that religion is something that she should impose on those around her, and this is especially true with respect to her fourth-grade students. Instead, she regards her duty as a teacher to involve presenting material that is best supported by the available evidence, which clearly includes the truth of the evolutionary theory. As a result, after consulting reliable sources in the library and developing reliable lecture notes, Stella asserts to her students, "Modern-day Homo sapiens evolved from Homo erectus," while presenting her biology lesson today. Though Stella herself neither believes nor knows this proposition, she never shares her own personal faith-based views with her students, and so they form the corresponding true belief solely on the basis of her reliable testimony. (Lackey, 2008, p. 48)

This case shows that *AI*'s condition (1) is wrong because it is the case that the "Modern-day Homo sapiens evolved from Homo erectus," but Stella does not believe it. However, Stella is an approved informant for her students, and she properly conveys that *p*. Then belief is not a necessary condition for being an approved informant, as Craig states (Lackey, 2013, p. 254). But, for Lackey, this is just a symptom showing that *AI* is wrong as a whole. Justifying this, she suggests another case:

DISTRIBUTED INFORMATION

> The UN Population Commission, which is comprised of forty-seven individual members, has a central office located in New York City in which all of the data gathered by the Commission members are stored. Each member of the group was responsible for collecting information about a different segment of the population, and their respective work was done entirely independently from one another. Sam, who is not a member of the UN Population Commission, was hired to interpret and compile all of the data contributed by the members of this group into a single document, which she completed but did not yet publish. Maria, who is an investigative journalist working for an independently owned newspaper, suspects that the Commission is radically underreporting the number of Latinos currently living in the US for political purposes, and so she breaks into the New York office to research the matter. Once inside, Maria interprets and compiles all of the data contributed by the members of this group into a single document just as Sam did and publishes it in the newspaper. One of the statements in this report is, "the birth rate of Latinos in the US is on the rise," of which not a single member of the UN Population Commission is aware. (p. 261)

In accordance with Lackey, in DISTRIBUTED INFORMATION, "we have a knowledge attribution without [an approved] informant, and [an approved] informant without a knowledge attribution" (p. 262). To be sure, in this case, the knowledge that "the birth rate of Latinos in the US is on the rise," is attributed to the UN commission, but this institution is not an approved informant, "since not a single member of the group is privy to the relevant information" (p. 162). Maria, on the contrary, conveys the information that "the birth rate of Latinos in the US is on the rise," but it would be wrong to attribute knowledge to her since "[s]he arrived at her conclusion in a way that is causally independent from Sam's process, she is not a member of the UN Population Commission, she is not their official spokesperson, and she is not testifying on their behalf" (p. 261). Therefore, *AI* is wrong.

With the results of this thought experiment in mind, Lackey creates the *Reliable Information Account* (*RI*) for the function of knowledge attributions in our cognitive economies:

> *RI*: "The function of knowledge attributions is to identify or flag reliable sources of information" (p. 263).

As it is easily inferred from this formulation, Lackey disagrees with Craig's distinction between informants and sources of information. DISTRIBUTED INFORMATION justifies her view because even though Maria is considered an informant that "the birth rate of Latinos in the US is on the rise" for the public in general, the UN commission is a source of information for her and Sam. Yet, the UN commission is not an informant because none of its members have the belief that "the birth rate of Latinos in the US is on the rise." By the same token, Stella, in CREATIONIST TEACHER, is a source of information, but not an informant, for her students because she does not believe that the "Modern-day Homo sapiens evolved from Homo erectus."

4. The Advancing or Closing Agendas Account of Knowledge Attributions

My disagreement with Craig is in the way he executes his methodological program. Remember that in Craig's state-of-nature-explanation, the practice of knowledge attributions is the *explanandum*, and the human need of getting true beliefs about the surrounding environment is its *explanans*. The idea is that knowledge attributions are "highly appropriate responses" to the need of obtaining true beliefs. In his words, "[h]uman beings need true beliefs about their environment, beliefs that can serve to guide their actions to a successful outcome. That being so, they need sources of information that will lead them to believe truths" (Craig, 1990, p. 11). My contention is that Craig does not take into account the reason for which humans need "to believe truths," and such explanation seems to be crucial for his project. To be sure, in the fragment just quoted, Craig correctly states that knowledge attributions respond to the need of having true beliefs, and that true beliefs matter because they "serve to guide their actions to a successful outcome." However, Craig does not explain how knowledge attributions serve to guide human actions to a successful outcome. I submit that a theory of the function of knowledge attributions

in our cognitive economies should account for the ways in which knowledge attributions serve to guide our cognitive endeavors to a successful outcome. In the remaining part of this chapter, I am going to develop this intuition.

I find some of the steps of Craig's methodology useful for the task at hand, but I want to make some adjustments to them. To recall, Craig's methodological route starts with the selection of an "ordinary situation" as a field to test different hypotheses about the function of the concept of knowledge and knowledge attributions. If a robust hypothesis is found, the study concludes with the determination of the conditions under which the concept of knowledge and knowledge attributions operate. So far so good, but I do not believe that a community of our imaginary ancestors in the terms described by Craig is an "ordinary" situation. Craig's selection of such community is justifiable from his state of nature methodology. Given that I do not follow the state on nature tradition in this paper, I have freedom to select a case post-state of nature. There is one element that I want to maintain as close as possible to Craig's methodology: I want the agents taking part in my field of experimentation to lack knowledge as well. Being loyal to the spirit of this work, I propose to use criminal investigation as a field of philosophical exploration.

A possible objection to this methodological decision is that criminal investigation is not an "ordinary situation" either. Instead, this is an activity belonging to a specialized domain. This could lead me to a specialized concept of knowledge going against the main objective of this chapter: to account for the function of knowledge attributions in our cognitive economies in general. This is my response. I understand criminal investigation as the activity of determining whether a crime was committed. In this sense, criminal investigations are a type of inquiry, and inquiry is general enough to serve my purposes. I do recognize that criminal investigations are executed through particular evidence-handling actions such as looking for evidence at the scene

of the crime, interviewing eyewitnesses or looking in police databases for criminal records. These activities are regulated by specific rules such as the Fourth, Fifth and Sixth Amendments of the United States Constitution. However, these are particular applications of the concept of criminal investigation in a particular legal system. Following Rawls's (1955) differentiation between "justifying a practice and justifying a particular action falling under it" (p. 3), I do not need to include these particular applications in my concept of criminal investigation, as I mentioned in the introduction of my dissertation. If this is right, the concept of criminal investigation I am going to develop here is general enough to lead me to the broad concept of knowledge required for the achievement of the main objective of this chapter.

Moving to the second step, I want to maintain the elasticity that Craig attributes to the formulation of hypotheses. Using his words, the idea is "to illuminate [the actual practice of knowledge attributions] by showing that a concept with the hypothesized role would have characteristics closely resembling those that [they exhibit]" (Craig, 1990, p. 2). Then, the corroboration of my hypothesis requires not a detailed description, but an accurate resemblance to the object under account.[1] Finally, I am not concluding with a list of conditions individually necessary and jointly sufficient, as Craig does it, because this is a method belonging to conceptual analysis, and here I am studying function of knowledge attributions in our cognitive economies.

The central question of my view is: How do knowledge attributions serve to guide human actions to a successful outcome? To answer this question, I need an activity linking human actions with cognitive endeavors. I believe criminal investigation, as instantiations of the general epistemic project of inquiry, satisfy this requirement. Criminal investigations, as all types of

[1] This elasticity provides another reason for thinking that a general concept of criminal investigation, as a sort of inquiry, will do the job required in this chapter.

inquiries, are cognitive enterprises wondering whether *p*. Broadly speaking, in criminal investigations, *p* stands for an action catalogued as a crime for criminal law. Some of those actions are assault, drug possession, burglary, domestic violence, homicide, and so on. Criminal investigations are one of the sub-agendas of the prosecution in criminal cases. The ultimate agenda of a prosecution is to show, beyond a reasonable doubt, that a defendant committed a crime. When the prosecution does not satisfy this burden, the innocence of the defendant is assumed. The goal of criminal investigations is to present a case to the prosecutor. This includes a cognitive agenda of determining whether a crime has been committed, and who did it. Such cognitive agenda is closed or advanced in two ways: either determining that there is good evidence of the occurrence of a crime, or determining that there is not good evidence for the occurrence of a crime. Criminal investigations involve different types of activities; to inquire is the main one, but criminal investigators also search for evidence, interview witnesses, conduct interrogations, collect and preserve legal evidence, and the like. The connection between knowledge and action in criminal investigations becomes clear by the fact that when an investigator comes to know that *p*, he/she stops performing all the actions related with the inquiry of whether *p*.

Imagine a criminal investigator wondering whether *p*; how can this investigation finish in a successful outcome? Relevant information that is processed in the right way allows the criminal investigator to come to know *p*. There are two main sources of information in criminal investigations: state of affairs, or physical evidence, such as fingerprints, sound recordings, photographs, and so on, and the testimony of eyewitnesses and other collaborators. Let me focus on testimonial evidence. Testimonies are relevant when they provide information useful to advance the agenda of the criminal investigation. That is, they provide information useful to

determine that either there is good evidence for the hypothesis that a crime occurred, or there is not good evidence for such hypothesis. When this is the case, criminal investigators attribute knowledge to the eyewitness, victims and other collaborators. Consequently, the function of knowledge attributions in criminal investigation is to flag information useful to finish the investigation with a successful outcome.

Now, I can formulate a more general view of the function of knowledge attributions: the *Advancing or Closing Agendas Account* (*ACAA*).

> *ACAA*: The function of knowledge attributions is to identify or flag relevant information to close or advance an epistemic agenda.

Given that epistemic agendas are aimed at knowledge, they are advanced or closed in response to relevant information. For instance, a criminal investigator receiving testimonies of victims and eyewitnesses providing details of the crime and descriptions of the perpetrator advances in his/her agenda because they confirm the hypothesis of that a criminal action occurred. If this is right, attributing knowledge is a way of saying that the information someone conveys leads to the advancing or closing of a cognitive agenda. Neither *ATI* nor *RI* explains the connection between knowledge attributions and successful, or frustrated, cognitive endeavors. However, from my perspective, a theory of the function of knowledge attributions in our cognitive economies should be able to do so. Flagging an adequately terminated inquiry is important because that leads to knowledge, but *ATI* does not account for this fundamental relationship. By the same token, even though reliable information has epistemic value itself, a theory accounting for the function of knowledge attributions should be able to show that the information coming from a proper knowledge attribution is relevant within a cognitive enterprise. My account, unlike *ATI* nor *RI*, shows the specific connections between knowledge attributions and epistemic projects, or

cognitive agendas.

Chapter 3: Testimony and Knowledge Attributions

1. Introduction

The goal of epistemologies of testimony is to evaluate the conditions under which a hearer acquires knowledge based on testimony. According to Greco (forthcoming), theories of testimony face two interrelated dilemmas: The Dilemma Reductionism vs. Antireductionism, and the Dilemma Transmission Vs. Generation. Firstly, the Dilemma Reductionism vs. Antireductionism comes from two responses to the problem of the epistemic status of testimony.

> (1) *Reductionism*: the epistemic status of testimony comes from other sources of knowledge such as memory, perception [or] inductive reasoning.
>
> (2) *Antireductionism*: the epistemic status of testimony comes from testimony as a source of knowledge in its own right.

Let me show how (1) and (2) work with a list of cases by Greco:

> Case 1. A seasoned investigator questions a potentially uncooperative witness.
>
> Case 2. A job applicant tells you that he has no criminal record.
>
> Case 3. You ask directions from a stranger in an unfamiliar city. For example, where is the train station?
>
> Case 4. You ask your friend whether he intends to come to your party, and he says that yes, he does.
>
> Case 5. A third-grade teacher tells his student that France is in Europe.
>
> Case 6. A mother tells her small child that there is milk in the refrigerator. (forthcoming, pp. 8-9)

(1) accounts for Cases 1 and 2, and (2) accounts for Cases 5 and 6. Cases 3 and 4 are "somewhere in between" (Greco, forthcoming, p. 9). Under which conditions does a seasoned investigator acquire knowledge from the testimony of an uncooperative witness? A witness could

be “uncooperative” in different ways. For instance, he/she could be reluctant to convey relevant information for the investigation, or the information he/she provides is inaccurate, incomplete, or false. Either way, a seasoned investigator has to use his/her previous experience interrogating witnesses, his/her knowledge of the case, his/her experience in cases similar to the one case he/she is investigating, and the like. If this is right, Case 1 shows that the epistemic status of testimonial knowledge comes from other sources of knowledge. Therefore, (1) is right. Something similar would happen with a job recruiter wanting to know if a job applicant has criminal records in Case 2. The job applicant is not necessarily uncooperative, as the witness in Case 1. However, an experienced job recruiter knows that he/she should not rely only on the applicant’s testimony. The recruiter should check, by him/herself, other sources of information such as the police databases to verify the applicant’s information. This is confirmed by the way in which experienced job recruiters behave when trying to know, by the testimony of job applicants, other information such as a previous particular job experience. The recruiters in these cases not only rely on the applicant’s testimony, they also study the applicant’s CV, read recommendation letters, call and talk to references and former employees, and the like. Compare Cases 1 and 2 with Cases 5 and 6. A third-grade student comes to know that “France is in Europe” because his/her teacher says so. The student does not, and normally, cannot use other sources of information to verify his/her teacher’s testimony. Therefore, the epistemic status of testimony comes from testimony itself, as it is stated in (2). By the same token, in Case 6, the child knows that the milk is in the refrigerator because of his/her mother’s testimony. The child does not need to make inductive generalizations or to use previous knowledge to confirm his/her mother’s information.

For Greco, what characterizes Cases 1 – 6 is that in them testimonial knowledge is

increasingly easy to acquire. To clarify, *hard testimonial knowledge* demands from the hearer background information and non-testimonial reasons to acquire knowledge by testimony, as in Cases 1 and 2. Alternatively, in *easy testimonial knowledge*, the hearer knows from testimony straight away, as in Cases 5 and 6. Putting this together with the results of the previous paragraph, (1) seems to account better for cases of hard testimonial knowledge, and (2) seems to work better for cases of easy testimonial knowledge. What if one tries to explain cases of easy testimonial knowledge, such as Cases 5 and 6, with (1), and cases of hard testimonial knowledge, such as Cases 1 and 2, with (2)? I believe one will make testimonial knowledge in Cases 5 and 6 too hard to acquire, and too easy to obtain in Cases 1 and 2. To be sure, to demand from the third-grade student and from the child to use memory, perception and inductive reasoning to verify the correctness of their caretakers' testimony seems to be wrong. Alternatively, it would be naïve to think that the investigator in Case 1 acquires knowledge with the testimony of an uncooperative witness. Similarly, a job applicant's testimony is not enough for the job recruiter to achieve knowledge about the former. Greco shapes this problem with the following dilemma:

> Dilemma Reductionism vs. Antireductionism
>
> (3) Either testimonial knowledge requires good inductive evidence on the part of the hearer or it does not.
>
> (4) If it does not, then testimonial knowledge is too easy [to acquire in some cases]. There will be cases counted as knowledge that should not be.
>
> (5) If it does, then testimonial knowledge is too hard [to acquire in some cases]. There will be cases not counted as knowledge that should be.
>
> Therefore,
>
> (6) 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. (Greco, forthcoming, p, 10)

Secondly, the Dilemma Generation vs. Transmission comes from two approaches

explaining the ways in which the hearer acquires the knowledge that *p* by testimony.

(7) *Generation*: The knowledge that *p* is acquired by the hearer him/herself.

(8) *Transmission*: The knowledge that *p* is transmitted, via testimony, from the speaker to the hearer.

Cases 1 – 6 illustrate these ideas as well. (7) accounts for Cases 1 and 2, and (8) accounts for Cases 5 and 6. An uncooperative witness, *ex hypothesi*, either does not want to transmit knowledge, or the information he/she coveys is inaccurate, incomplete or false. As a consequence, the investigator comes to know on his/her own using the questionable witness's testimony and other sources of knowledge, such as his/her memories of other cases he/she has previously investigated, criminal profiles, the information of other witnesses and collaborators, and so on. Consequently, (7) seems to be right. The knowledge that a job recruiter acquires of a job applicant also seems to be generated. Even though it is right that the former uses some of the information testified by the latter, usually the knowledge of job applicants that job recruiters achieve goes beyond the description a job applicant would provide for him/herself. For example, at the end of an application process, job recruiters know by themselves whether the applicant is well-prepared for the job, if he/she has the experience required for the functions he/she will be in charge of, if he/she has past records than could affect the position he/she is going to fulfill, and so on. Compare Cases 1 and 2 with Cases 5 and 6. The information that "France is in Europe" seems to be transmitted from the teacher to the student in Case 5, and the child knows that the milk is in the refrigerator because his/her mom told him/her so. There is no generation of knowledge, but instead a transmission of knowledge in these two cases.

If these remarks are right, (7) accounts for cases of hard testimonial knowledge, and (8) for cases of easy testimonial knowledge. Does (7) make testimonial knowledge too hard to

acquire in Cases 5 and 6?, and does (8) make testimonial knowledge too easy to acquire in Cases 1 and 2? I believe the answer for these questions is yes. (7) makes testimonial knowledge too hard to acquire in Cases 5 and 6 because it demands from the third-grade student and the child to come to know by themselves that "France is in Europe" and "there is milk in the refrigerator." But they do not know this by themselves, but because of the testimony of their caretakers. (8) makes testimonial knowledge too easy to acquire in Cases 1 and 2 because under (8) the knowledge that the uncooperative witness and the job applicant have is supposedly transmitted to their hearers. But, such a testimony could be false; and, therefore, there is not knowledge transmitted in those cases. This is Greco's second dilemma.

