

## EPISTEMIC CONTEXTUALISM AND ITS PROBLEMS

EPISTEMIC CONTEXTUALISM AND ITS PROBLEMS: A PHILOSOPHICAL  
CRITIQUE

By QILIN LI, B. A., M. A.

A Thesis

Submitted to the School of Graduate Studies

in Partial Fulfilment of the Requirements

for the Degree of

Doctor of Philosophy

McMaster University

© Copyright by Qilin Li, October 2012

DOCTOR OF PHILOSOPHY (2012) (Philosophy)

McMaster University

Hamilton, Ontario

TITLE: Epistemic Contextualism and Its Problems: A Philosophical Critique

AUTHOR: Qilin Li, B.A. (Peking University), M.A. (Peking University)

SUPERVISOR: Professor Nicholas Griffin

NUMBER OF PAGES: vi, 234

## ABSTRACT

The purpose of this dissertation is to argue that epistemic contextualism, which proposes that the word ‘know’ is a context-sensitive term, is seriously deficient and therefore indefensible. Since epistemic contextualists claim that their semantic theory of ‘know’ contributes not only to a linguistic model of knowledge ascription but also to a unified solution to some important puzzles in epistemology, I divide my thesis into two basic parts. In the first part (i.e., Chapters 2 and 3), I argue that the proponents of both binary and ternary accounts of the supposed context-sensitivity of ‘know’ fail to provide a reasonable linguistic model of knowledge ascription. My argument in Chapter 1 indicates that ‘know’ cannot be treated as a binary context-sensitive term that is similar to paradigmatic indexical terms or gradable adjectives. Chapter 2 takes contrastivism as a representation of the ternary account of the supposed context-sensitivity of ‘know’ and argues that this theory is in an even worse position because it even fails to capture the supposed phenomena of the context-sensitivity of knowledge ascription. The second part (i.e., Chapters 4, 5, and 6) argues that epistemic contextualism does not provide us with a really satisfactory solution to the puzzles of skepticism, the epistemic closure principle and fallibilism. On the contrary, its rival, invariantism, with some support from pragmatics, psychology of belief and experimental philosophy, is able to solve the above puzzles in a quite nice way. At the end of my thesis (i.e., Chapter 7), I systematize the observations, the evaluations and the critiques of epistemic contextualism from the previous chapters and indicate that epistemic contextualists even fail to establish their supposed phenomena of the context-sensitivity of ‘know.’

## ACKNOWLEDGEMENTS

A number of people contributed to the final version of this thesis. First and foremost, I would like to express my sincere gratitude to my supervisor, Professor Nicholas Griffin, for all of his inspiring, detailed feedback and warm encouragement throughout the development of this dissertation. I would also like to acknowledge the efforts of other members of my supervisory committee, Professors Richard T. W. Arthur, Brian Garrett and Mark Vorobej. Professors Richard T. W. Arthur and Brian Garrett's insightful comments helped me avoid many problematic points. Professor Mark Vorobej kindly accepted my invitation to be the new supervisory member after Professor Brian Garrett's leave from the Department. Another person that I would like to thank is Professor Violetta Igheski, the Ph. D. advisor of the Department, whose generous help facilitated my preparation for the dissertation.

Several other people also deserve my deep gratitude. They helped me during the development of my research project either via personal communication or via email correspondences. They are: Trent Dougherty, Linhe Han, Jinpeng Jiang, Christoph Kelp, Ivona Kucerova, Jianhua Mei, Duncan Pritchard, Baron Reed, Patrick Rysiew, Jason Stanley, Zoltán Gendler Szabó, Chuang Ye and Haixia Zhong.

I would like to thank the Department of Philosophy at McMaster University for providing me with academic resources and financial support, without which I could not have accomplished my research.

I would also like to thank my parents, Yaohua Li and Huizhen Zhang, for their unwavering support, and also for constantly encouraging me to stick to my goal.

## TABLE OF CONTENTS

Chapter 1: Introduction	1
1.1 Some Clarifications and Classifications	1
1.2 The Plan	4
<u>PART ONE: Contextualism and Its Linguistic Models</u>	9
Chapter 2: The Binary Account of the Context-Sensitivity of Knowledge Ascription	10
2.1 Lewis' Contextualist Account of Knowledge Ascription	10
2.2. The Context-Sensitivity of Knowledge Ascription and Gradable Adjectives	26
2.3 Cohen's Argument for the Context-Sensitivity of Knowledge Ascription	38
2.4 The Cases for Contextualism and Experimental Philosophy	44
2.5 Some Invariantist Explanations	52
Chapter 3: Contrastivism and Its Problems: A Case Study of the Ternary Account of the Context-Sensitivity of Knowledge Ascription	61
3.1 Schaffer's Account of Contrastive Knowledge Ascription	63
3.2 Schaffer's Contrastivism and Its Problems	68
<u>PART TWO: Contextualism and Its Supposed Contributions to Epistemology</u>	86
Chapter 4: Contextualism and Skepticism	87
4.1 The Supposed Elegant Balance in Contextualism and the Indirect Concession of Knowledge Ascription	87
4.2 Contextualism and Its Supposed Protection of Our Everyday Knowledge Ascriptions	104
4.3 Conclusion	118
Chapter 5: Contextualism and Closure (Together with Skepticism)	120
5.1 Closure Principle of Knowledge: A Preliminary Outline	120
5.2 Two Types of Approach to the Supposed Failure of Closure	126
5.2.1 Skepticism and the Closure Principle of Knowledge	127
5.2.2 A Dretskean Approach to the Failure of Closure	129
5.2.3 A Nozickean Approach to the Failure of Closure	142
5.3 Contextualism and Closure	147
5.3.1 A General Sketch of Contextualism on Closure and Skeptical Puzzles	147
5.3.2 Contrastivism and Closure	152
5.3.3 Non- Contrastivist Contextualism and Closure	170
5.4 Closure and the Skeptical Problem: Some Lessons to Be Learned	175
Chapter 6: Contextualism and Fallibilism	181

6.1 Skepticism and Fallibilism	181
6.2 Cohen's Contextualist Account of Fallibilism	182
6.3 Challenges to Contextualist Fallibilism	190
6.3.1 Contextualist Fallibilism vs. Traditional Fallibilism	190
6.3.2 The Oddity of Fallibilism	195
6.4 The Explanation of the Oddity of (PF)	200
6.4.1 A Contextualist Explanation of the Oddity of (PF)	200
6.4.2 Gricean Approach to the Oddity of (PF)	203
6.5 Conclusion	213
Appendix 6.1 The Ambiguous Scope of the Possibility Operator and the Oddity of (PF)	214
Appendix 6.2 Another Pragmatic Explanation of the Oddity of (PF)	215
 Chapter 7: Epilogue	 217
 References	 226

## **CHAPTER 1: INTRODUCTION**

Epistemic contextualism is a hotly debated issue in contemporary epistemology.

Epistemic contextualism is a *semantic* theory of knowledge ascriptions, which suggests the word ‘know’ is a context-sensitive term: according to the theory, a sentence of the form ‘S knows that *p*’ can be true as uttered in one context and false as uttered in another.

Although they all endorse this general approach to knowledge ascription, different contextualists have different ways to capture the context-sensitivity of the term ‘know.’

With this in mind, it is useful for us to make some preliminary clarifications and classifications.

### **1.1 SOME CLARIFICATIONS AND CLASSIFICATIONS**

As will be shown, (binary) epistemic contextualists, such as Stewart Cohen, Keith DeRose and David K. Lewis, hold quite a different view on how to account for the supposed context-sensitivity of ‘know’ from the contrastivists (such as Jonathan Schaffer).

As Cohen suggests, there are two basic ways to cash out the contextualist idea of knowledge ascriptions (Cohen 1999, especially 61): (1) Knowledge is a two-place relation between a subject and a target proposition, which is contextually sensitive to the contexts of ascriptions. In this sense, the term ‘know’ functions in a similar way to context-sensitive terms such as ‘tall,’ ‘flat,’ etc. (2) Knowledge is a three-place relation between a subject, a target proposition and some other (semantic) component, such as standards of knowledge ascription, alternatives or contrast error possibilities, which



reflects the relevant feature of the context.

The first approach to the context-sensitivity of knowledge ascriptions is represented by the indexical model of knowledge ascriptions, which is proposed by Cohen, DeRose and Lewis (cf. Cohen 1988; DeRose 1992; and, Lewis 1996). The context-sensitivity of knowledge ascription stems from the fact that the verb 'know' is an indexical term that denotes different kinds of knowledge relations between the subject and the target proposition in different contexts. For instance, in skeptical contexts the binary knowledge relation it denotes is so demanding that no one can truly ascribe knowledge to anybody in those contexts. In ordinary contexts, by contrast, the relation it denotes is less demanding, so that one is often able to truly ascribe knowledge in those contexts. These epistemologists are thus committed to epistemic pluralism, according to which there is a plurality of knowledge relations, among which some are more demanding than others.

The second approach is represented by Schaffer's contrastivism, which suggests that, besides the arguments for the subject and the target proposition, the term 'know' also has a *third* argument place which, when made explicit, is occupied by a contrast clause that takes different propositions in different contexts. In a given context, the corresponding contrast clause represents an alternative that is eliminated by the subject's evidence in that context. According to Schaffer, the so-called binary knowledge claim that we commonly use is actually an abbreviated (and disguised) version of the ternary 'know'-relation. In a given context, when the contrast clause is specified, the full account

of the ternary knowledge ascription is derived. This provides contrastivists with a strategy to explain the difference between our everyday knowledge ascriptions and the supposed ignorance in the skeptical context. For instance, in everyday contexts, when we truly say that ‘Moore knows that he has hands,’ we actually ascribe (P1) to Moore:

(P1) Moore knows that he has hands rather than that he has stumps.

By explicitly indicating the contrast clause that ‘Moore has stumps,’ we admit that Moore has sufficient evidence to eliminate the alternative that he only has stumps. But, if Moore has the same amount of evidence in a skeptical brain-in-a-vat (BIV) scenario, it is false to ascribe (P2) to Moore:

(P2) Moore knows that he has hands rather than that he is a handless BIV.

This is because Moore’s evidence is no longer sufficient for him to eliminate the skeptical alternative of being a handless BIV when he is positioned in a skeptical context. Schaffer thinks that it is his contrastivist account of ‘know’ that provides a plausible account of the context-sensitivity of knowledge ascriptions.

Hereafter, I will call the first kind of epistemic contextualism (i.e., the view proposed by Cohen, DeRose and Lewis) ‘the binary contextualist account of knowledge ascription;’ and use ‘contrastivism’ as the representative of the second kind of epistemic contextualism (i.e., the ternary contextualist account of knowledge ascription). I would preserve the term ‘epistemic contextualism’ for the common spirit that is shared by both sub-theories.

Bearing the above clarifications in mind, the first thing we shall do is to carefully inspect the linguistic models that binary epistemic contextualism and contrastivism provide so that we can see whether their linguistic models really match our everyday cognitive practices with knowledge ascription. This will be the crucial research objective for the first part of my thesis.

On the other hand, both binary epistemic contextualists and contrastivists claim to have some significant theoretical advantages over non-contextualist accounts of knowledge ascription. In particular, they both claim that epistemic contextualism makes three important contributions to epistemology: (1) Epistemic contextualism provides a nice solution to the skeptical problem and meanwhile preserves our everyday knowledge. (2) Epistemic contextualism preserves a nice balance between the epistemic closure principle and epistemic modesty. (3) Epistemic contextualism provides a satisfactory defense of fallibilism. These three topics will be examined in detail in the second part of my thesis.

## **1.2 THE PLAN**

The aim of my thesis is to provide a thorough examination of epistemic contextualism and eventually to conclude that the prospect for contextualism is not as promising as its advocates suggest; on the contrary, epistemic contextualism does not have significant theoretical advantages over its rival, invariantism.

As mentioned in the previous section, the whole thesis is divided into two parts:

Part I involves two chapters, which aim to evaluate the validity of the linguistic models for epistemic contextualism as well as whether there are some good, independent motivations or reasons for us to accept epistemic contextualism.

Chapter 2 is devoted to the critique of the binary contextualist account of knowledge ascriptions from two perspectives. On the one hand, an indexical model for knowledge ascriptions is criticized. It is argued that contextualism has no good reason to model itself on indexicals: the argument from analogy by appealing to the comparison between the term 'know' and the context-sensitive terms such as 'tall,' 'flat,' etc, is not convincing. On the other hand, the so-called contextualist intuitions concerning knowledge ascriptions are contested. Contemporary binary contextualists propose two series of case studies (i.e., Cohen's Airport Case as well as DeRose's Bank Cases) to support the supposed context-sensitivity of 'know.' These contextualists argue that the intuitions illustrated in these cases are best explained by their contextualist theory of knowledge ascription. However, the data from experimental philosophy and psychological studies do not support this epistemic-contextualist contention. The supposed 'contextualist' intuitions are probably biased since they are not in accord with the folk practices of knowledge ascription that are illustrated by experimental philosophers and psychologists. Because the intuitions and the predictions that are invoked by contextualist epistemologists are not supported by the empirical data, the most important independent motivation for contextualism is suspicious. Since both independent motivations for binary contextualism are problematic, the conclusion will be

drawn that the first kind of epistemic contextualism does not have significant theoretic advantages over its invariantist rivals.

Chapter 3 is devoted to the criticism of Schaffer's contrastivism. It is argued that the ternary interpretation of the term 'know' is not in a better position either. It is argued that contrastivism is even worse than the binary contextualist account— contrastivism even fails to capture the supposed context-sensitivity of 'know.' As shown in this chapter, if we granted that 'know' is a context-sensitive term, the full-fledged contrastivist knowledge claim with the form 'S knows that  $p$  rather than  $q$ ' would remain context-sensitive, which implies that the linguistic model proposed by contrastivism, when compared with its binary contextualist agnate, is even more problematic.

Thus, at the end of Part One, the conclusion will be drawn that the two linguistic models for epistemic contextualism are both problematic and the supposed independent motivations or reasons for the acceptance of epistemic contextualism are suspicious. With the assistance of pragmatics and psychological theories concerning language use, invariantism, as the rival to contextualism, does not seem to be theoretically inferior to contextualism.

However, as some philosophers (such as Ernest Sosa, Richard Feldman, Stephen Schiffer, et al) argue, the serious problem for epistemic contextualism is that, as a semantic theory of knowledge ascription, it does not contribute any really important insight for epistemological research— just to specify under what condition a sentence such as 'S knows that  $p$ ' is true cannot help us in understanding the nature of knowledge

or solving any epistemological puzzles concerning knowledge. However, contextualists may find this complaint unacceptable, since they think epistemic contextualism contributes significantly to epistemological studies by providing a solution to skeptical puzzles, by preserving both the epistemic closure principle and epistemic modesty, and by defending fallibilism, which are all important in epistemology. So, in Part Two, I shall examine all of those three supposed contextualist contributions to epistemology respectively.

Chapter 4 evaluates the contextualist treatment of skepticism and concludes that contextualism does not solve the puzzle successfully. It is indicated that there is a dilemma for epistemic contextualists: if epistemic contextualists want to concede to skeptics, skeptics would eventually win and rob us of our knowledge even in everyday contexts; if epistemic contextualists want to sustain our everyday knowledge in any case, there is no evident advantage in their position over their rivals (such as, neo-Mooreans).

Chapter 5 evaluates the possibility of the coexistence of the epistemic closure principle and epistemic modesty in contextualism. Contrastivism is first picked up as an example to illustrate the tension between the epistemic closure principle and epistemic modesty. Then, a general lesson is drawn from the inspection of contrastivism and is eventually extended to non-contrastivist contextualism: if non-contrastivist contextualists want to preserve the epistemic closure principle, there is a general methodology to construct counter-examples that undermine epistemic modesty; if they want to preserve epistemic modesty, there are some counter-examples which imply that their contextualist

theory fails to provide a plausible account of our everyday practice of knowledge ascription.

I will argue in Chapter 6 that the epistemic contextualism that Cohen proposes does not provide a sustainable defense of fallibilism, because there are two challenges that epistemic contextualism fails to cope with: (1) Cohen's contextualist account of fallibilism leads to some misunderstanding of fallibilism. (2) Cohen's contextualist account of fallibilism cannot explain the oddity of fallibilism. By using both pragmatic interpretation and psychological support, it is argued that epistemic invariantism actually is advantageous over epistemic contextualism in accounting for the oddity of fallibilism.

In the very last chapter, I conclude that epistemic contextualism is problematic with respect to all the issues that we considered from chapters 2 to 6. When we take a more comprehensive perspective and consider all the lessons that we learned from those chapters, we are able to observe that there is a crucial methodology that epistemic contextualists employ: epistemic contextualists, in effect, use an inference-to-the-best-explanation strategy to support their position; that is, they present the supposed data that they claim to be able to handle better than any competing invariant theories. But, in the end, this strategy is extremely suspicious, because the original supposed data is problematic and the exigent demand that epistemic contextualists have to satisfy is to save their data in the first place.

## **PART ONE: CONTEXTUALISM AND ITS LINGUISTIC MODELS**



## **CHAPTER 2: THE BINARY ACCOUNT OF THE CONTEXT-SENSITIVITY OF KNOWLEDGE ASCRIPTION**

In this chapter, several proposed contextualist accounts of the context-sensitivity of knowledge ascription will be examined. They all treat ‘know’ as a binary context-sensitive relation between a knower  $S$  and the known proposition  $p$ . We shall start with Lewis’ contextualist account of knowledge ascription.

### **2.1 LEWIS’ CONTEXTUALIST ACCOUNT OF KNOWLEDGE ASCRIPTION**

David K. Lewis, as one of the most prominent contextualists, provides a very detailed semantic account of knowledge ascriptions. His contextualist theory of knowledge ascriptions was developed in two stages. In 1979, he proposed a contextualist version of a conversational rule in his “Scorekeeping in a Language Game,” which provides a general linguistic foundation for his contextualist account of knowledge. The crucial rules in his paper are called ‘rules of accommodation for conversational score’ and the general scheme can be stated as follows,

If at time  $t$  something is said that requires component  $s_n$  of conversational score to have a value in the range  $r$  if what is said to be true, or otherwise acceptable; and if  $s_n$  does not have a value in the range  $r$  just before  $t$ ; and if such-and-such further conditions hold; then at  $t$  the score-component takes some value in the range  $r$  (Lewis 1979, 347).

Let us use Lewis’ own example to illustrate the above rule. Suppose Lewis has two cats named Bruce and Albert respectively. Bruce lives with Lewis in his house in the USA and

Albert currently lives with Lewis' friends, Mister and Mistress Cresswell in New Zealand.

Now you visit Lewis in his US house and he points to Bruce and starts to speak to you:

The cat is in the carton. The cat will never meet our other cat, because our other cat lives in New Zealand. Our New Zealand cat lives with the Cresswells. And there he'll stay, because Miriam would be sad if the cat went away. (Lewis 1979, 348.)

Evidently, the definite description 'the cat' in the first sentence and in the last sentence refers to different cats. Lewis thinks the conversational score (i.e., the referent in the given case) of the definite description 'the cat' changes gradually as the dialogue continues. When Lewis says 'the cat is in the carton,' it is Bruce that is salient to the interlocutors. But, by using 'our other cat,' 'our New Zealand cat,' Lewis gradually makes Albert become salient in the context of conversation. Lewis thinks 'rules of accommodation for conversational score' are able to successfully explain why 'the cat' in the last sentence refers to Albert.

Roughly speaking, by embracing such a scheme, Lewis provides a very flexible mechanism of context shifting. According to Lewis, if we apply the above rules to the issue of knowledge ascriptions, we find that the conversational contexts of knowledge ascriptions easily shift due to the consideration of different possibilities. For example, in an ordinary situation, you may say that 'I know that  $p$ ' at time  $t_1$ ; but a skeptic can very easily defeat your knowledge at a closely subsequent time  $t_2$  by suggesting that you may be deceived by an evil demon. By raising such a skeptical possibility, the skeptic extends the range of considered possibilities. Thus, without being able to preclude the skeptical

possibility, you cannot know that  $p$  at  $t_2$  but you did know that  $p$  at  $t_1$ . Lewis realizes that it seems that skeptics have an advantage in challenging our knowledge and this is due to the fact that “the rule of accommodation is not fully reversible” (ibid., 355). Therefore, we need some further detailed rules that specify and reveal the real nature of knowledge ascriptions.

A more detailed contextualist account of knowledge ascriptions is provided by Lewis in another famous paper— “Elusive Knowledge,” where a contextualist account of knowledge ascriptions is stated as follows,

S knows that  $p$  if and only if S’s evidence eliminates every possibility in which not- $p$  - Psst!- except for those possibilities that we are properly ignoring. (Lewis 1996, 554)<sup>1</sup>

In the above definition, one of the most crucial terms is ‘properly ignoring,’ which explicitly expresses the contextualist idea about knowledge ascriptions. Therefore, we need to closely examine this term if we want to correctly appreciate Lewis’ account. Roughly speaking, we use ‘ignoring’ in (at least) two basic senses: Firstly, the statement that someone S ignores something may mean that S is actually unaware of the thing in question; in other words, the very thing in question does not enter S’s consciousness. For example, when a driver fails to see the sign on the highway, he misses the exit. In this sense, we can say that the driver ignores the sign; i.e., he is oblivious of the sign. This kind of ignoring is involuntary. But, ‘ignoring’ can also be used in another sense. For

---

<sup>1</sup> Some symbols are changed in order to make the statement consistent with the rest of the discussion in this chapter.

instance, in a press conference, there is a journalist who is famous for her critical attitude and everyone knows that she always raises hard questions. In order to avoid an embarrassing situation, the host never gives the journalist a chance to ask a question even though the host explicitly sees that the journalist puts up her hand. In this sense, we can also say that the host ignores the journalist.<sup>2</sup> So, in the second sense, when we ignore something, we refrain from responding to it even though we are explicitly aware of it; in other words, we just disregard the thing in question, when we ignore it in the second sense. Thus, the second kind of ignoring is always deliberate.

Now, the question is: In what sense does Lewis use ‘ignoring?’ According to Lewis, genuine ignoring is mainly the first kind. Lewis also suggests that deliberate ignoring should be called ‘make-believe ignoring’ or ‘self-deceptive ignoring,’ which is not the focus of his paper. As I. T. Oakley suggests, when Lewis uses the term ‘ignore,’ it should be understood as follows,

To ignore X is to not have X in one’s current consciousness, to not have it before one’s mind. (Oakley 2001, 318)

We now need to consider what ‘proper ignoring’ is. According to Lewis, ‘proper ignoring’ is characterized by a series of conversational rules. The rules can be classified into two groups: permissive rules (that tell us what we may ignore) and prohibitive rules (that tell us what we may not ignore). There are three permissive rules:

---

<sup>2</sup> To be clear: If the host was *unable* for some reason to let the journalist ask her question, then I do not think we would say he had ignored her.

- (1) The Rule of Reliability: we may properly ignore those possibilities that imply the failure of normally reliable cognitive processes such as perception, memory and testimony—“we are entitled to take them for granted” (Lewis 1996, 558).
- (2) The Rule of Method: we may properly ignore those possibilities that imply that our samples are not representative or that the best explanation of our evidence is untrue. That is to say, “we are entitled properly to ignore possible failures in these two standard methods of non-deductive inference” (ibid., 558).
- (3) The Rule of Conservatism: we may properly ignore those possibilities that are generally ignored by those people around us (cf. ibid., 559).

Lewis also suggests that these three permissive rules are comparatively weak and there are some other stronger rules that can override or defeat these three permissive rules.

These strong rules are prohibitive ones:

- (4) The Rule of Actuality: “The possibility that actually obtains is never properly ignored” (ibid., 554).
- (5) The Rule of Belief: “A possibility that the subject believes to obtain is not properly ignored, whether or not he is right to so believe” (ibid., 555).
- (6) The Rule of Resemblance: Given that “one possibility saliently resembles another, ... if one of them may not be properly ignored, neither may the other” (ibid., 556).
- (7) The Rule of Attention: “A possibility not ignored at all is *ipso facto* not properly ignored,” “[n]o matter how far-fetched a certain possibility may be, no matter how properly we might have ignored it in some other context, if in *this* context we are not in fact ignoring it but attending to it, then for us now it is a relevant alternative” (ibid., 559).

Lewis uses the above seven rules together with his definition of knowledge to provide a fully developed account of the context sensitivity of knowledge ascriptions.

According to Lewis, in different contexts, there are different sets of possibilities in which not-*p* holds that need to be eliminated by the subject’s evidence. Therefore, we have to pay attention to the term ‘every’ in Lewis’ definition of knowledge as well. Lewis

himself also clearly recognizes that the universal quantification over possibilities is one of the most important motivations for the contextualist account of knowledge ascriptions. According to Lewis, the facts about universal quantification in natural language strongly support his account of the context-sensitivity of knowledge ascriptions:

What does it mean to say that every possibility in which not- $p$  is eliminated? An idiom of quantification, like ‘every,’ is normally restricted to some limited domain. If I say every glass is empty, so it’s time for another round, doubtless I and my audience are ignoring most of all the glasses there are in the whole wide world throughout all of time. They are outside the domain. They are irrelevant to the truth of what was said. Likewise, if I say that every uneliminated possibility is one in which  $p$ , or words to that effect, I am doubtless ignoring some of all the uneliminated alternative possibilities that there are. They are outside the domain; they are irrelevant to the truth of what was said. (ibid., 553)

In this sense, those seven rules explicitly indicate how to figure out ‘some limited domain’ of possibilities that are relevant to knowledge ascription in a given context. Lewis’ contextualist account of knowledge ascriptions is derived from two important claims: (1) in different contexts, natural-language quantification is typically restricted to different domains; and (2) the definition of knowledge ascriptions involves a universal quantification over possibilities. Since natural-language quantification is context-sensitive, it seems reasonable to suggest that ‘know’ is context-sensitive as well.

At first glance, it seems that the natural-language-quantification model of context-sensitivity might support Lewis’ contextualist account of knowledge ascriptions. However, a deeper investigation of the natural-language-quantification model reveals that there are some serious problems for Lewis’ contextualist account of knowledge

ascriptions if he really thinks the context-sensitivity of ‘know’ can be modeled on universal quantification.

As many philosophers of language observe, “contextual supplementation works at the level of constituents of sentences or utterances, rather than the level of the sentences or utterances themselves” (Soames 1986, 357). This rule applies to the natural language quantifier ‘every’ as well. Consider this example,

Everyone is asleep and is being monitored by a research assistant. (ibid., 357)

In the above sentence, the universal quantifier is embodied by the word ‘everyone.’ Clearly, the research assistant is not involved in the domain of the discourse over which the universal quantifier ranges, because if the research assistant were involved in the domain and were asleep she could not monitor anyone in any real (or actual) situation (see, especially, Soames 1986, 357-359). A more interesting phenomenon is that different occurrences of ‘every’ may be associated with different domains of discourse, even if they occur in the same sentence. For instance,

As the ship pulled away from the dock, every man waved to every woman, every woman waved to every man, and every child waved to every child. (Stanley & Williamson 1995, 294)

For the very last sentence “every child waved to every child,” it is natural to interpret it as “every child on the ship waved to every child on the dock.” A competent English speaker would not be inclined to “[imply] that if two children were both on the dock (or both on the ship) then they waved to each other, and as still less implying that they waved to

themselves” (ibid., 294). Since the different occurrence of the universal quantifier in one sentence can be associated with different domains of discourse, it would not be surprising that we can have both a denial of one occurrence of the universal quantifier and an assertion of the other occurrence in one sentence without contradiction or infelicity. For instance,

Although we all looked out of the window, not everyone saw everyone putting up their umbrellas.<sup>3</sup>

A natural interpretation of the above sentence would be this: the first ‘everyone’ ranges over the domain of people inside the building who looked out through the window and the second ‘everyone’ ranges over a domain of people outside who were looked at from within. So, the sentence actually expresses: not everyone inside saw everyone outside putting up their umbrellas.