> Dilemma Generation vs. Transmission
>
> (9) Either testimonial knowledge [is transmitted from the speaker to the hearer] or [the hearer comes to know by him/herself].
>
> (10) If testimonial knowledge [is transmitted from the speaker to the hearer], then it is too easy [to acquire in some cases]. A hearer can come to know merely by believing what a speaker says.
>
> (11) If [the hearer comes to know by him/herself], then testimonial knowledge is too hard [to acquire in some cases]. A hearer can never depend on a speaker to transmit knowledge, but must in every case come to know "for herself".
>
> Therefore,
>
> (12) An adequate account of testimonial knowledge is impossible: a given account must make testimonial knowledge either too easy in some cases or too hard in others. (Greco, forthcoming, p. 14)

These dilemmas additionally show an antagonism between (1), reductionism, and (7), generation, and (2), antireductionism, and (8) transmission. On one hand, with the pairing of (1) and (7), a hearer comes to know that *p* by him/herself because the epistemic status of testimony is derived from other sources of knowledge such as memory, perception or inductive reasoning. On the other hand, with the combination of (2) and (8), the hearer knows that *p* because

testimony has epistemic status by itself, and the knowledge that *p* is transmitted from the speaker to the hearer. In Greco's words:

> If you opt for reductionism, you make it impossible to accommodate transmission … Accordingly, you make testimonial knowledge too hard. If you opt for anti-reductionism, … you create a disconnect between the requirements for testimonial knowledge and the requirements for knowledge of any other kind. Accordingly, you make testimonial knowledge too easy. (Greco, forthcoming, p. 16)

The objective of this chapter is to compare the ways in which *EC*, *SSI* and Agendivism try to solve the aforementioned dilemmas of epistemologies of testimony. Let me use the model of knowledge attributions to explain the epistemological problem of testimony. An agent, the putative knower$_1$ (K_1), testifies that *p*. Another agent, the knowledge attributor$_1$ (A_1), receives such testimony and, attributing knowledge to K_1, allegedly comes to know that *p*. Now, A_1 becomes K_2, and he/she is the object of evaluation of a new attributor (A_2) wondering whether K_2 knows that *p* by testimony. My intuition is that *EC* and *SSI* make testimonial knowledge too easy because they endorse (2) and (8). Agendivism, differently, dissolves those dilemmas. This chapter is structured with the steps of my argumentation. I will start showing that *EC* and *SSI* endorse the *Knowledge Account of Assertion* (*KAA*). That is, the claim that

KAA: One should assert that *p* only if one knows that *p*.

A second step shows that *KAA* leads to (2) and (8). Third, I am going to justify that (2) and (8) make testimonial knowledge too easy. Finally, I will show that Agendivism has a better response to the dilemmas of epistemologies of testimony than *EC* and *SSI*.

2. Epistemic Contextualism, Subject-Sensitive Invariantism and the Knowledge Account of Assertion

The starting point of my argumentation shows the connections between *KAA*, *EC* and *SSI*. With this in mind, first, I am going to reconstruct Peter Unger's and Timothy Williamson's

KAA. Second, I will make explicit the ways in which these accounts have been endorsed by DeRose's and Cohen's *EC* and Stanley's and Hawthorne's *SSI*.

Unger (1975) proposes *KAA* as a way of uncovering the nontrivial relations between knowledge and assertion. His idea is that when one asserts something, one represents oneself as knowing whatever was asserted. In his words,

> *KAA-Unger*: "if *S* asserts, states, or declares that *p*, then he not only represents it as being the case that *p*, but he represents it as being the case that he *knows* that *p*" (p. 253).

For Unger, the main support for *KAA-Unger* is the antipathy generated by the skeptic claims such as "Nobody knows anything." If in *KAA-Unger*, *S* stands for a skeptic and *p* for "Nobody knows anything," we obtain: "if a skeptic asserts, states, or declares that nobody knows anything, then he not only represents it as being the case that nobody knows anything, but he represents it as being the case that he knows that nobody knows anything." But this proposition is self-contradictory because if a skeptic represents him/herself knowing that nobody knows anything, then something is known by someone: the skeptic him/herself. Therefore, the skeptic has a wrong representation of him/herself.

Williamson (2000) provides a second version of *KAA* in the following terms:

> *KAA-Williamson*: "One must: assert *p* only if one knows *p*" (Williamson, 2000, p. 241).

Two main arguments support *KAA-Williamson*. The first argument comes from conversational patterns. Imagine a speaker asserting "*p*." Now compare the following reactions:

(13) How do you know that *p*?

(14) Where did you read that *p*?

Both questions presuppose a response: while (13) presupposes that somehow the speaker knows that *p*, (14) presupposes that the speaker read "*p*" somewhere. However, while (13) is a proper reaction to the assertion that "*p*," (14) is not. The reason for this is that asserting "*p*" implies that the speaker knows *p*, but it does not necessarily imply that the speaker read "*p*" somewhere (p. 252). The correctness of (13) also receives support from the fact that (13) is not a proper reaction when the respondent knows that the speaker knows *p*, as when *p* stands for "I want to go home."

The second argument for *KAA-Williamson* comes from the way it deals with Moore's Paradox instantiated by the following proposition:

(15) *p* and I do not know that *p*.

KAA-Williamson and the concept of conjunction show why it is wrong to assert (15). Shortly, with *KAA* to assert that "*p*" is to imply that "I know that *p*." Then, (15) is "I know that *p* and I do not know that *p*." However, this does not make sense because one knows a conjunction only if it is true, and for a conjunction to be true, its two conjuncts have to be true. But if the second disjunct, "I do not know that *p*," is true, then the first one, "I know that *p*," is false, and *vice versa*. Therefore, (15) is self-contradictory (p. 253).

KAA-Williamson allows for an *EC*st response to one Cartesian-type defense for the correctness of (15). Such defense claims that to assert (15) could be acceptable if its first conjunct is cancelled out by a criterion other than knowledge. This is a job that (15)'s second disjunct can do, as in the following variation of (15):

(15)* *p* and I cannot be absolutely certain that *p*.

In this case, one can assert "*p*" without being absolutely certain that *p*. So, to assert (15) is correct. Williamson disagrees. His diagnosis is that in (15)* there "is a reluctance to allow the contextually set standards for knowledge and certainty to diverge" (p. 254). *EC* makes possible

that divergence, as it is shown by the next slight modification of (15)*:

(15)** *p* and by Descartes's standards I cannot be absolutely certain that *p*.

In (15)** there is a change of contexts making the second conjunct epistemically more demanding than the first one: "the reference to Descartes holds those standards apart from the present context" (Williamson, 2000, p. 234). Conversational patterns confirm the Cartesian objector's illegitimate movement. It would be inappropriate to respond to the assertion that *p* asking "How can you be so certain that *p*?" For Williamson, the expression "so" in this response is an indication of the rise of epistemic standards with the demanding threshold of certainty. Yet, this does not cancel out (15)'s first conjunct because under ordinary standards, it is appropriate to state that "*p*" even if one is not certain that *p*. To sum up, below is Williamson's explicit approval of *EC*:

> The putative connections between knowledge, assertion and certainty contain an obvious sceptical threat … One response is to permit contextual variation in epistemic standards: in effect, 'know' would express different contents in different contexts, as a result of either variation in meaning … If so, 'assert' will express correspondingly different contents. (Williamson, 2000, p. 254)

*EC*sts also endorse *KAA*. For DeRose, *KAA* provides an adequate response to the *Generality Objection* against *EC*. The Generality Objector claims that variations of knowledge-attribution statements do not have anything special. Rather, such variations are a ubiquitous phenomenon affecting assertability in general (DeRose, 2002, p. 178; 2009, pp. 89-92). This is confirmed by the fact that in high-standard contexts, it becomes as difficult to assert "*p*" as to assert "*K* knows that *p*." For instance, in DeRose's BANK CASE HIGH, it is wrong for DeRose to assert:

(16) "I know that the bank will open on Saturday."

But also, it is wrong for him to assert:

(17) "The bank will open on Saturday."

If this is right, there is nothing special with knowledge-attribution sentences. Indeed, a better explanation for the unassertabilty of propositions such as (16) and (17) in high-standard contexts comes from the *Warranted Assertability Principle* (*WA*):

> *WA*: One should assert that *p* only if one is positioned well enough with respect to *p* to properly assert it. (DeRose, 2002, p. 178; 2009, p. 91)

Under *WA*, *p* becomes unassertable because the epistemic standards for the assertability of *p* are increased in such a way that one is not well enough positioned with respect to *p*. Consequently, the incorrectness of asserting that *p* in a high-standard context is not due to the contextual variation of the truth conditions of *p*, as it is claimed by *EC*. To illustrate, (17) becomes unassertable when DeRose is not in a good enough epistemic position to assert it, and not because of the variations of the truth conditions of the statement: "The bank will be open on Saturday." By the same token, for the Generality objector, knowledge-ascription sentences such as (16) do not vary because of the contextual change of the truth conditions of "to know," but because DeRose, in BANK CASE HIGH, is not positioned well enough to correctly state (16).

The challenge posed by *WA* is that in some contexts it demands the asserter to be extremely well epistemically positioned with respect to *p* in order for him/her to assert *p*, but in other contexts the asserter can be moderately epistemically positioned to correctly assert *p*. So, how do we determine *WA*'s specific content? For DeRose, *KAA* provides an "impressive" and "correct" response to this question: "One must know that *p* in order to be positioned well enough with respect to *p* to assert it" (2002, p. 179; 2009, p. 93). However, a qualification is required, given that knowledge is a context-sensitive matter, *KAA* should adopt a relative form. This is DeRose's version:

> *KAA-DeRose*: A speaker, *S*, is well-enough positioned with respect to *p* to be able

> to properly assert that *p* if and only if *S* knows that *p* according to the standards for knowledge that are in place as *S* makes her assertion. (2002, p. 182; 2009, p. 99)

Notice that *KAA-DeRose* brings together the standards for the correction of assertion and the standards for knowledge ruling the asserter's context. However, for DeRose, "our ascriptions of warranted assertability do not generally sway together with our knowledge attributions" (2009, p. 99). To be sure, under *KAA-DeRose* it is possible that the proposition "*S* is warranted in asserting that *p*," is true in the knowledge attributor's contexts, but "*S* knows that *p*," is wrong in the same context. The explanation for this is that the standards of knowledge governing the knowledge attributor's context are higher than the ones ruling *S*'s contexts in such a way that *S*'s belief that *p* meets the lower epistemic standards of his/her context, but not the higher epistemic standards of the knowledge attributor's contexts.

Despite this detachment between ascriptions of warranted assertability and knowledge attributions, *KAA-DeRose* brings together these two elements when the putative knower and the knowledge attributor are the same agent, as in "I know that *p*." This fusion between standards for assertability and knowledge is confirmed by *KAA-DeRose*'s explanation of the Moore's Paradox instantiated by (15). When a speaker asserts "*p*," he/she represents him/herself knowing (15)'s first conjunct, under the standards regulating both assertability and knowledge in his/her context. Yet, when the same speaker asserts (15)'s second conjunct, he/she is contradicting the standards he/she thought were right in asserting "*p*."

Going back to the Generality Objection, *KAA-DeRose* is useful in denying that the unassertability of knowledge attributions in high-standard contexts is part of a more general phenomenon covering all types of assertions. DeRose claims that "when the epistemic standards

go up past the speaker's ability to meet them, 'I know that *p*' not only becomes unassertable, as the simple '*p*' does: It becomes false" (DeRose, 2009, p. 110). On one hand, "*p*" becomes unassertable when the asserter finds him/herself in a context at which he/she is not in a good epistemic position to assert "*p*." In this case, he/she prefers to assert something weaker that "*p*" such as "Probably *p*," "I'm pretty sure that *p*," "I think that *p*," and the like. However, the assertion "~*p*" is not a possibility for the asserter. To illustrate, when in BANK CASE HIGH, DeRose is not well epistemically positioned to state (17), he could have properly stated "Probably the bank will open on Saturday," "I'm pretty sure that the bank will open on Saturday," "I think that the bank will open on Saturday," and so on. Yet, for him it would be wrong to state "the bank will not open on Saturday." On the other hand, "I know that *p*" not only becomes unassertable, but false. Therefore, its negation is a possibility for the asserter. This explains why in BANK CASE HIGH when DeRose is not in a good epistemic position to state (16), it is right for him to state "I do not know whether the bank will open on Saturday." This difference of linguistic behavior between the assertion of "*p*" and the assertion of "*S* does not know that *p*" shows that the second has a distinctive character overcome by the Generality Objector.

*SSI*sts also embrace *KAA*. First, Stanley (2005) recognizes that *KAA* does a good job explaining the oddity of the Moore's Paradox, as Williamson shows it (Stanley, 2005, p. 11). Second, Hawthorne (2004) uses *KAA* to explain the unassertability of *lottery propositions*. He understands these sorts of propositions in juxtaposition with *ordinary propositions*: while "we ordinarily take ourselves to know" the latter, "we would be intuitively disinclined to take ourselves to know" the former (p. 5). A typical ordinary proposition is:

(18) "I know where my car is parked right now" (p. 4).

And a lottery proposition is:

> (19) "I know whether or not I am one of the unlucky people whose car has been stolen during the last few hours" (p. 4).

Propositions such as (19) are true, and if one were going to assert such propositions, one would have enough evidence for thinking that they are true. However, one is inclined to think that one does not know those propositions. That is why lottery propositions make a strong case for skepticism. Other examples of lottery propositions are: "I will not win a major prize in a lottery this year," and "I will not be one of the unlucky people to have a sudden and unexpected fatal heart attack." (pp. 7-8)

Why are propositions such as (19) unassertable? Hawthorne answers this remarking that there is a non-trivial connection between assertion and knowledge attribution as it is shown by Unger's and Williamson's idea that "[t]he practice of assertion is constituted by the rule/requirement that one asserts something only if one knows it" (Hawthorne, 2004, p. 23). Hawthorne's version of *KKA* follows Unger's closely:

> *KAA-Hawthorne*: "Asserting that *p*, one represents oneself as knowing that *p*" (p. 23).

In his understanding, *KAA-Hawthorne* does not imply that asserting "*p*" is the same as asserting "I know that *p*." Rather, when an agent asserts "*p*," he/she is also implicitly conveying that he/she knows that *p*, but he/she does not assert so. This is justified by the fact that the asserter could be criticized if he/she does not know that *p.* If this is right, to assert propositions such as (19) is wrong because, with this linguistic action, the asserter is representing himself as knowing that his car will not be stolen, but even if the chance of his/her car not being stolen during the last few hours is extremely low, he/she does not know it. Therefore, he/she is representing

him/herself wrongly (p. 85).

Along with these ideas, Hawthorne suggests that *EC* gets the connection between knowledge attributions and assertion wrong. Showing his point, he proposes the following case:

> WHERE IS YOUR CAR?
>
> You are in the house being asked where your car is. I am outside looking at your car. I have what the contextualist describes as 'pretty high standards' for 'know'; you have what he describes as 'lower standards'. I am thus happy to claim that you do not know where your car is. I am of course happy to claim that I know where your car is, since I am looking right at it, which is good enough, by my standards, to know. I hear you flat-out assert 'My car is parked outside'. Insofar as I am genuinely convinced that you do not know, am I not convinced that you shouldn't flat-out assert that your car is outside? Of course, I may not think you have committed a really egregious act. But if I really am convinced that you do not know where your car is, I will reckon you a little out of line to flat-out assert that it is outside when asked. (p. 91)

In this case, Hawthorne points out that *EC* allows for the shifting epistemic standards according to the knowledge attributor's contexts. While "you," under your low epistemic standards, attribute knowledge to yourself asserting that you know where your car is, "I," under my high epistemic standards, attribute knowledge to myself asserting that I know where your car is, but I deny knowledge to you because according to my comparatively higher epistemic standards, you do not know where your car is. Since for *EC*, the same attributor-dependence that governs knowledge attributions rules assertability, the following sentence becomes true:

(20) *S* may assert that *p*, but *S* does not know that *p*.

For Hawthorne, (20) "sounds odd" because it contradicts *KAA*. Therefore, *EC* gets the connection between knowledge attributions and assertion wrong.

Responding to this objection, Cohen (2004) also embraces a contextualized version of *KAA*. His starting point is *KAA-Unger*. To recall:

> *KAA-Unger*: "Asserting that *p*, … one represents oneself as knowing that *p*"
>
> (Unger, 1975, p. 253).

For Cohen, a contextualist version of this principle assumes that *S* represents him/herself as knowing that *p* by the standards governing his/her particular context. If this is right, a contextualist version of *KKA-Unger* would state that "When *S* asserts *p* in *C*, *S* represents himself as being such that '*S* knows *p*' is true at *C*" (Cohen, 2004, p. 486). Additionally, under Cohen's interpretation, *KKA-Unger* is a special version of the "principle that one should not represent oneself falsely". Consequently, Cohen's version *KAA* is:

> *KAA-Cohen*: "*S* may assert *p* in *C* only if '*S* knows *p*' is true at *C*" (Cohen, 2004, p. 486).

With this in mind, Cohen claims that the oddity of (20) is a consequence of a "false inference about what is entailed by '*S* may assert *p*' when uttered at the high-standards context" (p. 486). Given that the person asserting (20) is in higher epistemic standards than *S*, he/she is prone to think that *S* knows that *p* relative to high standards. This is illustrated by Cohen's version of WHERE IS YOUR CAR?

> WHERE IS YOUR CAR?*
>
> Suppose John has recently parked his car in lot 2. Suppose further that John is in a low-standards context (car theft is not being discussed) and someone asks him where his car is. He asserts that it is in lot 2. If I am in a high-standards context where car theft is being discussed, then according to Contextualism, I can truly say, "John does not know that his car is parked in lot 2." This remains true despite the fact that given John's own low-standards context (car theft is not salient), he can truly say, "I know my car is parked in lot 2". Hawthorne suggests that "given a contextualist profile", John has the right to assert that his car is parked in lot 2.Thus we get the odd result that at my high-standards context I can truly say "John may assert that his car is in lot 2 but doesn't know that his car is parked in lot 2." (Cohen, 2004, pp. 483-484)

The problem with this last assertion is that it contravenes the principle that one should not represent oneself falsely. Following the non-false self-representation principle, *S* should only represent him/herself knowing that *p* in the low standards governing his/her epistemic practices. So, a proper way of expressing the idea contained in (20) would be:

(20)* "*S* may represent himself as knowing by low standards but *S* does not know by high standards" (Cohen, 2004, p. 486).

So far, the relevant literature shows that both *EC* and *SSI* endorse *KAA*. The next step in my argumentation is to show that these accounts also embrace antireductionism and transmissibility because *KAA* leads them to those accounts of testimony.

3. The Knowledge Account of Assertion, Transmisibility and Antireductionism

Making it easy to remember, in this section I will take into account the following propositions:

KAA: One should assert that *p* only if one knows that *p*.

(2) *Antireductionism*: the epistemic status of testimony comes from testimony as a source of knowledge in its own right.

(8) *Transmission*: The knowledge that *p* is transmitted, via testimony, from the speaker to the hearer.

Let me present my preliminary intuitions using the model of knowledge attributions and testimonial knowledge proposed above. When does a knowledge attributor (A_2) correctly assert that a putative knower (K_2) knows that *p* based on testimony? According to *KAA*, K_2 knows that *p* based on testimony if the speaker knows that *p*. Therefore, the speaker becomes the first putative knower (K_1) in the chain of testimonial knowledge transmission. (2) follows from *KAA* since the proper assertion that *p* by K_1 transforms K_1's testimony into a source of knowledge of its own. Furthermore, (8) follows from *KAA* because K_1's proper assertion that *p* transfers the knowledge that *p* from K_1 to K_2.

KAA supports my intuitions. Williamson (2000), for instance, claims that one has the

warrant to assert a mathematical proposition *p* in at least two possible ways. On one hand, an agent knows that *p* because he/she "has followed [a proof of *p*] and retains some memory of it" (p. 263). On the other hand, an agent "knows by testimony that there is a proof of *p*" (p. 264). This suggests that testimony is a source of knowledge of its own like reasoning and memory. However, if the supposed expert mathematician testifying that *p* does not know that *p*, then the hearer will not know either. This is because, for Williamson, testimony transmits knowledge, but if the speaker does not have knowledge, there is nothing to transmit. In Williamson's words, "Testimony is a special source of warrant because one speaker can *pass on* a warrant to another. Since the expert mathematicians have no warrant to assert *p* themselves, they have none to pass on to you" (p. 264). Or in a more general way:

> In normal circumstances, when the hearer knows that the speaker asserted *p*, the speaker has no reputation for unreliability, and so on, a speaker who asserts *p* thereby puts a hearer in a position to know *p* if (and only if) the speaker knows *p*. (2000 p. 267)

Epistemologies of testimony also show the connection between *KAA* and (2). According to Jennifer Lackey (2008), it is possible to identify at least two versions of antireductionism: one weak and one strong:

> Antireductionism (Weak)
>
> For every speaker, *A*, and hearer, *B*, *B* knows that *p* on the basis of *A*'s testimony iff:
>
> (i) *B* believes that *p* on the basis of the content of *A*'s testimony,
>
> (ii) *B* has no undefeated (psychological or normative) defeaters for *A*'s testimony, and
>
> (iii) It is true that *p*. (p. 158)
>
> Antireductionism (Strong)
>
> For every speaker, *A*, and hearer, *B*, *B* knows that *p* on the basis of *A*'s testimony iff:

> (i) *B* believes that *p* on the basis of the content of *A*'s testimony,
>
> (ii) *B* has no undefeated (psychological or normative) defeaters for *A*'s testimony, and
>
> (iii) *A* knows (believes with justification/warrant) that *p*. (p. 159)

It is clear that the difference between strong and weak antireductionism is condition (iii). While in the weak version the proposition asserted has to be true, in the strong version, *p* has to be known by the speaker. The problem for the weak version is that a true assertion based on a lucky guess with the absence of undefeated defeaters against the speaker would be enough for *B* to know, but this is wrong. This is why Williamson prefers the strong version of antireductionism (Williamson, 2000, p. 242).

With regards to the relation of *KAA* with (8), Lackey (2008) makes *KAA* part of the necessary and sufficient thesis of her definition of transmission in the following terms:

> For every speaker, *A*, and hearer, *B*, *B* knows that *p* on the basis of *A*'s testimony …
>
> Necessary Thesis:
>
> … only if *A* knows (believes with justification/warrant) that *p*.
>
> Sufficient Thesis:
>
> … if (1) *A* knows (believes with justification/warrant) that *p*, (2) *B* comes to believe that *p* on the basis of the content of *A*'s testimony that *p*, and (3) *B* has no undefeated defeaters for believing that *p*, then *B* knows (believes with justification/warrant) that *p*. (p. 39)

To make it explicit, the connection between *KAA* and (8) is in the claim that the speaker has to know that *p* to testify that *p,* transferring testimony to the hearer.

If my intuition is right, *EC* and *SSI* not only embrace *KAA* but also (2) and (8). Hawthorne, however, does not agree. He states that WHERE IS YOUR CAR? shows that *EC* entitles people to assert propositions they do not know, and, consequently, it can be testimony without the speaker knowing what he/she testifies. So, WHERE IS YOUR CAR? poses a

counter-example against (8). These are Hawthorne's words:

> [I]f I think that you are in general entitled to flat-out assert propositions that you do not know, then I will have some considerable inclination to trust you about things that I think you do not know. This threatens to disrupt the plausible idea that, in general, *A* should only trust *B*'s testimony that *p* insofar as *A* thinks that *B* knows *p*. (2004, pp. 91-92)

Let me spell out this argument with the case inspiring it. In WHERE IS YOUR CAR?, you are entitled to assert that you know that your car is parked outside, even though you are not well enough epistemically positioned to know that your car is parked outside. Given that I allow you to assert that your car is parked outside, I would allegedly have "some considerable inclination to trust you" about something you do not know. Therefore, if you testify about the place your car is, you would testify about something you do not know. Yet, this contradicts (8).

I have two arguments against Hawthorne's position. Remember that Cohen reacts to WHERE IS YOUR CAR? claiming that you are entitled to assert that your car is parked outside only within your low epistemic standards, but not under my high epistemic standards. For Cohen, Hawthorne's mistake is to think that you represent yourself as knowing that your car is parked outside in my high epistemic standards because this contravenes the principle that you should not represent yourself falsely. Assuming that this is right, if according to my high epistemic standards, you do not know that your car is parked outside, then you are not warranted in asserting so in my context. Should I trust you, then? Surely I should not because from my perspective you neither know nor are warranted in asserting that your car is parked outside. So, WHERE IS YOUR CAR? does not pose a counter-example for the principle that "*A* should only trust *B*'s testimony that *p* insofar as *A* thinks that *B* knows *p*" because I neither think you know where your car is nor do I trust you in telling me where it is.

This argument is confirmed by a second one pointing out that WHERE IS YOUR CAR? is not a threat for (8) because transmission is a theory of testimony and WHERE IS YOUR

CAR? is not testimonial in nature. To be sure, for a case to be testimonial in nature the resulting knowledge should be testimonial, and for this the hearer has to acquire knowledge on the basis of the content of the speaker's testimony (Lackey, 2008, pp. 30-31; 145; 178). However, in WHERE IS YOUR CAR? my resulting knowledge that your car is parked outside does not come from your assertion that your car is parked outside, but from my perception of your car being parked outside. This is corroborated by the fact that neither (20) nor (20)* are meant to describe a hearer in a testimonial relationship. Those propositions state:

> (20) *S* may assert that *p*, but *S* does not know that *p*. (Hawthorne, 2004, p. 87)
>
> (20)* "*S* may represent himself as knowing by low standards but *S* does not know by high standards" (Cohen, 2004, p. 246).

The asserter of those propositions denies that *S* knows that *p* in the asserter's high epistemic standards. However, a hearer in a testimonial relation does not assert, before hand, that the speaker does not know. On the contrary, if the speaker expects to achieve knowledge through testimony, he/she, *prima facie*, attributes knowledge to the speaker. Maybe, *ultima facie*, the hearer would find undefeated defeaters for believing that *p* based on testimony, but this is not the starting point of a testimonial relationship and the knowledge acquired, if there is any, would not be testimonial in nature.

4. Epistemic Contextualism, Subject-Sensitive Invariantism and Easy Testimonial Knowledge

According to Greco (forthcoming), (2) and (8) "seem to make testimonial knowledge too easy, allowing that one can come to know by simply believing what one is told, and thus licensing gullibility" (p. 8). He borrows this idea from Elizabeth Fricker (1994), for whom (2)

confers to the hearer the "epistemic right to assume that the speaker always says the truth" (p. 125), unless the former has some undefeated defeater against the latter. The problem with this presumptive right is "the dispensation from the requirement to monitor or assess the speaker for trustworthiness, before believing in it. Thus it may be called a [presumptive right] to believe *blindly*, or uncritically, since the hearer's critical faculties are not required to be engaged" (p. 144). Cases 1 and 2, above, illustrate this point. To recall, these are the cases:

Case 1. A seasoned investigator questions a potentially uncooperative witness.

Case 2. A job applicant tells you that he has no criminal record.

Let me modify slightly Case 1 in order to make the illustration stronger. Given that in Case 1 the witness is described as "potentially uncooperative," it would be unlikely that a "seasoned investigator" would adjudicate to him/herself the epistemic right to assume that he/she does not need to have reasons to believe the witness is not lying. Consequently, I shall omit the aforementioned adjective for the witness obtaining a most neutral case:

Case 1*. A seasoned investigator questions a witness.

Picking up the topic of easy knowledge again, if in Cases 1* and 2 the seasoned investigator and the job recruiter had the presumptive right to think that the witness and the job applicant always say the truth, then some cases in which the witness and the job applicant are prone to lie would be wrongly considered as testimonial knowledge.

I believe *EC* and *SSI* confer such a presumptive right to the hearer when they allow different epistemic standards for the members of the testimonial relationship. According to (2) and (8), testimony is a source of knowledge on its own, and transfers knowledge from the speaker to the hearer disregarding the epistemic standards of the agents involved. As a consequence, in cases where the speaker is in a lower epistemic standard than the hearer, the

latter can acquire knowledge from the former, even though the speaker had no knowledge according to hearer's epistemic standards. WHERE IS YOUR CAR? and WHERE IS YOUR CAR?* show how *EC* allows for this difference of epistemic standards. *SSI* also permits such divergence. Recall that *SSI* denies that the meaning of the expression "to know" varies according to the context of ascription. From this perspective, the factors determining the correctness of a knowledge attribution are in the subject, or putative knower, and not in the attributor. Practically, knowledge attributions vary according to the salience of error possibilities for the putative knower. If for the speaker fewer error possibilities are salient than for the hearer, then they have two different epistemic standards. The following case by John MacFarlane (2005) illustrates this point.

> IS YOUR CAR STILL PARKED IN THE DRIVEWAY? (PART I)
>
> Arnold and Beth share a car, which is parked in their driveway. Beth has very good reasons for thinking that their car is in their driveway. She saw it there several hours ago when she left for work. She knows that she and Arnold have the only keys, and that Arnold has been out of town all week. But because Beth is deciding whether to get auto insurance today or tomorrow, she is subject to high epistemic standards. These standards require that she be able to rule out the possibility that the car was stolen after she left for work. Since she cannot do this, she does not know that the car is in the driveway.
>
> Arnold, on the other hand, is subject to low epistemic standards. He has just arrived at the airport and he is wondering how he will get groceries later in the day. But unlike Beth, he does not have any reason at all to think that their car is in the driveway. He has been gone all week, and Beth sometimes takes the car to work. So he calls Beth on the phone and asks, 'Is our car in the driveway?' Beth replies: 'Well, that's where I left it this morning.' Arnold has no reason to doubt this report, so (according to the Transmission Principle) he comes to know that Beth left the car in the driveway that morning. He infers that it is still there, and since his grounds are sufficient to meet the low epistemic standards appropriate to his circumstances, he thereby comes to *know* that the car is in the driveway … (p. 134-135)

Given the practical stakes of Arnold and Beth, fewer error possibilities are salient for the former than for the latter. Consequently, the second has higher epistemic standards than the first.

Why does this difference between the speaker's and the hearer's epistemic standards allowed by *EC* and *SSI* make testimonial knowledge too easy? Using the language of the dilemmas of epistemologies of testimony, the response is that, under *EC* and *SSI,* there are cases that count as knowledge that should not count. In other words, the inferiority of the speaker's epistemic standards together with (2) and (8) make testimonial knowledge too easy because the hearer can acquire knowledge under epistemic standards that are lower than his/her own. MacFarlane illustrates this point nicely with the idea of *knowledge laundering*. That is, cases where "[s]omeone who does not know that *p* can come to know that *p* simply by cycling her evidence through someone in less demanding circumstances." (2005, p. 135). The second part of Arnold and Beth's case makes explicit the idea:

> IS YOUR CAR STILL PARKED IN THE DRIVEWAY? (PART II)
>
> … now two hours pass. Arnold is in a taxi—he is late after spending some time buying a surprise gift for Beth at the airport—and Beth is still pondering whether to get auto insurance. Assuming that Arnold is home by now, she calls him on his cell phone. "Is our car in the driveway," she asks? He is not surprised that she has asked; he assumes that she is checking to see whether he has taken the car out himself. "Yes, it's still in the driveway," he says confidently. And why shouldn't he? He *knows* that it is. Beth accepts his testimony. She is not being doxastically irresponsible in doing so. After all, she has no reason to think Arnold untrustworthy, and no reason to think he is not home. So according to the Transmission Principle, Beth now knows that their car is in their driveway. She has "inherited" this knowledge from Arnold.

This is a case of easy testimonial knowledge because Arnold came to know that their car was parked in the driveway because of the evidence Beth gave him earlier. Beth, given Arnold's and Beth's difference of epistemic standards plus (2) and (8), came to know because of the information she gave previously to Arnold. Consequently, Beth escapes from her high epistemic standards recycling evidence through Arnold. However, this case should not be considered as knowledge.

5. Agendivism and the Dissolution of the Dilemmas of Epistemologies of Testimony

Agendivism, unlike *EC* and *SSI*, dissolves the dilemmas of epistemologies of testimony. I am going to justify this point, first, outlining an agendivistic theory of testimonial knowledge, and, second, tackling the aforementioned dilemmas. When does a knowledge attributor (*A*) correctly assert that a putative knower (*K*) knows that *p* based on testimony? Remember that my working hypothesis is that *A* correctly asserts that *K* knows that *p* when *K* properly closes or advances his/her cognitive agenda. In Chapter 1, I mentioned that some agendas include things that agents want or need to know. That is what I called cognitive agendas, which I defined as a set of questions that cognitive agents want, or need, to answer for the achievement of their objectives. When does a hearer properly answer the questions he/she needs for the advancing of his/her cognitive agenda? My intuition is that a hearer properly closes his/her cognitive agenda when receiving relevant information from the speaker, answers the questions required for the advancing or closure of his/her agendas. Consequently, there are two sub-cognitive agendas in testimonial knowledge: the speaker's agenda of providing relevant information, and the hearer's agenda of properly answering the questions he/she needs for the achievement of his/her objectives. I will identify those agendas as *agenda of epistemic relevance*, and *agenda of epistemic arrival*. While the latter aims to achieve knowledge, the former intends to provide relevant information. Testimonial knowledge combines these two agendas in such a way that the proper closure of the speaker's agenda of epistemic relevance is one of the conditions for the proper closure of the hearer's agenda of epistemic arrival. Let me spell out this idea.

From an agendivistic perspective, communicative interactions, such as testimony, are activities performed by agents in order to achieve specific objectives (i.e., agendas). This is illustrated by Greco's cases of testimonial knowledge. In Case 1, the investigator wants to

advance his/her inquiry. In Case 2, the job recruiter looks for the better candidate for the job. In Case 3, you want to find the train station. In Case 4, you want to confirm the number of people attending to a party you are hosting. In Case 5, the third grader wants to learn some geographic information. Finally, in Case 6, the small child wants to find an object. Two important consequences follow from this. First, speakers' agendas of epistemic relevance are properly closed when they facilitate the advancing or closing of the hearers' agendas. In this sense, a witness neither confirming nor disconfirming the hypothesis of a legal inquiry, or a job applicant who does not provide the required information to properly be assessed for their candidacy for a job, or street indications that do not lead to the arrival point, or a friend lying about coming to a party in your house, or a geography teacher giving his/her third grade students wrong geographic information, or a mom lying to her child about an object he/she is looking for do not close properly their agendas of epistemic relevance. Second, testimony achieves the communicative objective assigned to it when the hearer uses it to advance or close his/her agendas of epistemic arrival. In this sense, an investigator disregarding relevant testimonial information because of racial profiling, or a job recruiter ignoring good qualified candidates for the job so that one of his/her family members can be hired, or a tourist who does not follow street directions in a city he/she does not know, or a party host making fewer drinks than the number of guests he/she knows he/she is having, or a distracted student, or a rebellious kid, do not close their agendas of epistemic arrival properly.

How hard or easy is it to achieve knowledge by testimony? It depends on the agenda to be closed or advanced. As I mentioned it in Chapter 1, different agendas have different closure conditions. While the closure of some agendas calls for gross-performance, other agendas impose detailed tasks to be performed with great detail. Given the nature of the agendas to be

closed in Cases 1 and 2, testimonial knowledge is hard to obtain and, both, the investigator and the job recruiter are expected to use their background information and their experience to achieve testimonial knowledge. Alternatively, given the less stringent agendas of a third grader and a small kid, they can easily achieve knowledge from the testimony of their caretakers.

In this sense, agendivism is not reductionist because it holds that the ways in which the information is conveyed in a testimony impacts the appropriate closure of the speaker's agenda of epistemic relevance. However, agendivism is not antireductionist because it does not believe that the adequate closure of the testifier's agenda is enough: the hearer has cognitive work to do. By the same token, agendivism holds neither transmission nor generation because the hearer cannot know without the information provided by the testifier, but this information in itself is not enough; the hearer has to properly close or advance his/her agenda of epistemic arrival. Agendivism, consequently, dissolves the dilemmas of epistemologies of testimony.

Chapter 4: Expert Testimony

1. Introduction

The epistemological problem of expert testimony arises from conflicting philosophical interpretations of specific legal rules, namely, Frye v. United States (1923), *Federal Rules of Evidence* (*FRE*) 702, Daubert v. Merrell Dow Pharmaceuticals (1993), and Kumho Tire Co. v. Carmichael (1999). To contextualize, these rules create a *divided court* where fact-finding tasks are split between the trial judge and the jury.[1] While the latter is in charge of the ultimate decision of the facts under litigation, the former, beforehand, eliminates potentially confusing, unnecessary, or illegally obtained evidence from the jury's deliberation. *Prima facie*, the jury is supposed to find the facts under litigation using the common knowledge obtained from the testimony of lay eyewitnesses. However, some cases call for the use of expert knowledge helping the jury to understand the legal evidence presented by the parties. The trial judge, then, has to decide whether the proposed expert has the knowledge to help the jury in its findings. If this is not the case, the trial judge keeps expert knowledge out of the jury's deliberations declaring the requested expert testimony inadmissible.

This gatekeeping role of the trial judge is clarified by the concept of *epistemic paternalism* (Goldman, 1991, p. 118). Broadly speaking, it seems epistemologically appropriate to state that the more relevant evidence a cognitive agent (X) can collect and use for his/her doxastic decisions, the better. This principle has a social counterpart regulating the activities of an agent (Y) having control of the evidence to be used by X:

> If agent X is going to make a doxastic decision concerning question Q, and agent Y has control over the evidence that is provided to X, then, from a purely

[1] This terminology is borrowed from (Damaska, 2003, p. 120).

> epistemic point of view, *Y* should make available to *X* all of the evidence relevant to *Q,* which is (at negligible cost) within *Y*'s control. (Goldman, 1991, p. 114)

However, this principle seems to have rational restrictions. For instance, in the curriculum selection in education, especially in primary and secondary schools, some points of view and arguments are left out to facilitate learning processes of the core ideas in specific subject matters (p. 121). Another example is the ways in which the network news broadcastings offer relatively limited interpretations of an event so that it is understandable for their audience (p. 123). By the same token, trial judges do not provide some relevant information to the juries because it can be misleading. This is epistemic paternalism and "[t]he general idea is that the indicated rules of evidence are designed to protect jurors from their own 'folly,' just as parents might keep dangerous toys or other articles away from children, or might not expose them to certain facts."