However, we cannot observe any similar behavior or phenomena involving ‘know’ even if we granted Lewis’ contextualist account of context-sensitivity of knowledge ascriptions. We can borrow Stanley’s example to illustrate the problem.

Consider,

- (1a) If Bill has hands, then Bill knows that he has hands, but Bill does not know that he is not a bodiless brain in a vat (hereafter BIV for short);
- (1b) If Bill has hands, Bill does not know that he is not a bodiless BIV, but Bill knows he has hands. (Stanley 2004, 138)

If the context-sensitivity of ‘know’ is really based upon the context-sensitivity of natural

---

<sup>3</sup> The example is adapted from (Stanley & Williamson 1995, 294).



language quantification, according to Lewis' theory, we might expect that both (1a) and (1b) shall be felicitously assertible or acceptable, since in each statement the domain of alternative possibilities for the first 'know' is different from the domain of alternative possibilities for the second 'know.' If Lewis' account were correct, we, as competent English speakers, should find both statements to be acceptable. However, this is not the case. As DeRose comments, both (1a) and (1b) will lead to the problem of abominable conjunction,<sup>4</sup> and therefore cannot be acceptable. But if 'know' is context-sensitive in the Lewisian way, it is mysterious why neither (1a) nor (1b) are acceptable, because according to Lewis' account felicitous utterances of the sentences would actually involve 'know' whose underlying domains of alternative possibilities change across the conjunction.

A more disturbing problem for Lewis' account of the context-sensitivity of 'know' can be identified if we take a closer inspection of his theory of knowledge ascription. Consider the following statement

(\*) S knows that  $p$  but S does not know that not- $q$  (where  $q$  is one inconsistent alternative to  $p$ ).

According to Lewis' account, if 'know' inherits its context-sensitivity from the quantifier 'every,' then a Lewisian epistemologist should be able to conclude that, in *some* context, (\*) is a true *assertible* statement, because in *that* context  $q$  is an irrelevant alternative to  $p$

---

<sup>4</sup> The term 'abominable conjunction' refers to conjunctions such as, 'S does not know that he is not a handless brain-in-a-vat but S knows that he has hands.' For a discussion of the abominable conjunction, see (DeRose 1995, 27-29).

and therefore  $S$  does not have to rule out  $q$  in *that* context. As explained earlier, a Lewisian epistemologist may indicate that  $q$  is an irrelevant alternative to  $p$  in the given context, since  $S$  is unaware of (i.e.,  $S$  ignores)  $q$ . Thus, (\*) should be an assertible statement. But a serious problem occurs: the same Lewisian epistemologist cannot sincerely assert (\*), because in asserting (\*) she had endorsed  $S$ 's knowledge of  $p$  but at the same time she had also endorsed that there is an un-ruled-out alternative  $q$  that undermines  $S$ 's knowledge of  $p$ . In this sense, there is no conceivable context in which the Lewisian epistemologist is able to sincerely assert (\*). In this situation, the Lewisian epistemologist has to find a way to explain the unassertibility of (\*). As will be shown in Chapter 4, a pragmatic explanation of the unassertibility of (\*) is available. But the endorsement of a pragmatic explanation of the unassertibility of (\*) definitely undermines the motivation for the acceptance of the context-sensitivity of 'know.'

If philosophers of language, such as Stanley and Williamson, are correct, we have to conclude that Lewis' account of the context-sensitivity of 'know' by an appeal to natural language quantification fails since there are significant differences between the so-called context-sensitivity of 'know' and the context-sensitivity of natural language quantification.

However, those philosophers who have sympathy with Lewis' idea may suggest that Lewis' account of the context-sensitivity of 'know' can survive if the model of the context-sensitivity of natural language quantification is given up. Since Lewis also provides seven specific rules to explain how to properly ignore some possibility in which

not-*p*, it is still promising for Lewisian contextualists to develop another linguistic model of the context-sensitivity of ‘know.’ For instance, Lewis can use “the Rule of Attention” to develop a semantic theory of the context-sensitivity of ‘know.’ Lewis also suggests that, by attending to different alternative possibilities, we can have different knowledge ascriptions in different contexts of conversation. In this sense, we may focus our attention upon different alternative possibilities, which can help us in revealing the different senses of ‘know’ in different contexts. Compare the following two statements:

(2a) John knows that [Phil]<sub>A</sub> hits Jack.

(2b) John knows that Phil [hits]<sub>A</sub> Jack.

The device ‘[ ]<sub>A</sub>’ indicates the different alternative possibilities that are attended to. For instance, (2a) is true, since John has good evidence to eliminate alternative possibilities, such as that Mark hits Jack, David hits Jack, etc; and (2b) is true, because John has good evidence to eliminate alternative possibilities, such as that Phil hugs Jack, Phil bites Jack, etc. Thus, we can see that (2a) and (2b) can be true in their respective contexts, since different alternative possibilities are attended to.<sup>5</sup>

One clarification should be emphasized here. It should be noticed that, in Lewis’

---

<sup>5</sup> It is admitted that to correctly assert that John knows that Phil hits Jack, we have to rule out all error possibilities that John may not properly ignore. In this sense, we actually need a full account of John’s knowledge, i.e.,

John knows that [Phil]<sub>A</sub> [hits]<sub>A</sub> [Jack]<sub>A</sub>.

This suggests a consideration of a series of error possibilities, such as,

David (rather than Phil) hits Jack, Phil hugs (rather than hits) Jack, Phil hits David (rather than Jack), David (rather than Phil) hugs (rather than hits) Jack, David (rather than Phil) hits David (rather than Jack), Phil hugs (rather than hits) David (rather than Jack), David (rather than Phil) hugs (rather than hits) David (rather than Jack), etc.

However, for the convenience of the current discussion, I only pick up (2a) and (2b) as representatives here.

contextualist account of ‘know,’ the term ‘know’ is still a binary relation term between a subject and the target proposition. Even if ‘know’ is context-sensitive in Lewis’ sense, the sentences (2a) and (2b) do express fully all the semantic components of the knowledge ascriptions and therefore they are not abbreviations of some other fully developed statements. This is the crucial distinction between Lewis’ contextualist semantics of ‘know’ and some other semantics of ‘know’ (such as contrastivism) that treat ‘know’ as a ternary relation between a subject, a target proposition and a third semantic component that reflects the shift of contexts.<sup>6</sup>

With this clarification in mind, we may go on with the investigation of Lewis’ account of context-sensitivity of ‘know’ by appeal to the sensitivity of attention. In linguistics, there are some relevant studies of attention-sensitive or focus-sensitive terms. For instance, the term ‘only’ is one of the terms with this property. As Laurence R. Horn suggests, the term ‘only’ can shift the information that we attend to. For example, the sentence ‘Muriel only voted for Hubert’ can be clarified in two ways,

(3a) Muriel only voted for [Hubert]<sub>A</sub>.

(3b) Muriel only [voted]<sub>A</sub> for Hubert. (Horn 1969, 100-101)

According to Horn, (3a) can be re-paraphrased as “Muriel voted only for Hubert” or “Muriel voted for only Hubert.” In (3a), the attention is focused on ‘Hubert’ and an alternative may be that Muriel voted for Lucifer. Under this interpretation, (3a) actually

---

<sup>6</sup> As shown in the previews footnote, a semantic theory of the context-sensitivity of ‘know’ can even treat ‘know’ as a five-place relation. However, for the sake of the current discussion, I just ignore this complexity.

expresses the proposition that Muriel voted only for Hubert and she did not vote for Lucifer. On the other hand, (3b) has different attended information, which is ‘vote;’ and an alternative may be that Muriel campaigned for Hubert. So, we can interpret (3b) as that Muriel only voted for Hubert and she did not campaign for him. Given the above semantic difference between (3a) and (3b), we can generate the following conjunction with consistency,

(4) Muriel only voted for [Hubert]<sub>A</sub>, although of course she did not only [vote]<sub>A</sub> for him.

A plausible interpretation of (4) can be that Muriel is a staunch supporter of Hubert— she did not vote for any candidates other than Hubert and she even campaigned for him. So, (4) is acceptable because the sets of alternatives that are caused by different attention or focus are not subset-comparable; in other words, the thing that is affirmed in the first conjunct neither implies nor is implied by the thing denied in the second conjunct. Since the thing affirmed in the first conjunct is totally different from the thing denied in the second conjunct, most competent English speakers would find that (4) is felicitously acceptable.

But when we want to construct a similar conjunction for knowledge ascriptions we find it problematic. Consider this,

(5) ?? John knows that [Phil]<sub>A</sub> hits Jack, although of course John does not know that Phil [hits]<sub>A</sub> Jack.

According to Lewis’ contextualist account of knowledge ascriptions, (5) should be

interpreted as follows: Since John has good evidence to eliminate the alternative possibilities such that it is Mark who hits Jack, it is David who hits Jack, etc, the first conjunct is true; on the other hand, the second conjunct is also true because John's evidence cannot eliminate the alternative possibilities that Phil hugs (rather than hits) Jack. In this sense, a competent English speaker should find (5) acceptable as well. But this is not the case. I think, for most competent English speakers, (5) is just a contradiction.<sup>7</sup> In this sense, we cannot observe here the result that is predicted by Lewis' contextualist account of knowledge ascriptions— here we simply cannot find a similar story that we witness in the studies of the term 'only.'

It is also worth noting that the Rule of Attention actually is the crucial rule that eventually supports Lewis' famous conclusion that knowledge is elusive—knowledge cannot survive in epistemological studies. Lewis writes:

[E]pistemology...became an investigation of the ignoring of possibilities. But to investigate the ignoring of them was *ipso facto* not to ignore them. Unless this investigation was an altogether atypical sample of epistemology, it will be inevitable that epistemology must destroy knowledge. That is how knowledge is elusive. Examine it, and straightway it vanishes. (Lewis 1996, 559-560)<sup>8</sup>

It is understandable why Lewis embraces the Rule of Attention— he needs this rule to account for the skeptical challenge. Lewis' contextualist account of knowledge ascriptions does allow skeptics to sway us easily by changing the contexts of conversations. By mentioning a skeptical alternative possibility, it enters our

---

<sup>7</sup> For some related discussion, see Gillies (un.).

<sup>8</sup> Recall our discussion of two different senses of 'ignoring.' It is very evident that Lewis' use of 'ignoring' is mainly in the first sense.

consciousness and cannot be properly ignored anymore. That is why we do not have knowledge in the skeptical context. But does the Rule of Attention really capture the nature of knowledge ascriptions? Probably not. As many philosophers suggest, knowledge is one type of belief, which should be somehow robust. This implies that knowledge should survive through some scrutiny.<sup>9</sup> It is common for us to study knowledge by considering at least some counterfactual situations. We consider the counterfactual situations because we want to reveal the nature of knowledge, even if we were not aware of these situations before. But just mentioning certain uneliminated alternative possibilities that have not been considered before does not directly imply a shift of the context of knowledge ascription— let alone a change of context which automatically causes the corresponding knowledge ascription to be withdrawn. Recall the relevant alternative theory of knowledge ascription. In this theory, in order to specify in the given circumstances what alternatives are relevant and what alternatives are not, we have to mention some far-fetched alternatives so that we can explain why they are irrelevant to the given context. The theoretical insight here is to distinguish what is reasonable to be said from what merely might be said. In a given context only those reasonable alternatives should be considered. But Lewis' Rule of Attention simply destroys this distinction.

A deeper problem is that the Rule of Attention actually does not provide a good explanation of skepticism either. It should be noticed that a skeptical scenario is not

---

<sup>9</sup> This comment is made by Professor Nicholas Griffin in a conversation.

merely a logical alternative possibility to the target proposition— the skeptical scenario is cleverly designed and set up; therefore we should be able to tell good skeptical arguments and scenarios from bad ones.<sup>10</sup> But the Rule of Attention simply blurs the distinction, since according to the rule the only thing required is to simply mention any possible skeptical possibility— merely bringing it to our attention is sufficient.

Another negative side effect of the Rule of Attention is that it makes many of our disagreements and agreements on knowledge superficial. Just like the Lewisian explanation of the consistency between our ordinary knowledge ascriptions and the skeptics' denial of our knowledge ascriptions, many disagreements on knowledge may also be regarded as consistent with each other and therefore there is no real disagreement, because two different persons who 'disagree' with each other may have different alternative possibilities in mind, which implies that they use 'know' in different senses.

An even worse situation is that we cannot safely share an agreement about a knowledge claim with others, because we may have different alternative possibilities in mind and only 'appear' to use 'know' in the same sense. There is an important pragmatic use of knowledge claims: in asserting that *S* knows that *p*, we implicitly convey that we know that *p* as well. But if 'know' is a context-sensitive term in Lewis' sense, we have to abandon the above pragmatic use of knowledge claims, because the context in which knowledge is ascribed to *S* may be totally different from our context and the

---

<sup>10</sup> Actually, this criticism can be applied to the contextualist view generally. Contextualism of knowledge ascription owes us an account of how to distinguish a good (and successful) skeptical hypothesis from a bad (and unsuccessful) skeptical hypothesis. For a relevant discussion of the distinction between the successful and the unsuccessful skeptical hypotheses, see (Cross 2010).



corresponding uses of ‘know’ exhibit different senses. This problem indicates that if we want to maintain our pragmatic use of knowledge claims, we have to reject Lewis’ contextualist account of ‘know.’

In the next section we will go on to examine another model of the context-sensitivity of knowledge ascriptions, which suggests that the context-sensitivity of knowledge ascriptions is similar to the context-sensitivity of gradable adjectives, such as ‘tall,’ ‘flat,’ ‘large,’ ‘small,’ etc.

## **2.2. THE CONTEXT-SENSITIVITY OF KNOWLEDGE ASCRIPTION AND GRADABLE ADJECTIVES**

According to epistemic contextualism, the truth value of knowledge ascriptions may vary in different contexts, since the standards (or strength) of knowledge ascriptions vary in different contexts.<sup>11</sup> The context-sensitivity of knowledge ascriptions is claimed to be comparable to the context-sensitivity of gradable adjectives, such as ‘tall,’ ‘flat,’ ‘large,’ ‘small,’ etc. According to Stewart Cohen, “many, if not most, predicates in natural language are such that the truth-value of sentences containing them depends on contextually determined standards, e.g. ‘flat,’ ‘bald,’ ‘rich,’ ‘happy,’ ‘sad,’ ...” (Cohen 1999, 60).<sup>12</sup> For example, in order to figure out whether a given surface is flat or not we

---

<sup>11</sup> For instance, Stewart Cohen, Keith DeRose and David Lewis all make this kind of suggestion in various situations.

<sup>12</sup> Evidently, in this quote Cohen does not pay attention to the difference of the adjectives that he lists in the end of the quote. However, there are some crucial differences among them. For instance, ‘bald’ is a vague predicate, ‘rich’ is a gradable adjective with some implicit comparison class. But it normally cannot be treated as an absolute term. There are some other gradable adjectives that can be treated sometimes as absolute terms, for instance, ‘flat.’ Actually, epistemic contextualists, such as Cohen and DeRose, mainly use the gradable adjectives such as ‘flat’ and ‘tall’ as the linguistic model for ‘know.’ So, in the remainder of this section, we shall mainly focus on the gradable adjectives such as ‘flat’ and ‘tall.’

have to figure out in what context the evaluation of ‘flatness’ is taken, since “the context will determine how flat a surface must be in order to be flat” (ibid., 60). Another classical example is the attribution of ‘tallness’ to someone. Normally, an attribution of tallness would be sensitive to a contextually salient scale of height. For instance, when we talk about the height of a professional basketball player, we may apply a rather higher standard for ‘tall’ than when we talk about the height of a normal person in an everyday context. Epistemic contextualists think these kinds of facts about gradable adjectives make a good model for the context-sensitivity of knowledge ascriptions, since they think it is intuitive that knowledge ascriptions come in varying degrees of strength according to the context in which they are made and the context will also determine a corresponding standard for the knowledge ascription in question. Knowledge ascriptions, according to the contextualist view, are “intuitively” gradable and therefore they, just like those gradable adjectives, are contextually sensitive in a similar way. But is this really the case?

Most linguists claim that gradable adjectives have at least two defining characteristics. First, “gradable adjectives can be modified by degree adverbials such as *quite*, *very*, and *fairly*” (Kennedy 1999, xiii). In this sense, a gradable expression would allow for modifiers. But normally a non-gradable expression or term would not be felicitously modified by those adverbs. For instance,<sup>13</sup>

- (6a) The surface is very flat.
- (6b) The surface is fairly flat.
- (6c) The surface is really flat.

---

<sup>13</sup> (6a)-(6f) are adapted from (Stanley 2004, 124). (6g)-(6i) are examples provided by Kennedy (1999, xiv).

- (6d) John is very tall.
- (6e) John is fairly tall.
- (6f) John is really tall.
- (6g) ?? Giordano Bruno is very dead.
- (6h) ?? I want the new spacecraft to be quite octagonal.
- (6i) ?? Carter is a fairly former president, and Lincoln is an extremely former president.

(6a)-(6f) would sound perfectly felicitous and appropriate for competent English speakers; but (6g)-(6i) would sound odd. At first glance, we may not think that ‘know’ can pass this test, since the classical modifiers such as ‘very,’ ‘fairly’ cannot felicitously modify ‘know.’ Nor can the corresponding adjective ‘known.’ Here are some examples:

- (7a) ?? John very knows that Obama is the current president of US.
- (7b) ?? John fairly knows that Obama is the current president of US.
- (7c) ?? It is very known that Obama is the current president of US.
- (7d) ?? It is fairly known that Obama is the current president of US.

With respect to (7c) and (7d), some contextualists may complain that the infelicity of them is due to the improper selection of the modifiers. For example, the modifier ‘widely’ can be felicitously applicable to ‘known’:

- (7c<sup>\*</sup>) It is widely known that Obama is the current president of US.

However, the crucial point that should be emphasized here is that we want to examine whether ‘know’ and its derivatives (such as ‘known’) can be felicitously modified by classic *degree* modifiers. Clearly, the modifier ‘widely’ is not a proper modifier that can be felicitously used to characterize the supposed degree of knowledge or the degree of the strength of epistemic position with respect to the target proposition. The term ‘widely’

can only indicate the scope of the persons who acquire the target proposition. In this sense, (7c<sup>\*</sup>) actually means that *most rather than only a few people* know that Obama is the current president of US. Therefore, even if we all accept that (7c<sup>\*</sup>) is a felicitous statement, this would not help contextualists to establish their intended linguistic model of knowledge ascription. Thus, given (7a) to (7d), it remains plausible to suggest that the term ‘know’ (and its derivative terms such as ‘known’) cannot be felicitously modified by the classical degree modifiers.

But suppose that contextualists are convinced by the examples of (7a) to (7d). They may suggest that the modifier ‘really’ can be properly applied to ‘know.’<sup>14</sup> Since in some cases, the term ‘really’ is a degree modifier, it seems that knowledge is gradable if ‘know’ can be modified by ‘really.’ Here is the Airport Case that is provided by Cohen.

**The Airport Case:** 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 if anyone knows whether the flight makes any stops. A passenger Smith replies, “I do. I just looked at my flight itinerary and there is a 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, anyway. It could contain a misprint. They could have changed the schedule since it was printed, etc,” Mary and John agree that Smith doesn’t *really* know that the plane will stop in Chicago on the basis of the itinerary. They decide to check with the airline agent. (Cohen 2000, 95, with my emphasis.)

However, Cohen’s case should be carefully interpreted. Actually, according to Cohen, the above case illustrates how the context may be changed when stakes are high. In the

<sup>14</sup> Note: it is very interesting that the term ‘known’ cannot be felicitously modified by the term ‘really.’ I suspect no one would think the following statement is felicitous:  
(7d<sup>\*</sup>) ?? It is really known that Obama is the current president of US.

normal situation when Mary and John have no urgent issue to deal with in Chicago, they can ascribe the corresponding knowledge to Smith; i.e., Smith knows that the plane will stop in Chicago, by just finding the information from the itinerary. But when the stakes for Mary and John are very high and they must make sure whether the plane will actually stop at Chicago or not, they would apply a higher standard of knowledge ascription and therefore deny that Smith has the corresponding knowledge in question. However, it is worth noting that in the above case Cohen explicitly clarifies for what reason “Mary and John agree that Smith doesn’t *really* know that the plane will stop in Chicago on the basis of the itinerary” (my emphasis); namely, that the schedule may have changed or the itinerary may contain a misprint. Contextualists suggest the context-sensitive gradable expressions of ‘know’ can pass the test, since it allows for the modifier ‘really.’

It is worth noting that the modifier ‘really’ can be used in (at least) two ways: in some cases, ‘really’ is a degree modifier; for instance, “the surface of the table is really flat.” But, in some other cases, ‘really’ is a stylistic modifier of emphasis, in which sense ‘really’ is similar to ‘actually’ or ‘genuinely.’ For instance, “This picture is really drawn by Picasso.” In this latter case, ‘really’ is not a degree modifier at all. Thus, we have to be sure whether the term ‘really’ used in Cohen’s case is a genuine degree modifier rather than an emphasis modifier. As Stanley observes, there is a way to test whether ‘really’ is used as a degree modifier; i.e., “negations of degree-modifier uses of ‘really’ can be conjoined with assertions of the unmodified forms without inconsistency” (Stanley 2004, 125). Here are his examples:

- (8a) John is tall, but not really tall.  
(8b) Michigan is flat, but not really flat.

Both statements are acceptable. But we cannot find similar phenomena in knowledge ascriptions. The following statement would sound quite odd for competent English speakers:

- (9) ?? Although Smith knows that that the plane will stop in Chicago by reading the information from the itinerary, Smith doesn't really know that the plane will stop in Chicago.

We have to say that (9) does (at least) sound odd even if we do not regard it as a contradiction. Thus, when we compare (8a), (8b) with (9), the oddity of (9) reveals that the 'really' that occurs in both (9) and Cohen's case is not a genuine degree modifier. If the above *prima facie* analyses and comparison are correct, we can conclude that there are important differences between the supposed context sensitivity of knowledge ascriptions and the context sensitivity of gradable adjectives with respect to the first test.

The second important characteristic of gradable adjectives is that they can occur in certain complex syntactic environments, such as degree constructions. According to Kennedy, "a degree construction is a construction formed out of an adjective and a *degree morpheme*— an element of {-er/more, less, as, too, enough, so, how, ...}" (Kennedy 1999, xiv). For instance, these statements are perfectly natural to a competent English speaker:

- (10a) John is taller than Mike.

(10b) My watch is less expensive than John's.

But the following locutions are deeply puzzling,<sup>15</sup>

(11a) ?? John knows that Obama is the current president of US more than Mary knows it.

(11b) ?? John knows that Obama is the current president of US more than he knows that Bush was president.

However, the following case should be distinguished from cases like (11a) and (11b):

(11c) John knows more than Mary does.

It is admitted that (11c) is perfectly acceptable. But this does not imply any degree constructions for knowledge ascriptions. In order to see this, we may consider the following situation: suppose that there is a set of target propositions in a given context, which involves  $\{p_1, p_2, p_3, p_4, p_5\}$ . In the context, John knows all of these propositions; but Mary, on the other hand, only knows that  $p_1, p_2$  and  $p_3$ . In this sense, John knows more than Mary does. However, this does not provide any support to the contextualist project, because 'know' in (11c) then takes a totally different complement from the ones in (11a) and (11b). In a case like (11c), we actually suggest that "John knows more of the given set of target propositions." But, if contextualists want to establish their linguistic model of 'know,' they have to establish that "John more knows the given set of target propositions," which is completely infelicitous. It is especially evident that cases like (11c) cannot help the contextualist when we consider their contextualist interpretation of

---

<sup>15</sup> Both examples are adapted from (Stanley 2004, 125).

skepticism. If the contextualist story of skepticism is true, contextualists should be able to establish their linguistic model of the context-sensitivity of ‘know’ with respect to only one single target proposition. If only one single target proposition is concerned, I suspect we cannot understand in what sense it can be properly stated that ‘John knows more that  $p$  than Mary does.’ And we can never make the statement ‘John knows more that  $p$ ’ always felicitous either. Thus, if contextualists want to rescue their project, they have to search somewhere else for support.

Another interesting observation of contextualism of knowledge ascription with respect to (11c) is that, if the contextualist interpretation of skepticism is correct, (11c) can be regarded as a crucial counterexample to the contextualist linguistic theory of knowledge ascription, which suggests an important difference between knowledge ascriptions and gradable adjectives. As Igor Douven observes, there is a principle for gradable adjectives when we compare two objects from a certain perspective, which can be stated as follows:

(Principle of Comparison, hereafter PC for short) For all  $x$  and  $y$  and a gradable adjective  $A$ : if it is true/false in a conversational context that  $x$  is  $A$ -er than  $y$  (or that  $x$  is more  $A$  than  $y$ ), then that remains true/false given any shift in that context. (Douven 2004, 315)

Here is one example to illustrate (PC). Suppose John and Mary are ordinary persons and they are both tall in the normal sense. However, John is taller than Mary. Now suppose a professional basketball coach sees both John and Mary and does not think anyone of them is tall at all. In the later case the conversational context changes and the coach uses



a more demanding standard for ‘being tall,’ which neither John nor Mary can satisfy. Therefore neither John nor Mary is tall now. But what remains true is that John is still taller than Mary, even though the coach’s standard of tallness is applied. But nothing similar happens to the knowledge ascriptions even granted the aforementioned clarification concerning the set of  $\{p_1, p_2, p_3, p_4, p_5\}$ . As Douven suggests, when a context of knowledge ascription is shifted to the skeptical one, both John and Mary are completely ignorant (see, especially, Douven 2004, 317-320). In the skeptical context, neither John nor Mary knows anything and therefore in the skeptical context it seems to be pointless or puzzling to suggest that John knows more than Mary, since the set of things that they know would be the empty set for both of them in the skeptical context. In this sense, we can see that the so-called gradable knowledge ascriptions cannot properly pass the second test either.

There is also another interesting comparison between the knowledge ascriptions and gradable adjectives. As many philosophers indicate, gradable adjectives can be used in a quite “strange” way; that is, in a different way from the normal rules of the terms. For example,<sup>16</sup>

Jack is my ten-year old little cousin who always grows much more slowly than the average boy of his age. So, he is much shorter than the average height of the boys of his age. Normally, a tall boy should be at least taller than the average height for boys of his age; and in this sense, Jack is not tall. Suppose my mother and I had not seen Jack for several months until this afternoon. I happened to meet him in the street. I was surprised by his growth in these several months.

---

<sup>16</sup> I am grateful to Zoltán Gendler Szabó for his instruction in an email discussion. The example is adapted from his in the email.

However, Jack was still a little bit shorter than the average height of the boys of his age, although he grew really fast in these several months. When I came back home, I told my mother that Jack was tall now. My mother was surprised as well. Even though I also told her that Jack was still a little bit shorter than the average height of the boys of his age, we both agreed that Jack was tall now.

Admittedly, the word ‘tall’ in the very last statement “Jack was tall now” is used in a quite personal way, in which I select an unusual reference class for ‘tall.’ Normally, a tall boy should be at least taller than the average height of the boys of his age in order to count as being tall. But I pick up a different reference class in the above case, i.e., being tall with respect to the height that Jack previously was. However, I think a competent English speaker will still find the statements in the above case are plausible and acceptable, even though I do not use a normal reference class. In this case, I actually lower the standard of ‘tall’ to a level that may fail to satisfy certain normative requirements in most everyday cases. But it is worth noting that the statements in the case are still acceptable since ‘tall’ is a contextually sensitive adjective; and within the unique context that was created in the above case, my mother and I did not make any terrible linguistic mistakes at all when we both agreed Jack was tall now. In this sense, I think, by introducing the above example, I demonstrate that, for a genuine gradable adjective, we have the freedom of picking up different reference classes for it in different contexts.

But it is really hard to conceive of a context where we can treat knowledge ascriptions in a similar way. I do not think a rational, competent English speaker can so easily ascribe knowledge to herself by merely lowering the standard of knowledge ascriptions to an incredibly low level— she simply cannot justify her cognitive position

with respect to certain target proposition by indicating that she uses a incredibly low standard of knowledge ascriptions, which is never accepted by anyone else (even if it is a higher one than she previously used). She cannot apply any similar strategy to ascribe knowledge to herself simply because it is not the *normal* way for a person to acquire knowledge.

The crucial point is this: when we compare ‘know’ with classical gradable adjectives, we can find a significant difference between them. With respect to a genuine gradable adjective such as ‘tall,’ we are free to decide the reference class so that almost anything might satisfy the adjective in question. For instance, there is nothing especially awkward in suggesting that an object is tall with respect to dwarves. But, on the other hand, we cannot treat ‘know’ in a similar way. For example, it sounds absurd to suggest that S knows that *p* with respect to dummies.

I think we have to conclude that there are significant differences between the context-sensitivity of gradable adjectives and the supposed context-sensitivity of knowledge ascriptions. Gradable adjectives cannot provide promising hints for the linguistic model of a contextualist theory of knowledge ascriptions.

The last question concerning the gradability of knowledge ascriptions is that many philosophers, as competent English speakers, do not have any intuitions about the gradability of knowledge ascriptions. For these philosophers, ascriptions of propositional knowledge by their nature are *not* gradable. For instance both Fred Dretske and (early) Peter Unger suggest that knowledge is an absolute concept. Therefore, “[k]nowing that

something is so, unlike being wealthy or reasonable, is not a matter of degree” (Dretske 1981, 107). According to them, the factivity of propositional knowledge ascriptions blocks the comparison and therefore propositional knowledge ascriptions cannot be compared in a way that gradable adjectives can. In this sense, “[i]f we both know that the ball is red, it makes no sense to say that you know this better than I” (ibid., 107). Some philosophers think that even a simple version of gradable propositional knowledge ascriptions, which holds that there is a strong sense and a weak sense of ‘knowing that  $p$ ,’ is completely implausible. For instance, Saul A. Kripke argues that it is really surprising to suggest that ‘knowing that  $p$ ’ is semantically ambiguous and that we need to distinguish a strong sense of ‘knowing that  $p$ ’ from a weak sense of ‘knowing that  $p$ ’ (cf. Kripke 1977, 267-269.). Kripke does not think contextualists provide any convincing (linguistic) evidence to support their contextualist claim concerning the gradability of factual-propositional knowledge. According to Kripke, although contextualists suggest that in certain contexts we have relatively stable propositional knowledge ascriptions that can survive through more questioning while in other contexts we have less stable knowledge ascriptions that can be easily defeated, this does not entail that factual-propositional knowledge has two senses, because there are other ways of accounting for the phenomenon. Kripke writes,

Suppose there are some cases of knowledge in which no future evidence will lead me to change my mind, and *other* cases of knowledge in which I would change my mind. That does not show that the word ‘know’ is being used in two *senses* anymore than there being Americans who are rich and Americans who are

poor shows that the word ‘American’ is being used in two senses. Any class may, in various interesting ways, divide up into subclasses. Why not instead say that, in general, knowing does not imply that no future evidence would lead me to lose my knowledge, but in some cases, where I do know, it just is in fact the case (and not because of some special sense of ‘know’) that no future evidence would lead me to change my mind? (Kripke 2011a, 42)

Kripke concludes “it seems to me that the idea that factual-propositional knowledge has two different senses is a red herring” (ibid., 42). If it is very difficult to defend the simple version of the contextualist account of gradable knowledge ascriptions in which there are only two senses of ‘know’, it would be even more challenging to defend a more complicated version that involves more than two senses of ‘know.’ With the above philosophical comments in mind, we can see that contextualists have to provide more convincing arguments in order to support a contextualist account of knowledge ascriptions as gradable. Contextualists would also have to explain what errors are involved in non-contextualist account. Otherwise, we do not have any reason to accept the contextualist account of propositional knowledge ascriptions.

However, some contextualists do not think their project is driven into a dead end — they think they can still preserve their contextualist account of knowledge ascriptions even though they are prepared to give up the claim that knowledge comes in degrees. In the next section, we will investigate Cohen’s strategy to rescue a contextualist theory of knowledge ascriptions to see whether his approach is promising.

### **2.3 COHEN’S ARGUMENT FOR THE CONTEXT-SENSITIVITY OF KNOWLEDGE ASCRIPTION**

According to Cohen, whether or not propositional knowledge ascriptions come in degrees is not a crucial issue for the contextualist view. He writes,

Does knowledge come in degrees? Most people say no (though David Lewis says yes). But it doesn't really matter. For, on my view, justification, or having good reasons, is a component of knowledge, and justification certainly comes in degrees. So context will determine how justified a belief must be in order to be justified *simpliciter*. This suggests a further argument for the truth of the contextualists' claim about knowledge. Since justification is a component of knowledge, an ascription of knowledge involves an ascription of justification. And for the reasons just indicated, ascriptions of justification are context-sensitive. (Cohen 1999, 60)

Roughly speaking, Cohen wants to derive the context-sensitivity of knowledge ascription from the context-sensitivity of the corresponding justification that not only is a component of knowledge but also comes in degrees. However, one immediate complaint about Cohen's treatment is this: if it is the degree and the context-sensitivity of justification that play the central role in his account of knowledge ascription as well as in the correct resolution of the skeptical problem, then the issue concerning the supposed context-sensitivity of knowledge ascriptions is simply an idle wheel in the theory. In this sense, whether 'know' is a context-sensitive term is no longer crucial and the whole contextualist project about 'know' collapses.

Another objection to Cohen's proposal is that Cohen cannot plausibly defend his claim that "it doesn't really matter" whether or not 'know' comes in degrees. In order to see this, let us paraphrase Cohen's argument as follows (cf. Stanley 2004, 131):

**Premise 1 (P1):** Gradable expressions are context-sensitive.

**Premise 2 (P2):** “Being justified in believing that  $p$ ” is a gradable expression;

**Intermediate Conclusion (IC):** “Being justified in believing that  $p$ ” is context-sensitive. (from P1 and P2)

**Premise 3 (P3):** “S is justified in believing that  $p$ ” is a conceptual component of “S knows that  $p$ .” (the definition of “know”)

**Premise 4 (P4):** “S knows that  $p$ ” can inherit the property of context-sensitivity from its conceptual component.

**Conclusion:** “S knows that  $p$ ” is context-sensitive. (from IC, P3 and P4)

If the above argument is sound, Cohen’s claim that “it doesn’t really matter” whether or not ‘know’ comes in degrees is wrong, because a parallel argument would actually require that ‘know’ comes in degrees. In order to see why this is the case, we should clarify the term ‘context-sensitive’ in (P1). According to Cohen, justification comes in degrees which are sensitive to contextually salient scales and therefore a fully developed account of the context-sensitivity in (P1) actually is this: Gradable expressions are sensitive to contextually salient scales. Given this full account of context-sensitivity, we can then get a more detailed argument:

**(P1\*):** Gradable expressions are sensitive to contextually salient scales.

**(P2\*):** “Being justified in believing that  $p$ ” is a gradable expression;

**(IC\*):** “Being justified in believing that  $p$ ” is sensitive to contextually salient scales. (from P1\* and P2\*)

**(P3\*):** “S is justified in believing that  $p$ ” is a conceptual component of “S knows that  $p$ .” (the definition of “know”)

**(P4\*):** “S knows that  $p$ ” can inherit the property of context-sensitivity from its conceptual component.

**Conclusion\*:** “S knows that  $p$ ” is sensitive to contextually salient scales. (from IC\*, P3\* and P4\*)

Thus, Cohen cannot conclusively reject the conclusion that ‘know’ comes in degrees, if he holds the view that his first argument is valid. Thus, Cohen fails to save contextualism

from the view that ‘know’ comes in degrees. As Stanley observes, Cohen’s argument is not sound either. There are some serious problems in (P1)/(P1\*) and (P4)/(P4\*). First of all, neither (P1) nor (P1\*) is true, since we can find some gradable expressions that are contextually insensitive. Here is Stanley’s example: ‘being taller than six feet.’ Since the expression ‘being taller than six feet’ can be modified by some classical modifiers, such as ‘much,’ ‘a little bit,’ etc., we can plausibly suggest that the expression ‘being taller than six feet’ is gradable. But it is definitely context insensitive. Thus both (P1) and (P1\*) are false, because “gradability does not entail context-sensitivity” (ibid., 132). If neither (P1) nor (P1\*) is true, it would not be sound to derive (IC) or (IC\*) from the corresponding first two premises.

Another serious problem comes with (P4) and (P4\*) — Cohen provides no explicit reason (let alone a convincing one) for us to take them as true. Without a convincing reason, (P4) or (P4\*) commit the fallacy of composition. The fallacy of composition occurs when one derives the conclusion that something is true of a whole from the premise that it is true of some part of the whole (or even of every proper part). For instance, the set of natural numbers includes the number 2 as one of its elements. We know that 2 has the property of being even; but we cannot infer that the whole set of natural numbers also has the property of being even. Cohen may suggest that (P4) or (P4\*) is significantly different from the above example in two important respects: (i) Cohen may emphasize that justification is a necessary *conceptual component* of ‘know.’ In other words, justification would be necessarily entailed by knowledge, if we do the conceptual



or semantic analysis of ‘know.’<sup>17</sup> (ii) Cohen only talks about the context-sensitivity in question and therefore he did not make a general claim concerning whether some other properties of knowledge’s conceptual components can be transmitted to knowledge ascriptions or not.

However, the above strategy does not really solve the problem. As Stanley suggests, it does not seem to be true that “from the fact that a certain term  $t$  contains in the analysis of what it expresses a property that is expressed by a context-sensitive term  $t'$ , that  $t$  is therefore context-sensitive” (ibid., 132). Stanley also provides two examples to illustrate his idea. The first term is ‘vacuum.’ A reasonable analysis of the notion of being a vacuum would involve being absolutely empty. However, the term ‘empty’ is normally regarded as a context-sensitive one. But, this does not imply that the term ‘vacuum’ would also be context-sensitive. Stanley’s second example is the expression ‘John’s enemy,’ which is *prima facie* context-insensitive. As he suggests, “analyzing the notion of being John’s enemy involves appealing to the notion of being an enemy, which is expressed by the context-sensitive word ‘enemy’ (in one context, it may mean an enemy of  $x$ , and in another context, an enemy of  $y$ )” (ibid., 133). Stanley’s counterexamples indicate that Cohen fails to specify a valid way for him to derive the context sensitivity (or gradability) of ‘know’ from the context sensitivity (or gradability) of ‘justification.’

So, Cohen’s strategy to save the contextualism of knowledge ascriptions is not

---

<sup>17</sup> Note: I don’t think this strategy really works for Cohen’s project, because the set of natural numbers can be constructed by numbers 1, 2 and the successor relation. In this sense, we can also suggest that 2 is a necessary conceptual component of natural number.

successful. It is plausible to suggest that justification can also be context insensitive even though we grant that justification is gradable. If ‘being justified’ is used as a normative term in epistemology, we do not have the freedom to pick up a too low standard for justification so that we can easily satisfy ‘being justified’ whenever we want. If ‘being justified’ has its normative dimension in epistemology, we can treat ‘being justified’ as something similar to ‘being higher than  $x$ ’ where ‘ $x$ ’ stands for a normative standard. A comparison is helpful here: even though we can plausibly talk about ‘being strongly justified’ and ‘being weakly justified,’ this does not imply that ‘being justified’ is a context-sensitive expression but rather that ‘being justified’ is gradable, because we can also talk about the gradability of ‘being higher than 1 meter’ by using ‘being much higher than 1 meter’ and ‘being a little bit higher than 1 meter’ but ‘being higher than 1 meter’ is in no sense context-sensitive. In this sense, there is a big gap between context-sensitivity and gradability. Furthermore, even if we accept that justification is context-sensitive, it is still quite difficult to *directly* derive the context-sensitivity of ‘know’ from the context-sensitivity of ‘being justified in believing.’

In this section, it is shown why Cohen’s strategy to rescue contextualism is unsuccessful, since his argument for the context-sensitivity of ‘know’ is flawed— the argument is unsound because some of its important premises are false. However, other contextualists may think it is no great loss if Cohen’s argument is unsound, since they think they can find some other ways to defend contextualism. For instance, contextualists may give up all the above linguistic strategies but still argue that there is some linguistic

intuition that explicitly tells us that the word ‘know’ is context-sensitive. And they may illustrate this supposed intuition by some thought experiments or examples. In this case, even if contextualists cannot specify a satisfactory linguistic model for the context-sensitivity of ‘know,’ the central theoretic thesis that ‘know’ is context-sensitive can still be defended, since we can (somehow) intuit the context-sensitivity of ‘know’ when we consider these cases that are provided by contextualists. So, in the next section, we shall closely examine these contextualist cases.

## **2.4 THE CASES FOR CONTEXTUALISM AND EXPERIMENTAL PHILOSOPHY**

As shown in the second section, Cohen provides his famous Airport Case to illustrate that knowledge ascriptions vary in different contexts, which suggests that ‘know’ is a context-sensitive term. However, Cohen’s Airport Case does not explicitly illustrate the shift of contexts by setting up a pair of cases. Cohen only implicitly compares the differences of the contexts of knowledge ascriptions. Another contextualist Keith DeRose thinks it would be better if contextualists provide a pair of cases that explicitly illustrate the differences of context. Therefore DeRose provides his Bank Cases:<sup>18</sup>

**Bank Case A:** Keith and his wife Sarah are driving home on a Friday afternoon. They plan to stop at the bank on the way home to deposit their paychecks. But as they drive past the bank, they notice that the lines inside are very long, as they often are on Friday afternoons. Although Keith and Sarah generally like to deposit their paychecks as soon as possible, it is not especially important in this case that they be deposited right away, so Keith

---

<sup>18</sup> Both cases are adapted from (DeRose 1992, 913). For relevant discussion of the cases, also see DeRose 2002, 168-170.

suggests that they drive straight home and deposit their paychecks on Saturday morning. Sarah says, “Do you know the bank will be open tomorrow?” And Keith replies, “Yes, I know it’ll be open. I was just there two weeks ago on Saturday. It’s open until noon.”

**Bank Case B:** Keith and his wife Sarah drive past the bank on a Friday afternoon, as in Case A, and notice the long lines. Keith again suggests that they deposit their paychecks on Saturday morning, explaining that he was at the bank on Saturday morning only two weeks ago and discovered that it was open until noon. But in this case, they have just written a very large and very important check. If their paychecks are not deposited into their checking account before Monday morning, the important check they wrote will bounce, leaving them in a very bad situation. And, of course, the bank is not open on Sunday. Sarah reminds Keith of these facts. She then says, “Banks do change their hours. Do you know the bank will be open tomorrow?” Then, Keith replies, “I guess you’re right. I don’t know that the bank will be open tomorrow. I’d better go in and deposit the paychecks today.”

When we compare Bank Case A with Bank Case B, we notice two important differences between them: (1) The stakes are different. In Bank Case A there is no special or important reason for Keith and Sarah to deposit their paychecks right away. But in Bank Case B, if they fail to deposit their paychecks in time, the important check they wrote will bounce. Thus we can also regard Bank Case A as a low-stakes case; and Bank Case B as a high-stakes case. (2) The ways of introducing the alternatives are different. In Bank Case B Sarah explicitly suggests that the bank may not open the next day, since banks do change their hours, which also may be thought to undermine Keith’s original justification for his belief that the bank will be open. But in Bank Case A Sarah does not mention the alternative. Because of the above differences, it seems to be plausible for contextualists to suggest that the contexts are changed from Bank Case A to Bank Case B. Since, in Bank Case B, not only the stakes are high but also an explicit alternative is indicated, it seems

quite reasonable for Keith to deny that he knows that the bank will be open tomorrow (Saturday). According to contextualists, as long as we find that the above cases are intuitively plausible, the cases would support their thesis that ‘know’ is a context-sensitive term. If the contextualist stories are correct, we actually have a linguistic intuition about the context-sensitivity of ‘know’ (even though it may still be quite difficult to specify a concrete linguistic model for it).

It is a surprising phenomenon that most (if not all) contextualists seem never to wonder whether their intuitions about the cases are shared by anybody else, since they never cite or provide any evidence that their intuitions are common to other people (i.e., other non-contextualist philosophers or even non-philosophers). So, it is worth investigating whether other people have the contextualist intuitions.

There is a new burgeoning sub-discipline in philosophy that casts a lot of doubt upon the philosophical intuitions that are used to construct many philosophical thought experiments. It is called ‘experimental philosophy.’ The philosophers who do experimental philosophy normally hand out questionnaires on philosophical cases to university students and ask them what their intuitive responses to the cases are. By analyzing the statistical data experimental philosophers can see whether the philosophical intuitions in the cases are really shared by other people.

In 2001, Jonathan M. Weinberg, Shaun Nichols and Stephen Stich worked together to test whether there is any significant cultural diversity in epistemic intuitions among Westerners and Easterners. The subjects are Asian (Chinese and Korean) students

and US students, who represent Easterners and Westerners respectively. The outcome suggests that there is significant cultural diversity in epistemic intuitions which leads Asian students and US students to have different evaluations about whether the subject in a Gettier case has knowledge. Although Weinberg, Nichols and Stich do not have any survey concerning whether there is any significant cultural diversity in the intuitions about the context-sensitivity of ‘know,’ they do make a prediction that it is highly probable that a similar cultural diversity will be found.<sup>19</sup> However, a contextualist may find their prediction unconvincing, since it is not based on any statistical data. More importantly, since contextualism of knowledge ascriptions is developed within the Western Philosophical tradition, it would not be seriously challenged by evidence of cultural diversity with regard to the context sensitivity of ‘know’ as long as the contextualist theory is restricted to Western philosophy.

More detailed research has been done recently by Joshua May, Walter Sinnott-Armstrong, Jay G. Hull and Aaron Zimmerman. They wanted to test contextualist intuitions about the context-sensitivity of ‘know’ and randomly distributed their questionnaires to “university students (primarily 18-24 years old) in a class or around campus at the University of California, Santa Barbara” (May, Sinnott-Armstrong, Hull & Zimmerman 2010, 269). In order to detect the effect of each factor (stakes vs. alternatives), they constructed a series of cases from the above Bank cases as such (ibid.,

---

<sup>19</sup> For the relevant discussion, see Weinberg, Nichols & Stich 2001.

268-269)<sup>20</sup>:

**Low Stakes-No Alternative (LS-NA):** Keith and his wife Sarah are driving home on a Friday afternoon. They plan to stop at the bank on the way home to deposit their paychecks. It is not important that they do so, as they have no impending bills. As they drive past the bank, they notice that the lines inside are very long, as they often are on Friday afternoons. Keith notes that he was at the bank 2 weeks before on a Saturday morning, and it was open. Realizing that it isn't very important that their paychecks are deposited right away, Keith says, "I know the bank will be open tomorrow. So we can deposit our paychecks tomorrow morning".

**High Stakes-No Alternative (HS-NA):** Keith and his wife Sarah are driving home on a Friday afternoon. They plan to stop at the bank on the way home to deposit their paychecks. Since they have an impending bill coming due, and very little in their account, it is very important that they deposit their paychecks by Saturday. As they drive past the bank, they notice that the lines inside are very long, as they often are on Friday afternoons. Keith notes that he was at the bank 2 weeks before on a Saturday morning, and it was open. Keith says, "I know the bank will be open tomorrow. So we can deposit our paychecks tomorrow morning".

**Low Stakes-Alternative (LS-A):** Keith and his wife Sarah are driving home on a Friday afternoon. They plan to stop at the bank on the way home to deposit their paychecks. It is not important that they do so, as they have no impending bills. As they drive past the bank, they notice that the lines inside are very long, as they often are on Friday afternoons. Keith notes that he was at the bank 2 weeks before on a Saturday morning, and it was open. Sarah points out that banks do change their hours. Still, realizing that it isn't very important that their paychecks are deposited right away, Keith says, "I know the bank will be open tomorrow. So we can deposit our paychecks tomorrow morning".

**High Stakes-Alternative (HS-A):** Keith and his wife Sarah are driving home on a Friday afternoon. They plan to stop at the bank on the way home to deposit their paychecks. Since they have an impending bill coming due, and very little in their account, it is very important that they deposit their paychecks by Saturday. As they drive past the bank, they notice that the lines inside are very long, as they often are on Friday afternoons. Keith notes that he was at the bank 2 weeks before on a Saturday morning, and it was open. Sarah points out that banks do change their hours. Keith says, "I know the bank will be open tomorrow. So we can deposit our paychecks

---

<sup>20</sup> However, in the interest of consistency, the names are adapted.

tomorrow morning”.

Under each scenario, there is a request:

Please check one box to indicate how strongly you agree or disagree with this statement: “Keith knows that the bank will be open on Saturday”.

The students’ responses are tracked by a 7-point Likert scale: strongly agree (7), moderately agree (6), slightly agree (5), neither agree nor disagree (4), slightly disagree (3), moderately disagree (2), strongly disagree (1). In order to calculate the results, numbers were assigned to each response. May and his colleagues initially perform the between-subjects experiment: each participant receives only one questionnaire that contains only one of the above four cases and the participant does not know whether or not her/his scenario is different from that of other participants. The result is presented in Table 2.1 (ibid., 270):

**Table 2.1: Mean Responses for Between-Subjects Experiment**

	<b>No Alternative (NA)</b>	<b>Alternative (A)</b>
<b>Low Stakes (LS)</b>	5.33	5.30
<b>High Stakes (HS)</b>	5.07	4.60

According to most contextualists, knowledge will be ascribed to Keith in LS-NA but not in HS-A. For some contextualists such as David Lewis, Keith does not have knowledge even in LS-A since an alternative is explicitly raised. But the data in Table 1 disconfirm the contextualist prediction— it turns out that most participants would think Keith knows that the bank will be open tomorrow (Saturday) no matter whether the stakes are high or



low; furthermore, it also suggests that Keith's knowledge survives even when an alternative is explicitly raised. Besides the above conclusion, May and his colleagues also observe that "practical interests did, whereas alternative possibilities did not, affect the level of *confidence* our subjects had in their attributions of knowledge" (ibid., 270). In this sense, it is the 'stakes' rather than (just a mentioning of) the 'alternative' that has some influences over the degrees of the participants' beliefs concerning whether Keith should be attributed with the corresponding knowledge. But some other experimental philosophers still think practical interests cannot really determine the truth values of knowledge ascriptions (cf. Feltz & Zarpentine 2010).

A more interesting finding is provided when May and his colleagues do a second experiment to determine whether the order in which the scenarios are presented affects the participants' decision about whether Keith knows that the bank will be open tomorrow (Saturday) in the given case. It is called the 'within-subjects experiment.' As they report, there is a framing effect. As shown in the first experiment (just a mentioning of) an 'alternative' is not a significant parameter for the knowledge ascriptions. So, May and his colleagues decided to use (LS-NA) and (HS-A) to perform the second experiment so that the experiment can be kept close to the cases discussed by contextualists. As May and his colleagues report, although most participants think Keith has the corresponding knowledge in both the (LS-NA) and (HS-A) scenarios, the agreement among the participants is greater when the low-stakes context rather than the high-stakes context is presented first (see Table 2.2 below, cf. May, Sinnott-Armstrong, Hull & Zimmerman

2010, 271). It can also be observed that “the difference between the high and low stakes context was greatest when the low stakes context was presented first” (ibid., 272), which implies a significant interaction between the evaluation of the knowledge ascription and the order of presenting the scenarios.

**Table 2.2: Mean Responses for Within-Subjects Experiment**

	<b>LS-NA</b>	<b>HS-A</b>
<b>LS-HS Order</b>	5.61	4.59
<b>HS-LS Order</b>	4.60	4.21
<b>Both Orders</b>	5.13	4.42

The above findings are also confirmed by some other theorists who conducted independent research on the topic of contextualism. For instance, Wesley Buckwalter also reports that the truth values of knowledge claims neither fluctuate between contexts of knowledge ascriptions nor were sensitive to the practical interests of the subject in question (cf. Buckwalter 2010, especially, 403-405), and concludes that “the pattern of folk knowledge attribution [is] considerably divergent from what [contextualist] theories assume or predict” (ibid., 404).

Assuming the results of the experimental philosophers accurately reflect the intuitions of the participants, we may draw several conclusions from their research. First, the contextualists’ predictions regarding so-called intuitive or common-sense judgments about the cases are quite suspicious (if not completely false). The data from experimental philosophy support the claim that knowledge is quite robust and stable— at least it is not as shifty as contextualists describe. A mere mentioning of an alternative is not a crucial

factor that can change knowledge ascriptions. Second, a person's practical interests or stakes can affect the attributers' confidence in attributing knowledge to the very person in question. But it should be noticed that, according to the current result, the effect does not seem to be influential enough to determine whether knowledge is attributed to the person. Third, the current result from experimental philosophy seems to favor an invariantist account of knowledge ascriptions (cf. Buckwalter 2010, 404-405).

However, even though the data from experimental philosophy do not sound like good news for them, contextualists may just bite the bullet by arguing that those data are inconclusive—the experiments are perhaps inadequately designed and therefore cannot probe folk intuitions about knowledge ascriptions thoroughly. Comparing the mean response to (LS-NA) with the mean response to (HS-A) in Table 1, we can see that there is a significant drop between them. This may give contextualists some hope for their theories. If there is no further theory that explains the relevant differences, contextualism of knowledge ascriptions may be still a good theoretical choice. So, in the next section, we will go on to discuss whether a non-skeptical invariantist can provide good explanations or not in order to see whether the supposed contextualist “intuition” is defensible in a theoretical sense.

## **2.5 SOME INVARIANTIST EXPLANATIONS**

In this section, we will see how a non-skeptical invariantist<sup>21</sup> can explain the

---

<sup>21</sup> For a skeptical invariantist, the task will be different— she will agree with a contextualist that Keith does not know that the bank will be open tomorrow in (HS-A). But she would suggest that Keith does not

experimental evidence for the cases of (LS-NA) and (HS-A). I think an invariantist will agree with a contextualist that Keith knows that the bank will be open tomorrow (Saturday) in (LS-NA). The big difference between an invariantist and a contextualist is how they interpret Keith's 'knowledge' in (HS-A). For a contextualist, in (HS-A), Keith does not know that the bank will be open tomorrow. But an invariantist would suggest that Keith still knows that the bank will be open tomorrow in (HS-A). But he is not warranted in asserting it. This is normally called a 'warranted assertibility maneuver' (WAM).<sup>22</sup> According to WAM, Keith is not warranted in asserting that he knows the bank will be open tomorrow in (HS-A), because it would pragmatically convey some false implicatures. It should be noted that there are two important features of the scenario: (i) the stakes are high; and (ii) an alternative is explicitly raised by Sarah. According to invariantism, although it is true that Keith knows that the bank will be open tomorrow in (HS-A), if he asserts it, it would pragmatically convey two implicatures: (i) that Keith would act upon the knowledge in (HS-A), which means that he would likely drive directly home on Friday and then deposit their paychecks on Saturday;<sup>23</sup> (ii) that Keith has some evidence to rule out the alternative that Sarah explicitly suggests. It seems to be evident that the first implicature is false, since the stakes are so high in (HS-A) that Keith is not willing to take the risk of going home directly and depositing the paychecks on

---

have the knowledge even in (LS-NA). Since it seems to be less useful to defend a skeptical invariantism, hereafter without specific indication the terms "invariantist" or "invariantism" in this section will always be used to refer to non-skeptical ones.