The *problem of expert testimony and knowledge attributions* (*ET&KA*) is that the trial judge, *ex hypothesi*, does not have the specialized knowledge that he is supposed to attribute. The knowledge account of assertion, explained in the previous chapter, illuminates this point. To recall, according to this view:

> "One must: assert *p* only if one knows *p*" (Williamson, 2000, p. 241).

To properly assert that "an expert knows that *p*", the trial judge should know that "an expert knows that *p*." Given that knowledge is factive, to know that "an expert knows that *p*," a trial judge should know *p* (Hawthorne, 2004, p. 160). But, since *p* is a proposition from a field of expertise that the trial judge does not have, he/she does not know that *p*. A response to *ET&KA* completes the following formula:

> *ET&KA:*
>
> A trial judge correctly asserts that an expert knows that *p* iff …

Strict Invariantism (*SI*) fixes high standards for knowledge attributions demanding from the trial

judge the same knowledge that he/she would attribute to an expert. Alternatively, *EC*, holding that the correctness of knowledge attributions varies with their contexts of enunciation, claims that the trial judge should be in a good enough epistemic position, given the legal purposes, to assert that an expert knows that *p*.

In this chapter, I will evaluate these general approaches through the most elaborate legal epistemologies endorsing them, namely, the *Deference-Education Account* by Ronald Allen (1993; 1994; 2012),[2] and the *Epistemic Legal Contextualism* by Alani Golanski (2001).[3] My goal is to show that my agendivism proposes a better alternative for *ET&KA*. Briefly, *SI* makes attributions of specialized knowledge too hard to obtain because trial judges are required to have specialized knowledge before hearing experts. *EC* makes attributions of specialized knowledge too easy to obtain because it does not clarify the conditions under which a trial judge is supposed to attribute specialized knowledge. Agendivism, differently, studies the agenda to be closed by a trial judge determining the conditions under which his/her knowledge attribution is appropriate. I will accomplish the following itinerary. First, I will present the legal context from which *ET&KA* arises. Second, I am going to reconstruct the main accounts of *ET&KA*. Finally, I will evaluate those accounts and present my agendivistic view.

2. The Legal Context of the Problem of Expert Testimony and Knowledge Attributions

I believe the best way of explaining *ET&KA* is through the rules of admissibility of expert testimony. This section is devoted to the chronological reconstruction of them. My working hypothesis is that the legal criteria for admissibility of expert testimony do not provide

[2] Other *SI*st accounts of expert testimony in legal contexts are (Brewer, 1998; Haack, 2005; Leiter, 1997).
[3] Other *EC*st accounts of expert testimony in legal contexts are (Dale, 2003; Sanders, 2010).

any responses for *ET&KA*. In this section I will show so, as a preamble to the philosophical debate around it.

In Frye v. United States (1923), the defendant, Frye, appealed the decision of the Supreme Court of the District of Columbia convicting him of murder in the second degree. From the appellant's perspective, the Supreme Court erred when it excluded an expert testimony about the result of a sort of lie detection test taken by the defendant and referred to it as "the systolic blood pressure deception test." Broadly speaking, the idea behind this test was that while to say the truth is a spontaneous act, to lie requires a conscious effort that is manifested in the increasing of blood pleasure. The response of the Court of Appeals of the District of Columbia was to confirm the decision of the Supreme Court and, as a consequence, to exclude the requested expert testimony because, for the Court of Appeals, the systolic blood pressure deception test did not have a general scientific recognition.

In this case, the admissibility of a specific expert testimony depends on two factors: whether the jury needs specialized knowledge to understand the facts under litigation, and whether the requested testimony is generally accepted by the knowledge community to which it belongs. The first element is ruled in the following fragment:

> The rule is that the opinions of experts or skilled witnesses are admissible in evidence in those cases in which the matter of inquiry is such that inexperienced persons are unlikely to prove capable of forming a correct judgment upon it, for the reason that the subject-matter so far partakes of a science, art, or trade as to require a previous habit or experience or study in it, in order to acquire a knowledge of it. When the question involved does not lie within the range of common experience or common knowledge, but requires special experience or special knowledge, then the opinions of witnesses skilled in that particular science, art, or trade to which the question relates are admissible in evidence. (p. 1014)

I interpret that this criterion for determining the necessity of an expert testimony is centered on the legal debate under consideration. To be sure, a trial judge is expected to evaluate the matter

of inquiry determining whether the jury would form a correct judgment about the facts under litigation. If, for the proper understanding of the factual dispute, the imagined jury should have a special habit, experience or study, then an expert testimony would be needed. Alternatively, if the common knowledge actually possessed by juries suffices for a correct judgment of the facts under litigation, the expert testimony is not needed.

The second element for the acceptability of expert testimony comes from the *General Acceptance Test*:

> Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone, the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs. (p. 1014)

Following this quote, a trial judge is expected to perform three different tasks. First, he/she has to identify the scientific principle from which the proposed testimony is inferred. Second, he/she should identify the scientific community to which that principle belongs. Finally, he/she is supposed to evaluate whether the scientific principle is generally accepted by the scientific community to which it belongs. Then, Frye v. United States' response to *ET&KA* is:

> *ET&KA*-Frye v. United States:
>
> A trial judge correctly asserts that an expert knows that *p* iff
>
> (i) the principle from which the expert infers his/her testimony is generally accepted by the scientific community to which the expert belongs.

I believe this response is unsatisfactory. The General Acceptance Test demands from the trial judge to identify three elements: the principle from which the expert testimony is inferred, the community to which that principle belongs and the acceptability of that principle in the relevant scientific community. But the trial judge, by definition, does not have specialized knowledge.

Therefore, he/she cannot determine those three elements. Deontic logic teaches that an obligation implies that the agent can perform the obligatory action, but *ET&KA*-Frye v. United States prescribes an action that the trial judge cannot execute. Additionally, even if the trial judge is able to identify both the relevant principle and scientific community, Frye v. United States does not define "acceptance." Is it explicit acceptance of all and each of the members of the scientific community? It is the acceptance of some of its members? Does a scientific principle need a to fulfill a specific condition for being acceptable?, etc. One could interpret that Frye v. United States' concept of acceptance is determined by peer review and publication processes, but this is not necessarily the case, as it is shown by the other legal cases.

In 1975, the Congress of the United States passed into a law a set of explicitly formulated rules of evidence for federal courts: *The Federal Rules of Evidence* (*FRE*). The rule for the admissibility of expert testimony (i.e., *FRE* 702) at that time stipulated:[4]

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.

I interpret that the knowledge evaluations a trial judge is expected to execute under this regulation are substantially different form the ones prescribed by Frye v. United States. According to *FRE* 702 (1975), the admissibility of expert testimony does not depend on the nature of the matter at issue, as in Frye v. United States, but on the potential help or support that the specialized knowledge could give to the jury. In other words, while in Frye v. United States the admissibility of expert testimony is matter-dependent, for *FRE* 702 (1975) it is agent-

[4] The current version of Rule 702 is different from the one quoted here because of its amendment in 2000. Given that such an amendment was a legislative reaction to Daubert v. Merrell Dow Pharmaceuticals (1993) and Kumho Tire Co. v. Carmichael (1999), I will explain these cases before working with the current version of Rule 702. To differentiate, I will refer to the former version as *FRE* 702 (1975). Otherwise, I will refer to the current version as *FRE* 702.

dependent. The practical consequence of this distinction is that under the *FRE* 702 (1975) a trial judge's object of analysis is the knowledge that the jury possesses, or lacks, and not the matter at issue. The idea is that trial judges should determine whether the jury has the specialized knowledge that, according to the party requesting the expert testimony, is needed for the finding. If the jury possesses the type of knowledge under consideration, then the expert testimony would not give any help and, consequently, the expert testimony should not be admitted.

FRE 702 (1975), unlike Frye v. United States, does not provide criteria for deciding if the expert has the knowledge needed by the jury. Instead, *FRE* 702 (1975) only defines *experts* as someone "qualified as [such] by knowledge, skill, experience, training, or education." This is potentially problematic because not all people qualified as an expert necessarily have the knowledge that the jury lacks. Daubert v. Merrell Dow Pharmaceuticals (1993) supplies the required criteria. Let me present the facts under litigation before relating this case to *ET&KA*.

In this case, the petitioners, Jason Daubert and Eric Schuller, two children born with serious birth defects, and their parents sued the company Merrell Dow Pharmaceuticals Inc. before the California State Court. The reason for their allegations were that Daubert's and Schuller's birth defects were caused by their mothers' ingestions of Bendectin, a prescription antinausea drug marketed by the respondent. Arguing against these allegations, the respondent used an expert who, after reviewing all the literature on Bendectin and human birth defects, concluded that no published study had found Bendectin to be a cause of fetuses' malformations. The petitioners counter-attacked with the testimony of eight experts who using "in vitro" and "in vivo" animal studies, and pharmacological analysis of the chemical structure of Bendectin, found a link between this drug and fetuses' malformations (p. 477). The California State Court, using the General Acceptance Test, denied the petitioners' allegations because, given that the

aforementioned studies were not published or subject to a peer review process, they were not accepted by a scientific community. The United States Court of Appeals for the Ninth Circuit affirmed this decision. The petitioners, then, questioned the authority of the General Acceptance Test before the Supreme Court arguing that such a rule "was superseded by the adoption of the *Federal Rules of Evidence*." The Supreme Court agreed with the justification that nothing in *FRE* 702 (1975) includes the General Acceptance Test as a "necessary prerequisite to admissibility." Therefore, the decisions of the California State Court and the Court of Appeals were cancelled.

This case complements *FRE* 702 (1975) ruling that an expert testimony is helpful for the fact-finding if it is relevant and reliable. First, the Court's concept of relevance is an interpretation of *FRE* 401 (1975). There, "relevant evidence" is defined as "that which has any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." According to the Court, this is a "liberal" standard of relevance whose core is the connection between the evidence and the legal inquiry (p. 587). Consequently, for the admissibility of expert testimony, reliability is the "valid scientific connection" between the requested testimony and the inquiry to be advanced by the jury (p. 592). The justification for this interpretation is that expert testimony that does not relate with the issue to be considered by the jury, does not give any help (p. 591). Second, the Court believes that recognizing the jury's lack of specialized knowledge and the relevance of the knowledge that expert testimony could supply is not enough. In its words, "the trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable" (p. 589). For the evaluation of reliability, the Court suggests a list of non-restrictive criteria (pp. 593-594). The first criterion is "testability." According to the Court, the

main feature of scientific endeavors is that they formulate hypotheses that are evaluated in different ways. This is why "a key question to be answered in determining whether a theory or technique is scientific knowledge that will assist the trier of fact will be whether it can be (and has been) tested." The second criterion is whether the theory or technique has been subjected to peer review and publication. However, this is not a rigid rule, as in Frye v. United States, because, for the Court, not all novel scientific ideas are necessarily published. Rather, this criterion should be complemented with the others. A third element is the low potential rate of error and the existence and maintenance of standards controlling the operation of the scientific technique under evaluation. A fourth factor to be taken into account is the general acceptance, or disapproval, that the supposed expert knowledge has produced in the relevant scientific community. Finally, the trial judge should not focus on the conclusions of the assessed scientific knowledge, but on the general principles and methods leading to it.

With these elements, Daubert v. Merrell Dow Pharmaceuticals would suggest the following response for *ET&KA*:

> *ET&KA*-Daubert v. Merrell Dow Pharmaceuticals:
>
> A trial judge correctly asserts that an expert knows that *p* iff
>
> (i) The expert's knowledge should have a "valid scientific connection" to inquiry advanced by the jury.
>
> (ii) The expert's theory or technique is testable, or has been subjected to peer review and publication, or has a potentially low rate of error, and has and maintains standards of operation controlling, or is accepted by the relevant scientific community.

Even though Daubert v. Merrell Dow Pharmaceuticals provide a flexible test for the acceptability

of expert testimony, *ET&KA* remains unanswered. The trial judge lacks the scientific knowledge the expert testimony is supposed to provide, and without this knowledge he/she would not be able to find a "valid scientific connection" between the testimony and the issue under account. Maybe the trial judge would be able to find it if the testimony is evidentially relevant for the inquiry to be advanced by the jury, but *ET&KA*-Daubert v. Merrell Dow Pharmaceuticals demands something stronger that the trial judge, given his/her lack of specialized knowledge, will not be able to provide. To this objection, the Court would ambiguously respond: "We are confident that federal judges possess the capacity to undertake this review. Many factors will bear on the inquiry, and we do not presume to set out a definitive checklist or test" (p. 593).

As I mentioned before, Daubert v. Merrell Dow Pharmaceuticals only refers to scientific knowledge, but how can *FRE* 702 (1975) be applied to non-scientific specialized knowledge? Kumho Tire Co. v. Carmichael (1999) answers this question. In this case, a group of people, after surviving a car accident in which one of the tires of a minivan blew out overturning the vehicle, sued the tire maker before the District Court for the Southern District of Alabama. Justifying their allegations, the plaintiffs used the expert testimony of an engineer, Dennis Carlson, Jr., who was supposed to testify that a defect in the tire's manufacturer caused the blow out. The justification for this came from his visual and tactile inspection of the tire and "the theory that in the absence of at least two of four specific, physical symptoms indicating tire abuse, the tire failure of the sort that occurred here was caused by a defect." The tire maker's response was to remove this expert testimony because, allegedly, it did not satisfy *FRE* 702 (1975). The District Court evaluated Carlson's testimony using the reliability criteria from Daubert v. Merrell Dow Pharmaceuticals. For the District Court, there were no records of other tire experts using Carlson's methodology of combining a tactile and visual inspection with the

theory of the two indicators of tire abuse. As a consequence, the District Court did not find evidence for testability and rate of error. Furthermore, the Court did not identify references to articles or papers validating Carlson's approach. Therefore, Carlson's testimony was excluded. The District Court, responding to the petitions of the plaintiffs, reviewed its decision recognizing that the Daubert factors are flexible, but its ultimate decision about Carlson's testimony remained the same. The Court of Appeals for the Eleventh Circuit, reversing the District Court's decision, clarified that the District Court erred as a matter of law applying Daubert v. Merrell Dow Pharmaceuticals to Carlson's testimony because it was not a scientific testimony, but a technical one, and the Daubert factors refer exclusively to scientific testimony. Finally, the Supreme Court, reversing the Court of Appeals' decision, stated that the Daubert factors of reliability apply to all types of expert testimony, whether it is scientific or not.

Two ideas from this case are relevant for my project. First, according to the Supreme Court, since *FRE* 702 (1975) includes the expressions "scientific" and "technical" in referring to expert testimony, it does not make sense to differentiate between one and the other in the task entrusted to the trial judge. Consequently, the Daubert factors are applicable to scientific-based testimony, but also to technical-, skill- and experience-based testimony (p. 147). Second, the Court makes explicit the role of the knowledge attributor of the trial judge, as follows:

> "[N]o one denies that an expert might draw a conclusion from a set of observations based on extensive and specialized experience. … [T]he question before the trial court [is] specific, not general. The trial court [has] to decide whether this particular expert [has] sufficient specialized knowledge to assist the jurors 'in deciding the particular issues in the case.'" (p. 156)

To emphasize, the function of the trial judge is not to evaluate the justificatory status of the experts proposed by the parties, and neither is it to assess the experts' reasoning or argumentation. Rather, once the trial judge has identified that an expert testimony is required for the fact-finding, he/she has to decide whether the expert proposed by the parties has the

knowledge that is required. As I take it, the rules of admissibility provide criteria for allowing, or not, the introduction of expert knowledge in trial, but they do not say anything about the correctness of the attributions of expert knowledge. This hypothesis is confirmed by the current version of *FRE* 702.

> A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:
>
> (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
>
> (b) the testimony is based on sufficient facts or data;
>
> (c) the testimony is the product of reliable principles and methods; and
>
> (d) the expert has reliably applied the principles and methods to the facts of the case.

However, deciding whether an expert has "sufficient facts or data," or if his/her technical or scientific "principles or methods" are reliable and correctly apply to a legal case requires scientific and technical knowledge that, *ex hypothesi*, the trial judge lacks. *SI*st and *EC*st have competing solutions for this problem. In the next two sections I will explore these alternatives.

3. Strict Invariantism and Expert Testimony

Strict invariantism (*SI*) is the view that knowledge attributions do not vary from context to context because the standard for knowledge is only one, and it is high. I believe the most elaborate theory endorsing this position is Allen's *Deference-Education Account*. For this view, the problem of expert testimony arises in legal systems including three statements that, although generally accepted, are individually problematic, and collectively poisonous for the cognitive aspirations of legal proceedings (Allen, 2012, p. 2). Such statements are:

(1) There are different forms of knowledge.

(2) The different forms of knowledge can be accommodated for trial purposes by taking an internal perspective on the evidence being offered.

(3) Experts can opine about the relationship between their field of expertise and the issues under litigation.

A good example of the combination of (1) – (3) is *FRE* 702. This piece of legislation differentiates between "scientific, technical, or other specialized knowledge" and common knowledge. The latter is possessed by the trier of facts (i.e., judge + jury) and the second one by witnesses qualified as experts. According to *FRE* 702, a person becomes an expert via the acquisition of expert "knowledge, skill, experience, training, or education." Finally, such expertise may "assist the trier of fact to understand the evidence or determine a fact in issue."

The trouble of combining (1) – (3) comes from the conflict between the fundamental cognitive aspirations of modern legal proceedings and the role that experts play in them. On one hand, legal proceedings want fact-finders to be able to process and deliberate upon the evidence presented at trial to reach a rational judgment about the facts under litigation (Allen, 2012, p. 11; Allen & Miller, 1993, pp. 1131-1132). On the other hand, experts can present their opinion about the field of expertise and the litigated facts (Allen, 2012, p. 19; Allen & Miller, 1993, pp. 1132-1133). This puts the trier of facts in situations in which his/her knowledge is exceeded by the expert's knowledge. For the problem of knowledge attributions faced by the trial judge, this means that the knowledge that trial judge is supposed to attribute "can only be understood with knowledge or experience that [he/she] lacks so that the chances are virtually zero that [he/she] will understand what the spoken words are intended to convey, or at least will be unable to intelligently appraise the truth of what is spoken" (Allen, 2012, p. 12).

Allen's justification for his solution to the *ET&KA* takes the form of a disjunctive

syllogism:

(4) There are only two possible solutions to *ET&KA*. Either the trial judge defers his/her decision to the judgment of others or the trial judge is educated in the matters of his/her decision (Allen, 2012, p. 11; Allen & Miller, 1993, p. 1133).

(5) A trial judge should not defer his/her decision to the judgment of others.

(6) Therefore, a trial judge should be educated in the matter of his/her decision.

"To defer," in (4)'s first disjunct, "means to adopt someone else's views as correct, not because you understand and agree, but because you are simply delegating that decision to someone else" (Allen, 2012, p. 11). Practically, if the trial judge defers his/her decision of determining whether the expert has the knowledge the jury needs, then it delegates such decision to the party requesting the expert testimony. With regards to (4)'s second disjunct, Allen claims that there are two ways of interpreting the trial judge's lack of specialized knowledge. Either it is a cognitive limitation, or it is lack of information (Allen, 2013, p. 12). But it is not lack of information because, in normal conditions, judges and jurors know a vast variety of things. They do not have specialized or technical knowledge, but it does not mean they are not able to learn the scientific and technical matters relevant for their decisions.

There are several reasons for which trial judges should not defer their decision. First, it goes against the cognitive aspirations of legal proceedings (Allen, 2013, p. 15). If modern legal systems want fact-finders to accurately determine the facts under litigation after rationally examining the evidence, then when the trier of facts delegates his/her decision, the cognitive goal of legal proceedings is not satisfied. A second argument against deference is that it allows for the introduction of "junk science" (Allen, 2013, p. 15). That is, false accounts that are presented as scientific truths in trial. If the trial judge delegates the decision of evaluating the expert's

testimony to the party requesting it, there is no guarantee of impartial evaluation because the parties could validate a testimony that, although false, favors their interests.

Even though from Allen's disjunctive syllogism follows that trial judges should be educated in the matter of their decision, Allen also provides positive arguments for this conclusion. First, from his perspective, the only way of realizing the cognitive aspirations of legal proceedings is if the evidence is presented in an "educational mode" (Allen, 2012, p. 1). To be sure, legal proceedings want fact-finders to make rational decisions. For him, a decision is rational "if a fact finder could see clearly that one side was right and the other wrong" (Allen, 2012, p. 16). A fact-finder cannot see clearly, if he/she does not have all the relevant information. Therefore, the fact-finders should be educated in the matters of their decisions. Second, the education alternative avoids the problem of junk science because the explanations required to educate fact-finders in the matters under litigation will eliminate false propositions (Allen, 2013, p. 14). Finally, with education, the problem of expert testimony is dissolved. Remember that this problem arises from the assumption that there are different types of knowledge, namely, expert knowledge and common knowledge. Yet, if the trial judge has common knowledge and specialized knowledge, then the problem of expert testimony does not exist. In Allen's words:

> Some may think [that deference is a better alternative] because of the incompatibility between "scientific" knowledge and lay knowledge, but that is not the cause of the difficulties. Incompatibilities between forms of knowledge do not exist; there simply is or isn't knowledge. (2012, p. 20)

This quote, additionally, exemplifies Allen's *SI* because for him there are not contextually-dependent forms of knowledge. Instead, knowledge is just one: the scientific or technical one. This explains why he demands from trial judges to learn specialized knowledge, as it is shown by Allen's response to the *ET&KA*:

ET&KA-Allen:

A trial judge correctly asserts that an expert knows that *p* iff

(i) The trial judge has the expert knowledge to verify that the expert meets the standards of knowledge fixed in the expert's field of expertise.

4. Epistemic Contextualism and Expert Testimony

I believe that the most complete contextualist response to the *ET&KA* is the Epistemic Legal Contextualism of Golanski (2001). This is my reconstruction of his position:

(7) The law encourages and expects its fact-finders to know things.

(8) Legal evidence is often technical or scientific.

(9) Fact-finders are expected to know some science.

(10) Fact-finders are mostly non-experts.

(11) No one could reasonably expect triers of fact to know technical and scientific things the way experts in their respective disciplines do.

(12) "The evidence needed to know a proposition may differ in amount or kind depending on the circumstances in which we make our knowledge claims" (Golanski p. 566)

The concept of knowledge that Golanski has in mind is the traditional concept of knowledge understood as justified truth belief (p. 565). As it is generally accepted, modern legal systems not only want fact-finders to have true beliefs of the facts under litigation, but they also require the fact-finders to be justified in believing. The reason for this is that, as is defended for most theories of epistemic justification, a belief could be accidentally true. Legal systems avoid accidental true beliefs and privilege epistemic justification. Propositions (7) and (8) are facts

that, given the previous sections of this paper, do not require extra clarification. (9) is inferred from (7) and (8), and although it is clear that the fact-finders are expected to have some sort of knowledge about the science or technique contained in expert testimony, the problem is the sort of knowledge which is expected for the fact-finders to have. (10), *ex hypothesi*, states that fact-finders are not experts in the terms defined by *FRE* 702. If (10) is right, (11) would be correct, too. However, according to (9), fact-finders are expected to have some sort of scientific knowledge. For Golanski, from these last three propositions it is inferred that the knowledge the fact-finders are supposed to have should be different from the knowledge possessed by scientists and technicians, which is the conclusion of the argument in (12).

Which type of knowledge are fact-finders expected to have and how does this knowledge differ from scientific and technical knowledge? Golanski states that "courts … 'know' things, the very thing courts do have expertise about" (p. 707). This claim is supported by the idea that knowledge is context-sensitive and, consequently, the scientific and technical knowledge that fact-finders should have is the kind appropriate for legal scenarios. To justify this position, Golanski uses Annis's case that I referred to in Chapter 1 as JONES, and accommodates it to expert testimony. To recall, JONES shows that it is possible to attribute and deny knowledge to two different putative knowers, even when they satisfy the same epistemic condition. In that case, the putative knowers are Jones, a non-medically trained person having an ordinary conversation, and Smith, an MD student in one of his qualification exams. The epistemic condition that both satisfy is that they have the same evidence for the proposition "polio is produced by a virus," namely, both read in a newspaper that Jonas Salk stated that polio is produced by a virus. However, given the different "issue-contexts" that Jones and Smith respectively have, it is right to attribute knowledge to Jones, but not to Smith. For Golanski, the

reason for this difference is that given the MD student's issue-context, he would be expected to rule out alternatives to *p* that Jones is not expected to. Some of the alternatives suggested by Golanski that might be relevant to Smith, but not to Jones are: "[a] medical article may have challenged the integrity of Salk's electron microscope; perhaps Dr. X in New Zealand has an obscure, contrasting theory; maybe Dr. Y claims Salk has mischaracterized the virus's nucleic acid or the structure of its capsid" (Golanski, 2001, p. 703). According to Golanski, this is just an application of DeRose's principle that "the ability to rule out such alternatives would only be relevant if one were after a strong form of knowledge" (DeRose, 1992, p. 922). Given that Jones, unlike Smith, does not have a strong form of knowledge, he should not be expected to rule out the possibilities that an MD student is expected to.

To illuminate the problem of expert testimony with these ideas, Golanski proposes the following version of JONES:

> JONES (EXPERT TESTIMONY)
>
> > Let us give the polio/virus personae courtroom roles, Smith being an expert witness, Jones a lay juror. Smith testifies that she has studied a lot, has so many degrees and holds so many professional positions. Based on all her expertise, she opines that Company *X*'s toxic product could not have caused *L*'s polio because *Y* polio is caused by a virus. Believing Smith, Jones now also knows at least that much—that polio is caused by a virus. (pp. 704-705)

As in the original case, in Golanski's version of JONES, it is not right to expect Jones, a lay juror, to rule out the possibilities that Smith, an expert witness, is able to rule out. However, it does not mean that Jones does not have knowledge. Instead, Jones knows according to the legal standards. Applying this to the *ET&KA*, for Golanski, the expression "the expert knows that *p*" asserted by a trial judge implicates the shifting meaning of "knows." A trial judge should not be expected to rule out the same counter-possibilities that an expert is expected to rule out. The "issue-context" of trial judges activities justify this distinction. In Golanski's words,

> [i]n its gatekeeping role, the court is making a knowledge claim about the expert's approach and methodology and is saying that, in that context, "E knows P**," or "E knows what it takes to know that P*" (by law's standard, the Daubert criteria), and thus "E's testimony will place the fact-finder in a better position for ascertaining truth," that is, for acquiring JTB. (p. 714)

If this is right, a trial judge does not need to possess the knowledge he/she is attributing to the expert, as it is required by *SI*sts. Rather, all that is required for the correction of the trial judge's knowledge attribution is enough knowledge given his/her practical purposes. This is Golanski's response to the *ET&KA*:

> *ET&KA*-Golanski
>
> A trial judge correctly asserts that an expert knows that *p* iff
>
> (i) The trial judge is in a good enough epistemic position to assert that the expert knows that *p* for the law's purposes.

5. Agendivism and Expert Testimony

An agendivistic account of *ET&KA* starts by clarifying the agendas and sub-agendas involved. Broadly speaking, the main epistemic agenda of legal proceedings is the fact-finder's responsibility of accurately determining the facts under litigation. Sometimes, the proper advancing of this agenda calls for specialized information that the fact-finder lacks. In these cases, three interrelated agendas arise. The agenda to be advanced by the fact-finder is split in two sub-agendas. First, a trial judge is in charge of admitting the expert's testimony. For this, the trial judge has to decide whether the expert is a reliable source of specialized information. Which means, given the discussion I advanced in Chapter 2, the trial judge is in charge of attributing specialized knowledge to the expert. Second, once the expert's testimony is admitted, the jury would have all the information for advancing its original agenda. Third, the expert is expected to provide the relevant specialized information for the fact-finders (i.e., trial judge + jury) to

properly close their respective agendas. If this interpretation is right, my object of study is the agenda that the trial judge is supposed to advance, along with the information that the expert is expected to provide him/her for that. To clarify, remember the difference between the problem of knowledge attribution and the problem of knowledge possession. In Chapter 1, I stated that while the former is whether *A* properly asserts that *K* knows that *p*, the latter is whether *K* knows that *p*. For *ET&KA*, this is the difference between the following propositions:

(13) A trial judge asserts that the expert knows that *p*.

(14) The expert knows that *p*.

The problem is not whether the expert knows that *p*, but whether the trial judge correctly asserts that the expert knows that *p*.

Going back to the theories accounting for *ET&KA* reconstructed in the previous sections, Allen incorrectly mixes the problem of knowledge attribution with the problem of knowledge possession because he expects the trial judge to have the expert knowledge he/she is supposed to attribute. This makes knowledge attributions of specialized knowledge too hard to obtain since it demands from the trial judge to acquire the specialized knowledge that he/she is attributing through an *ad hoc* education provided by the parties.[5] Golanski seems to take the difference between the problems of knowledge possession and knowledge attribution into account. However, he does not establish clear criteria for the correctness of attributions of specialized knowledge. The expression "a good enough epistemic position … for law's purposes" in

[5] An additional problem for this proposal is that it distorts the epistemic function of the parties under litigation. To be sure, adversarial legal proceedings are designed in such a way that the fact-finder comes to know the facts in dispute because the parties diligently collect and present the evidence that favors their respective positions (Goldman, 2005, p. 167). For Allen, on the contrary, "trials are educational events in which the fact finder is expected to comprehend, process, and deliberate on the evidence, and as a result to reach rational conclusions" (Allen, 2012, p. 1). However, to demand from the parties the education of the trier of facts is to impose responsibilities beyond their epistemic ones.

ET&KA-Golanski could be interpreted in two different ways: as the purposes of this trial at hand, at this specific time, or as the purposes of trials in general (Sanders, 2010, p. 1394). In the first interpretation, if the concern is the case at hand, then the trial judge would attribute knowledge when the expert has enough knowledge to answer the particular question under litigation. The problem with this is that expert knowledge such as scientific explanation is general, and the trial judge cannot always demand from experts to know the particularities responding to a particular case. Furthermore, the main worry of the case at hand is to decide within the procedural time-constrains. This could press the trial judge to attribute knowledge just good enough to decide this case, setting the bar of knowledge attributions too low and allowing for junk science. In the second interpretation, if the concern is the general purposes of trial, then the issue is not to decide but to arrive to a factually correct outcome. Consequently, the trial judge would attribute knowledge to experts able to provide general explanations. The problem with this alternative is that the bar for correct knowledge attributions is set too high since general theories are not of too much help to lay jurors.

I believe clear criteria for the correctness of knowledge attributions of specialized knowledge starts with an accurate diagnosis of *ET&KA*. To recall, Allen claims that the issue of *ET&KA* is that the knowledge that the trial judge is supposed to attribute "can only be understood with knowledge or experience that [he/she] lacks so that the chances are virtually zero that [he/she] will understand what the spoken words are intended to convey, or at least will be unable to intelligently appraise the truth of what is spoken" (Allen, 2012, p. 12). But this interpretation is too strong. Usually when a layperson listens to an expert, he/she understands some of the words conveyed by the expert. I will borrow Goldman's distinction between *esoteric* and *exoteric* statements within an expert discourse to clarify my point (2001, p. 99). While the

former are an essential part of the specialized knowledge and are inaccessible for a lay person, the latter are outside the core of the domain of expertise and could be understood by a lay person either when they are conveyed or later. For instance, in Daubert v. Merrell Dow Pharmaceuticals, a description of the chemical structure of Bendectin is esoteric, but the concept of fetus malformation is exoteric. This distinction provides a more accurate picture of *ET&KA* because to say that the trial judge does not understand any of the words conveyed by the expert seems wrong. Instead, what they do not understand are the esoteric statements conveyed by the expert. My view is that the understanding of the exoteric statements of an expert testimony would suffice for properly attributing knowledge to the expert in legal contexts. Before developing this idea, let me make another point about Allen's account.

If my moderate interpretation of *ET&KA* seems to be right, why does Allen interpret *ET&KA* in such an extreme way? I believe this interpretation facilitates his argumentation. To be sure, I believe Allen incurs two types of fallacies: a false dilemma and a straw man fallacy. In bold terms, there is a false dilemma when the arguer justifies his/her point with an exclusive disjunction, yet there is at least one additional option. Practically, Allen states that "[t]here are only two possible solutions to [*ET&KA*]. Either the necessary background information must be provided somehow, or fact finders must defer to the judgment of others" (Allen, 2012, p. 11; Allen & Miller, 1993, p. 1133). This disjunction implies that either the trial judge understands the statements by the expert, or he/she does not. However, it is possible to imagine an intermediate position in which the trial judge understands the expert's exoteric statements. Indeed, Allen would accept this alternative because, as I already stated, for him, judges and jurors are able to know a large variety of things. Moving to Allen's second argumentative mistake, there is a straw man fallacy when the arguer presents his/her opponent in a weak way so

that the argumentative attack is easier. When Allen states that if the trial judge does not acquire the specialized knowledge that the expert has, then the trial judge defers his/her decision, he is underestimating the reasoning capacities of fact finders. They can learn specialized knowledge, even if it is not exactly the same knowledge that the expert possesses. If this is right, this would not be deference, in the terms stipulated by Allen.

Going back to my theory, a crucial question for the trial judge is which type of specialized information is required for the jury to advance its cognitive agenda. In Chapter 2, I stated that the function of knowledge attributions is to flag out sources of information relevant to advance cognitive agendas. For *ET&KA,* the idea is that the trial judge must flag out the expert as a relevant source of information for the jury to advance its factual finding. Given that it is not part of the jury's agenda to decide about matters of specialized knowledge, the trial judge does not need to scrutinize the expert's esoteric propositions. Which of those propositions are relevant for the jury's agenda? Given that the fact-finding cannot be accomplished because the jury does not have determined specialized information, the required information should be the one matching the jury's lacking. But, how can the trial judge correctly attribute the specialized knowledge that the jury does not have to the expert if the trial judge him/herself does not have such knowledge?

According to Goldman, esoteric statements are part of the premises and lemmas of the arguments presented by experts. This explains why it is difficult for a layperson to understand specialized arguments. However, it does not mean a layperson cannot be justified in accepting the conclusion of a specialized argument. Explaining this, Goldman differentiates between *direct* and *indirect argumentative justification*. On one hand, a hearer is directly justified in believing the conclusion of an argument if he is justified in believing its premises and understands the

inferential connections between them and the conclusion (Goldman, 2001, p. 94). On the other hand, "[t]he idea of indirect argumentative justification arises from the idea that one speaker in a debate may demonstrate dialectical superiority over the other, and this dialectical superiority might be a plausible *indicator* for [a lay] of greater expertise" (p. 95). To clarify, Goldman's concept of indirect argumentative justification is limited to situations where two experts argue defending two contrary propositions and a non-expert has to decide which them is right. If one of the experts has dialectical superiority over the other, it would reasonably seem to the layperson that the former has more expertise than the latter. Some of the signs of dialectical superiority providing indirect argumentative justification suggested for Goldman are the debate in which one expert presents an argument and his/her counterpart is not able to provide a rebuttal for it, or the comparative quickness or smoothness with which the experts respond.

My intuition with *ET&KA* is that the correctness of a trial judge's knowledge attribution comes from indirect justification as well. To recall, the advancement of the jury's agenda requires specialized information that a trial judge is in charge of identifying in (i.e., attributing to) the expert witnesses presented by the parties. For this attribution, the trial judge does not need to have the information he/she is attributing to the expert, but to have an indication that the expert is the source of the required information. This indication comes from the relevance of the expert's exoteric statements to the jury's agenda. By relevance, I mean the information that the jury needs to pursue its finding. This is my proposal:

ET&KA-Agendivism:

A trial judge correctly asserts that an expert knows that *p* iff

(i) The finding of the facts requires the knowledge that *p*.

(ii) The trial judge properly asserts that the jury does not know that *p*.

(iii) The trial judge is indirectly justified in believing that the expert knows that p.

(i) determines the connection between the information the trial judge is expected to attribute and the agenda for which that information is relevant. (ii) shows that the agent in charge of advancing the agenda in account is not able to satisfy the role that was assigned to him/her. (iii) reveals the normative character of my proposal. This requirement of indirect justification here is less stringent than Allen's demand of the trial judge knowing *p* to attribute *p*, and more specific than Golanski's idea of a good enough epistemic position given the law's purposes. This shows the superiority of Agendivism over *SI* and *EC* in *ET&KA*.

Chapter 5: Juries and Tribunals: Knowledge Attributions and Group Epistemology

1. Introduction

Knowledge can be attributed to individuals and groups. For instance, just as it would be proper to say that the suspect knows that it would be better to plead guilty, it would be proper to assert that the Supreme Court knows the implications of its last decision on affirmative action. Theories of group epistemology compete providing the best account for group knowledge attributions. Specially, they study group belief and group epistemic justification as important components of group knowledge. Two main approaches are important here, namely Summativism and Non-Summativism. The concept of *Summativism* (*S*) was a contribution of Anthony Quinton (1975-1976) to the social epistemology:

> Groups are said to have beliefs, emotions and attitudes and to make decisions and make promises. But these ways of speaking are plainly metaphorical. To ascribe mental predicates to a group is always an indirect way of ascribing such predicates to its members. With such mental states as beliefs and attitudes, the ascriptions are of what I have called a summative kind. (p. 17)

In this sense, *S* refers to a view taking into account everyday mental states attributed to groups. As a theory of group belief, *S* holds that:

> *S-belief*: A group (*G*) believes that *p* iff all or some of *G*'s members believe that *p*.