<sup>22</sup> Many invariantist philosophers hold such a view. See Brown 2006; Larkin (un.); Pritchard 2010; Rysiew 2001 & 2007.

<sup>23</sup> It may also imply that the stakes in question are at some acceptable level (or, at least, the stakes are not too high).

Saturday (i.e., Keith does not want to act on his knowledge in this case). The second implicature seems to be false as well, since Keith's evidence that he went to the bank two weeks ago and it was open until noon at that time cannot rule out the alternative that the bank has changed its opening hours and does not open on Saturday. Thus, with WAM, an invariantist is able to explain the (HS-A) case nicely.

The contextualist may complain that, instead of introducing all the context-factors into the semantic content, an invariantist just exports the contextual factors into pragmatics. Thus, according to DeRose, the WAM strategy "simply claimed that it's the conditions of warranted assertability, rather than of truth, that are varying with context, and the contextualist is then accused of mistaking warranted assertability with truth" (DeRose 1999, 201). Thus, DeRose thinks that the WAM turns the debate between invariantism and contextualism into a dispute about the terms 'warranted assertability' and 'truth.'

But I find the above contextualist reply unconvincing for two reasons: (1) a non-skeptical invariantist does not need to accuse contextualists of mistaking warranted assertability with truth. The real accusation is rather that what contextualists treat as semantic matters should be properly treated as pragmatic matters. This does not imply that contextualists are confusing warranted assertability with truth but rather that contextualists fail to distinguish pragmatic issues from semantic ones correctly. The dispute between a non-skeptical invariantist and a contextualist is about where the boundary between the pragmatic data and the semantic data should be drawn in the given

case. Since it is the contextualists who propose a context-sensitive treatment of ‘know,’ the onus is on the contextualists to support their claim by some further evidence. (2) The debate between invariantism and contextualism is a real disagreement about the nature of knowledge ascriptions. Even if we granted that it is difficult to provide a theoretic account of the boundary between semantics and pragmatics, at least we can plausibly suggest that invariantism with WAM provides a competing explanation of the difference between (LS-NA) and (HS-A). And the contextualist needs to provide something more than mere counter-assertion in order to show that her position has the advantage.

Some philosophers argue that the pragmatic interpretation endorsed by some invariantists has two problems: Firstly, the generality of the pragmatic strategy is questionable. That is, the pragmatic interpretation can be applied *only in some* cases, where the knower’s belief is maintained constantly. Secondly, the invariantists who endorse the pragmatic interpretation suggest that, even in the (HS-A) scenario, Keith knows that the bank will be open tomorrow (i.e., Saturday). But it is possible that, in the (HS-A) scenario, Keith loses his firm belief that the bank will be open tomorrow and therefore does not have the corresponding knowledge either. If this is the case, the pragmatic interpretation is not useful any more. Therefore, the psychological account of the change of belief would be relevant to an understanding of the change of knowledge ascription. These philosophers suggest that, when Keith does not hold the corresponding firm belief in (HS-A), the real difference between the (LS-NA) and (HS-A) is the change

of the subject's threshold for confident belief.<sup>24,25</sup> It is plausible to read Keith as having less confidence in (HS-A). And this can also be seen as questioning whether, in (HS-A), Keith has attained a firm belief on the target proposition at all. Some philosophers call the relevant firm belief 'outright belief,'<sup>26</sup> since belief may come in degrees. It can be noted that, in both (LS-NA) and (HS-A), there is no significant difference in the evidence that Keith has for the target proposition. When the stakes are high in (HS-A), Keith seems to be in a process of figuring out what he will believe regarding whether the bank will be open tomorrow. Since Keith does not form an outright belief and is willing to collect more evidence, it seems to be plausible to suggest that Keith does not have the corresponding knowledge in (HS-A).

However, a more detailed psychological explanation is developed by Jennifer Nagel. Nagel invokes Arie W. Kruglanski and Donna M. Webster's term 'need-for-closure' in order to satisfactorily explain (HS-A). The 'closure' here is a psychological (rather than a philosophical or mathematical) name for "arrival at a settled belief" (Nagel 2008, 287); it is "the juncture at which a belief crystallizes and turns from hesitant conjecture to a subjectively firm 'fact'" (Kruglanski & Webster 1996, 266).

<sup>24</sup> For the relevant psychological account of the change of belief, see Bach 2005; Brown 2005 & 2006; Nagel 2008; and Williamson 2005.

<sup>25</sup> As shown, there are (at least) three invariantist accounts that go against contextualism so far: experimental philosophy, the pragmatic account and the psychological account. When we put these three theories together and compare them with the contextualist account of knowledge ascription, they form a serious challenge to contextualism, which undermines the contextualist methodology essentially. However, since this kind of challenge does not directly relate to the rejection of the contextualist *linguistic model* of 'know,' I will not raise it in this chapter. However, I will come back to this issue and indicate why the standard methodology that contextualists appeal to is flawed in the last chapter.

<sup>26</sup> The term is borrowed from Brian Weatherson. For the relevant discussion of 'outright belief,' see Weatherson 2005.

According to Nagel, a subject in a high-stakes scenario will normally be in a low need-for-closure condition and therefore the subject either has not formed an outright belief yet or has suspended belief with respect to the target proposition. When stakes become high, the corresponding epistemic anxieties for the subject are increased; so it would be rational for the subject to seek for more evidence. In this situation, the subject's evidence-based outright belief will require the subject to extend the corresponding evidence base. Since Keith's evidence in (LS-NA) and (HS-A) is the same, we, as attributors, would be inclined to think that Keith's confidence level in the corresponding belief does not satisfy the requirement for the evidence-based outright belief in (HS-A). But, by contrast, in (LS-NA) the stakes are low and it is much easier for Keith to form an outright belief regarding the bank's open hours on the Saturday. Since the evidence-based outright belief is a necessary condition for knowledge, we can plausibly attribute knowledge to Keith in (LS-NA), because he has the corresponding evidence-based outright belief; on the other hand, we can plausibly deny that Keith knows that the bank will be open tomorrow (i.e., Saturday) in (HS-A), because he does not have the corresponding evidence-based outright belief. As Nagel remarks, "because of the perceived need-for-closure difference between the subjects, we don't expect the same information to produce the same level of belief" (Nagel 2008, 289) in (HS-A) and (LS-NA). But this does not imply that knowledge ascriptions are sensitive to the subject's stakes. The above *psychological* (rather than pragmatic or semantic) explanation only indicates that whether the subject is in the state of evidence-based outright belief may



vary when the stakes are changed. The crucial semantic standard of knowledge ascriptions is still responsive to those traditional factors, such as, outright belief, justification, sufficient evidence, etc. Thus, “stakes have at most an indirect impact, mediated by their influence on traditional factors. Because subjects in high-stakes contexts are often aware of their stakes, and because awareness of high stakes lifts epistemic anxiety and produces the need for greater evidence, a shift in stakes will often change what the subject needs to do in order to comply with the traditional norm of thinking in an evidence-based manner” (Nagel 2010a, 426-427).

What is crucial for this psychological explanation is that Keith is in different confidence levels in (HS-A) and (LS-NA). But can contextualists just stipulate that Keith is in the same confidence level— say, Keith has the same outright belief— in both cases so that they can refute the invariantist account? I do not think this is a promising strategy. First, we may wonder how the contextualists can make such a stipulation without being dogmatic. As psychological researches indicate, changes in stakes impact on epistemic anxieties, which will in turn affect the scope of evidence upon which the corresponding outright belief is formed. Therefore, Keith cannot be plausibly thought to be in the same doxastic state in both (HS-A) and (LS-NA) just by stipulation. It would (at least) require some revision of the case of (HS-A). Second, it is the concept of *evidence-based* outright belief that plays an important role on the psychological account. In (HS-A), increased epistemic anxiety would call for an expanded evidence base for the corresponding *evidence-based* outright belief. So a contextualist cannot stipulate that Keith has the same

*evidence-based* outright belief in both (HS-A) and (LS-NA). Third, a contextualist may revise (HS-A) into a new case in which Keith forms an outright belief that the bank will be open tomorrow because of some further reason, for instance, time pressure<sup>27</sup>, wishful thinking, etc. But this does not undermine the invariantist psychological explanation either. Since Keith fails to satisfy the corresponding requirement of the expanded scope of evidence in the new case, even though he forms an outright belief, the belief is not properly evidence-based.

It is shown, I think, that invariantism either with a WAM supplementary explanation can provide a good account for the differences between (HS-A) and (LS-NA) when the subject holds his evidence-based outright belief in both (HS-A) and (LS-NA). But, if the subject loses his evidence-based outright belief in (HS-A), an invariantist can invoke a psychological supplementary explanation to solve the problem. In either case, there is no evidence that indicates contextualism has any theoretical advantages over the above competing accounts. Thus, the difference between (HS-A) and (LS-NA) does not provide any decisive support to contextualism, since an invariantist can also explain it in a satisfactory way.

All in all, we can see that an invariantist semantic account of ‘know’ can plausibly explain the data in both (LS-NA) and (HS-A): when the subject’s

---

<sup>27</sup> For instance, a revised (HS-A) case may involve the following new information: Keith and his wife drive their car to the bank when there is only two minutes left before the bank is closed. In this situation, neither Keith nor his wife can deposit their paychecks nor can they consult the bank assistant for the information whether the bank will be open tomorrow (i.e., Saturday). In this case, Keith forms his wishful belief that the bank will be open tomorrow (i.e., Saturday).

evidence-based outright belief is maintained properly, a pragmatic explanation would indicate why we are reluctant to ascribe knowledge to the subject; when the subject fails to maintain his evidence-based outright belief, a psychological explanation would indicate why the corresponding knowledge ascription should be withdrawn. In either case, we need not embrace any context-sensitivity of ‘know.’

Therefore, we can conclude that binary contextualism fails to provide a satisfactory linguistic model for the supposed context-sensitivity of ‘know’ and there is no conclusive theoretical advantage that favors binary contextualism over the traditional invariantism of knowledge ascription. Since binary contextualism is not a good option, we will go on to examine another form of contextualism (i.e., contrastivism) in the next chapter, which suggests that ‘know’ is a ternary context-sensitive term.

### **CHAPTER 3: CONTRASTIVISM AND ITS PROBLEMS: A CASE STUDY OF THE TERNARY ACCOUNT OF THE CONTEXT-SENSITIVITY OF KNOWLEDGE ASCRIPTION**

As mentioned in Chapter 1, there are two basic ways to cash out the contextualist idea of knowledge ascriptions (cf. Cohen 1999, 61): (1) knowledge is a binary context-sensitive relation between a subject and a target proposition; and (2) knowledge is a ternary context-sensitive relation among a subject, a target proposition and some other parameter that reflects some feature of the context, such as standards or alternatives. In Chapter 2, I've argued that binary contextualism fails to provide a satisfactory linguistic model for us to treat 'know' as a binary context-sensitive term and, therefore, the first contextualist approach to the context-sensitivity of 'know' is refuted. In this chapter, I will examine the second contextualist treatment of 'know,' which treats 'know' as a ternary context-sensitive term where the third parameter varies in different contexts. I will take Jonathan Schaffer's contrastivism as the example of the ternary contextualist treatment of 'know' here.

According to Schaffer's contrastivist view of knowledge ascriptions (see, especially, Schaffer 2005 & 2007), knowledge is a ternary relation between a knower (e.g., *S*), a proposition known (e.g., *p*) and a *contrast proposition* (e.g., *q*) which one must eliminate in order to know that *p*; thus, the verb 'know' has a third argument place for a contrast proposition. For example, Schaffer formalizes

(1) Moore knows that he has hands.

as something akin to

(1') Knows (Moore, that Moore has hands, *q*)

where the third argument place is filled by the free variable '*q*.' With this analysis in hand, Schaffer thinks his contrastivism of knowledge ascriptions can nicely explain our tendency to make different knowledge ascriptions in skeptical contexts and ordinary contexts. For instance, in skeptical contexts, '*q*' is assigned a very demanding contrast proposition which Moore cannot plausibly eliminate (e.g. the proposition that Moore is a handless brain-in-a-vat) and this explains why (1) seems false in those contexts. By contrast, in ordinary contexts '*q*' is assigned a mundane contrast proposition which Moore can eliminate (e.g. the proposition that Moore has apparent stumps), which explains why (1) seems true in those contexts.

Although he thinks his theory can plausibly explain our intuitions concerning knowledge ascriptions, Schaffer's own account of contrastive knowledge ascriptions makes him vulnerable to objections not faced by his contextualist peers who regard 'know' as a binary context-sensitive term. I will argue that Schaffer's contrastivism is problematic because he cannot provide an adequate explanation of the so-called phenomenon of 'moderate context-dependence' of contrastive knowledge ascriptions. And it will be argued that, whereas the other contextualists can provide straightforward semantic explanations of it, an epistemologist who embraces Schaffer's account of

contrastive knowledge ascriptions would bring out at least one of the following problems:

(i) an implausible complication of our syntactic theory; (ii) an endorsement of controversial processes such as free enrichment; and (iii) a strategy of resorting to pragmatic explanations which involve further problems. Thus, Schaffer's contrastivist account of knowledge ascriptions seems no better than the first kind of contextualist approach that treats 'know' as a binary context-sensitive term; and in some respects contrastivism is even worse (or so it seems) because it leads to a problematic account of the epistemic closure principle. In order to establish these conclusions I first outline Schaffer's theory briefly.

### **3.1 SCHAFFER'S ACCOUNT OF CONTRASTIVE KNOWLEDGE ASCRIPTION**

Before we start to outline Schaffer's account, we need some terminology to facilitate our explanations later on.

First, let  $P$  be a contrastive compound sentence with the form of ' $F_a$  rather than  $F_o$ ', whose fact clause is ' $F_a$ ' and whose foil clause is ' $F_o$ '. For example, the  $P$ -sentences below are all contrastive sentences, whose fact clauses are the corresponding  $F_a$ -sentences and whose foil clauses are the corresponding  $F_o$ -sentences:

(2)  $P_2$ : Moore has hands rather than stumps.

$F_a$  of  $P_2$ : Moore has hands.

$F_o$  of  $P_2$ : Moore has stumps.

(3)  $P_3$ : There is a goldfinch rather than a raven in the garden.

$F_a$  of  $P_3$ : There is a goldfinch in the garden.

F<sub>o</sub> of P<sub>3</sub>: There is a raven in the garden.

(4) P<sub>4</sub>: Mary stole the bicycle rather than the wagon.

F<sub>a</sub> of P<sub>4</sub>: Mary stole the bicycle.

F<sub>o</sub> of P<sub>4</sub>: Mary stole the wagon.

However, it should be noted that the above account remains in many ways imprecise, and some tricky issues come up in making that precise.<sup>1</sup> But it remains sufficient for our current purposes of outlining Schaffer's account.

Secondly, Schaffer suggests that every statement with the form 'S knows that *p*' is an abbreviated contrastive knowledge ascription with an implicit contrastive proposition *q*. The abbreviated contrastive knowledge ascription is ambiguous since the implicit contrastive proposition *q* is not stated. When the corresponding contrastive knowledge ascription is presented, there will be no further contextual ambiguity.

Thirdly, we can now define a full-fledged contrastive knowledge ascription as a sentence of the surface form 'S knows that P', where P is an embedded contrastive

---

<sup>1</sup> The account is imprecise because it fails to deal with cases of structural ambiguity, where a single surface string can be analyzed into two or more distinct logical forms. For example, (I) is the surface string of two distinct sentences, the logical forms of which can be roughly represented as (I') and (I''):

- (I) Mike beats me rather than John.
- (I') (Mike beats me) rather than (Mike beats John).
- (I'') (Mike beats me) rather than (John beats me).

And the embarrassing situation could be even subtler. For example, (II) can be associated with two distinct logical forms, roughly represented as (II') and (II''):

- (II) The police said the victim was John rather than Jack.
- (II') The police said (the victim was John rather than Jack).
- (II'') (The police said the victim was John) rather than (the police said the victim was Jack).

This set of sentences provides an even worse problem to our definition. Suppose that we read (II) as (II'), we can clearly discover that (II) is no longer a 'contrastive sentence,' since it only represents the police as *saying* something contrastive (but the sentence itself is not contrasting one state of affairs with another). But our imprecise account cannot distinguish such situations and would mistakenly count (II) as (II'').

sentence. The following are examples of contrastive knowledge ascriptions:

- (5) Moore knows that he has hands rather than stumps.
- (6) I know that there is a goldfinch rather than a raven in the garden.
- (7) Holmes knows that Mary stole the bicycle rather than the wagon.

With this terminology in hand, we can now present Schaffer's account of contrastive knowledge ascriptions as follows: According to Schaffer, an utterance of a contrastive knowledge ascription expresses a proposition of the form  $\langle K, \langle S, p, q \rangle \rangle$ , where  $p$  (i.e. the proposition known) is the fact clause of the embedded contrastive sentence, and  $q$  (i.e. the contrast proposition) is the foil clause of the embedded contrastive sentence. For example, on this account, an utterance of the contrastive knowledge ascription 'Moore knows that he has hands rather than stumps' expresses a proposition of the form  $\langle K, \langle S, p, q \rangle \rangle$ , where  $p$  is 'he has hands' (the fact clause), and  $q$  has the value 'he has stumps' (the foil clause). It is worth noting that we say " $q$  has the value 'he has stumps'" rather than just " $q$  is the proposition that he has stumps" because, as we will see in the next section, Schaffer thinks foil clauses are context-sensitive, because different propositions can be assigned to them in different contexts. According to Schaffer,

One can directly articulate the contrasts with "rather than"-clauses. For instance, if one says, "I know that there is a goldfinch in the garden rather than a raven", then the value of  $p$  is: there is a goldfinch in the garden, and  $q$  is: there is a raven in the garden. While if one says, "I know that there is a goldfinch in the garden rather than a canary", then the value of  $p$  is: there is a goldfinch in the garden, and  $q$  is: there is a canary in the garden. Whereas if one says, "I know that there is a goldfinch in the garden rather than at the neighbor's", then the value of  $p$  is: there is a goldfinch in the garden, and  $q$  is: there is a goldfinch at the neighbor's. The "rather than"-clause is a mechanism of contrastivity. It explicitly articulates



$q$  (Schaffer 2005, 252).

And in another paper, Schaffer also indicates,

I take it as intuitively clear that the alternatives of contrastive ascriptions are to be read off their ‘rather than’-arguments. For instance, the alternative in ‘Holmes knows that Mary stole the bicycle rather than the wagon’ is: that Mary stole the wagon (Schaffer 2004, 89).

There are two points that are crucial to Schaffer’s ideas. First, on this account, the proposition known is not that expressed by the entire embedded contrastive sentence, but only that of its fact clause. However, anyone not drawn to the idea that ‘know’ takes a “‘rather than’- argument” is likely to treat the ‘rather than X’ construction as part of the direct sentential complement of ‘knows’. In order to illustrate this point, consider the following set<sup>2</sup>,

- (5) Moore knows that he has hands rather than stumps.
- (5’) Knows (Moore, [that he has hands], [that he has stumps]).
- (5’’) Knows (Moore, [that he has hands rather than stumps],  $[[v]]$ <sup>3</sup>).

According to Schaffer, since (5) is a full-fledged contrastive statement of knowledge ascription, there is no further contextual ambiguity involved in (5) and all necessary contextual parameters are explicitly indicated. Therefore, Schaffer himself would offer (5’) as the rough logical form of (5) and according to contrastivism, (5) involve no further

<sup>2</sup> However, there is a third logical form of (5), that is

(5\*) Contrast ([Moore knows that he has hand], [Moore knows that he has no stumps])

Since (5\*) is not a logical analysis of a knowledge ascription but rather a pure contrast proposition of two knowledge claims, (5\*) is quite different from contrastive knowledge ascriptions.

<sup>3</sup> Note: ‘ $[[v]]$ ’ is not a contrast proposition here. It is rather a variable. The variable ‘ $v$ ’ may or may not be present, depending on whether one treats ‘knows’ as a binary or a ternary predicate.

contextual ambiguity since all three arguments of ‘know’ are saturated.

But non-contrastivist contextualists would still claim that the logical form of (5) is something akin to (5’), because they think that (5) remains contextually ambiguous and some further contextual parameter should be indicated if we want to disambiguate (5). It should be noticed that both Schaffer and the non-contrastivist contextualist think their own logical analysis of (5) is *intuitively* correct. So, their disagreement between (5’) and (5’’) cannot be easily solved by appealing to the supposed contextualist intuition about knowledge ascription. Thus, the supposed contextual parameter of ‘know’ is much more obscure, since contextualists themselves disagree with each other on the issue of whether (5) still involves any further contextual ambiguity. In this sense, we may wonder how we can rationally rely on the supposed contextualist intuition about knowledge ascription and provide a correct analysis of (5) by using the supposed intuition. Thus, the disagreement over (5’) and (5’’) implies a serious challenge to both contrastivism and non-contrastivist contextualist theories of knowledge ascription. The second point worth noting is that, on Schaffer’s account, the contrast proposition for a contrastive knowledge ascription is given by the denotation of the relevant foil clause, so that what the contrast proposition can *be* is limited by what the relevant foil clause can *denote*. This suggests the following way of attacking Schaffer’s doctrine: to find a context in which a contrastive knowledge ascription intuitively requires for its truth that the subject eliminate a contrast proposition that cannot plausibly be the denotation of the relevant foil clause. To pursue a detailed argument along this approach is the main issue in the next section.

### 3.2 SCHAFFER'S CONTRASTIVISM AND ITS PROBLEMS

Three issues are targeted in this section. Firstly, a description of the phenomenon of the so-called 'moderate context-dependence' of contrastive knowledge ascriptions needs to be provided. Secondly, it will be shown that Schaffer's contextualist peers can give straightforward semantic accounts of this phenomenon. Thirdly, it will be argued that Schaffer's contrastivism cannot provide a straightforward account of this phenomenon. Schaffer must choose among (i) implausibly complicating our syntactic theory, (ii) appealing to controversial processes such as free enrichment, or (iii) resorting to pragmatic explanations and thereby running into further problems. If the arguments in this section are sound, they show (at least) that a Schafferian contrastivist is at an explanatory disadvantage vis-à-vis her/his fellow contextualists. So, let us start with the moderate context-dependence of contrastive knowledge ascriptions.

Consider,

(5) Moore knows that he has hands rather than stumps.

Suppose that 'know' is a context-sensitive term and let us consider two contexts: First, suppose (5) is uttered in an ordinary context  $C_o$ . In such a context, an utterance of (5) attributes to Moore a quite modest piece of knowledge. Could not Moore know that he has hands rather than stumps just by, say, raising his hands and waving them in front of his face? If he had only stumps, he would surely be unable to do that. Therefore, we are

inclined, in  $C_o$ , to say (5) is true. But now imagine a different context (call it  $C_s$ ), in which certain skeptical possibilities in which Moore has stumps have been raised. Perhaps it has been suggested that his hands may have been cut off five minutes ago by a mafia ruffian who then gave Moore a pill causing him to hallucinate that he still had hands; or that Moore may be a brain-in-a-vat who “has stumpy arms stapled onto his envatted brain” (Schaffer 2005, 258). According to the general contextualist theory<sup>4</sup>, once these possibilities are made salient, an utterance of (5) seems false, since it now seems to attribute to Moore a quite immodest piece of knowledge, which he cannot acquire just by raising and waving his hands around or by doing anything for that matter.

So the phenomenon to be explained is this: contrastive knowledge ascriptions such as (5) still seem to have some degree of context-dependence. In  $C_o$ , (5) seems to require for its truth merely that Moore eliminate a mundane subset of stump-possibilities, for instance, those possibilities in which he has stumps that are apparent to him as such. But, on the other hand, in  $C_s$ , (5) seems to require for its truth that Moore eliminate a significantly more inclusive set of stump-possibilities, which includes the skeptical possibility that (for example) Moore is a brain-with-stumps-in-a-vat.<sup>5</sup> I would like to suggest that this sort of context-dependence is ‘moderate’, because the set of possibilities

---

<sup>4</sup> This is the common contextualist spirit that is shared in both the binary account and the ternary account of the context-sensitivity of ‘know.’

<sup>5</sup> There are two ways to talk about the elimination of stump-possibilities in  $C_s$ . One is to say that the truth of (5) in  $C_s$  requires the elimination of a *more inclusive* set of stump-possibilities (i.e., the skeptical ones *plus* the mundane ones); the other one is to say that it requires the elimination of a *different* set of stump-possibilities (i.e., the skeptical ones *instead of* the mundane ones). I will take the former approach here, but this would not affect the substance of any subsequent arguments.

that Moore must eliminate in order for a token of (5) to appear true, although contextually variable in the way described above, are still restricted in  $C_o$  and  $C_s$  to possibilities *in which Moore has stumps*. The term ‘moderate’ can help us to distinguish those possibilities that are under the discussion in this section from some other more radical or remote possibility that is not one in which Moore has stumps, say, the possibility that he is a bodiless (and therefore stumpless) brain-in-a-vat.

Now let us consider how the contextualists would account for the moderate context-dependence of (5) in turn. It seems that they have no trouble at all in accounting for this phenomenon. A non-contrastivist contextualist explains the data in the same way that she explains the context-dependence of simple, non-contrastive knowledge ascriptions like ‘Moore knows that he has hands’— viz., by saying that the raising of far-fetched possibilities in  $C_s$  shifts the standard of ‘know’ to a more demanding level, thereby falsifying (5). As some contextualist philosophers suggest (cf. Ludlow 2005), the logical form of (5) should be expressed as (5’’’),

(5’’’) Knows (Moore, [that he has hands rather than stumps],  $s$ ),

In (5’’’), ‘ $s$ ’ is a free variable ranging over epistemic standards. Here again, the explanation is simple and straightforward: the raising of skeptical possibilities in  $C_s$  installs an unmeetably high epistemic standard, which is then assigned to ‘ $s$ ’ as its value, thereby falsifying (5). A similar point holds for Ram Neta’s idea (cf. Neta 2008) as well, which treats ‘ $s$ ’ as a variable ranging over evidence rules so that  $C_s$  assigns to  $s$  a more

stringent rule on which Moore no longer counts as having evidence for the proposition that he has hands rather than stumps.

So it seems that non-contrastivist contextualists have no problem accounting for moderate context-dependence. But for Schaffer's account of contrastive knowledge ascriptions, this does not seem to be an easy task. To begin to appreciate this point, recall that, on Schaffer's account, the rough logical form of (5) is (5')

(5') Knows (Moore, [that he has hands], [that he has stumps]).

There is no free contrast variable in (5') waiting to be given a contextually determined value; the contrast slot of 'knows' is now occupied by a foil clause. So, unlike those cases of simple, non-contrastive knowledge ascriptions such as 'Moore knows that he has hands', Schaffer cannot appeal to the context-dependence of the free variable 'q' as an explanation of the context-dependence of (5) as we see in (5''). The challenge for Schaffer then is to find some other way of accounting for the context-dependence of (5).