And as a theory of epistemic justification,

> *S-Epistemic Justification*: *G* is justified in believing that *p*, iff all or some of *G*'s members are justified in believing that *p*.

Non-summativism (*NS*) denies that group belief and epistemic justification depend on the epistemic status of *G*'s members. Therefore,

> *NS-belief*: *G*'s belief that *p* does not depend on *G*'s members' beliefs that *p*.

And,

> *NS-Epistemic Justification*: *G*'s justified belief that *p* does not depend on *G*'s members' justified belief that *p*.

In a positive way, they claim that it is possible to attribute knowledge to groups even when there is not knowledge recognition for their members. In other words, they consider groups as epistemic agents over and above their individual members.

*NS*sts use the *divergence argument* to show that *G*'s justificatory status diverges from the status of its members. One version of this argument reveals that if *G* and its members have different evidence for *p*, then *G*'s and *G*'s members' justificatory status might diverge. In making this case, *NS*sts turn to legal scenarios where, given the exclusionary rules of evidence (i.e., rules that forbid the introduction of irrelevant, potentially confusing, or illegally obtained evidence in a criminal trial), the jury is asked to ignore relevant information in its deliberations. However, it is always possible for the jurors to take the supposed suppressed information into account in their personal consideration. As a part of her criticism against *NS*, Lackey (2013) captures the issue in the following way:

> DIFFERENT EVIDENCE
>
> A jury is deliberating about whether the defendant in a murder trial is innocent or guilty. Each member of the jury is privy to evidence that the defendant was seen fleeing the scene of the crime with blood spattered on his clothes, but it is grounded in hearsay that, though reliable, was ruled as inadmissible by the judge. Given only the admissible evidence, the jury as a group justifiedly believes that the defendant is innocent, but not a single juror justifiedly believes this proposition because it is defeated by the relevant reliable hearsay evidence. (p. 3)

I will devote the first part of this chapter to the study of the main interpretations around DIFFERENT EVIDENCE. First, I will present the most elaborate argument for this case: Frederick Schmitt's notion of chartered groups (1994). Second, I will reconstruct and evaluate the arguments that have lead Lackey to suspect that DIFFERENT EVIDENCE is not a threat for

S (2013). Finally, departing from Lackey, I will show that DIFFERENT EVIDENCE represents a serious objection for *S*. For the sake of discussion, assume that justified belief is a necessary condition for knowledge. Then, accounts of DIFERENT EVIDENCE would endorse one of the following possibilities of knowledge attributions:

(1) The jury knows that the defendant is innocent, and the jurors do not know that the defendant is innocent.

(2) The jury does not know that the defendant is innocent, and the jurors do not know that the defendant is innocent.

(3) The jury does not know that the defendant is innocent, and the jurors know that the defendant is innocent.

(4) The jury knows that the defendant is innocent, and the jurors know that the defendant is innocent.

To clarify, the justification of the proposition "the defendant is innocent" depends on the lack of defeaters for *p*. The defeater of *p*, *ex hypothesi*, is the hearsay evidence that "the defendant was seen fleeing the scene of the crime with blood spattered on his clothes." With this in mind, I interpret that Schmitt would endorse (1) and Lackey (2). My view is that (1) is the best alternative too, but, I disagree with Schmitt's reasons. Broadly speaking, Schmitt claims that to attribute knowledge to the jury is right because given that the jury is a group created to perform a particular action, it has special epistemic standards such as the exclusionary rules of evidence. For Schmitt, to deny knowledge to the jurors is also right because they have a defeater for *p*. Even though Lackey would accept that the knowledge denial to the jurors is right, she would not tolerate the knowledge attribution to a jury because, for her, the hearsay rule obeys practical concerns, but not necessarily epistemic ones. Additionally, she points out that to state that the

jury only exists under its constitutive rules, as Schmitt does, leads to the absurd consequence that a jury which breaks the law is not a jury. Departing from Lackey, I will justify that the hearsay rule makes epistemic sense. Second, I will replace the notion of a chartered group with the notion of an agenda to explain how it is right to attribute knowledge to the jury, but wrong to attribute knowledge to the jurors.

In the second part of this chapter, I will confirm my agendivistic conclusions on DIFFERENT EVIDENCE providing a response for THE DOCTRINAL PARADOX (List & Pettit, 2002, p. 93; 2011, pp. 45-46). Without entering in specific details here, some collective courts adopt majoritarian procedures for making their decisions. That is, they make decisions given the majority of votes from their members. The problem is that majoritarian procedures do not necessarily lead to rational group decisions. Then, courts could face a dilemma: either respect the votes of their individual members and sacrifice group rationality, or ignore the judgments of their members and satisfy group rationality. Agendivism proposes a solution for THE DOCTRINAL PARADOX in which the beliefs of the individual judges are respected without sacrificing collective rationality.

2. On Different Evidence

I want to start re-formulating DIFFERENT EVIDENCE because Lackey's version has some terminological imprecisions begging for correction. I believe Lackey overlooks two important elements of adversarial criminal proceedings: the burden of proof and the presumption of innocence. Shortly, the burden of proof is the obligation of prosecutors to justify, according to the appropriate standard of proof, that the accused is guilty. The presumption of innocence requires the juries to assume that the defendant is innocent until and unless the prosecutor has

satisfied his/her obligation (Laudan, 2006, p. 89). One important epistemological consequence is that the fact-finder does not have to know whether the defendant is innocent. Instead, the jury is supposed to know whether the defendant is guilty, or they assume that the defendant is innocent. This explains why the main plea possibilities in a criminal procedure are "guilty" and "non-guilty." Lackey uses the expression "innocent" for "not guilty." I think this is an imprecision because to know that the defendant is "innocent" implies an argument showing that the defendant did not perform the alleged crime. Differently, when a defendant is "not guilty" all that is said is that the argument for "guilty" did not reach the standard required.

A version of DIFFERENT EVIDENCE sensitive to these terminological precisions could be:

> DIFFERENT EVIDENCE*
>
> A jury is deliberating about whether the defendant in a murder trial is guilty or not guilty. Each member of the jury is privy to evidence that the defendant was seen fleeing the scene of the crime with blood spattered on his clothes, but it is grounded in hearsay that, though reliable, was ruled as inadmissible by the judge. Given only the admissible evidence, the jury, as a group, justifiedly believes that the defendant is not guilty, but not a single juror justifiedly believes this proposition because it is defeated by the relevant reliable hearsay evidence.

In this version the expression "justifiedly believe that the defendant is not guilty" is to believe, given the available evidence, that the prosecutor did not satisfy the burden of proof. In this sense, the jury would not believe that the defendant is "innocent," as stated by Lackey. Rather, the jury would fail to justifiedly believe that the defendant is guilty. If this new version of DIFFERENT EVIDENCE is right, knowledge attributions (1) – (4) should be modified as follows:

(1)* The jury knows that the defendant is not guilty, and the jurors do not know that the defendant is not guilty.

(2)* The jury does not know that the defendant is not guilty, and the jurors do not know that the defendant is not guilty.

(3)* The jury does not know that the defendant is not guilty, and the jurors know that the defendant is not guilty.

(4)* The jury knows that the defendant is not guilty, and the jurors know that the defendant is not guilty.

Given that the debate Schmitt-Lackey is in terms of DIFFERENT EVIDENCE and propositions (1) – (4), I am going to work with this version, but allow me to first clarify that a more accurate version of the case would be DIFFERENT EVIDENCE* and propositions (1)* – (4)*.

2.1 An Interpretation of Different Evidence Against Summativism

Schmitt's endorsement of (1) is a consequence of his interpretation of JONES. To recall, JONES is supposed to capture our intuitions about knowledge attributions and denials when Jones, a non-medically trained person in an ordinary conversation, and Smith, an MD student taking one exam, respectively state that they know that "polio is produced by a virus" because they read so in a newspaper. Accounting for this case, its creator, Annis, claims that social or occupational roles impose special epistemic standards that are different from the ordinary ones (1978, p. 215). As a consequence, knowledge attributions to individuals playing a social or occupational role are different from the ones to common individuals. Practically, although Jones and Smith have the same evidence for *p*, it is right to attribute knowledge to the former but not to the latter.

Schmitt interprets JONES differently. In his words, "I would agree that the doctor would not be *medically* justified in *stating* the proposition, nor in *acting* in her medical practice … But it hardly follows that the doctor is not *epistemically* justified in *belief*" (1994, p. 269, italics in the original). To be sure, for Schmitt, there is no reason for thinking that Smith is not justified in believing that polio is caused by a virus after reading a newspaper reporting that Jonas Salk discovered so. However, Schmitt does not deny that Smith's belief is questionable, yet this does not have to do with epistemic standards, but with the standards for social and occupational roles such as the ones required for medical statements and actions. Why should we accept knowledge attributions that fall short in standards for social and occupational roles? Schmitt's response is that specialists have a life beyond their social and occupational roles. We should allow for ordinary epistemic standards for specialists because when they are not performing their special activities, they have to rely on common knowledge (p. 271).

Once Schmitt has shown that ordinary epistemic standards are independent from social and occupational roles in this fashion, he wonders if ordinary epistemic standards are also independent from the social role of groups. His answer is negative, at least for a special type of group which he refers to as a *chartered group*, and defines as a group "founded to perform a particular action or actions of a certain kind" (p. 272). The reason for this distinction between individual and group knowledge attributions is that whereas specialists have a life beyond the performance of their occupational roles, chartered groups only exist because of the role assigned to them. To clarify, according to Schmitt, "a set of individuals forms a group just in case the members of the set each openly expresses his or her willingness to act jointly with the other members of the set" (p. 260). While for most groups individuals do not need to express the activity they are disposed to jointly perform, for charter groups such activity might be openly

indicated. Two consequences follow from this. First, given the member's will that is expressed in the establishment of the group, chartered groups can only perform the action for which they were created. Second, since chartered groups do not have a life beyond their constitutive office, there is no reason for allowing ordinary epistemic standards for them. Therefore, a correct knowledge attribution to a chartered group depends on the special epistemic standards fixing the admissibility and strength of the reasons required for the performance of its constitutive action. This explains why, in DIFFERENT EVIDENCE, it is right to attribute knowledge to the jury and not to its members. In Schmitt's words, "[a] court … would not lose its justification merely because a member possesses [hearsay evidence]. And this is because in his legal capacity, the court rightly excludes hearsay, and its legal capacity is the only capacity in which it operates" (p. 274).

2.2 An Interpretation of Different Evidence Favoring Summativism

A standard argument for DIFFERENT EVIDENCE, such as Schmitt's, endorses (1). That is, it attributes knowledge to the jury and denies knowledge to the jurors. The usual reason for this option is that while the latter has a defeater for *p*, the former does not. If this is right, an argument against DIFFERENT EVIDENCE has the burden of providing reasons against (1). Lackey accepts this challenge showing that the assumption leading to (1) is wrong. To be sure, for her, to hold (1) presupposes that both the knowledge attribution to the jury and the knowledge denial to the jurors are motivated on epistemic reasons. "But why should we think the notion of justification is epistemic in both evaluations?" (p. 15), Lackey inquires. Specifically, she claims that the notion of justification in the knowledge attribution to the jury is not epistemic. The reason for this is that "the central motivation for ruling out hearsay evidence is

practical or procedural rather than epistemic" (p. 15). Two independent arguments support this claim.

The first argument points out that that the problem of excluding hearsay evidence does not have to do with the determination of the truth but with the rights of the parties under litigation. To clarify, if it were allowed for one of the parties under litigation to include hearsay evidence, the counterpart would not be able of examining and cross-examining the original source of information. This unfairly favors the party using the hearsay. Lackey supports this point with the Ohio State Bar Association statement that "hearsay evidence is generally not admissible because it may place crucial evidence before the court without allowing the other side to confront the person who is being quoted to challenge the accuracy of the statement or the credibility of the person who made it" (as cited in Lackey, 2013, p. 15). The second argument invites us to imagine two pieces of evidence. One piece is hearsay produced by a highly reliable process. Another piece is first hand evidence that is not so reliable, for instance, a confession obtained after several exhausting hours of practicing harsh interrogation on the suspect. Disregarding its truth conduciveness, the former would be inadmissible, and the latter could be legitimately taken into consideration.

Putting all this together in DIFFERENT EVIDENCE, if the jury would have included the hearsay that the defendant was seen fleeing the scene of the crime with blood spattered on his clothes in its deliberations, it would have not known that the defendant is innocent because it would have had a reliable defeater for its belief. However, given that the jury followed the exclusionary rules of evidence zealously, it excluded the just mentioned hearsay, and it does not have a defeater for *p*. Now, given that the reason for excluding the defeater is not epistemic, but procedural, the jury is not epistemically justified. In Lackey's words, "this shows only that while

both the jury and the individual jurors epistemically justifiedly believe that the defendant is guilty, the jury is *legally justified* in believing that the defendant is innocent" (pp. 15-16).

According to Lackey, a possible objection to her view comes from Schmitt's concept of chartered group. Avoiding unnecessary repetition, for Schmitt, it does not make sense to say that if the jury would have taken the hearsay under account, it would have been epistemically justified because this is not a possibility for the jury. In his words, "the court rightly excludes hearsay, and its legal capacity is the only capacity in which it operates" (Schmitt 1995, p. 274). Lackey responds to this objection with a *reductio ad absurdum.* Assume that the only capacity in which the jury operates is its legal capacity. Then, the jury only is a jury when it follows the law. But, "a jury might consider hearsay evidence when forming its belief about a defendant's innocence or guilt." Therefore, that jury is not a jury! But this conclusion is wrong, "juries can make mistakes or break the rules and still remain a jury" (Lackey, 2013, p. 16).

Another way of squelching Schmitt's objection is showing that to defend DIFFERENT EVIDENCE with the notion of chartered group makes DIFFERENT EVIDENCE vulnerable to the *Illegitimate Manipulation of Evidence Problem*. This problem is defined by Lackey in the following terms: "[A]ny account of the justification of group beliefs that permits group epistemic justification to be achieved through the illegitimate manipulation of evidence should be rejected" (p. 13). To clarify, this problem was originally posed for the most popular *NS* account of group justification: the Joint Acceptance Account (Gilbert, 1989, p. 306; Schmitt, 1994, p. 265; Halki, 2011; 150). Without referring to any particular theory, this approach states that an attributor, *A*, correctly states that a group, *G*, knows that *p*, when *G*'s members jointly accept that *p*.

A fragment of one of Lackey's multiple counter-examples against this principle suffices to illustrate the Illegitimate Manipulation of Evidence Problem.

> FABRICATING EVIDENCE
>
> Phillip Morris is one of the largest tobacco companies in the world, and each of its operative members is individually aware of the massive amounts of scientific evidence revealing not only the addictiveness of smoking, but also the links it has with lung cancer and heart disease. Entirely because of what is at stake financially and legally, however, each of these members decides to jointly accept that all of the scientists working on the relationship between smoking and health problems are liars. (p. 12)

This case shows how the joint account enables attributions of knowledge on the basis of manipulation and fabrication of evidence. For Lackey, Schmitt's defense of DIFFERENT EVIDENCE allows for illegitimate manipulation of evidence too. Given that the jury is catalogued as a chartered group, and that there is no constrains for chartered groups, then there is no constrains on the evidence the jury is authorized to exclude. As a consequence, for Lackey, the jury could exclude all the evidence contrary to its view, and at the end it would be justified in believing because, given the illegitimate manipulation of evidence, the jury would not have any defeater against its view. In this sense, the jury could unacceptably behave as, to use Lackey's example, a "group … whose primary charter is to exclude any evidence that conflicts with their belief that aliens have visited Roswell, New Mexico? In such a case, the group could end up justifiedly believing that aliens have visited Roswell simply because they are illegitimately restricting the evidence available to them" (p. 17).

2.3 Different Evidence Reloaded

I believe the best way of introducing my interpretation of DIFFERENT EVIDENCE is contrasting it with the views studied until now. Firstly, Schmitt endorses (1). For one thing, he approves the knowledge attribution to the jury because given the jury's legal capacity, it correctly excludes the hearsay evidence that "the defendant was seen fleeing the scene of the

crime with blood spattered on his clothes" defeating the proposition that "the defendant was innocent." For the other, Schmitt also favors the knowledge denial to the jurors because they have a defeater against *p*. Secondly, Lackey prefers (2). To recall, this is the knowledge attribution claiming that "The jury does not know that the defendant is innocent, and the jurors do not know that the defendant is innocent." On one hand, she, unlike Schmitt, advocates for the knowledge denial to the jury, for it is not epistemically justified. On the other, she, as Schmitt, likes the knowledge denial to the jurors because of the defeater they posses. Finally, I find (1) more compelling than the other alternatives. On one side, unlike Lackey, I give my thumbs up to attributing knowledge to the jury, but I disagree with Schmitt's justification for it. On the other side, I give my thumbs down to attributing knowledge to the jurors; yet, it is not because they have a defeater against *p*, as Schmitt and Lackey suggest, but because I do not believe it is proper to attribute knowledge to a juror *qua* juror, when he/she uses hearsay evidence.

From my view, neither Lackey nor Schmitt properly respond to the problem of knowledge attributions in DIFFERENT EVIDENCE. Given that I defend that it is appropriate to attribute knowledge to the jury, I have to defend this position from Lackey's attack. I am not going to defend Schmitt's argumentation for the knowledge attribution to the jury because I believe Lackey is right in her criticisms against the concept of a chartered group. Rather, I will propose a new justification for the knowledge attribution to the jury. From my perspective, knowledge attributions have the purpose of stating that a cognitive agenda has been properly closed. Given that the object of knowledge attributions is cognitive agendas, the conditions under which a knowledge attribution is properly closed or advanced depends on the nature of the cognitive agenda claimed to have been properly closed or advanced. I am going to defend

attributing knowledge to the jury against Lackey's argumentation, before bravely presenting my own view.

2.3.1 The Correctness of Knowledge Attributions to the Jury in Different Evidence: A Negative Justification

My contention is that the notion of justification used in the knowledge attribution to the jury is epistemic. Arguing for this, I have the burden of showing that Lackey's position is wrong. As I take it, Lackey's central point is that "The central motivation for ruling out hearsay evidence is practical or procedural rather than epistemic" (Lackey, 2013, p. 15). To explain my strategy attacking this claim, I want to clarify the concept of "epistemic" because its scope changes depending on the definition used. To clarify, "epistemic" is an adjective qualifying something with the normative dimensions of knowledge. For what matters in this paper, there is a narrow and a broad concept of epistemic. Lackey uses the narrow one. She understands "epistemic" in terms of "reliability," as it is shown in the following quote referring to Schmitt's account of group beliefs: "the epistemic goodness or badness … can … be fleshed out in terms of traditional justification-conferring features, such as being produced by a reliable process, being grounded in adequate evidence, and so on" (p. 6). Now, "reliability," for her, is truth-conduciveness. This is instantiated in the fragment where she differentiates "inadmissibility" from "unreliability." This is the relevant quote: "[B]eing inadmissible is clearly not the same as being unreliable or otherwise non-truth-conducive" (p. 15). To conclude, for Lackey, something is qualified as epistemic when it is, or it is not, truth-conducive. Given that the motivation for ruling out hearsay evidence is not truth-conducive, then it is not epistemic.