But Schaffer still thinks his theory is able to handle the problem. According to Schaffer, the source of the moderate context-dependence of (5) is none other than the foil clause— 'that he has stumps'. As he explains:

So does Moore know that he has hands rather than stumps? Yes, in a sense. What Moore knows can be more fully described as follows: he knows that he has hands rather than *stumps that are apparent*. Or more fully: Moore knows that he has hands rather than *stumps that he would veridically perceive*. Fuller descriptions are always available. Which worlds these descriptions denote is contextually variable. Thus, strictly speaking, ... "Moore knows that he has hands rather than that he has stumps" is *true* in contexts in which "that he has

stumps” denotes worlds [in which Moore’s stumps are apparent to him] (Schaffer 2005, 258-259).

Elsewhere, Schaffer also remarks,

The contrastive ascription [that Holmes knows that Mary stole the bicycle rather than the wagon] still retains some context-dependence, in that there is context-dependence concerning which set of worlds is denoted by a that-clause. Thus the alternative that Mary stole the wagon may or may not (depending on context) include worlds in which Holmes is a brain-in-a-vat veridically hallucinating Mary’s thieving (Schaffer 2004, 98).

Roughly speaking, the idea here is that the foil clause,

(6) that Moore has stumps

is a context-sensitive term, whose content varies from context to context. In  $C_o$ , (6) denotes the mundane contrast  $q_o$ , the proposition that Moore has stumps *that are apparent*. In  $C_s$ , (6) denotes the more demanding contrast  $q_s$ , the proposition that Moore has stumps *tout court*. Since Moore can eliminate  $q_o$  but not  $q_s$ , this explains our tendency to affirm (5) in  $C_o$  but deny it in  $C_s$ . One might be curious about why Schaffer suggests that Moore would not be able to eliminate  $q_s$ . The answer is that Schaffer follows a Lewisian route in defining the elimination of a possibility (cf. Lewis 1996), that is, a possibility  $P$  is ‘eliminated’ for a subject  $S$  just in case  $P$  is *incompatible* with  $S$ ’s having all the experiences she is actually having. Moore is unable to eliminate  $q_s$ , on this definition of elimination, because  $q_s$  is compatible with Moore’s total experiences. Moore could, after all, be a brain-with-stumps-in-a-vat having exactly the same experiences which he actually has. However, Moore is able to eliminate  $q_o$ , since  $q_o$  is incompatible

with his actual experiences-- Moore cannot have all his actual experiences and still have stumps that are *apparent to him as such*. On Lewis's definition of elimination, very few possibilities about the external world may be eliminated that do not make reference to how things appear.

The problem with this proposal is that it appears to violate a plausible thesis about complex expressions, which is named the Context Thesis (CT) by Zoltán Gendler Szabó (2001). To a first approximation, CT states that the context-sensitivity of a complex expression is always traceable to that of a constituent. Given CT, any complex expression whose content differs between two different contexts must contain a constituent whose content so differs. Now, according to Schaffer,

(6) that Moore has stumps

is certainly a complex expression, which could have one content in  $C_o$  and another in  $C_s$ . Nevertheless, it seems that none of the constituents of (6) has a content that differs between  $C_o$  and  $C_s$ : neither 'Moore', nor 'stumps', nor 'has' is context-sensitive in this sense. Thus, it follows that Schaffer's proposal is an apparent violation of CT.

However, Schaffer might respond by denying that (6) contains no constituent whose content differs between  $C_o$  and  $C_s$ ; the temptation to think it does is due to an impoverished conception of (6)'s real syntactic structure, he might say. One way to implement this idea is to follow Jason Stanley and Zoltán Gendler Szabó in accepting a version of the so-called Nominal Restriction Theory (cf. Stanley & Szabó 2000; Stanley



2002b). According to a simplified version of the theory, each common noun is syntactically associated with a restrictor variable that denotes a contextually relevant set of objects. For instance, according to this theory, the rough logical form of (7) is (7'):

- (7) Every student plays chess.  
 (7') Every  $\langle$  student,  $i \rangle$  plays chess.

Relative to a context, ' $i$ ' is assigned a set of relevant objects. This set then intersects with the set of all students to yield the denotation of ' $\langle$  student,  $i \rangle$ '. For example, suppose that I am discussing the recreational habits of the students in Ann's math class, and I utter (7). The restrictor variable ' $i$ ' is assigned the set of all things in Ann's math class. So the denotation of ' $\langle$  student,  $i \rangle$ ' in this context is the intersection of the set of all students and the set of all things in Ann's math class. Therefore, an utterance of (7) in this context would express the proposition that (roughly) every student *who is in Ann's math class* plays chess.<sup>6</sup> Now, if the Nominal Restriction Theory is correct, Schaffer could save his proposal by saying that the common noun 'stump' as it occurs in (6) is also associated with a restrictor variable, so that the logical form of (6) is something like (6'):

- (6) that Moore has stumps.  
 (6') that Moore has  $\langle$  stumps,  $i \rangle$ .

---

<sup>6</sup> I say 'roughly', because according to Stanley and Szabó, the restrictor variable does not occupy its own syntactic node (as it would if it played a role equivalent to that of the restrictive relative clause 'who is in Ann's math class'). Rather, a restrictor variable *cohabits* a node with the noun with which it is associated. In fact, in the sentence 'every student who is in Ann's math class plays chess', the restrictor variable associated with 'student' is still present and can be given a contextually determined value. For example, in a context in which only Chinese students are at issue, an utterance of 'every student who is in Ann's math class plays chess' arguably expresses the proposition that (again, roughly) every *Chinese* student who is in Ann's class plays chess (cf. Jason & Szabó 2000, 256).

The alleged context-sensitivity of (6) can then be explained as follows: In ordinary, non-skeptical contexts such as  $C_o$ , only things that are apparent to Moore are relevant. In such a context, ‘ $i$ ’ is assigned the set of all things apparent to Moore, and the denotation of ‘ $\langle$  stumps,  $i \rangle$ ’ is restricted to the set of stumps that are apparent to Moore.<sup>7</sup> Thus, the denotation of (6) in  $C_o$  is  $q_o$ , the proposition that Moore has stumps *that are apparent*. In skeptical contexts such as  $C_s$ , by contrast, things that are not apparent to Moore are also relevant (perhaps as a result of considering skeptical scenarios). In such a context, ‘ $i$ ’ is assigned (say) the set of all things, apparent or otherwise, and the denotation of ‘ $\langle$  stumps,  $i \rangle$ ’ extends to include stumps that are not apparent to Moore. So, the denotation of (6) in  $C_s$  is  $q_s$ , the proposition that Moore has stumps *tout court*. On this account, (6) has a different content in  $C_o$  than in  $C_s$  because it contains a constituent—the covert restrictor variable associated with ‘stumps’—whose content differs between  $C_o$  and  $C_s$ . In this way, Schaffer can explain the alleged context-sensitivity of (6) without violating CT.

However, this proposal runs into trouble when it comes to cases where no common nouns are involved. For instance, suppose that Moore has a dog named Fido, who just let out a loud bark at him. Then consider the contrastive knowledge ascription:

(8) Moore knows that Fido barked rather than meowed.

---

<sup>7</sup> One might worry here about the oddity of talk of ‘the *set* of stumps that are apparent to Moore’. This worry may be assuaged by noting that, strictly speaking, the denotations of common nouns and their restrictor variables are *properties*, not sets (cf. Jason & Szabo 2000, 252). Thus it would be more accurate (and presumably less odd) to say that in  $C_o$ , ‘ $i$ ’ is assigned the *property* of being apparent to Moore, so that the denotation of ‘ $\langle$ stumps,  $i \rangle$ ’ is ‘restricted’ to the more specific *property* of *being stumps that are apparent to Moore*. For convenience, I will ignore this complication in the discussions here.

Intuitively speaking, a token of (8) may be true if uttered in an ordinary context (call it  $C_o^*$ ), but false if uttered in a skeptical context (call it  $C_s^*$ ) in which one is attending to far-fetched possibilities in which Fido meowed, such as the possibility in which Fido meowed but Moore is a brain-in-a-vat hallucinating that Fido barked. So, akin to (5), (8) seems to be moderately context-dependent. Now, to be consistent, Schaffer must say that the context-dependence of (8) is due to the fact that in the foil clause,

(9) that Fido meowed

there is a context-sensitive term that denotes a mundane contrast in  $C_o^*$  and a demanding contrast in  $C_s^*$ . But here the alleged context-sensitivity of (9) cannot be modeled along the lines of nominal restriction that are outlined by Stanley and Szabó, for the simple reason that (9) contains no occurrence of common nouns and it makes no sense to say that the denotation of 'Fido' can be contextually restricted, since qua proper name it can only denote a single individual.<sup>8</sup>

In this sense, there is no obvious route from the context-sensitivity of common nouns to the context-sensitivity of (9). Are there other ways of making (9) context-dependent in the way required by Schaffer's explanation, without violating CT?

---

<sup>8</sup> Some philosophers hold a predicate view of names, according to which names are semantically just like common nouns (cf. Burge 1973; Larson & Segal 1995). But even granting this view, there is no way to make (9) context-dependent in the way required by Schaffer's explanation. For even on the predicate view, names that occur in argument position (as in 'Fido meows', as opposed to 'I have two Fidos', where 'Fido' behaves predicatively) can only pick out a *single* individual. Now if (9)'s alleged context-dependence were due to the context-dependence of 'Fido', that could only be because 'Fido' picks out one dog in  $C_o^*$  and a *different dog* in  $C_s^*$ , which is clearly absurd (is it the neighbor's dog bearing the same name?). Moreover, there are contrastive knowledge ascriptions that are moderately context-dependent but whose embedded contrastive sentence does not even contain proper names, such as 'I know that it is raining rather than snowing here'. Now a predicate view of 'here' is not even remotely plausible; it makes no sense, for example, to say 'It is raining *two heres*' or 'Jimmy went to *a here*.'

One might suggest that ‘meow’ (and perhaps many other verbs) has an argument place for *manner*, and that therefore the logical form of (9) contains a free variable ‘*m*’ for the manner of meowing. On this suggestion, in  $C_o^*$  (but not in  $C_s^*$ ), the value of ‘*m*’ is such that the denotation of (9) is a mundane contrast proposition to the effect that Fido meowed *in a way that is apparent to Moore*. That would explain why (8) seems true in  $C_o^*$  but false in  $C_s^*$ .

However, I think most philosophers of language would reject the existence of such manner variables,<sup>9</sup> primarily because (i) phrases specifying the manner in which something is done seem to be optional adjuncts rather than mandatory arguments, and (ii) such phrases fail the so-called ‘negation test’ (cf. Marti 2006; Stanley 2005b; Cappelen & Hawthorne 2007). For example, if verbs were associated with argument places for manner, one would expect there to be contexts in which (10)-(12) could be felicitously uttered, but there are not,

(10) “John cut the salami.” “No, he cut it with a spoon.”

(11) “Mary danced at the wedding.” “No, she danced in a graceful manner.”

(12) “Bob hit Jane.” “No, he hit her very softly.”

Similarly, there is no context in which (13) would be felicitously uttered,

(13) “Fido meowed.” “No, Fido meowed in a way that is not apparent to Moore.”

---

<sup>9</sup> For example, opponents of the binding argument have taken the (alleged) fact that it forces one to posit manner variables to be a *reductio* of the binding argument (see, e.g., Recanati 2002), while proponents explicitly deny that their argument has this consequence. To my knowledge, the only philosopher who *seems* to endorse the idea that there may be a manner variable in ‘John cut the salami’ is Ludlow (cf. Ludlow 2005, 19).

So the alleged context-dependence of (9) cannot be due to the presence of a covert manner variable. These considerations also tell against a proposal on which (9) is context-dependent because its logical form is something like ‘there was an event  $e$  that is a meowing by Fido’ (cf. Davidson 1967), where the denotation of the common noun ‘meowing’ is restricted in  $C_o^*$  to those meowings that were apparent to Moore (cf. Stanley & Szabó 2000). For if such contextual restriction did occur we would expect there to be contexts where it would be felicitous to respond to an utterance of ‘Fido meowed’ by saying ‘No, it wasn’t apparent to Moore’, but there are not.

The conclusion to draw here seems to be that, given CT, there is no way to make (9) have the sort of context-dependence required by Schaffer’s explanation, save by positing *ad hoc* structures (such as manner variables) in (9)’s logical form and thus implausibly complicating our syntax. After recognizing this point, we may naturally wonder whether Schaffer can bite the bullet and deny CT. It seems that there is one theory that is helpful to Schaffer’s doctrine.

So-called ‘truth-conditional pragmatists’ have notoriously argued that the context-sensitivity of a complex expression need not be traceable to any constituent, but may be due instead to *free enrichment*— pragmatic processes that enrich contents to include propositional constituents that do not correspond to any elements in syntax. If there are such processes, then it is perhaps open to Schaffer to claim that in  $C_o^*$  the content of (9) is simply ‘enriched’ into the mundane contrast proposition that Fido meowed *in a manner that is apparent to Moore* (or something to that effect), while  $C_s^*$

somehow keeps such enrichment processes from occurring. That would explain why (8) seems true in  $C_o^*$  but false in  $C_s^*$ .

It should be acknowledged that I do not think I have a conclusive objection against appealing to free enrichment as an explanation of the moderate context-dependence of (8). However, the existence of such unconstrained processes is highly contentious.<sup>10</sup> In my view, contrastivists should (at least) remain as neutral as possible regarding the dispute between truth-conditional pragmatists and their opponents, which is orthogonal to the central epistemological issues at stake. Thus, I don't think Schaffer, without appealing to truth-conditional pragmatism, can provide a satisfactory analysis of contrastive knowledge ascriptions like (8). Schaffer's new modification on the context-sensitivity of the contrast proposition in a contrastive knowledge ascription would restrict his contrastivism to cases where the corresponding contrast propositions involve common nouns (such as, 'stump'). But, when the contrast proposition in a contrastive knowledge ascription has no common-noun components Schaffer has to concede that his theory *by itself* cannot explain those contrastive knowledge ascriptions similar to (8). So, the generality of the contrastivism is seriously restricted.

Furthermore, even granted that Schaffer can appeal to truth-conditional pragmatism to solve the relevant problem, we have to conclude that a contrastivist who resorts to such an appeal would raise a few eyebrows among her fellow contextualists,

---

<sup>10</sup> There are many philosophers who argue against free enrichment. See, for example, Stanley 2000 & 2002; Szabó 2000; King & Stanley 2005b; and, Predelli 2005.

who do not embrace contrastivism but, as we saw above, can provide straightforward semantic explanations of moderate context-dependence, without appealing to controversial processes.

I have argued that there is no straightforward way to flesh out Schaffer's suggestion that the moderate context-dependence of contrastive knowledge ascriptions is due to the context-dependence of foil clauses; one who takes this line must choose between a solution that posits *ad hoc* structures in syntax and one that resorts to controversial processes such as free enrichment. However, there is another issue that is worth exploring, i.e., what options are available to a contextualist theorist who still accepts Schaffer's account of contrastive knowledge ascriptions but seeks an alternative explanation of moderate context-dependence. In other words, we want to find out whether a contextualist can hold a contrastivist account of knowledge ascriptions but reject Schaffer's modification of the context-sensitivity of foil clauses. In the remainder of this chapter I will argue that it is really difficult for one to maintain such a theoretical position.

In the case of (8)

(8) Moore knows that Fido barked rather than meowed.

there seem to be two general strategies available to such a theorist:

- (a) One can still seek a semantic explanation of the data, either by (a1) positing a fourth argument place in the 'knows' predicate, or by (a2) treating 'knows' as an indexical;

- (b) One can reject the semantic significance of the data. For example, one can  
 (b1) hold that (8) is false in both  $C_o^*$  and  $C_s^*$ . Our mistaken intuition that (8)  
 is true in  $C_o^*$  must then be explained pragmatically. Alternatively, one can  
 (b2) hold that (8) is true in both  $C_o^*$  and  $C_s^*$ . Our mistaken intuition that (8)  
 is false in  $C_s^*$  must then be explained pragmatically.

There is, I think, little to be said for (a1) and (a2). Surely they look *ad hoc* as well. And they open the contrastivist up to a number of burdens and objections that she does not otherwise face. In the case of (a1), the burden is to provide syntactic evidence supporting the postulation of the extra argument place, as well as to reformulate arguments for contrastivism in terms of four-place knowledge relations. In the case of (a2), the claim that ‘know’ is an indexical would invite a host of ‘lexical freak’ objections that have been leveled against indexicalist versions of contextualism and which Schaffer claims it is a virtue of contrastivism to avoid (see Schaffer 2004, 85-86).<sup>11</sup> It should also be emphasized that the indexical treatment of ‘know’ can lead to the betrayal of the general project of the ternary interpretation of knowledge ascription, because there is no need to embrace a *ternary* account of ‘know’ when ‘know’ can be treated as a *binary* indexical. Therefore I do not pursue the two (a)-options further here.

Turning to (b1). On this option, the foil clause (9)

(9) that Fido meowed

---

<sup>11</sup> According to Schaffer, when ‘know’ is treated as an indexical, we have to concede that the supposed indexical term ‘knows’ “differs from the other indexicals in its lexical kind, subtlety of shiftiness, and bindability” (Schaffer 2004, 86). In this sense, if we treat ‘know’ as an indexical we have to concede that the behavior of the supposed indexical term ‘know’ is unprecedented. Therefore the supposed indexicality of ‘know’ implies that “‘knows’ is some sort of lexical freak” (ibid., 85). According to Schaffer, this is the conclusive evidence for us to reject the indexical treatment of ‘know.’ For some relevant discussion of the indexicality of ‘know,’ see my Chapter 2.



invariantly denotes (as it should) the proposition that Fido meowed *tout court*. Given the Lewisian definition of elimination, Moore is unable to eliminate this proposition. Thus, on this option, (8) is false, in both  $C_o^*$  and  $C_s^*$ . One must then provide a pragmatic explanation of how we are fooled in  $C_o^*$  into thinking that (8) is true.

There are two problems with this strategy. First, giving pragmatic explanations of apparently semantic intuitions is inconsistent with the spirit of contextualism (and contrastivism is just one form of contextualism). The main selling point of contextualism is its supposed ability to capture semantically our intuitions about the truth and falsity of knowledge ascriptions, and contextualists such as DeRose have argued against explaining such intuitions via any kind of pragmatic maneuver (cf. DeRose 1999 & 2002). Option (b1) thus looks quite foreign to the otherwise contextualist spirit of contrastivism. Also, as we saw above, non-contrastivist contextualists uniformly give semantic explanations of the data. This gives the contrastivist all the more reason not to relegate moderate context-dependence to pragmatics.

Secondly, (b1) would have the consequence that, whereas binary ascriptions are often true, contrastive knowledge ascriptions are almost never true. Thus one can truly say ‘I know Obama is president’, but never (on this view) ‘I know Obama rather than Eminem is president’ (since there are worlds in which Eminem is president and I am a brain-in-a-vat thinking Obama is); one can truly say ‘I know the Capitol is built of marble’, but never ‘I know the Capitol is built of marble rather than Legos’; one can truly say ‘I know the Red Sox lost’, but never ‘I know the Red Sox lost rather than won’; and

so on. On this view, whenever one attempts to be a little more explicit about the contrast one has in mind, one starts speaking falsely and only implicating something true. This result is peculiar, to say the least.<sup>12</sup>

Finally, let me only briefly discuss (b2) here, since (b2) is also related to the issue of the closure principles that will be carefully discussed in Chapter 5. On (b2), since we want to hold (8) be true in both  $C_o^*$  and  $C_s^*$ , we have to admit that Moore is able to eliminate (9) in both contexts. Thus, a straightforward implication of such view would require some new definition of elimination of possibilities other than Lewis's. In particular, elimination must be redefined so that it is no longer closed under *contraction*, i.e. so that it is possible for S to eliminate  $p$  even if, for some  $q$ ,  $q$  entails  $p$  but S is unable to eliminate  $q$ . Thus, on the new definition of elimination, Moore should be able to eliminate  $p$ : that Fido meowed, even though he is unable to eliminate  $q$ : that Fido meowed *and he is a brain-in-a-vat hallucinating Fido barked*.

However, there are two further problems with (b2) as well. Firstly, akin to the corresponding remark on (b1), the option (b2) also betrays the contextualist spirit of contrastivism, which is exactly the same as the first problem for (b1). Since the problem is explicitly outlined, I will not repeat it here. The second problem is that if elimination is redefined in the way described above, then the contrastivist can no longer preserve an adequate version of *epistemic closure* and the supposed epistemic modesty. In particular,

---

<sup>12</sup> There might still be *some* true contrastive knowledge ascriptions, such as 'I know that the Red Sox lost rather than won in a way that is apparent to me (i.e. without my being a brain-in-a-vat deceived into believing the Red Sox lost).' But that does not undermine the point that *most* contrastive knowledge ascriptions come out false on the (b1) option. After all, who would talk like *that*?

the following inference rule that Schaffer proposes:

$$\text{(Contract-}q\text{)} \quad (\text{Ksp}q_1 \ \& \ (q_2 \rightarrow q_1) \ \& \ \{q_2\} \neq \emptyset) \rightarrow \text{Esp}q_2$$

(where  $\text{Esp}q_2$  means that S is in a position to know that  $p$  rather than  $q_2$ ) (Schaffer 2007, 244)

will be rendered invalid, since it crucially relies on the fact that elimination as defined by Lewis is closed under contraction, or, in Schaffer's words, that "any subregion of an eliminated region is an eliminated region" (ibid., 244). But it is an unaffordable cost, as Christoph Kelp indicates, that abandoning (Contract- $q$ ) has the consequence that the contrastivist no longer has a closure principle that can explain the way in which competent deduction enlarges our knowledge base (see Kelp 2007 & 2011). A worse situation is that the supposed attractive feature of contrastivism would disappear, because when the epistemic closure principle is abandoned the skeptical argument is not valid at all. Thus, there is no need for us to embrace a contrastivist theory of knowledge ascription, where the epistemic closure principle is abandoned. However, the relevant issues will be picked up in Chapter 5 (especially, §5.3.2), when we discuss contextualism and the epistemic closure principle.

In sum, Schaffer's contrastivism does not provide a satisfactory ternary account of the context-sensitivity of knowledge ascriptions. The contrastivist model of the supposed context-sensitivity of 'know' is no better than its binary contextualist counterpart if Schaffer's contrastivism is not even worse.

The arguments that I present in both Chapters 2 and 3 show that contextualism

has serious problems in providing us with satisfactory linguistic models of the supposed context-sensitivity of 'know.' Since epistemic contextualists owe us a detailed linguistic interpretation of the mechanism of the supposed context-sensitivity of knowledge ascription, there is little reason to embrace a contextualist theory of knowledge ascriptions.

In Part Two, however, we will set aside the linguistic issues of epistemic contextualism but consider whether epistemic contextualism could make a significant contribution to research on the nature of knowledge itself. In Part Two, epistemic contextualism will be considered with respect to three important problems in contemporary epistemology: the skeptical problem, the closure principle and fallibilism.

**PART TWO: CONTEXTUALISM AND ITS SUPPOSED  
CONTRIBUTIONS TO EPISTEMOLOGY**

## **CHAPTER 4: CONTEXTUALISM AND SKEPTICISM**

When we want to see what contributions contextualism makes to contemporary epistemology, a good place to start is with an evaluation of contextualism with respect to the skeptical problem, since “contextualism in epistemology first gained interest as a response to skepticism” (Greco 2010, 102). Contextualists always proudly suggest that contextualism is able to achieve an elegant balance between skeptical intuition and our everyday intuition concerning knowledge ascriptions. By sharply separating skeptical contexts from ordinary contexts of knowledge ascription, contextualists think they can safeguard our ordinary knowledge ascriptions from skeptical challenges. In this chapter, I shall question both supposed theoretical advantages of contextualism. As will be shown, on the one hand, the supposed elegant balance of the two intuitions will eventually put contextualism into a dilemma. On the other hand, there are some serious counter-examples to the systematic and structured contextualist theory, which will undermine the so-called contextualist protection of our everyday knowledge ascriptions against direct skeptical challenge.

### **4.1 THE SUPPOSED ELEGANT BALANCE IN CONTEXTUALISM AND THE INDIRECT CONCESSION OF KNOWLEDGE ASCRIPTIONS**

One of the most important theoretical advantages claimed by epistemic contextualism is that it provides an elegant balance between our everyday knowledge ascriptions and skeptical challenges. On the one hand, it is claimed, contextualists hold a plausible and sympathetic understanding of epistemic skepticism and sincerely respect skeptical

intuitions. Contextualists suggest that they do not hold any dogmatic attitude toward the intuitions that motivate skepticism—they explain why we feel seriously challenged when we encounter skeptical arguments and why we seem to treat the skeptical challenge towards our knowledge as significant. The contextualist concedes that skeptics are right that most (if not all) of our knowledge ascriptions fail in the face of possible skeptical scenarios; in other words, we do not have any knowledge that can survive the skeptical possibilities, since the standard of knowledge ascription in the skeptical context is raised to an incredibly high level that seems impossible to meet. In this sense, a Moorean response to skepticism that ‘I know I am not a brain-in-a-vat’ commits one to a dogmatic view that does not fully appreciate the nature of the skeptical challenge. But contextualists suggest this does not imply that skeptics completely win the battle, because they do not want to concede fully to the skeptics—they still want to save our ordinary intuitions about everyday knowledge because it seems also intuitively compelling that we *do* know a lot. In order to save our everyday knowledge, contextualists suggest that skeptics confuse skeptical and ordinary contexts of knowledge ascription. In most cases, contextualists think, knowledge is ascribed to the agent in question in a mundane context where the standard of knowledge ascription is comparatively low and certainly much lower than the one in the skeptical scenario. Bearing this kind of theoretical explanation in mind, we can see how contextualists seek to save our ordinary knowledge from skeptical attacks—in the everyday contexts of knowledge ascription, we are able to satisfy the moderate standard of knowledge ascription and truly claim that we have

knowledge, since in these mundane contexts of conversation all the stringent, too-demanding skeptical standards of knowledge ascription are irrelevant. Thus, an elegant balance between the skeptical intuition of the ignorance of the skeptical propositions and the ordinary intuition of the mundane knowledge ascriptions is supposedly reached.

However, I shall argue in the remaining part of this chapter that the above contextualist balance actually poses a serious dilemma for contextualism— it implies either that, if the skeptic is taken seriously, the concession made by contextualists would eventually lead us to a full-fledged skepticism that gives skeptics a complete victory in the end, or that, if the skeptical intuition is not taken seriously, there is no need for us to accept contextualism. In order to fully develop my argument against the so-called ‘elegant balance’ in contextualism, we shall firstly consider a case study that is derived and further developed from the discussion of skepticism in the contextualist literature.

Imagine the following case: During a break in a seminar on epistemic skepticism, one of my classmates comes to ask me to lend her an anthology of epistemology papers so that she can make a photocopy of one of them. And I tell her that I put the book on the shelf in my office. After hastily searching for it on my quite cluttered shelf without success, she asks whether I am sure the book is on the shelf. Since I vividly remember that I just put the book there a few minutes ago, then (say, at time  $t_1$ ) I reply:

(1) I know that the book is on the shelf.



The conversation between my classmate and me continues. My classmate goes on to ask me whether I *really* know where I put the book. Reminding me of all the skeptical arguments and hypotheses we just heard about in the seminar, she asks how I know that I am not deceived in believing that I put the book on the shelf a few minutes ago by a Cartesian evil demon. Suppose I am deeply impressed by such an error possibility and realize that I do not have any convincing evidence to rule out such a ‘defeater.’ After thinking for a few minutes, (at time  $t_2$ ) I decide to make a concession as follows:

(2) I don’t know that the book is on the shelf.<sup>1</sup>

However, my classmate does not think my reply is satisfactory and complains:

My Classmate: What do you *really mean* when you said “I don’t know that the book is on the shelf”? A few second ago (i.e., at  $t_1$ ), you just said “I know that the book is on the shelf,” but now, “I don’t know that the book is on the shelf?” Oh, come on. Please be honest; do you really know or not?