From my perspective, truth-conduciveness is not the only epistemic goal. My intuition is that if the hearsay rule is justified for any other epistemic end, then such rule is epistemically justified. To illustrate, I want to focus on one end that has special importance for legal contexts, namely, error avoidance. The notion of reliability also provides some insight for my proposal. Truth conduciveness in the sense of reliability is just error avoidance. A comparison between two pairs of Goldman's concepts, "reliability" and "error," and "power" and "ignorance" justify this point. For Goldman, *reliability* is "a tendency to produce a high truth ratio of beliefs," and *error* is "false belief" (1986, p. 27). The correlation between these two concepts is inversely proportional. That is, the more reliable a cognitive procedure is, the smaller the proportion of errors admitted. Conversely, unreliable cognitive processes such as "confused reasoning, wishful thinking, reliance on emotional attachment, mere hunch or guesswork, and hasty generalization … tend to produce error a large proportion of the time" (1976, p. 10). Now, contrast the second pair of concepts. *Power* is "the capacity to produce true beliefs in answer to a high ratio of questions one wants to answer or problems one wants to solve," and *ignorance* is "the absence of true belief" (1986, p. 27). In this sense, the more powerful the cognitive agent is, the less ignorance he suffers from. If this is right, from this, I infer that we value reliable cognitive processes because we want true beliefs, but also because we want to avoid error. My intuition is confirmed by Goldman in the following lines: "A reliable process, method, or procedure is an antidote to error. The greater the reliability of one's methods, the smaller one's proportion of errors" (1986, p. 27). This proves that truth-conduciveness and error avoidance are two different epistemic goals. It is clear that obtaining truth implies avoiding error, but we can imagine a cognitive agent with the aim of obtaining truth and another cognitive agent with the goal of avoiding error. While the first would be, *prima facie*, prone to accept a vast set of propositions

than later can be proven to be false, the second would consider a generous number of propositions unacceptable until they are proven to be true. Going back to my main concern here, if the motivation for the hearsay rule is error avoidance, then it is epistemic. This is my main justification for refusing Lackey's claim that "The central motivation for ruling out hearsay evidence is practical or procedural rather than epistemic." I will attack this proposition undermining the arguments leading to it.

Two independent sub-arguments provide support for the claim that "[t]he central motivation for ruling out hearsay evidence is practical or procedural rather than epistemic." First,

(5) Legal proceedings are motivated either for practical (i.e., procedural) or for epistemic concerns.

(6) "Hearsay evidence is excluded because with it the opposing side is denied the possibility of confronting the source of the information" (Lackey, 2013, p. 15).

Therefore,

(7) This is a practical or procedural concern, but not necessarily an epistemic one.

According to Lackey, this argument is confirmed by the following one:

(8) "Imagine a piece of hearsay evidence that has been produced by a far more reliable process and is better grounded in evidence than a piece of firsthand evidence. Nevertheless, the former would be inadmissible in a court of law, while the latter would not be" (Lackey, 2013, p. 15).

Therefore,

(9) "The mere fact that something is ruled inadmissible does not necessarily reveal anything about its epistemic status" (Lackey, 2013, p. 15).

(5) understands legal proceedings as having one exclusive rationale. On one hand, legal proceedings are designed to achieve practical, or procedural, purposes related to the fair application of due process such as the right of confrontation of the defendant which is an interpretation of the sixth amendment to the United States Constitution providing that "[i]n all criminal prosecutions, the accused shall enjoy the right … to be confronted with the witnesses against him." On the other hand, legal proceedings aim to find the truth of the facts under litigation.

This dichotomy is not necessarily right. Goldman, in "Legal Evidence" (2005), classifies theories of legal proceedings in two groups: either they are pluralistic or unified. *Pluralistic* accounts hold that legal processes have different aims, not one of which is prior to the other (e.g., justice, impartiality, allowing coexistence, seeking the truth, protection of civil rights, etc.). *Unified* theories, in contrast, explain proceedings with reference to one main end. They do not hold that legal proceedings actually achieve the selected goal; better yet, they use it as an explanatory resource to clarify the main activities performed in legal proceedings. Within this second alternative, one can find pure unified theories and impure unified theories. *Pure unified theories* hold that the legal practices taken into account are subsumable in one exclusive desideratum. *Impure unified theories* hold that although the aim of legal procedures is such an exclusive aim, it is possible to recognize alternative goals coexisting with the dominant rationale. Lackey's account is a pure unified about the epistemic goal of legal proceedings. For her, legal proceedings either obey exclusively a practical or an epistemic rationale, and it is not the case that legal proceedings obey both a practical and an epistemic objective. But, this is not necessarily the case; legal proceedings follow epistemic values along with other practical ones.

This idea allows Goldman, for instance, to defend that although the main goal of the law is not the determination of the truth; it is truth-oriented. These are his words:

> The aim [of legal procedures] is securing *substantively just* treatment of individuals. This depends on (1) the content of the law and (2) the genuine, or true, facts concerning the actions they (and others) performed and the circumstances of those actions. Thus, determining the truth about a person's actions is a crucial *means* to just treatment. (Goldman, 2005, p. 164)

As I already stated, (6) rationalizes the exclusion of hearsay evidence through a practical or procedural rationale, namely, through the right of confrontation of the defendant against whom the hearsay would be used if it were admissible. However, I believe this is a reductionist interpretation of the hearsay rule because it also makes epistemic sense. Without defending a particular theory, these are some of the epistemic interpretations. First, Brian Leiter in "Prospectus and Problems for the Social Epistemology of the Evidence Law" claims that "[a]lthough on its face, the hearsay doctrine is a rule of exclusion, in reality it is a rule of admission" (2001, p. 323). His idea is to interpret the hearsay rule using the multiple exceptions to it. Adopting this perspective, the problem is not that hearsay is not truth-conducive, but how could it be so. Second, Nance Dale in "The Best Evidence Principle" suggests that the hearsay rule creates an epistemic incentive for the parties to produce the best evidence possible. Having two paths of evidence for finding the facts under litigation, one leading straight to the facts, and other being mediated by different circumstances, it seems the best path is the one providing information without mediation. For Dale, this is the objective of the hearsay rule (1998, p. 272). Finally, Larry Laudan in *Truth, Error and Criminal Law: An Essay on Legal Epistemology* suggests that when relevant evidence, such as hearsay, tends to be overestimated by the juries, it is a source of error, and, then, it is epistemically appropriate to exclude it (2006, p. 120). Epistemic interpretations of the hearsay rule such as these also provide a criticism against (9)

because, for them, when hearsay evidence is ruled inadmissible, something about its epistemic status is revealed.

Even if the only motive for excluding hearsay evidence is the right of the litigant against whom this evidence is used, I believe that this is not only a practical concern, as stated in (7). The reason for this is that the adversarial controls of legal proceedings can be understood as epistemic as well. Remember that the adversarial systems of adjudication allocate the responsibility of handling evidence in the parties. Adopting the fact-finder's perspective, the parties under litigation provide to the trier of facts the relevant information for confirming or defeating the information conveyed by the witnesses, but if the opportunity of cross-examination is omitted, as in hearsay evidence, we deprive the trier of facts of this way of fortifying or defeating his/her beliefs (Ho, 2008, p. 270).

2.3.2 The Correctness of Knowledge Attributions to the Jury in Different Evidence: A Positive Justification

As I briefly stated before, knowledge attributions have the purpose of stating that a cognitive agenda has been properly closed. Given that the object of knowledge attributions is cognitive agendas, the conditions under which a knowledge attribution is properly closed or advanced depends on the nature of the cognitive agenda claimed to have been properly closed or advanced. In DIFFERENT EVIDENCE, the cognitive agendas under account are the jury's and the jurors'. First, the jury is a collective agent with the agenda of rendering a verdict of acquitting or condemning the accused. For achieving this objective, juries have a set of conditions of resolution and time constraints. Broadly speaking, the jury has to hear the evidence as it is presented by the prosecutor and the defense in a trial, and, after receiving instructions

from the judge, the jurors have a deliberation to consider the verdict. If this is right, the objective of the cognitive sub-agenda of rendering a verdict is the finding of the facts under litigation. For this sub-agenda, juries also have conditions of resolution such as the standard of reasonable doubt imposed on the finding of the facts justifying a verdict in which the accused is declared guilty of committing a crime. Hearsay evidence, as I understand it, is one of the limitations imposed by the agendas of juries and jurors. That is why I believe that to attribute knowledge to the jury in DIFFERENT EVIDENCE is right. When the jury excludes hearsay evidence, it is properly following one of the limitations imposed by its cognitive agenda. This does not lead to the problem faced by Schmitt's account because when a jury does not follow the limitations of its agenda, it does not cease to exist. Instead, it is just a jury, which does not close its agenda.

With regards to the jurors, I propose that it is inappropriate to attribute knowledge to them in DIFFERENT EVIDENCE. The reason for this is that a juror plays a role determined by the agenda that the legal procedure imposes on him/her. If hearsay evidence is a cognitive limitation imposed on the jury, and the jurors are the constitutive parts of the jury, then hearsay evidence is also a limitation for them. This does not mean that jurors *de facto* do not take hearsay evidence into account. Instead, the idea is that a proper knowledge attribution has to take into account the cognitive agenda for which the recognition of knowledge is made. These intuitions seem to be confirmed by studies on empirical judicial psychology where simulated jurors are exposed to hearsay evidence to render a false verdict (Sevier, 2012). The experiments report that jurors prefer direct evidence to hearsay. Now, when the jurors do not resist the temptation and take hearsay evidence into account, they tend to disregard the hearsay evidence that is not accompanied by a justification explaining this sinful strategy. My hunch here is that the critical

attitude of jurors about hearsay evidence is an indication of the inappropriateness of knowledge attributions to the jurors in DIFFERENT EVIDENCE.

3. The Doctrinal Paradox

One argument for *S* is that it captures ordinary intuitions of group knowledge and belief, as Margaret Gilbert (1994) states:

> What is it for *us* to believe that such-and-such, according to our everyday understanding? It is common to answer this question with some form of 'summative' account. For *us* to believe that *p* is for all or most of us to believe that *p*. Or perhaps a 'common knowledge' condition may be added: for *us* to believe that *p* is for all or most of us to believe that *p*, while this is common knowledge among us. Whatever the precise account given, the core of it is a number of individuals who personally believe that *p*. (p. 235)

Aggregation procedures transform these ordinary intuitions into institutional designs providing social mechanisms to combine individual beliefs to obtain group beliefs. To be sure, "an aggregation procedure is a mechanism by which a group can generate collectively endorsed beliefs or judgments on the basis of the group members' individual beliefs or judgments" (List, 2005, p. 27). In this sense, an aggregation procedure is a procedure having individual judgments as inputs and collective judgments as outputs; for instance, a procedure of majority voting "whereby a group judges a given proposition to be true whenever a majority of group members judges it to be true" (List 2005, p. 27), or a unanimity procedure "whereby the group makes a judgment on a proposition if and only if the group members unanimously endorse that judgment" (List 2005, p. 30). While in the former the input is the individual votes of its members and the output is the position collecting more votes, in the latter the input is the opinion of each of its members and the output is the unanimous agreement of them.

Despite the support majoritarian procedures might receive from ordinary intuitions, they face problems of collective rationality, as it is shown in the following case:

> THE DOCTRINAL PARADOX
>
> Suppose a three-member court has to make a decision in a breach-of-contract case. The court seeks to make judgments on the following propositions:
>
> - The defendant was contractually obligated not to do a certain action (the first premise).
> - The defendant did that action (the second premise).
> - The defendant is liable for breach of contract (the conclusion).
>
> According to legal doctrine, obligation and action are jointly necessary and sufficient for liability; that is, the conclusion is true if and only if both premises are true. Suppose, as shown in Table 1 [below], judge 1 believes both premises to be true; judge 2 believes the first but not the second to be true; and judge 3 believes the second but not the first to be true. Then each premise is accepted by a majority of judges, yet only a minority, that is, judge 1, individually considers the defendant liable.
>
> Table 1: The doctrinal paradox

	Obligation?	Action?	Liable?
Judge 1	True	True	True
Judge 2	True	False	False
Judge 3	False	True	False
Majority	True	True	False

> The "doctrinal paradox" consists of the fact that the court's verdict depends on whether it votes on the conclusions or on the two premises: a majority vote on the issue of the defendant's liability alone would support a "not liable" verdict, whereas majority votes on the two premises would support a "liable" verdict. This shows that, even for a single given combination of individual judgments, the court's verdict is highly sensitive to its method of decision making. If the court wishes to respect the judges' majority opinion on the premises of the case, this can lead to a different verdict that if it wishes to respect the majority opinion on the case's overall conclusions. (List & Pettit, 2011, pp. 45-46)

According to List and Pettit, the procedure followed by the tribunal in THE DOCTRINAL PARADOX, as all majoritarian procedures, follow three principles (2011, pp. 49-50):

(10) *Universal domain*: All the judges' individual judgments are admissible inputs if they are complete (i.e., they include a judgment for each of the doctrinal elements of liability), and consistent (i.e., liability follows from the judges' judgments on obligation and action).

(11) *Anonymity*: The judgments of all the judges have equal weight in determining the tribunal's judgment.

(12) *Systematicity*: The court's judgment on each proposition depends only on the judges' judgments on that proposition, and the same pattern of dependence holds for all propositions.

The problem is that (10) – (12) go against the principle of collective rationality.

(13) *Collective rationality*: The aggregation function produces a court's judgment that is complete (i.e., includes all the doctrinal elements of liability) and consistent (i.e., liability follows from obligation and action).

However, (13) is false in THE DOCTRINAL PARADOX because, given the aggregation of the judges' individual judgments, the court holds a valid argument whose two premises (i.e., action and obligation) are true, but whose conclusion (i.e., liability) is false. If this is right, the problem of THE DOCTRINAL PARADOX is a conflict between individual rationality and group rationality. If one favors individual rationality, then one denies (13). If one favors collective rationality, then one denies individual rationality. This is why List and Pettit also formulate THE DOCTRINAL PARADOX as a dilemma:

(14) Either the court allows the votes of the judges to determine the view of the collectivity, or the court may take steps to ensure that the collective view will be rational.

(15) If the court allows the votes of the judges to determine the view of the collectivity, then there is a risk of the court holding an irrational set of views.

(16) If the court takes steps to ensure that the collective view will be rational, then it may be necessary for the court to ignore the vote of its judges.

(17) Either there is a risk of the court holding an irrational set of views or it is necessary for the court to ignore the vote of its judges (List & Pettit, 2002, p. 95)

For List and Pettit, the moral of THE DOCTRINAL PARADOX is that if one wants to preserve collective rationality, one has to give up one of the principles from (10) – (12). In their words, "if a group seeks to form intentional attitudes, it must relax at least one of the four conditions. As we now demonstrate, any three of them can be satisfied together. The question therefore is which one, or which ones, to relax" (List & Pettit, 2011, p. 50). First, to relax (10) implies making the judgments of the individual judges uniform in such a way that all the judges have the same judgments. However, this is a bad solution because "there is no guarantee that the intentional attitudes of several individuals … will fall in a [uniform] pattern" (p. 52). Second, to relax (11) implies giving more importance to the decision of one of the judges, yet given the non-hierarchical orientation of the court, this is not a good solution (p. 53). Finally, to relax (12) implies breaking the same pattern of dependence held for all propositions. Either the court prioritizes the premises (i.e., action and obligation) making its decision from the judges' votes on these propositions and ignoring the votes on the conclusion, or the court prioritizes the conclusion ignoring the premises (p. 56). For List and Pettit, this is "the best way to avoid the impossibility of rational attitude aggregation" (p. 58).

I interpret that the reason for the approval of relaxing (12) is justified because it respects the diversity of judges' judgments threatened by the denial of (10). Giving up (12) also keeps the democratic structure of the court intact, eroded by the relaxation of (11). If this is right, the question is which of the propositions should be prioritized, the premises or the conclusion? Agendivism justifies a premise-driven approach. To be sure, the agenda of the court is to render

a verdict on the liability for a breaching of contract. Such agenda is closed by the aggregation of judges' votes and advanced by the votes of each judge individually considered. This means that each judge's vote is a sub-agenda for the court's collective judgment. How do the judges, individually considered, close their agendas? Each of them is expected to decide the liability given the evidence presented by the parties. What do the parties have to prove? According to the nature of liability, they have to provide evidence for the alleged fact that the defendant was contractually obligated not to do a certain action, and for the argued fact that the defendant did that action. Once the parties present their evidence to the judges, each of the judges makes his/her judgment on each of these elements. Given that THE DOCTRINAL PARADOX describes the liability for breaching a contract as the conclusion of a valid argument whose premises are the two elements that the parties are supposed to prove, the judges individual votes are the consequence of their personal evaluation of the evidence presented by the parties. For instance, if Judge 1 considers that the parties presented enough evidence for the fact that the defendant was contractually obligated not to do a certain action, and the fact that the defendant did that action, then the liability follows. By the same token, if Judge 2 does not see enough evidence for the obligation that the defendant allegedly had to do, but enough evidence corroborating the defendant performed the aforementioned action, then the liability does not follow. If this is right, agendivism provides an argument for the court to form its decision aggregating the judges' votes on the premises and to ignore the votes in the conclusion: having a majoritarian decision on the conclusion necessarily follows.

Conclusions

I believe it is worth finishing my dissertation putting together the main conclusions of my arguments. This dissertation was devoted to the study of knowledge and knowledge attributions in legal contexts. The inspiration for this was the Contextualist Suggestion (*CS*) that "courtroom proceedings provide a context that show the context-sensitivity of knowledge ascription truth-conditions." I disagree with *CS*, but before showing my points of contention, I want to recall the main terminology used.

As I take it, there is a knowledge attribution when an agent, the attributor (*A*), asserts that another agent, the putative knower (*K*), knows that *p*. The problem of knowledge attributions is, then, whether *A* correctly asserts that *K* knows that *p*. Traditional theories of knowledge (*TTK*) claim that the correctness of knowledge attributions only depends on traditional factors for knowledge such as such as whether *K* believes that *p*, whether *p* is true, whether *K* has good evidence for *p*, the strength of *K*'s epistemic position, and so on. Against *TTK*, shifty epistemologies argue that the correction of knowledge attributions depend on non-traditional, or contextual, factors such as the salience of error possibilities or the practical stakes. The most important shifty epistemologies are Epistemic Contextualism (*EC*) and Subject-Sensitive Invariantism (*SSI*). While *EC* claims that the correctness of knowledge attributions depends on the salience of error possibilities or the practical states of *A*'s context of utterance, *SSI* states that the correctness of knowledge attributions depends on the salience of error possibilities or the practical states of *K*'s contexts.