I: Well, I can understand your complaint. So, when I said “I know that the book is on the shelf,” (i.e., at  $t_1$ ) I was wrong. I don’t know that the book is on the shelf.

Now, let us number the following sentence as (3), which is supposed to be uttered at time  $t_3$ :

(3) When I said “I know that the book is on the shelf” at  $t_1$ , I was wrong.<sup>2</sup>

---

<sup>1</sup> One thing should be clarified here. Many philosophers, I think, would disagree with my reaction in the given case here— they probably think the concession is made inappropriately. For instance, most neo-Mooreans would suggest that, even if the evil demon hypothesis is present, we still have our ordinary knowledge of a lot of things. However, I think contextualists would probably think (2) is true in some contexts, i.e., the skeptical context where the skeptical error possibility is explicitly stated and considered. As will be shown in the later analysis, what I am trying to do in the case is to capture some contextualist ‘intuitions’ here.

Evidently, sentence (3) is an ascription of ignorance, which is in play through the denial of a previous knowledge ascription that is expressed by (1). With the above case in hand, I wonder how a contextualist would explain the case.

According to the standard story told by many contextualists, both (1) and (2) are true. Contextualists indicate that, because I vividly remember having put the book on the shelf just a few minutes ago, my belief is sufficiently well-grounded so that it can meet the ordinary epistemic standards of knowledge ascription in the above given context. Thus, the above ascription (1) would be true. On the other hand, contextualists think my utterance of sentence (2) is also perfectly acceptable, since my classmate explicitly raises those skeptical hypotheses, which brings about the shift of the context of the conversation from the ordinary one to the skeptical one. Because in the skeptical context, the standard of knowledge ascription would be much more demanding than the one in the everyday context, most contextualists would readily suggest that (2) is also true according to the skeptical standard of knowledge ascription. Thus, contextualists think they can satisfactorily explain the truth of both (1) and (2). More crucially, contextualists want to

---

<sup>2</sup> Here I would agree with Baron Reed: many contemporary epistemologists would be inclined to reject the concession that is embodied in asserting (3). Consider neo-Moorean philosophers again. They would suggest that a concession like (3) just means the skeptics win the battle eventually; however, neo-Moorean epistemologists think we do have a good way to refuse the skeptical challenge. But this is not crucial to my current purpose of investigating contextualism. I want to emphasize that the assertions (2) and (3) in the given case would not explicitly violate the doctrine of contextualism. According to contextualism, my denial of the knowledge ascription that the book is on the shelf in (2) is true in the context where the skeptical hypothesis is explicitly presented saliently. And many people would mistakenly take (2) as the denial of (1), as contextualists would suggest, because they fail to realize the context shifts between the everyday discussions of knowledge ascriptions and the skeptical discussion of knowledge ascriptions. Pace Stephen Schiffer, I would also regard this kind of contextualist explanation as a certain kind of *error theory*. Granted all of the above theoretical background and explanation, I would suggest that (3) would not seem to be too awkward or implausible.

point out that (1) and (2) are not contradictory with each other, since the context-sensitive term ‘know’ in (1) and (2) is used in different contexts.

But a problem occurs when we come to (3). It should be noticed that there is a distinctive feature of (3): there is only one explicit occurrence of the verb ‘know’ in (3) and this ‘know’ appears in quotes. Keeping the contextualist treatment of (1) and (2) in mind, a similar but more crucial question is presented: what conversational context sets the standard of knowledge ascription that is relevant to (3)? In order to answer the question, I suggest, it would be a good strategy to illustrate some general features of context-sensitive terms within quotes by considering some classical cases.

For instance, one day I go to Toronto to visit my friend Lisa, with whom I have not been in touch for a while. Lisa is surprised by my unexpected visit and so I tell her: “I am here to see you, since we have not seen each other for a while.” (And suppose the sentence is uttered at time  $t_4$ ). On the next day when I come back to Hamilton and meet my classmate Daniel, a competent speaker of English, who asks me what is the first sentence I said to Lisa when I saw her, I respond (at time  $t_5$ ): “I said (at  $t_4$ ), ‘I am here to see you, since we have not seen each other for a while’.” In this example we can elicit the following two sentences:

- (4) I am here to see you, since we have not seen each other for a while.
- (5) I said, ‘I am here to see you, since we have not seen each other for a while’.

Clearly, both (4) and (5) involve two context-sensitive terms, ‘here’ and ‘you;’ and only in (5) do these two context-sensitive terms occur within quotes. Granted the scenario in

the above case, I think, it seems quite evident that ‘here’ in (4) refers to Toronto and ‘you’ in (4) refers to Lisa. Since (5) is considered as a report of my utterance made at  $t_4$ , the referents of context-sensitive terms ‘here’ and ‘you’ in (5) would remain fixed to Toronto and Lisa respectively. By the same reason, neither Daniel nor any competent English speakers would mistakenly think ‘here’ within the quotes in (5) would refer to Hamilton or ‘you’ within the quotes in (5) would refer to Daniel. Thus, we can draw the conclusion from the above observation: when a context-sensitive term occurs within quotes, its semantic value is fixed by the context where the quoted sentence is uttered rather than the context where the sentence is quoted as a report. This kind of observation provides us a reasonable strategy to analyze (3).

Given this general fact about context-sensitive terms that occur within quotes, it seems quite reasonable to conclude that the standard of knowledge ascription that is relevant to (3) is actually the same ordinary standard of knowledge ascription relevant to (1). Since the ordinary standard of knowledge ascription that is relevant to (1) is less demanding, the concession made in (3) in fact is semantically equivalent to the denial of (1) *according to the ordinary standard of knowledge ascription*. In other words, by asserting (3), I acknowledge that I actually don’t know that the book is on the shelf at  $t_1$ , *even though I am (at  $t_1$ ) in the everyday conversational context of knowledge ascription*. Since the context for the quoted sentence in (3) is the ordinary one, we, at the same time, rule out the following interpretation of (3): after I am confronted with the skeptical challenges raised by my classmate, I eventually concede that, *according to the*

*demanding (skeptical) standard of knowledge ascription*, I cannot know that the book is on the shelf at  $t_3$ . Thus, when I utter (3), the concession made by (3) is neither that, *at*  $t_3$ , I cannot meet the demanding standard of knowledge ascription (which is brought into play by the skeptics), nor that, *at*  $t_1$ , I cannot meet the same demanding standard of knowledge ascription either. In sum, the concession I make by asserting (3) is actually that I cannot meet the relatively loose standard of knowledge ascription in the everyday conversational context, when the original knowledge ascription (1) is made.

An immediately subsequent question is now posed for contextualism: Does the kind of concession that is illustrated in the above case imply that the contextualist treatment of the skeptical challenge is eventually defeated? I am inclined to say ‘Yes’ to the question, because, under the contextualist interpretation of knowledge ascriptions, it seems that the skeptic would easily invade the domain of our everyday knowledge ascriptions by forcing us to make concessions like (3). It should be repeated that the crucial feature of the contextualist treatment of the skeptical problem is that contextualists on the one hand grant that the denial of knowledge ascriptions like (2) is true *only* in the skeptical contexts where the demanding (skeptical) standard of knowledge ascription legitimately works. Thus, contextualists claim that (2) cannot be regarded as a denial of (1), since the relatively lax standard of knowledge ascription would be in place when (1) is uttered. In other words, by separating and isolating skeptical contexts from everyday contexts of knowledge ascription, the demanding skeptical standard of knowledge ascription would no longer affect our everyday

knowledge ascriptions; and the edifice of everyday knowledge is effectively defended. As we have already seen, since contextualists grant that direct concessions like (2) are regularly made by subjects in the skeptical context, there is no evident reason why some indirect concessions like (3) cannot be made by those subjects. As far as I can see, contextualists cannot satisfactorily explain those indirect concessions like (3) by appealing to their strategy that sharply separates the everyday contexts of knowledge ascription from the skeptical contexts, because contextualists have to face a dilemma: if (3) is true, then the skeptic wins since they successfully rob us of our everyday knowledge by forcing us to make concessions like (3); if (3) is false, the subjects (as competent English speakers) who want to make concessions like (3) must be mistaken in asserting those concessions, but the mistake cannot be easily explained because it is hardly derived from contextual confusion, for (3) does not involve any explicit confusion of contexts.<sup>3</sup> As shown in the above, indirect concessions like (3) need not require the demanding skeptical standard of knowledge ascription to be motivated or taken into account, since indirect concessions like (3) are tantamount to the confession that the beliefs in question do not meet *the relatively loose standards of knowledge ascriptions* when the original utterances are asserted. In this way, the skeptics get around the

---

<sup>3</sup> The contextual confusion is crucial to the contextualist solution of the skeptical problem. According to contextualism, skeptics mistakenly think they can undermine all human knowledge, because they fail to discriminate between the skeptical context of knowledge ascription and the everyday context of knowledge ascription. Thus, even though someone asserts (2) in a skeptical scenario, she/he can still protect her/his everyday knowledge, because (2) does not contradict any everyday knowledge ascriptions when the skeptical context is distinguished from the everyday context. But, a person who asserts (3) cannot make a similar mistake, because (3) does not lead to an explicit confusion of contexts. So, contextualists have to find some other reason to explain why a competent English speaker would mistakenly assert (3), if contextualists want to suggest that (3) is false.

contextualists' defense of our ordinary knowledge ascriptions, since it seems very easy for them to induce us to make indirect concessions like (3).

Moreover, the skeptical strategy shown above can be easily generalized to most (if not all) of our ordinary knowledge ascriptions. Contextualists can block the skeptical strategy concerning *only* direct concessions like (2) and isolate it only within skeptical conversational contexts; but contextualists cannot reasonably block the skeptical strategy concerning indirect concessions like (3) by emphasizing that the demanding skeptical standard of knowledge ascription cannot affect our ordinary knowledge ascriptions. If this is the case, the skeptics can force us to make the indirect concessions like (3) to withdraw our original knowledge ascriptions according to their respective ordinary standards. Under the pressure of this skeptical strategy, contextualists cannot *satisfactorily* defend our ordinary knowledge against the skeptical challenge.

However, one possible way for contextualists to retrieve their strategy is to appeal to what I call 'semantic blindness.'<sup>4</sup> A Contextualist may suggest that we, users of English, are blind to the semantic workings of the term 'know' and actually become insensitive to the context-sensitivity of 'know.'<sup>5</sup> Due to semantic blindness about the

---

<sup>4</sup> I borrow the term 'semantic blindness' from John Hawthorne. However, Hawthorne's concern with semantic blindness is different from mine here. Hawthorne uses the term to indicate the phenomenon that a person  $S_1$  may report some other person  $S_2$ 's knowledge without being semantically aware of  $S_2$ 's epistemic standard of knowledge ascription. For his discussion of 'semantic blindness,' see Hawthorne (2004, 107-111, 114-115).

<sup>5</sup> Although I do not provide enough textual support to indicate who endorses both contextualism and the semantic-blindness doctrine, I do think the semantic-blindness doctrine at least partially fits with the contextualist project. Note: Contextualism, as an error theory, has to accuse skeptics and those people who are impressed by the skeptical arguments of being confused by different contexts of knowledge ascription. This implicitly implies that skeptics as well as those people who are impressed by the skeptical arguments are semantically blind to the context-sensitivity of 'know.'

term ‘know,’ the contextualist may suggest, we are always confused by different standards of knowledge ascription in different conversational contexts. As we can see in the typical contextualist critiques of skepticism, skeptics, as well as those who are deceived by skepticism, confuse the demanding skeptical standard with the relatively lax everyday standard of knowledge ascription and therefore mistakenly think we do not have any knowledge (even in the ordinary contexts of knowledge ascription). By a similar pattern of reasoning, contextualists may suggest that, in the above case, I *should not* make the concession (3) since I am semantically blind to the context-sensitivity of the term ‘know’ and get confused by different standards of knowledge ascription. Thus, even though it seems that (3) sounds intuitively as plausible as (2), this is in fact not the case. Since my epistemic position at  $t_1$  is good enough to satisfy the relatively lax standard of knowledge ascription, contextualists would say that (1) is true and therefore it is wrong to withdraw it by uttering (3) sometime later. In other words, when I make the concession (3), I am mistaken in surreptitiously (and probably unconsciously) carrying the skeptical standard into the ordinary conversational contexts of knowledge ascription.

I find this kind of contextualist response really unsatisfactory. First of all, by applying the concept of semantic blindness to the term ‘know,’ contextualists transform their theory into a version of error theory. As Stephen Schiffer indicates, this contextualist error theory is really problematic, since the theory suggests that “people uttering certain knowledge sentences in certain contexts systematically confound the propositions their utterances express with the propositions they would express by uttering those sentences



in certain other contexts” (Schiffer 1996, 325). When Schiffer criticizes contextualism, the error-theory problem only occurs in the contextualist explanation of why a direct denial of knowledge like (2) is not a contradiction of a direct ascription of knowledge like (1). But when contextualists use semantic blindness to defeat my objection, the situation becomes even worse, since the linguistic structure embodied in (3) would easily make any competent speaker of English realize the difference of the context in which (3) is uttered from the context in which the quoted sentence in (3) is uttered. We may recall the case of my visit to Lisa again. In this case, it is redundant for both interlocutors to explicitly explain what the terms ‘here’ and ‘you’ refer to in (5), since they are so obvious to both people. I would be very surprised if a competent speaker of English like Daniel thinks I would mean that I am in Hamilton to see Daniel at  $t_5$ , when he hears my utterance of (5). Any competent speaker of English would understand (5), as a report of my utterance of (4), means I was in Toronto to see Lisa at  $t_4$ , since there is no plausible way for an competent speaker of English to fail to recognize the differences of the contexts and therefore get confused. I would suggest that recognition of how a context-sensitive English term functions within quotes is part of being a competent speaker of English. I think it would be strange to accept that we would get systematically confused by different contexts when we utter sentences like (3). In other words, even to suggest that we get confused and become mistaken in using the expressions that involve the term ‘know’ in quotes like (3) is tantamount to the claim that we are completely blind to the semantic fact that the term ‘know’ is context-sensitive *at all*. Granted this kind of

absolute lack of recognition of the context-sensitivity of the term ‘know,’ we may well wonder how we could ever have come to possess a term that was so difficult to use. It is surely rather odd to suggest that competent English speakers are as a matter of course semantically blind to a linguistic feature of ‘know,’ its context-sensitivity. If the ‘sense’ of a term is a function of ‘use,’ and if most competent English speakers not only fail to recognize the context-sensitivity of ‘know’ but also actually use the word ‘know’ explicitly in an insensitive way, we have to conclude that ‘know’ is a context-insensitive term. This definitely undermines the whole project of epistemic contextualism.

Furthermore, the mystery generated by our supposed semantic blindness to the context-sensitivity of the term ‘know’ could even undermine some intuitively plausible explanations concerning the utterance of a knowledge ascription. Let us consider a Gettier case as follows:

One day at 11:00am, my wife asks me about the time. I see my reliable old clock on the wall, which indicates the time is 11:00. I then tell her it is 11:00 am. Since she knows that I am sometimes careless and misread the time, she asks me to double-check the time. I look at the clock again and make sure it is 11:00 am. So, I speak loudly: “I know it is 11:00 am.” (Let us number the sentence as (6) which is uttered at time  $t_6$ ) For some reason, my wife goes on to ask how I know it is 11:00 am and I tell her that I read the time from the clock on the wall. Then, my wife laughs and says, “Don’t you realize that the old clock stopped two days ago?” I then have a check of the clock and it does not work and it turns out that the clock just happened to stop at 11:00 two days ago. So, I have to confess, “When I said ‘I know it is 11:00 am,’ (i.e., at  $t_6$ ) I was wrong.” Suppose this last sentence is uttered at  $t_7$ , which is numbered as (7).

In this Gettier case, we get these two statements:

- (6) I know it is 11:00 am.  
(7) When I said “I know it is 11:00 am,” I was wrong.

Clearly, (6) is false, since I am involved in a Gettiered situation. But, how to explain (7)? If we put aside the supposition of semantic blindness about the context-sensitivity of the term ‘know’ provisionally, there would be a perfectly plausible explanation of (7): (7) is tantamount to a denial of (6), since the context of the quoted sentence in (7) is the same context as that of (6). This explanation falls perfectly into the same pattern of the analysis as the first two cases, which is not only reasonable but also theoretically economic. But, if we suppose that we are semantically blind to the context-sensitivity of the term ‘know,’ then the contextualist theory leads to a problem. First of all, it is unclear whether the context of the quoted sentence in (7) and the context of (6) are the same. Evidently, when I utter (6), I never think about the possibility that the clock happened to stop at 11:00 two days ago, since the clock has been reliable for a long time. But, after my wife’s mentioning that it is broken, I find out that my knowledge claim at  $t_6$  is actually defeated by this circumstance and therefore, at  $t_7$  I utter (7) to withdraw my previous knowledge claim. But it is evident that more counter-possibilities are considered at  $t_7$  than at  $t_6$ , which might suggest that the standard of knowledge ascription at  $t_7$  is more demanding than those at  $t_6$ . Thus, given semantic blindness about the context-sensitivity of the term ‘know,’ I cannot tell whether there is only one context or two different contexts in the above Gettier case; consequently, within the given contextualist theoretical framework, I could not know whether I (correctly) withdraw my previous knowledge ascription by

uttering (7) or not. This is absurd. Contextualists may object to my above complaint by stressing the differences between skeptical cases and Gettier cases. However, as Baron Reed suggests, the differences between skeptical cases and Gettier cases may not be as significant as we originally think. Reed argues that we can create a powerful skeptical argument from a comparison between a normal knower and her/his deliberately constructed Gettiered counterpart (cf. Reed 2009, 91-104). We can also provide an elaborate<sup>6</sup> Gettiered skeptical hypothesis such as: I am a victim of a Gettiered scenario, who just happens to have a justified true belief that *p* by accident. Thus, a person would not have knowledge whether she/he cannot rule out the possibility that she/he is suffering from an elaborate Gettiered skeptical challenge. If Reed's suggestion is correct, when an elaborate Gettiered skeptical hypothesis is mentioned, we can expect that it is very difficult for contextualists to explain the corresponding indirect concession in question.

The last worry concerning the semantic blindness of the term 'know' is that it generates a methodological tie in the combat between contextualism and skepticism. Skeptics suggest that we have hardly any knowledge since the standard is too demanding to be satisfied; thus, from a strictly semantic point of view, we cannot truly claim that we know anything. The skeptics argue that the 'illusion' that we know many things is due to our confusion of the loose use of 'know' with the semantically correct demanding use, to which we are semantically blind. Thus, both the skeptic and the contextualist can appeal

---

<sup>6</sup> For discussion of the difference between a mere skeptical hypothesis and an elaborate skeptical hypothesis, see Feldman (1999, especially 94-96 ).

to semantic blindness. Normally, we would think this kind of skeptical theory is intuitively implausible. But, when we consider contextualism supplemented by our semantic blindness of the term ‘know,’ it is hard to know which is more implausible. As mentioned above, the semantic blindness of the term ‘know’, as a contextualist response to the problem of indirect concessions of knowledge ascriptions, would commit us to a complete lack of the awareness of the context-sensitivity of ‘know’ on the one hand, and a profoundly recondite semantic mechanism of the term ‘know’ on the other hand. If the use of the term ‘know’ is so complicated, we would probably feel less reluctant to accept skepticism. In this sense, when we compare contextualism with skepticism, we may eventually find out that there is no significant advantage of one theory over the other.

If we treat the above problem seriously, we should acknowledge that the skeptical resort to semantic blindness is more straightforward than the contextualist one. Skeptics can consistently rely on the semantic blindness and suggest that human beings hardly know anything—they think they know a lot simply because they are semantically blind to the nature of the standard of knowledge ascription which is always very, very demanding. Semantic blindness simply strengthens their skeptical position on knowledge. However, contextualists cannot consistently hold that competent English speakers are semantically blind to the context-sensitivity of ‘know,’ because contextualists have to rely on our intuitions of the context-sensitivity of ‘know’ in order to make use of cases such as the Airport Case or the Bank Case in arguing for contextualism. Thus, if a contextualist embraces the doctrine of semantic blindness, his position is even worse than that of

skepticism.<sup>7</sup>

So, as I suggest, if contextualists cannot satisfactorily solve the problem of the indirect concession of knowledge ascription, contextualism cannot really defend our ordinary knowledge against the skeptical challenge. Since skeptics can use the indirect concession strategy to undermine our edifice of knowledge, contextualism has no significant theoretical advantage over its rival invariantist theories<sup>8</sup>, such as neo-Mooreanism, for these theories would explicitly block direct concessions like (2) and therefore leave no way for the indirect concession like (3) to be put in play.

In conclusion, the elegant balance promised by contextualism, which implies that we could both respect the skeptical intuition that is a profound and unanswerable challenge and also continue to maintain our everyday knowledge ascriptions, now seems to have failed. Contextualists are eventually left with a dilemma: either they still honor the skeptical intuition, or they reject it— either way leads to an unacceptable outcome for contextualism. On the one hand, if we indeed respect the skeptical intuition, that very intuition would lead us to direct concessions like (2), which deny that we can have any knowledge with respect to the demanding skeptical standard of knowledge ascription.

---

<sup>7</sup> This is also extended to the general contextualism of knowledge ascription. Contextualism, as an error theory, has to accuse skeptics and those people who are impressed by the skeptical arguments of being confused with different contexts of knowledge ascription. This implicitly implies that skeptics as well as those people who are impressed by the skeptical arguments are semantically blind to the context-sensitivity of 'know.' Since skeptics deny we have any knowledge, we only consider those people who are impressed by the skeptical arguments here. If contextualists think they can also understand the Bank Case or the Airport Case properly, then contextualists actually suggest that these people recognize the context-sensitivity of 'know' when they consider the Bank Case or the Airport Case; but they *fail to* recognize the context-sensitivity of 'know' when they consider skeptical arguments.

<sup>8</sup> For a recent excellent defense of invariantism, see Reed (2010).

This intuition would also force us to make some indirect concessions like (3), which suggest that we should withdraw our previous knowledge ascriptions even in ordinary conversational contexts. Thus, the skeptical intuition would eventually lead us to a vast and mighty skepticism. On the other hand, if we reject the skeptical intuition in the first place and refuse to make any concessions like (2) or (3), we would have no convincing reason to take the contextualist position, since invariantist theories, such as neo-Mooreanism, seem to do a better job. Neither honoring nor rejecting the skeptical intuition results in a satisfactory contextualist position.

However, contextualists may just bite the bullet and go on to emphasize that contextualism is still a good theory that can deal with the direct skeptical challenge, although it cannot provide a satisfactory response to the indirect concession problem. Thus, contextualists actually retreat since they would have to abandon one of the so-called theoretical advantages of contextualism— viz., the elegant balance between skeptical intuition and our ordinary intuition concerning knowledge ascriptions. Some philosophers may think this kind of retreat is acceptable, as long as contextualism can safeguard our everyday knowledge ascriptions from skeptical challenges. So, in the next section, we shall examine the sustainability of the contextualist protection of our everyday knowledge ascriptions against skeptical challenges.

#### **4.2 CONTEXTUALISM AND ITS SUPPOSED PROTECTION OF OUR EVERYDAY KNOWLEDGE ASCRIPTIONS**

As we have seen in the previous section, although contextualism may fail in responding

to the problem of the indirect concessions of knowledge ascriptions, it may still seem to be acceptable if it is really able to protect our ordinary knowledge ascriptions against direct skeptical challenges. In this section, I shall argue that contextualists also fail to accomplish this theoretic goal. I use Keith DeRose's contextualist theory as an example, since some other contextualists' views (e.g., Lewis' and Cohen's) have already been discussed in the previous chapters. However, before we step into the examination of concrete contextualist theories, we should recall the general contextualist strategy.

Contextualists normally suggest that there are at least two different standards of knowledge ascriptions. One is the demanding skeptical standard, which seems to be impossible to satisfy; we have to concede that we barely know anything when we are confronted with this standard—but it is only to be employed in skeptical conversational contexts concerning knowledge ascriptions. The other standard that we are able to satisfy is relatively lax; this ordinary standard of knowledge ascription is the one we typically deal with in our everyday conversation and therefore we do know a lot of things in the ordinary sense. Thus, the general contextualist strategy is to safeguard the large number of everyday knowledge ascriptions against skeptical challenges, since the too demanding skeptical standard of knowledge is totally irrelevant to our ordinary knowledge ascriptions.

Many epistemologists find that this rough contextualist strategy of protecting our everyday knowledge ascriptions against skeptical challenges is rather trivial and that it also makes the skeptical problem theoretically less interesting. For instance, Barry Stroud



criticizes such a rough understanding of contextualism by providing an argument from comparison;

Suppose someone makes the quite startling announcement that there are no physicians in the city of New York. That certainly seems to go against something we all thought we knew to be true, It would really be astonishing if there were no physicians at all in a city that size. When we ask how the remarkable discovery was made, and how long this deplorable state of affairs has obtained. Suppose we find that the bearer of the startling news says it is true because, as he explains, what he means by ‘physician’ is a person who has a medical degree and can cure any conceivable illness in less than two minutes. We are no longer surprised by his announcement, nor do we find that it contradicts anything we all thought we knew to be true. We find it quite believable that there is no one in the whole city who fulfils all the conditions of that peculiar ‘re-definition’ of ‘physician’. Once we understand it as it was meant to be understood, there is nothing startling about the announcement except perhaps the form in which it was expressed. It does not deny what on first sight it might seem to deny, and it poses no threat to our original belief that there are thousands and thousands of physicians in New York (Stroud 1984, 40).

As we have seen, the rough contextualist strategy would commit skeptics to a ‘re-definition’ of knowledge by posing the too-demanding standard of knowledge ascription. In this sense, it is rather trivial for contextualists to suggest that such a re-defined demanding standard is irrelevant to our everyday practices concerning knowledge ascriptions; and under this rough contextualist interpretation of the skeptical challenge, it would also make readers feel quite surprised by the fact that such a trivial skeptical problem has occupied the center of contemporary epistemological research for decades.

In order to dissolve this kind of complaint, contextualists have to develop a subtle, fine-grained and sophisticated contextualist theory to elegantly and systematically

explain why skeptical hypotheses are irrelevant to our everyday knowledge ascriptions in a non-trivial way. In other words, contextualists could reasonably be expected to explain the irrelevance by appealing to some plausible theoretical stipulations or principles that are constitutive of their contextualism. Whether they can ultimately accomplish such a goal significantly affects the evaluation of the contextualist protection of our everyday knowledge ascriptions. So, in the remaining part of this chapter, we shall examine DeRose's contextualist theory. We shall find that this prominent contextualist theory does not provide us with a satisfactory proposal concerning the current issue in question.