With this terminology in mind, I interpret *CS* implies that the context of utterance is the context of litigation in which *A* is at the moment of the attribution. This explains, for example, why a knowledge attribution to a presumptive witness by a police officer just starting a criminal

investigation is less demanding than the one by an attorney to the same witness in a cross-examination at trial. A counter-example for *CS* is EVERYONE KNOWS. To recall, in that case the conviction of the defendant would meet the epistemic standards of all the knowledge attributors within and without the courtroom (e.g., the cops, the prosecutor, the judge, the jury, and so on). However, in EVERYONES KNOWS conviction is not guaranteed because from the fact that it meets the epistemic standards of the knowledge attributors does not follow that it meets the invariant epistemic standards of proof fixed in criminal legal procedures for conviction. Therefore, the correction of knowledge attributions in legal contexts does not depend on the context of the litigation the attributor is in.

I account for the correctness of knowledge attributions in legal contexts with an agendivistic view. The conceptual background of my account comes from the notions of agent and agenda. An agent is an entity doing something. Agendas and sub-agendas are plans of action agents are disposed to close or advance. In this sense, agendas are like networks of actions to be discharged. Agendas and sub-agendas have conditions of closure determining both the actions an agent is expected to perform in order to achieve his/her objective, and the time range in which he/she should do it. An agenda in course is properly closed when agents deploy their resources in such a way that its conditions of closure are obtained, but agendas are not closed *simpliciter*. Instead, the agent's matching of the conditions of resolution comes in degrees. An agenda in course is properly advanced when some of its closure conditions have been obtained, but not all of them yet. Some agendas include things an agent desires or needs to know for the achievement of his/her objectives. I refer to this as cognitive agenda, defined as a set of questions that a cognitive agent wants, or needs, to answer for the achievement of his/her objectives.

For my agendivistic view, knowledge attributions have the purpose of stating that a cognitive agenda has been properly closed. Given that the object of knowledge attributions is cognitive agendas, the conditions under which knowledge is properly attributed depends on the nature of the cognitive agenda claimed to have been properly closed or advanced. This explains why in EVERYONE KNOWS conviction cannot be secure, even if everyone within and without the court knows that the defendant is guilty. One of the closure conditions of conviction is the finding of the facts supporting conviction according to one specific standard of proof: beyond a reasonable doubt. Knowledge is not properly attributed to the trier of facts, and conviction is not secured, until such requirement is satisfied. With all of this alleged knowledge, conviction is not secure because the closure conditions of conviction demand the trier of facts to find the facts under litigation beyond a reasonable doubt. This confirms that knowledge attributions in legal contexts depend on the closure conditions of cognitive agendas they impose on legal agents and not on their context of utterance, as is stated by *CS*.

These general remarks on agendivism and knowledge attributions in legal contexts allowed me to deal with particularly different problems. The first issue I dealt with was the problem of the function of knowledge attributions in our cognitive economies. The most important antecedent to this issue is found in Craig's *Knowledge in the State of Nature*. In this book, he claims that the purpose of knowledge attributions is to flag approved informants (Craig, 1990, p. 11). I showed how this account has been attacked by alternative accounts showing that it is possible to find cases of knowledge attributions without approved informants, and approved informants without knowledge attributions. My disagreement with Craig is in the way he executes his methodological program. He correctly states that knowledge attributions respond to the need of having true beliefs, and that true beliefs matter because they serve to guide human

actions to a successful outcome. However, Craig does not explain how knowledge attributions serve to guide human actions to a successful outcome. I submit that a theory of the function of knowledge attributions in our cognitive economies should account for the ways in which knowledge attributions serve to guide our cognitive endeavors to a successful outcome. With my agendivistic view, I claim that the function of knowledge attributions is to identify or flag relevant information to close or advance an epistemic agenda. This is confirmed by criminal investigators who only attribute knowledge to witnesses, victims, undercover agents, and the like, when they provide relevant information allowing to advance the agenda of a criminal investigation: to determine if a crime occurred and who did it.

A second concern for the problem of knowledge attributions in legal context is the attributions of testimonial knowledge. In dealing with this problem, I showed that *EC* and *SSI* allow for easy testimonial knowledge. That is to say, in some cases *EC* and *SSI* incorrectly attribute testimonial knowledge. My path of argumentation was the following. First, I showed that *EC* and *SSI* endorse the Knowledge Account of Assertion (*KAA*), which is the claim that one should assert that *p* only if one knows that *p*. The relevant literature of *EC* (Cohen, 2004; DeRose 2002; 2009), *SSI* (e.g., Hawthorne, 2004; Stanley, 2005) and *KAA* (Williamson, 2000) confirmed this premise. Second, I claimed that *KAA* leads to antireductionism (i.e., the epistemic status of testimony comes from testimony as a source of knowledge in its own right) and transmission (i.e., the knowledge that *p* is transmitted, via testimony, from the speaker to the hearer). The evidence for this was shown by the fact that important versions of *KAA* (Williamson, 2000) endorse antireductionism and transmission. Additionally, some reputable theories of testimony (Lackey, 2008) also recognize the link between *KAA*, antireductionism and transmission. My third premise was to show that antireductionism and transmission allow for

easy testimonial knowledge. That is, these theories of testimonial knowledge "[allow] that one can come to know by simply believing what one is told" (Greco, forthcoming, p. 8). For instance, under antireductionism and transmission, a criminal investigator comes to know that *p* because an uncooperative witness states the *p*. However, this attribution of testimonial knowledge is wrong because the information the uncooperative witness could give could be inaccurate, false or incomplete. Therefore, *EC* and *SSI* allow for easy testimonial knowledge.

My agendivistic view, differently, claims that a hearer properly closes his/her cognitive agenda when receiving relevant information from the speaker, and answers the questions required for the advancing or closure of his/her agendas. Consequently, there are two sub-cognitive agendas in testimonial knowledge: the speaker's agenda for providing relevant information, and the hearer's agenda of properly answering the questions he/she needs for the achievement of his/her objectives. Agendivism is not antireductionist because it does not believe that the adequate closure of the testifier's agenda is enough: the hearer has cognitive work to do. By the same token, agendivism does not hold transmission because the hearer cannot know without the information provided by the testifier. But this information in itself is not enough; the hearer has to properly close or advance his/her agenda.

A third problem studied in my dissertation was the problem of expert testimony and legal knowledge. Given that in American law of evidence, for expert testimony to be heard by the jury, the trial judge has to decide if the expert has the required specialized knowledge. As a consequence, the trial judge is an attributor of specialized knowledge. The problem is that the trial judge, *ex hypothesi*, does not have the specialized knowledge that he is supposed to attribute. Strict Invariantism (i.e., the view that knowledge attributions do not vary from context to context because the standard for knowledge is only one, and it is high) suggests that a trial

judge correctly asserts that an expert knows that *p* iff the trial judge has the expert knowledge to verify that the expert meets the standards of knowledge fixed in the expert's field of expertise. However, this view is too strong because it demands from the trial judge to have specialized knowledge to correctly attribute specialized knowledge. Legal EC claims that a trial judge correctly asserts that an expert knows that *p* iff the trial judge is in a good enough epistemic position to assert that the expert knows that *p* for law's purposes. However, the expression "good enough epistemic position … for law's purposes" is ambiguous and, consequently, does not provide criteria for the evaluation of attributions of specialized knowledge in legal contexts.

Agendivism departs from these views claiming that a trial judge correctly asserts that an expert knows that *p* iff the finding of the facts requires the knowledge that *p*, the trial judge properly asserts that the jury does not know that *p*, and the trial judge is indirectly justified in believing that the expert knows that p. The first condition determines the connection between the information the trial judge is expected to attribute and the agenda for which that information is relevant. The second requirement shows that the agent in charge of advancing the agenda in account is not able to satisfy the role that was assigned to him/her. And the third criterion reveals the normative character of agendivism. It is less stringent than Strict Invariantism and more specific than Legal *EC*.

My dissertation concludes providing agendivistic responses for two problems of knowledge attributions to groups in legal contexts: DIFFERENT EVIDENCE and THE DOCTRINAL PARADOX. To recall, non-summativists use DIFFERENT EVIDENCE to show that if a jury and its juror have different evidence for *p*, their justificatory status might diverge. This could occur because with the exclusionary rules of evidence the jury is asked to ignore relevant information in its deliberations that the jurors can take into account in their personal

consideration. In my agendivistic view, there is not conflict between the jury and its juror, *qua* jurors. The reason for this is that a juror plays a role determined by the agenda that the legal procedure imposes on him/her. If hearsay evidence is a cognitive limitation imposed on the jury, and the jurors are the constitutive parts of the jury, then hearsay evidence is also a limitation for them. THE DOCTRINAL PARADOX shows that a multi-agent court with a procedure of majority voting for fixing its collective beliefs could face a dilemma. "Either there is a risk of the court holding an irrational set of views, or it is necessary for the court to ignore the vote of its judges adopting a conflict between individual rationality and group rationality" (List & Pettit, 2002, p. 95). Agendivism dissolves such dilemma prioritizing some of the propositions that the judges can vote for according to the court's agenda of rendering a verdict. The idea of this is to guarantee group rationality respecting the individual judgments of the court's members.

References

Allen, R. (1994). Expertise and the Daubert decision. *The journal of criminal law and criminology, 84*(4), 1157-1175.

Allen, R. A. & Miller, J. (1993). The common law theory of experts: Deference or education. *North West Law Review*. 1131

Allen, R. (2012). The conceptual challenge of expert evidence. *International congress on procedural law*, Cartagena, Colombia.

Annis, D. (1978). A contextualist theory of epistemic justification. *American philosophical quarterly, 15*(3), 213–219.

Brewer, S. (1998). Scientific expert testimony and intellectual due process. *The Yale Law Journal, 107*(6), 1535-1681.

Cohen, S. (1999). Contextualism, skepticism, and the structure of reasons. *Philosophical perspectives, 13*, 57-89.

Cohen, S. (2004). Knowledge, assertion, and practical reasoning. *Philosophical issues, 14*, 482-491.

Craig, E. (1990). *Knowledge and the state of nature*. Oxford: Clarendon Press.

Dale, N. (2003). Reliability and the admissibility of experts. *Seton Hall Law Review, 34*, 191-253.

Damaska, M. (2003). Epistemology and legal regulation of proof. *Law, probability and risk, 2*, 117-130.

Daubert v. Merrell Dow Pharmaceuticals, Inc. 509 U.S. 579 (1993). Retrieved from LexisNexis Academic database.

DeRose, K. (1992). Contextualism and knowledge attributions. *Philosophy and phenomenological research, 52*(4), 913-929.

DeRose, K. (2002), "Assertion, knowledge, and context" *The Philosophical Review, 111*, 167–203.

DeRose, K. (2005). The ordinary language basis for contextualism and the new invariantism. *The philosophical quarterly, 55*(219), 172-198.

DeRose, K. (2009). *The case for contextualism*. Oxford: Clarendon Press.

Fallis, D. (2007). Attitudes towards epistemic risk and the value of experiments. *Studia Logica, 86*(2), 215-246.

Fantl, J., & McGrath, M. (2002). Evidence, pragmatics, and justification. *Philosophical review, 111*, 67-94.

Fantl, J., & McGrath, M. (2007). On pragmatic encroachment in epistemology. *Philosophy and phenomenological research, 75*, 558-89.

Fantl, J., & McGrath, M. (2009). *Knowledge in an uncertain world*. Oxford: Oxford University Press.

Fantl, J., & McGrath, M. (2012). Arguing for shifty epistemology. In: Brown, J. & Gerken, M. (Eds.). (2012). *Knowledge ascriptions* (pp. 55-74). Oxford: Oxford University Press.

Fricker, E. (1994). Against Gullibility. In B. Matilal & A. Chakrabarti (Eds.), *Knowing from Words* (125-161). Boston: Kluwer.

Frye v. United States. 293 F. 1013 (D.C. Cir 1923). Retrieved from LexisNexis Academic database.

Gabbay, D. & Woods, J. (2005). *The reach of abduction. Insight and trial. A practical logic of cognitive systems.* Amsterdam: Elsevier.

Gabbay, D. & Woods, J. (2003). *Agenda relevance. A study in formal pragmatics*. Amsterdam: Elsevier.

Gilbert, M. (1989). *On Social Facts*. New York: Routledge.

Golanski, A. (2001). Why legal scholars get Daubert wrong: A contextualist explanation of law's epistemology. *Whittier Law Review, 22*, 653–721.

Goldman, A. (1976). What is a Justified Belief? In G. Pappas (Ed.), *Justification and Knowledge* (1-23). Dordrecht: D. Reidel.

Goldman, A. (1986). *Epistemology and cognition*. Cambridge: Harvard University Press.

Goldman, A. (1991). Epistemic Paternalism: Communication Control in Law and Society. *The journal of philosophy, 88*(3), pp. 113-131.

Goldman, A. (1999). *Knowledge in a social world*. Oxford: Clarendon Press, 1999.

Goldman, A. (2001). Experts: Which ones should you trust? *Philosophy and phenomenological research, 63*(1), 85-110.

Goldman, A. (2004). Group knowledge versus group rationality: Two approaches to social epistemology. *Episteme, 1*, 11-22.

Goldman, A. (2005). Legal evidence. In M. Golding, & W. Edmunson (Eds.), *The blackwell guide to the philosophy of law and legal theory* (pp. 163-175). Maden: Blackwell Publishing.

Graham, P. (2006). Can testimony generate knowledge? *Philosophica, 78*, 105-127.

Greco, J. (2007). "The Nature of Ability and the Purpose of Knowledge." *Philosophical Issues* 17, 57-69.

Greco, J. (2011). *Achieving knowledge. A virtue-theoretic account of epistemic normativity*. Cambridge: Cambridge University Press.

Greco, J. (forthcoming). Testimonial knowledge and the flow of information. In Greco, J. & Henderson, D. (Eds.), *Epistemic Evaluation*. Oxford: Oxford University Press. Retrieved from https://sites.google.com/a/slu.edu/john-greco/

Haack, S. (2005). Trial and error: The Supreme Court's philosophy of science. *American Journal of public health, 95*(1), 66-73.

Halki, R. (2011). On Dialectical justification of groups beliefs. In H. Schmid, D. Sirtes & M. Weber (Eds.), *Collective epistemology* (pp. 119-153). Ontos Verlag: Frankfurt.

Hawthorne, J. (2004). *Knowledge and lotteries*. Oxford: Oxford University Press.

Hawthorne, J., & Stanley, J. (2008). Knowledge and action. *The journal of philosophy, 105*(10), 571-590.

Kelp, C. (2011). What is the point of "knowledge" anyway? *Episteme, 8*(1), 53-66.

Lackey, J. (2013). *What is justified group belief?* Unpublished manuscript.

Lackey, J. (2012). Group knowledge attributions. In: Brown, J. & Gerken, M. (Eds.), *Knowledge ascriptions* (pp. 243-268). Oxford: Oxford University Press.

Lackey, J. (2008). *Learning from words. Testimony as a source of knowledge*. Oxford: Oxford University Press.

Laudan, L. (2006). *Truth, error and criminal law. An essay on legal epistemology*. Cambridge: Cambridge University Press.

Leiter, B. (1997). The epistemology of admissibility: Why even good philosophy of science would not make for good philosophy of evidence. *Brigham Young University Law Review*, 803-819.

Lerner, C. (2006). Reasonable suspicion and mere hunches. *Vanderbilt Law Review, 59*, 407-473.

Levi, I. (1977). Epistemic utility and the evaluation of experiments. *Philosophy of Science, 44*, 368-86.

List, C. (2005). Group knowledge and group rationality: A judgment aggregation. *Episteme, 2*(1), 25-38.

List, C. & Pettit, P. (2011). *Group agency. The possibility, design, and status of corporate agents*. Oxford: Oxford University Press.

List, C. & Pettit, P. (2002). Aggregating sets of judgments: An impossibility result. *Economics and philosophy, 18*, 89-110.

MacFarlane, J. (2005b). Knowledge laundering: testimony and sensitive invariantism. *Analysis, 65*(2), 132-138.

Mathiesen, K. (2011). Can groups be epistemic agents? In H. Schmid, D. Sirtes & M. Weber (Eds.), *Collective epistemology* (pp. 23-44). Ontos Verlag: Frankfurt.

Neta, R. (2006). Epistemology factualized: New contractarian foundations for epistemology. *Synthese, 150*, 247-80.

Pardo, M. (2005). The field of evidence and the field of knowledge. *Law and Philosophy, 24*, 321-392

Pritchard, D. (2010). Anti-luck virtue epistemology. In D. Pritchard, A. Millar, & Haddock, A. (Eds.), *The nature and the value of knowledge* (pp. 48-65). Oxford: Oxford University Press.

Rawls, J. (1955). Two concepts of rules. *The philosophical review, 64*, 3-32.

Sanders, J. (2010). Applying Daubert inconsistently? Proof of individual causation in toxic tort and forensic cases. *Brooklyn law review, 75*, 1367-1404.

Schaffer, J. (2006). The irrelevance of the subject: Against subject-sensitive invariantism. *Philosophical studies, 127*, 87-107.

Schmitt, F. (1994). The justification of group beliefs. In Schmitt, F. (Ed.), *Socializing Epistemology* (pp. 257-287). Lanham: Rowman.

Stanley, J. (2005). *Knowledge and practical interests*. Oxford: Oxford University Press.

Sutton, J. (2007). *Without justification*. Cambridge: MIT Press.

Riggs, W. (2008). Epistemic risk and relativism. *Acta analytica, 23*(1), 1-8.

Taslitz, A. (2010). What is probably cause, and why should we care?: The costs and meaning of individualized suspicion. *Law and Contemporary Problems, 73*(3), 145-210.

Terry v. Ohio 392 U.S. 1. (1968) Retrieved from LexisNexis Academic database.

Twining, W. (2006a). Rethinking evidence. In: *Rethinking evidence. Exploratory essays* (2nd ed.) (pp. 237-270). Cambridge: Cambridge University Press.

Unger, P. (1984). *Philosophical relativity*. Minneapolis: University of Minnesota Press.

Unger, P. (1975). *Ignorance. A case for scepticism*. Oxford: Oxford University Press.

Williamson, T. (2000). *Knowledge and its limits*. Oxford: Oxford University Press.

Zagzebski, L. (1994). The inescapability of Gettier problems. *Philosophical quarterly, 44*(174), 65-73.