DeRose's account of the context-sensitivity of the term 'know' is one of the most prominent and influential theories in the literature of contemporary epistemic contextualism. In DeRose's contextualist theory, the notion of '(relative) strength of epistemic position' plays a crucial role (cf. DeRose 1995, 29). DeRose indicates that "how strong a subject's epistemic position must be to make true a speaker's attribution of knowledge to that subject is a flexible matter that can vary according to features of the speaker's conversational context" (ibid., 29). In other words, according to DeRose's theory, S knows that  $p$  in a certain context  $C$  if S is in a *good enough* epistemic position in  $C$  to have a true belief that  $p$ , where what is taken as a good enough epistemic position would flexibly vary with the context of utterance  $C$  (cf. DeRose 1992, 922). Thus, in order for a speaker to truly make a knowledge ascription that  $p$  to a certain subject, the subject has to be in a strong enough epistemic position. However, DeRose's account of the strength of the epistemic position is actually quite subtle and it deserves our close

inspection:

An important component of being in a strong epistemic position with respect to  $p$  is to have one's belief as to whether  $p$  is true match the fact of the matter as to whether  $p$  is true, not only in the actual world, but also at the worlds sufficiently close to the actual world. That is, one's belief should not only be true, but should be non-accidentally true, where this requires one's belief as to whether  $p$  is true to match the fact of the matter at nearby worlds. The further away one can get from the actual world, while still having it be the case that one's belief matches the fact at worlds that far away and closer, the stronger a position one is in with respect to  $p$  (DeRose 1995, 34).<sup>9</sup>

As a contextualist, DeRose emphasizes that it is the context of utterance that determines how strong the subject's epistemic position (with respect to that  $p$ ) should be in order to count the subject's true belief that  $p$  as knowledge. DeRose uses the term 'the sphere of epistemically relevant worlds' to indicate the structured contextually determined sphere of possible worlds. He also suggests that we should picture the sphere of epistemically relevant worlds in this way— "a contextually determined sphere of possible worlds [is] centered on the actual world, within which a subject's belief as to whether  $p$  is true must match the fact of the matter in order for the subject to count as knowing" (ibid., 36). In this way, DeRose is actually able to transform the rough contextualist strategy concerning different standards into a more precise and subtle account; namely, when the standard becomes more demanding, the sphere of epistemically relevant worlds would be enlarged.

Thus, different standards of knowledge ascriptions can be accurately measured

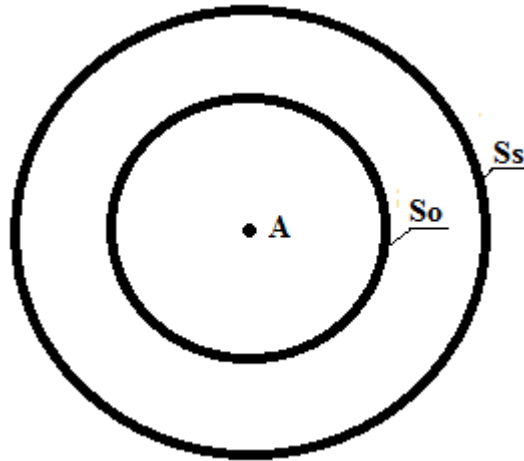
---

<sup>9</sup> Some symbols are adjusted so that the quotation can fit consistently with the discussion in the paper.

by the different sizes of the sphere of epistemically relevant worlds. In sum, “when it’s asserted that S knows (or doesn’t know) that  $p$  ... enlarge the sphere of epistemically relevant worlds so that it at least includes the closest worlds in which  $p$  is false” (ibid., 37). This statement reflects the influence on DeRose of the relevant-alternative theory. According to DeRose, in a context  $C$ , if a subject  $S$  knows that  $p$ ,  $S$ ’s epistemic position with respect to  $p$  in  $C$  must be strong enough so that  $S$  is able to rule out the relevant alternatives (i.e., some not- $p$  possibilities) in  $C$ . In this sense, in a given Context  $C$ , the weakest epistemic position that  $S$  is in should enable  $S$  to rule out at least one possible world where not- $p$  is the case so that  $S$  can know that  $p$  in  $C$ . Bearing the above explanations in mind, we now can see how DeRose’s contextualism works.

DeRose’s theory can explain why we can truly ascribe ordinary knowledge that  $p$  to a subject in an ordinary context  $C_o$ ; but the very same true belief that  $p$ , with the same strength of epistemic position, fails when ascribed to the very same subject in a skeptical context  $C_s$ . When we truly count the subject’s true belief that  $p$  as knowledge in  $C_o$ , the corresponding sphere of epistemically relevant worlds is relatively small and only reaches to the closest worlds where  $p$  is false. Let us call this sphere  $S_o$ .  $S$ ’s epistemic position is strong enough so that  $S$ ’s true belief matches the facts throughout  $S_o$ . When the skeptical hypothesis comes on the scene, the context is shifted from  $C_o$  to  $C_s$ . Since higher epistemic standards are needed, the corresponding sphere of epistemically relevant worlds for  $C_s$  would be much larger than  $S_o$ . Let us call this sphere of epistemically relevant worlds for the skeptical context  $S_s$ . Since all spheres of epistemically relevant

worlds take the actual world as centre, they are indeed concentric. As illustrated in Figure 4.1, the set of possible worlds that fall within  $S_o$  would be a sub-set of the set of possible worlds that fall within  $S_s$ . Since the subject's true belief that  $p$  can only match the facts throughout  $S_o$ , which is smaller than  $S_s$ , so the subject's belief that  $p$  would fail in matching the facts throughout  $S_s$ . Therefore, the subject's epistemic position with respect to the belief that  $p$  in  $C_s$  would not be considered knowledge.



**Figure 4.1** (the letter 'A' stands for the actual world)

According to contextualism, our ordinary knowledge ascriptions in everyday contexts would not be undermined by the skeptical hypotheses, because in the ordinary context the possible world  $w_s$ , where the skeptical hypothesis is the case, is comparatively far away from the actual world so that it would fall out of  $S_o$  and therefore is not counted as epistemically relevant to our ordinary knowledge ascriptions. DeRose's contextualism works quite well so far; however, a worry may be raised, since we may wonder whether his theory can always provide a plausible account of our various kinds of

practice concerning everyday knowledge ascriptions.

A serious counter-example is put forward by Michael Blome-Tillmann (2009). Blome-Tillmann argues that DeRose's theory cannot provide a satisfactory account for our everyday knowledge of the natural laws of the actual world or of some necessary truths. Consider the following case (cf. Blome-Tillmann 2009, 387): a famous logician Dr. L meets one of his friends, Dr. P, who is a world-leading physicist, on the campus of the university. Dr. L asks Dr. P some questions concerning the theory of relativity. Dr. P says,

(1) I know that nothing can travel faster than light.

Since this conversational context seems to be perfectly ordinary, we can reasonably suggest that Dr. P, as an outstanding physicist, does know that nothing can travel faster than light. However, as Blome-Tillmann observes, DeRose's theory cannot satisfactorily support this result.

According to DeRose's theory, Dr. P's assertion that he knows nothing can travel faster than light would induce an extension of the corresponding sphere ( $S_1$ ) of epistemically relevant worlds so that it includes at least the closest worlds in which there is something that can travel faster than light. Let  $w_1$  be the closest possible world where there is something that can travel faster than light. According to the prevailing orthodoxy concerning the closeness among possible worlds, given three possible worlds  $w$ ,  $w^*$  and  $w^{**}$ ,  $w$  is closer to  $w^*$  than it is to  $w^{**}$  if and only if  $w$  resembles  $w^*$  more than it resembles  $w^{**}$ . Thus  $S_1$  should be an extremely large sphere, because  $w_1$  would be

extremely far away from the actual world. Since the laws of nature in  $w_1$  are so different from the laws of nature in the actual world,  $w_1$  is very dissimilar to the actual world and therefore the distance between  $w_1$  and the actual world should be very, very great. Now the question occurs: whether the possible world  $w_s$  where the skeptical hypothesis is embodied, falls in  $S_1$  or out of  $S_1$ . Thus, we have to compare, between  $w_1$  and  $w_s$ , which world is closer to the actual world. It should be noticed that, by carefully selecting the skeptical hypothesis, we can make  $w_s$  closer to the actual world. For instance, the Brain-in-a-Vat (BIV, for short) hypothesis seems much more remote from the actual world than Peter Unger's skeptical hypothesis that there is an evil scientist who deceives us into falsely believing that rocks exist<sup>10</sup>. Evidently, the possible world where Unger's skeptical hypothesis is embodied would be less different to the actual world than the possible world where the BIV hypothesis is embodied. Now let  $w_s$  be the possible world where Unger's skeptical hypothesis is embodied. When we compare  $w_s$  and  $w_1$  with respect to their distance to the actual world, we can plausibly conclude that  $w_s$  is a closer possible world to our actual world, since  $w_s$  does not require a significantly different set of the laws of nature from the natural laws of the actual world. If this is the case, we can see that the actual world can be closer to  $w_s$  than it is to  $w_1$ . The situation can be illustrated in Figure 2. Thus, if we want to ascribe the knowledge that nothing can travel faster than light to Dr. P, we have to figure out whether Dr. P's belief that nothing can

---

<sup>10</sup> See Peter Unger, *Ignorance: A Case for Skepticism* (New York, NY: Oxford University Press, 1975), pp.7-8.

travel faster than light can match the facts throughout  $S_1$ . So, the crux now would be how to provide a good account for the matching relation between a subject's belief and the fact throughout the sphere of epistemically relevant worlds in a given context  $C$ .

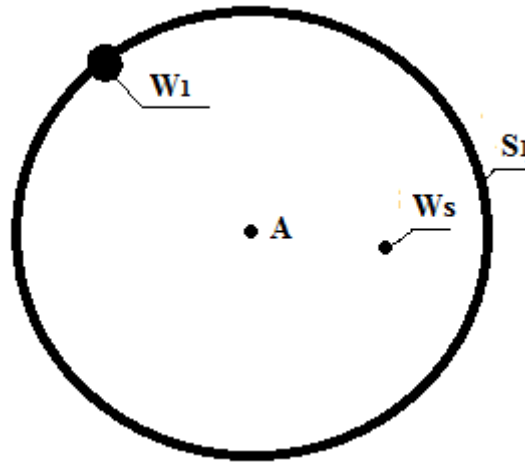


Figure 4.2<sup>11</sup>

It is worth noting that in DeRose's contextualist account of knowledge ascription, the counterfactual analysis of the safe belief plays a crucial role. So, we shall just put aside the issue of the context-sensitivity of 'know' temporarily and instead focus on the issue concerning what is a plausible account of the safe belief for DeRose's theory.

Unfortunately, DeRose himself never explicitly provides such an account of how to define the matching of belief and fact throughout the sphere of epistemically relevant worlds in a given context  $C$ . However, there remain certain clues for us to provide an account that would fit with DeRose's theory. In his critical commentary paper (i.e., DeRose 2004) on Sosa's account of the safety principle, DeRose explicitly embraces a

<sup>11</sup> Figure 4.2 is adapted from (Blome-Tillmann 2009, 388).



contextualized version of the safety principle and rejects Nozick's sensitivity principle.

According to Sosa<sup>12</sup>, a subject's knowledge that  $p$  entails that her/his belief that  $p$  is safe.

The definition of a safe belief is formulated in the subjunctive mood: a subject's belief that  $p$  is safe if and only if that very subject would not have held it without it being true.

Transforming this into the symbolic form:

A subject's belief that  $p$  (i.e.,  $B(p)$ ) is safe if and only if  $B(p) \Box \rightarrow p$ .

On the other hand, the sensitivity of a belief can be defined as:

A subject's belief that  $p$  (i.e.,  $B(p)$ ) is sensitive if and only if  $p \Box \rightarrow B(p)$ .

Since DeRose is also inclined to accept (a contextualist version of) safety and reject sensitivity, following Blome-Tillmann's suggestion, we can formulate a belief/fact matching principle roughly as follows:

(M) A subject's belief that  $p$  matches the facts in  $w$ , if and only if, the subject believes  $p$  in  $w$  only if  $p$  in  $w$ .

Put (M) formally:

(M) (A subject's belief that  $p$  matches the facts in  $w$ ) if and only if (the subject believes  $p$  in  $w \rightarrow p$  in  $w$ .) (cf. Blome-Tillmann 2009, 391).

However, as Blome-Tillmann indicates, (M) implies an implausible account concerning beliefs in necessary truths. Since a necessary truth holds in all possible worlds, the consequent of the conditional (the subject believes  $p$  in  $w \rightarrow p$  in  $w$ .) would always be

---

<sup>12</sup> For Sosa's detailed discussions of safety and sensitivity, see (Sosa 2000; 2007, 22-43; 2011, 67-95).

satisfied. Thus, if  $p$  is a necessary truth, then, one's belief that  $p$  will, as a matter of necessity, match the fact in all possible worlds, which necessarily implies that the belief that  $p$  matches the facts throughout any given sphere of epistemically relevant worlds, since the sphere of epistemically relevant worlds is a sub-set of the set of all possible worlds. In order to avoid such a counterintuitive consequence, Blome-Tillmann suggests that (M) should be strengthened as follows:

(M\*) For any possible world  $w$  that is close to the actual world  $A$ ,  
(a subject  $S$ 's belief that  $p$  matches the facts in  $w$ ) if and only if [( $S$  believes  $p$  in  $w \rightarrow p$  in  $w$ ) & ( $S$  believes  $\sim p$  in  $w \rightarrow \sim p$  in  $w$ )] (ibid., 392).

Thus, (M\*) allows a person to fail in knowing a necessary truth: either she does not believe  $p$  in  $w$  or in a sufficiently nearby possible world she falsely believes that  $\sim p$ ; but, in either case, even granted that  $p$  is a necessary truth (and therefore  $p$  is the case in every possible world), the subject does not know that  $p$ , since one of the necessary conditions of 'know' fails to be satisfied. Thus, in a given context  $C$ , the subject does not know that  $p$  in  $C$ , if there is one possible world within the corresponding sphere of epistemically relevant worlds in that context, in which the counterpart subject forms a false belief with respect to  $p$ , since the subject's belief that  $p$  does not match facts throughout the corresponding sphere of epistemically relevant worlds.

Bearing the above hints in mind, we now can understand why DeRose's theory implies that Dr. P does not know that nothing can travel faster than light. Since  $S_1$  is such a huge sphere that even  $w_s$  can fall in  $S_1$ , it seems quite obvious that in  $w_s$  the counterpart

Dr. P, as a victim of skeptical manipulation, can easily have a false belief that there is something that can travel faster than light. Besides this, there seem to be some other possible worlds that are even closer to the actual world where the subject in question can have the same false belief that may be generated by a misunderstanding of certain principles in the theory of relativity. Thus, we can clearly see that Dr. P's belief that nothing can travel faster than light cannot match the facts throughout the sphere  $S_1$ . According to DeRose's account, the above observation would force us to conclude that Dr. P does not know that nothing can travel faster than light even in the ordinary conversational context.

I think Blome-Tillmann's counterexample thus indicates a serious challenge to DeRose's contextualist theory. A more general lesson can be drawn from the above discussion. DeRose's contextualism actually fails to block the relevance of skeptical challenges to a huge amount of important everyday knowledge that concerns the intrinsic laws or features of our actual world. Under DeRose's interpretation, when we discuss this kind of knowledge, we shall see that some skeptical possible worlds would fall into the corresponding sphere of epistemically relevant worlds and this makes the skeptical worlds relevant to our ordinary knowledge about the laws of nature in the actual world. In these kinds of situations, our ordinary knowledge of the intrinsic laws of nature would always be denied.

Some contextualists may just bite the bullet and concede that, while we may have to give up ordinary knowledge concerning the laws of nature in our actual world, we

are still able to protect a large amount of ordinary knowledge such as ‘I know I have hands.’ However, the situation is actually even worse than it originally appears. Let us go back to the dialogue between Dr. P and Dr. L. Suppose, after he hears Dr. P’s assertion, Dr. L says,

(2) I know that either I have hands or nothing can travel faster than light.

Our pre-theoretical intuition is that Dr. L does also have the above knowledge. But, according to DeRose’s theory, the corresponding sphere  $S_2$  of epistemically relevant worlds now is even larger than  $S_1$ , since  $S_2$  is expanded to include the closest possible world  $w_2$  where the counterpart Dr. L has no hands and there is something that can travel faster than light. Similarly, DeRose’s theory will indicate that Dr. L’s belief that either he has hands or nothing can travel faster than light cannot match the facts throughout  $S_2$ , because in a skeptical world the counterpart Dr. L can be easily deceived to form a false belief that she has no hands and there is something that can travel faster than light. Thus, under DeRose’s interpretation, Dr. L does not know that either she has hands or nothing can travel faster than light, since DeRose also accepts the epistemic closure principle which can be expressed at the meta-linguistic level:

For any fixed context  $C_i$ , if a subject knows that  $p$  in  $C_i$  and  $p$  entails  $q$ , then she knows that  $q$  in  $C_i$ .<sup>13</sup>

Since Dr. L does not know that either she has hands or nothing can travel faster than light,

---

<sup>13</sup> Admittedly, this is really an over-simplified version of the epistemic closure principle. But let us just use it for the current argument provisionally.

and that either she has hands or nothing can travel faster than light is entailed by the proposition that she has hands, by using the epistemic closure principle together with *modus tollens*, DeRose would have to assert that Dr. L does not know that she has hands either<sup>14</sup>, which is almost tantamount to the skeptical denial of our everyday knowledge ascriptions. On this pattern, we can see that most (if not all) ordinary knowledge ascriptions can be undermined since the skeptical possibilities can be imported as relevant ones to our everyday knowledge ascriptions. Thus, DeRose's contextualist theory cannot protect our everyday knowledge ascriptions from a skeptical challenge.

In sum, in this chapter we can see that contextualists who follow DeRose's route cannot even safeguard our ordinary knowledge ascriptions against direct skeptical attacks. Blome-Tillmann's counter-example indeed poses a serious challenge towards DeRose's contextualist theory of knowledge ascriptions.

### 4.3 CONCLUSION

As I have argued, when confronted with skeptical problems, some supposed 'theoretical advantages' of contextualism are actually illusory— it cannot really achieve the elegant balance between the intuition in our ordinary knowledge ascriptions and the intuition embodied in the skeptical challenges. Working with the indirect concession of knowledge

---

<sup>14</sup> The reasoning can be explicitly indicated as follows: Suppose the current context is C and is fixed and let  $p :=$  Dr. L has hands,  $q :=$  either Dr. L has hands or nothing can travel faster than light. Evidently,  $p$  entails  $q$ , since  $p$  is the first disjunct of  $q$ . In C, the closure principle can be exemplified as: If Dr. L knows that  $p$  and  $p$  entails  $q$ , then Dr. L knows that  $q$ . Since it is presupposed that Dr. L does not know  $q$ , by applying *modus tollens* to the closure statement, we can derive that either Dr. does not know that  $p$  or  $p$  does not entail  $q$ . But, it is logically true that  $p$  entails  $q$ . Therefore, Dr. L does not know that  $p$  (i.e., Dr. L does not know that she has hands).

ascriptions strategy, these competing intuitions would put contextualism into a dilemma, which reveals that contextualism has no substantial privileged theoretical advantages over its rivals. On the other hand, when confronted with direct skeptical challenges, the most prominent, influential and sophisticated form of contextualism is shown to fail to dissolve the skeptical challenge. In neither respect, therefore, does contextualism provide a better result than its rivals, since it seems that contextualism does not meet the skeptical challenge.

However, contextualists may concede that their theory does not provide a good account of the skeptical problem; but they may still think contextualism can provide a satisfactory account of the epistemic closure principle on knowledge, which is an important component of the skeptical argument. This will lead us to the discussion of contextualism and the epistemic closure principle in the next chapter.

## **CHAPTER 5: CONTEXTUALISM AND CLOSURE (TOGETHER WITH SKEPTICISM)**

The issues about closure principles are currently hotly-debated topics in contemporary epistemology and in this chapter an investigation of closure principles on knowledge will be pursued. I will conclude at the end of this chapter that neither Jonathan Schaffer's contrastivism nor other non-contrastivist forms of contextualism provide us with a satisfactory account of closure principles on knowledge, since a tension is identified among their accounts of epistemic modesty, closure principles on knowledge and the context-sensitivity of 'know.' However, before we evaluate the contextualist account of closure principles on knowledge, we'd better first set up a preliminary outline of different versions of closure schemas on knowledge, which will serve as the foundation for the remaining discussions in this chapter.

### **5.1 CLOSURE PRINCIPLE OF KNOWLEDGE: A PRELIMINARY OUTLINE**

The closure principle that is currently debated in contemporary epistemology is actually an analogue to the mathematical concept of closure, namely

A set  $\Gamma$  is closed under an operation  $\lambda$  =<sub>df.</sub> For any element  $x$  that is in  $\Gamma$ , if  $y = \lambda(x)$ , then  $y \in \Gamma$ .

In the epistemological context, we can see that here the set  $\Gamma$  would be those propositions that serve as knowledge contents for a person  $S$ . So, the set  $\Gamma$  can be defined as those propositions that are known by  $S$ ; in other words, if we use  $K_{sp}$  to express 'S knows that

$p$ , then, the set  $\Gamma$  can be defined as  $\{p \mid Ksp\}$ . The simplest version of the closure principle on knowledge is that knowledge is closed under logical implication: if S knows that  $p$  and if  $p$  logically implies  $q$ , then S knows that  $q$ . In this sense, the set  $\Gamma$  would be deductively closed. Thus, dropping the set-theoretic notation, this gives us:

Closure under Logical Implication (CLI):  $[Ksp \ \& \ (p \rightarrow q)] \rightarrow Ksq$ .<sup>1</sup>

However, as many philosophers correctly indicate, CLI is indefensible, because it explicitly indicates that one can infer that S knows that  $q$  from that S knows that  $p$  “*solely* on the basis of the fact that  $q$  follows logically from  $p$ ” (Hintikka 1962, 30, italics added). It is bizarre to suggest that a person S should know all the propositions that are deductively implied by what she/he currently knows. Counterexamples to CLI can be found quite often in our everyday life. For instance, there is a student who grasps Euclidean geometry quite well and is competently able to prove some theorems from the given axioms. However, she/he does not know some quite distant consequences of those axioms, although those consequences are indeed implied by the axioms, because the person in question may fail to see that the axioms entail those consequences (Cf. Hintikka 1962, 30-31).

Thus, CLI needs to be emended somehow so that the above counterexamples will not work against it. It is helpful if we can first consider ways in which we can bring a person who knows that  $p$  but denies that he knows  $p$ 's logical consequence  $q$  to

---

<sup>1</sup> The definition is adopted and revised from (Kvanvig 2008, 458).



acknowledge that he also knows  $q$ , so that we may find some factors that can be added to CLI to make a more plausible closure principle. Here are some considerations:

[S]uppose that a man says to you, “I know that  $p$  but I don’t know whether  $q$ ” and suppose that  $p$  can be shown to entail logically  $q$  by means of some argument which he would be willing to accept. Then you can point out to him that what he says he does not know is already implicit in what he claims he knows. If your argument is valid, it is irrational for our man to persist in saying that he does not know whether  $q$  is the case. If he is reasonable, you can thus persuade him to retract one of his statements *without imparting to him any fresh information beyond certain logical relationships* (the rules of which he is assumed to master right from the beginning). You have done this by pointing out to him that he would have come to know that  $q$  all by himself if he had followed far enough to the consequences of what he already knew (Hintikka 1962, 31, italics added).

Hintikka suggests that we, rational persons, also have a certain inclination such that “we have every reason to follow up the logical consequences of what we know to some extent, one of them being the fact that, in the eyes of the law, people are presumed to intend (and hence to know) the reasonable and probable consequences of what they knowingly do” (ibid., 35). According to this understanding, it is the remoteness or obscurity of the logical relation between  $p$  and  $q$  that blocks us from knowing the logical consequence. So Hintikka goes on to suggest that if  $p$  logically implies  $q$  in a way that is obvious enough for the agent to grasp, the closure principle should remain sustainable,

If you say you know that  $p$  and if  $q$  obviously follows from  $p$ , then you are likely to admit that you know that  $q$ , too. (Notice, incidentally, that this is the case even if you are lying in saying that you know that  $p$ .) This likelihood is, roughly speaking, the greater the shorter the deductive chain which connects  $p$  and  $q$  (ibid., 35).

As Hintikka indicated, there probably should be some property that is held by the logical implication in question so that a person  $S$  can have epistemic access to the logical connection between the two propositions  $p$  and  $q$  in order for  $S$  to see (and then to grasp) how  $p$  logically implies  $q$ . Taking this hint into consideration in emending CLI, we may derive a promising closure schema as follows,

Closure Schema (CS):  $[Ksp \ \& \ (p \rightarrow q) \ \& \ A_s(p \rightarrow q)] \rightarrow Ksq^2$  (where ‘ $A_s(p \rightarrow q)$ ’ means  $S$  has ‘epistemic access’ to  $p \rightarrow q$ .)

The crucial issue here is what ‘epistemic access,’  $A_s$ , should be in CS. One option is this: if the logical implication from  $p$  to  $q$  is *known* by  $S$ ,  $S$  then knows that  $q$ .<sup>3</sup> Thus, we can derive another closure principle of knowledge:

Closure under Known Implication (CKI):  $[Ksp \ \& \ Ks(p \rightarrow q)] \rightarrow Ksq$ .<sup>4,5</sup>

However, some epistemologists still find that CKI is objectionable, because CKI does not capture all the necessary information hinted at above. From ‘ $S$  knows that  $p$ ,’ and ‘ $S$  knows that  $p$  deductively implies  $q$ ’ in the antecedent of CKI, we cannot conclude that  $S$  does competently deduce  $q$  from  $p$  and form the corresponding belief that  $q$ . Due to the complexity of the mechanism of belief-formation it seems quite possible for  $S$  to fail to know that  $q$  even if both conjuncts in the antecedent of CKI are true. In other words, CKI

<sup>2</sup> This is adapted from (Kvanvig 2008, 458).

<sup>3</sup> For instance, Timothy Williamson indicates that one of the ways for  $S$  to have a good epistemic access to the logical implication in question is for  $S$  to attain “reflective equilibrium over the propositions at issue by completing his deductions” (Williamson 2000), 116).

<sup>4</sup> This is adapted from Kvanvig’s “Known implication closure” in (Kvanvig 2008, 458).

<sup>5</sup> It is redundant for us to keep “ $p \rightarrow q$ ” as an independent conjunct in the antecedent of the formula, if we grant that knowledge is factive.

does not ensure that S does form a belief that  $q$  by knowing both that  $p$  and that  $p$  implies  $q$ . In order to fix the belief problem in CKI, there are two promising approaches: (1) to strengthen the antecedent of CKI; (2) to weaken the consequent of CKI.

In the literature concerning epistemic closure, it is quite easy to find many epistemologists who take the first approach to provide more reasonable formulations of the closure principle. For instance, Gettier suggests a version of the closure principle as follows:

[F]or any proposition  $p$ , if S is justified in believing  $p$ , and  $p$  entails  $q$ , and S deduces  $q$  from  $p$  and accepts  $q$  as a result of this deduction, then S is justified in believing  $q$  (Gettier 1963, 121, italics added and some symbols adapted).

When we compare this with CKI, it can be easily seen that Gettier replaces  $K_S(p \rightarrow q)$  by two clauses in the antecedent, namely: ‘S deduces  $q$  from  $p$ ’ and ‘S accepts  $q$  as a result of this deduction.’ The newly added clauses block the counterexamples previously raised. However, Hawthorne recently provides a somewhat more thorough and detailed closure principle by further qualifying the antecedent of CKI, which is named as ‘Single-Premise Closure’ (SPC) in his book:

Necessarily, if S knows  $p$ , competently deduces  $q$  and thereby comes to believe  $q$ , while retaining knowledge of  $p$  throughout, then S knows  $q$  (Hawthorne 2004, 31).

Suppose we can express “S believes that  $q$  based on the competent deduction from that  $p$  and that  $p$  implies  $q$  while retaining knowledge of  $p$  throughout” by the operator ‘ $B^*sq$ ’; then, we can take the insight that we learn from both Gettier and Hawthorne and

formulate an antecedent-strengthened version of CKI as follows:

Antecedent-Strengthened CKI (CKI-AS):  $\{Ksp \ \& \ Ks(p \rightarrow q) \ \& \ B^*sq\} \rightarrow Ksq.$

It should be noticed that CKI-AS still preserves the concept of ‘closure’ in a mathematically precise sense, since the crucial concept shared in both the antecedent and the consequent remains ‘K.’

The second approach to fix the problems in CKI is to weaken the consequent. Since S may fail in believing that  $q$  and therefore fail in knowing that  $q$ , even though S knows both that  $p$  and that  $p \rightarrow q$ , one straightforward and immediate remedy is to replace ‘Ksq’ in the consequent of CKI by some weaker concept or operator. One candidate available here is to replace ‘S knows that  $q$ ’ by ‘S is in a position to know that  $q$ .’ The locution ‘being in a position to know’ should be understood as not implying the corresponding belief in the proposition  $q$  in question. According to Jonathan Schaffer, the locution can be “understood as satisfying the evidential component of knowledge” (Schaffer 2007, 235). It should be noticed that, although some contemporary epistemologists do apply this concept in formulating an appropriate version of the epistemic closure principle<sup>6</sup>, detailed discussions of the concept of ‘being in a position to know’ are quite rare in the literature on closure principles and on skepticism (cf. David & Warfield 2008, 168). But, for the sake of the current discussion, we are satisfied with the intuitive understanding of this locution. If we use the operator ‘[[K]]sq’ to express that ‘S

<sup>6</sup> For instance, the locution ‘being in a position to know’ is used in the following papers: David and Warfield 2008; Kelp 2011; Klein 2004; and, Schaffer 2007.

is in a position to know that  $q$ ,' we can derive a corresponding consequent-weakened version of CKI as such,

Consequent-Weakened CKI (CKI-CW):  $\{Ksp \ \& \ Ks(p \rightarrow q)\} \rightarrow [[K]]sq$ .

One clarification needs to be addressed: When we compare CKI-CW with CKI-AS, we can explicitly identify that CKI-CW is actually no longer a *closure* principle on knowledge in the mathematically precise sense, because the key operators in the antecedent and in the consequent are different. But some key features of the knowledge operator remain preserved by the '[[K]]' operator; for instance, '[[K]]' remains surely factive. However, I will just ignore this complexity concerning the mathematical accuracy of the term 'the closure on knowledge' in the remaining discussion.

With the assistance of this preliminary outline of different versions of the closure principle, we now have set up a framework within which different evaluations and arguments for and against closure on knowledge can be addressed.

## **5.2 TWO TYPES OF APPROACH TO THE SUPPOSED FAILURE OF CLOSURE**

With the framework that has been set up in the previous section, we are now able to discuss two prominent types of approach, which are designed to convince us to abandon closure principles on knowledge. One is the Dretskean approach, the other one is the Nozickean approach. I will argue in this section that neither of them work well for their original purpose and therefore fail in convincing us to abandon closure principles on knowledge.

Before I discuss the argument against the closure principle on knowledge that is provided by Dretske and Nozick, some clarifications should be addressed here. First, both Dretske and Nozick are important epistemologists who propose that we should abandon the closure principle on knowledge. Second, their thoughts are historically relevant to our current discussion and they should be regarded as the pioneering advocates of the failure of the closure principle on knowledge. Third, for historical accuracy, both Dretske and Nozick argued that it is CKI that should be abandoned when they originally published their work (cf. Dretske 1970; Nozick 1981). But, Dretske later thinks that even (CKI-AS) and (CKI-CW) should be abandoned as well (cf. Dretske 2005a, 2005b). Since we have no significant disagreement with Dretske with respect to CKI, we will then devote our discussion of Dretske's new idea concerning the failure of (CKI-AS) and (CKI-CW). Last, although it is acknowledged that Nozick's argument is *precisely* against CKI, as will be shown, the methodological considerations in Nozick's argument can be applied against the plausibility of (CKI-AS) and (CKI-CW). Thus, when we evaluate his idea, Nozick's methodological considerations will be the main issue for us.

With the above clarification at hand, however, it seems better for us first to briefly discuss the skeptical argument that involves closure on knowledge, since both Dretske's theory of relevant alternatives and Nozick's sensitivity condition on knowledge are deeply connected with the problem of skepticism.

### **5.2.1 SKEPTICISM AND THE CLOSURE PRINCIPLE OF KNOWLEDGE**

According to some philosophers' understanding, closure principles on knowledge are one

of the most important devices that support skepticism. Consider a simplified version of a skeptical argument, which is called ‘the Argument from Ignorance’ by DeRose (1995, 1):

**The Argument from Ignorance (AI)**

1. I don’t know that not-H.
2. If I don’t know that not-H, then I don’t know that O.

So, C. I don’t know that O.

Where O is a proposition about the external world one would ordinarily think one knows (e.g., I have hands) and H is a suitably chosen skeptical hypothesis (e.g., I am a bodiless brain in a vat who has been electrochemically stimulated to have precisely those sensory experiences I’ve had, henceforth a BIV.)

The closure principle that is embodied in the second premise of AI<sup>7</sup> together with the statements that ‘I know that O’ and ‘I do not know that not-H’ comprise an inconsistent set. The premises of AI and its conclusion comprise a set of “mutually inconsistent propositions each of which enjoys some plausibility when considered apart from the others” (Schiffer 1996, 328). In order to dissolve the puzzle, we have to give up (at least) one of the propositions in the set. Some philosophers suggest we should admit the failure of the closure principle of knowledge.<sup>8</sup> So, now we consider some arguments against the closure principles on knowledge<sup>9</sup> in the following two sections.

---

<sup>7</sup> However, it should be emphasized here in advance that the second premise in AI merely embodies an (over-)simplified version of the closure principle. With the preliminary discussion of the form of closure principle of knowledge in §5.1 of this chapter, giving the most charitable interpretation, we suggest that the second premise in AI can only be regarded as an embodiment of CKI.

<sup>8</sup> Some other options are: a (neo-)Moorean epistemologist would reject the first premise of AI, which suggests that we have no knowledge with respect to the falsity of the skeptical hypotheses. But, DeRose and his fellow contextualists think this (neo-)Moorean reply violates *epistemic modesty*. According to the contextualist view, since (neo-)Mooreans have no conclusive evidence against the skeptical hypotheses, (neo-)Mooreans are dogmatists who reject skepticism in an implausible way. Contextualists think their theory is the best one, which not only preserves epistemic modesty with the explanation of why the first premise is true (in some contexts) but also protects our ordinary knowledge against the skeptical attack. The detailed discussion of contextualism will be provided in §5.3.

<sup>9</sup> However, for historical accuracy, it should be noted that some philosophers who are proponents of the failure of the closure principles of knowledge explicitly deny that it is their intention to refute skepticism.

### 5.2.2 A DRETSKEAN APPROACH TO THE FAILURE OF CLOSURE

Actually, Dretske's denial of closure seems to be the only way for him to dissolve the skeptical puzzle about knowledge, since, on the one hand, he thinks the first premise in AI is intuitively plausible and, on the other hand, he thinks we should deny the conclusion in AI. A correct attitude toward the puzzle, he maintains, is that "we simply admit that we do *not* know that some of these contrasting 'skeptical alternatives' are *not* the case, but refuse to admit that we do not know what we originally said we know" (Dretske 1970, 1016, italics originally). However, Dretske also indicates that his denial of closure is not motivated merely by the desire to dissolve the skeptical puzzle about knowledge— according to him, the failure of closure is "naturally" derived from a very general analysis of the nature of knowledge. The analysis is abstracted from a case study concerning zebras in a zoo.

**(The Zebra Case):**

S takes his son to the zoo, sees several zebras and, when questioned by his son, S tells him that the animals are zebras. Suppose S does know what zebras look like, and this is the city zoo, and the animals are in a pen clearly marked 'Zebras.' In this sense, S can plausibly claim that he knows that the animals are zebras. And it seems quite evident that something's being a zebra implies that it is not a mule cleverly disguised by the zoo authorities. Let us suppose S also knows this evident entailment. But, does S know that the animals are not mules cleverly disguised by the zoo authorities? (Dretske 1970, 1015-1016, with some adaptation).

---

For instance, Dretske explicitly claims that he "wasn't led to deny closure because it represented a way around skepticism" and his denial of closure was a result of what he thought to "be a plausible condition on the evidence (justification, reasons) required for knowledge" (Dretske 2005b, 43). Dretske claims that his theory of knowledge "leads quite naturally (not inevitably, but naturally) to a failure of closure" (Dretske 2005a, 19), which is normally regarded as a solution to the skeptical puzzle. And many philosophers who deny closure (including Dretske himself) are quite happy that their denial of closure leads to a solution to the skeptical puzzle even though such a result is only a by-product of their theories of knowledge.



By using the above case, Dretske wants to suggest that the following argument is *invalid*:

- 1\*. S knows that these animals are zebras.
  - 2\*. S knows that if these animals are zebras then they are not cleverly disguised mules
  - 3\*. If (S knows that these animals are zebras and S knows that if these animals are zebras then they are not cleverly disguised mules), then S knows that these animals are not cleverly disguised mules.
- So, C\*. S knows that these animals are not cleverly disguised mules.

Dretske suggests that C\* is implausible because the evidence that S “*had* for thinking them [i.e., those animals] zebras has been effectively neutralized, since it does not count toward their *not* being mules cleverly disguised to look like zebras” (Dretske 1970, 1016).

By being asked whether those animals are cleverly disguised mules, S may suddenly recognize a bunch of questions to which she/he does not have enough information to answer; for instance, ‘Have you checked with the zoo authorities?’ ‘Did you examine the animals closely enough to detect such a fraud?’ etc. – these questions would neutralize S’s evidence for his previous knowledge claim that she/he knows that these animals are zebras. Therefore S does not know that those animals are not cleverly disguised mules. Since Dretske wants to hold (1\*), (2\*) and the negation of (C\*), he thinks that (3\*), i.e., the instantiation of CKI, should be abandoned.

However, before we go on with Dretske’s approach, there are some clarifications that need to be addressed here. First of all, some defenders of closure suggest that since there is no evident reason for someone to raise the question whether S can know that those animals are not cleverly disguised mules, since there is no (implicit or explicit) clue

for her/him to suggest such an alternative, such a question may be regarded as an analogue to a skeptical hypothesis. Since Dretske aims to provide a general analysis of the nature of knowledge, the Zebra Case does not serve his purpose well, since it is as odd as the skeptical cases. However, this attempt to undermine the Zebra case is misleading. Although Dretske himself does admit that the suggested alternative in the Zebra Case does sound implausible, the plausibility of the alternative is not crucial here. The crucial question we address in the Zebra Case “is not whether this alternative is plausible, not whether it is more or less plausible than that there are real zebras in the pen, but whether [S] *knows* that this alternative hypothesis is false” (Dretske 1970, 1016, italics originally). In this sense, we may regard the alternative in question as implausible, but this can only suggest that such an alternative is remote—it does not automatically imply that it is as remote as the skeptical ones. In the remainder of the discussion we treat the Zebra case as a non-skeptical case just for the sake of the reasonable evaluation of Dretske’s approach.

Secondly, what Dretske shows in his Zebra Case is the implausibility of CKI, since the premise (3\*) in question can only be treated as an embodiment of CKI. Therefore some other *plausible* closure principles, such as CKI-AS or CKI-CW, can still be held, since Dretske’s theory of knowledge does not establish a failure of either CKI-AS or CKI-CW. However, according to Dretske, a more detailed and refined articulation of closure principle does not make any real improvement, because Dretske also suggests the following closure principle is invalid:

[I]f S knows that  $p$  is true and knows that  $p$  implies  $q$ , then, evidentially speaking, this is enough for S to know that  $q$  is true. Nothing more is needed. If S believes  $q$  on this secure basis— on the basis of two things he knows to be true— then S knows that  $q$  is true (Dretske 2005a, 13).

If we interpret 'this is enough for S to know that  $q$  is true' as 'S is in a position to know that  $q$ ,' we can see that Dretske also rejects (CKI-CW). If we treat Dretske's remark on how S's belief in  $q$  is formed as something similar to  $B^*sq$ , Dretske then rejects (CKI-AS).

Dretske also provides some other reason concerning why both (CKI-CW) and (CKI-AS) are invalid: according to Dretske, there are some (what he calls) *heavyweight propositions* whose truth cannot be ascertained through our normal evidence or our perceptions. According to Dretske, the truth of those heavyweight propositions has to be presupposed so that we can talk about the truth of knowledge claims attained via *perception*.<sup>10</sup> For instance, the propositions that there is an external world, that there are material objects, etc., are all good examples of heavyweight propositions. Here is one example from Dretske (2005a, 20), which suggests that (CKI-CW) is invalid: suppose S sees there are cookies in a jar and correctly comes to know that there are cookies in a jar. In this case, a heavyweight proposition is that there is an external world, which is known to be entailed by the proposition that there are cookies in a jar. Since the truth of this heavyweight proposition cannot be established by S's senses, S is in no position to know

<sup>10</sup> This should be noticed: Dretske covertly changes the subject from the general discussion of the closure principles such as (CKI-AS) and (CKI-CW) to the discussion about whether perceptual knowledge satisfies (CKI-AS) and (CKI-CW) or not.

that there is an external world via perception. Thus, our perceptual knowledge does not satisfy (CKI-CW). What Dretske suggests is that we have to abandon not only (CKI) but also some improved closure principles such as (CKI-CW).

In order to illustrate that (CKI-AS) is in no better position, we may consider Irving Thalberg's argument against closure principles like (CKI-AS). According to Thalberg, the following closure principle, which is quite similar to (CKI-AS), should be abandoned:

For any proposition  $p$ , if a person  $S$  knows that  $p$  [by evidence propositions  $E_1 \dots E_n$  which  $S$  accepts], and  $p$  entails  $q$ , and  $S$  deduces  $q$  from  $p$  and accepts  $q$  as a result of this deduction, then  $S$  knows that  $q$  [by  $E_1 \dots E_n$ ].<sup>11</sup>

Thalberg indicates that the above closure principle would fail since the evidential justification<sup>12</sup> would fail to be closed even under known implication. I think both Thalberg and Dretske share similar intuitions on evidence— since evidence is not normally transmissible through logical entailments (no matter if they are known or not), it seems quite natural to suggest that the agent in question would fail in possessing the knowledge in the consequent of closure principles, if we insist that the evidence should be the same for  $q$  as for  $p$ . Thus, “if knowledge that  $p$  requires one (or one's evidence) to

---

<sup>11</sup> Adapted from (Thalberg 1974, 347-348). Note: the clauses in the square brackets ‘[]’ are directly quoted from Thalberg's paper. However, it is worth noting that the consequent of Thalberg's version of the closure principle is different from (CKI-AS), because Thalberg explicitly specified that  $S$ 's knowledge of  $q$  is based on the evidence propositions  $E_1 \dots E_n$ . But there is no such restriction in the consequent of (CKI-AS).

<sup>12</sup> However, Thalberg (1974) proposes a distinction between evidential justification and strategical justification. Although he suggests a closure principle concerning evidential justification is doomed to fail, Thalberg does think a closure principle involving strategical justification is more promising. However, since Thalberg's discussion is mainly concerned with a necessary component of knowledge (i.e., justification) rather than knowledge itself directly, I will not give a detailed discussion of his thought here.

exclude not all, but only all relevant alternatives to  $p$ , then, it seems, one is committed to a failure of closure” (Dretske 2005a, 19). According to these epistemologists who want to deny the closure principle, this kind of general methodological consideration “leads quite naturally (not inevitably, but naturally) to a failure of closure” (ibid., 19). Thus, Dretske actually wants to abandon both (CKI-AS) and (CKI-CW).

Bearing this situation in mind, those philosophers who share similar ideas with Dretske have to explicitly reject the epistemic closure principle in general and endorse the proposal that in order for  $S$  to know that  $p$ ,  $S$  does not have to rule out all of those logical possibilities that are incompatible with his knowledge that  $p$  but rather only those ‘relevant alternatives’ to  $p$ . Take the Zebra case, for example. According to the Relevant Alternative theory, in order for  $S$  to know that those animals are zebras,  $S$  need not rule out the possibility that they are cleverly disguised mules but rather those relevant alternatives, such as that  $S$  is incompetent to tell what Zebras look like, or that  $S$  cannot recognize the label on the pen properly, and so on. Therefore, in a given case a knower need only rule out those alternatives that are both relevant to and incompatible with his knowledge claim, but not all logical possibilities that are incompatible with my knowledge claim are relevant.

This theory also sheds light upon the Cartesian skeptical problem: in order for  $S$  to know that she/he has two hands, the possibilities that  $S$  has to rule out are those ones that are relevant, for instance, that  $S$  lost one or two hands in a traffic accident, or that  $S$  only has stumps. But, the possibility that  $S$  is deceived in believing that she/he has hands

by an evil demon need not be ruled out by S. As Dretske suggests, if relevant alternative theory is correct, we have to acknowledge that the epistemic closure principle is not universally valid, because even though S is not in a position to know that S is not in a skeptical scenario S can correctly claim that she/he knows that she/he has two hands. Thus, those advocates of the failure of closure, who endorse Dretske's relevant-alternative theory, would happily reject the Cartesian skeptical argument, since they have already undermined the epistemic closure principle, which would block the inference from the premises to the conclusion in AI.

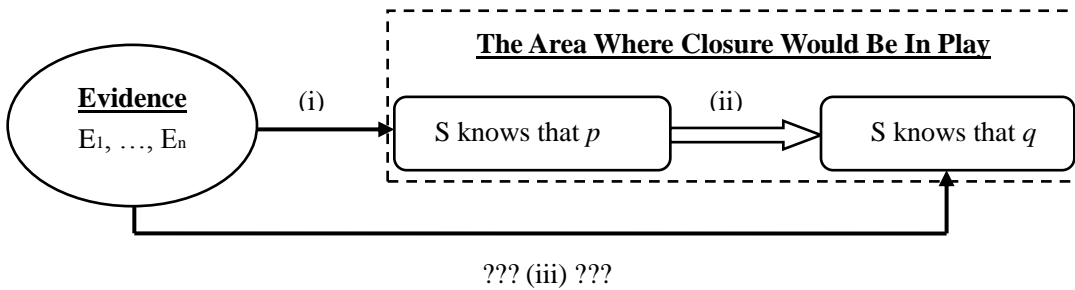
Given this outline of Dretske's approach to the denial of closure such as (CKI-AS) or (CKI-CW), we may start to evaluate his approach in order to see whether it is really plausible.

I would side with Peter D. Klein and suggest that the Dretske-type of approach toward the failure of closure is actually based upon a mistaken target. As Klein indicates, the mistaken target for this Dretske-type of approach is:

$(\forall x)(\forall y)$ [If  $e$  is an adequate source of S's justification for  $x$ , and  $x$  entails  $y$ , then  $e$  is an adequate source of S's justification for  $y$ ] (Klein 1995, 221).

As Klein correctly indicates, it is the above mistaken target, rather than epistemic closure itself, that is under attack by Dretske and Thalberg. It should also be emphasized that the mistaken target is stronger than the closure principles that we normally discuss. In other words, "the mistaken target implies the Closure principle; but the Closure Principle does not imply the mistaken target" (Klein 1995, 221); so, even granted the plausibility of the

counterexamples presented by Dretske and Thalberg, those counterexamples only work against the mistaken target rather than closure itself. We can use Figure 5.1 to explicitly schematize our idea here and illustrate what mistakes both Dretske and Thalberg are committed to,



**Figure 5.1**

As shown in Figure 5.1, those who would attack closure should focus on the area where closure principles may be in play (i.e., the process (ii)). But what Dretske and Thalberg question is process (iii). If we isolate the area and focus on it in order to examine the closure principles, it is not necessary for us to take process (iii) into consideration. However, even granted a charitable interpretation of Dretske and Thalberg's ideas concerning the relevance of process (iii), when we examine process (ii), it remains hard to think that their suggestions work as well. It is quite evident that the immediate ancestor of the proposition that S knows that  $q$  is the knowledge claim that S knows that  $p$  rather than the set of evidence of  $E_1, \dots, E_n$ . If we want to correctly indicate the source of S's knowledge that  $q$ , it is the set of evidence  $\{E_1, \dots, E_n\}$  *together with* S's knowledge that  $p$  (plus the known deductive entailment from  $p$  to  $q$ ).

However, epistemologists who pursue a Dretskean approach may suggest that the problems with the Zebra Case do not significantly undermine the correctness of the underlying deep insight such that in general closure principles, such as (CKI-AS) and (CKI-CW), are problematic— what needs to be done is to find some more sophisticated cases that properly illustrate the insight. Here come Robert Audi’s series of Arithmetical Calculation Cases. According to Audi, Drestke is right about this: it is not *obvious* that knowledge is always closed under known deduction and therefore Audi says that “it is at least not obvious that knowledge is always transmitted across valid deductive inferences (I mean, of course, the non-trivial kind, which have consistent premises none of which is equivalent to the conclusion)” (Audi 1988, 77). Bearing this consideration in mind, Audi introduces his original case of arithmetical calculation as follows,

**(Arithmetical Calculation Case I)**

I add a column of fifteen figures, check my results twice, and thereby come to know, and justifiably believe, that the sum is 10,952. As it happens, I sometimes make mistakes, and my wife (whom I justifiably believe to be a better arithmetician) sometimes corrects me. Suppose that, feeling unusually confident, I now infer that if my wife says this is not the sum, she is wrong. From the truth that the sum is 10,952, it certainly follows that if she says it is not, she is wrong. If it *is* the sum, then if she denies it, she is wrong. But even though I know or justifiably believe that this is the sum, can I, on this basis, *automatically* know or justifiably believe the further proposition that if she says that it is not the sum, she is wrong? Suppose my checking just twice is only enough to give me the *minimum* basis for justified belief and knowledge here. Surely I would then not have sufficient grounds for the further proposition that if she says the answer is wrong, she is wrong (Audi 1988, 77).<sup>13</sup>

<sup>13</sup> Audi speaks here of “justifiably believe that...,” etc, which is different from the key term in our current discussion of closure principles of *knowledge*. But, I think, since Audi himself explicitly uses the expression that ‘I know *or* justifiably believe that ...’ (italics added), we can plausibly treat them together without risking misinterpreting his idea here.



Immediately after this original case, Audi goes on to consider an objection that may be raised by defenders of closure principles: Since Audi only checked the sum twice and therefore merely reached the *minimum* requirement for his first knowledge claim, if, as Audi supposes, his wife says the answer is wrong, this would immediately put Audi's first knowledge claim in doubt, since it reduces Audi's justification for knowledge of the sum "below the threshold which it just barely reaches" (ibid., 78). Thus, Audi would no longer know that the sum is 10,952 and no counter-example to closure principle has been given. Audi thinks this objection may work well against his original case. So, he provides a more sophisticated (but rather bizarre, I think) case which can elude the above objection. Here is Audi's second case:

**(Arithmetical Calculation Case II)**

If the sum *is* 10,952, then even if there are two mistakes in the calculations I made to get it, it is *still* 10,952. This may sound strange, but the mistakes could cancel each other, say because one mistake yields a 9 instead of the correct 7, and the other yields a 6 instead of the correct 8. Now imagine that again I justifiably believe that the sum is 10,952 and know this (I have been careful enough and have not actually made any errors). Perhaps simply to test my intuitions about deductive transmission, I might infer that (even) if there are two errors in my calculation, the sum is 10,952. Surely I do not know or justifiably believe this; nor did my original, minimal justification give me situational justification for believing it (Audi 1988, 78).

Audi makes a serious mistake here: Although he expresses all the propositions in question in the present tense, one of the crucial propositions, namely '(even) if there are two errors in my calculation, the sum is 10,952,' is actually a disguised subjunctive—it should really be understood as saying 'even if there *were* two errors in my calculation,

the sum *would* still be 10,952.’ But this understanding undermines the deductive entailment. Although Audi suggests a situation to explain the case— ‘the-mistakes-could-cancel-each-other’— such a suggestion would not really save the entailment from ‘the sum is 10,952’ to ‘(even) if there are two errors in my calculation, the sum is 10,952’ when the latter proposition is understood subjunctively. Although there is a possible world in which two mistakes cancel each other and the sum remains 10,952, such a possible world would not be a near possible world— a nearer possible world would be the one in which two mistakes occur and the sum Audi can get in that possible world is no longer 10,952! The world, in which the two mistakes that may cancel each other and (thus) guide the counterpart Audi in that world in arriving at the correct answer, is rather distant, for it is only by an unlikely accident that the errors cancel each other. In fact, there are nearer possible worlds where the counterpart Audi makes two mistakes and the sum that the counterpart Audi gets is other than 10,952, although the correct answer remains 10,952. In such worlds the counterpart Audi could not correctly claim to know either that the sum is 10,952 or that if there are two errors in the calculation, the sum is 10,952. So the counterfactual entailment in the actual world (i.e., ‘even if there were two errors in my calculation, the sum would still be 10,952.’) cannot be true. Therefore Audi’s second case cannot be treated as a successful counterexample against closure principles.

So, the only arithmetical calculation that deserves serious consideration remains his original one. Pace Klein, I would suggest Audi’s first arithmetic calculation case does not successfully get out of the trap of the mistaken target, since Audi (implicitly) implies

that his *minimum* basis for his knowledge that the sum is 10,952 cannot be sufficient grounds for him to know that, if his wife says the answer is wrong, she is wrong. Since such a problem is already explained, I will not repeat this critique of Audi's case here. I think one of the crucial ideas that Audi utilizes in his first case is the instability of the borderline case of the knowledge that the sum is 10,952. Audi himself emphasizes several times that his evidence for his knowing that the sum is 10,952 *just* reaches (but does *not exceed*) the *minimum* requirement for the standard of knowledge about arithmetical calculation. Thus, Audi's knowledge that the sum is 10,952 based upon his checking his result twice is *just* "established" since the number of times he checked *just* reaches the threshold of justification for knowledge. When Audi says that it is quite unreasonable for him to claim that he is in a position to know that if his wife says the answer is wrong, she is wrong, Audi actually utilizes his "unstable" knowledge that the sum is 10,952. It should be realized that to clearly articulate a reasonable standard for knowledge concerning the minimum number of times a calculation must be checked for the result to be known is really a hard issue and our intuition on how to articulate such standard is also quite vague and may vary case by case, with the complexity of the calculation, the frequency of Audi's mistakes in calculating, etc.<sup>14</sup> This may cause someone to hesitate to ascribe to Audi the latter knowledge claim that, if his wife says the answer is wrong, then she is wrong.

---

<sup>14</sup> However, the difficulty concerning the explicit articulation of the standard would not inevitably imply or support the contextualist theory of knowledge ascriptions.

However, for the sake of the current discussion, let us set up a convention that the minimum number of times that a calculation must be checked for the result to be known is  $n$ . Suppose Audi does check his result  $n$  times, and therefore knows that the sum is 10,952. Given the deductive entailment in question is also known by Audi, according to the closure principle (CKI-CW), Audi is in a position to know that if his wife says his answer is wrong then she is wrong. There actually is no reason to suggest that Audi cannot be in such an epistemic position, because Audi's (potential) knowledge that if his wife says his answer is wrong then she is wrong would be based on his former knowledge that the sum is 10,952 (which, in turn, is based upon the original calculation and the subsequent checking for  $n$  times) together with his knowledge of the relevant entailment.<sup>15</sup> So we can plausibly suggest that the epistemic status of Audi's knowledge that if his wife says the answer is wrong then she is wrong is (at least) no worse than the epistemic status of his knowledge that the sum is 10,952. In this sense we cannot hold that Audi knows that the sum is 10,952 but simultaneously deny that he is in a position to know that if his wife says the answer is wrong then she is wrong. This examination of Audi's first Arithmetical Calculation Case would lead us into this consequence: either, Audi does know that if his wife says the answer is wrong then she is wrong and therefore the closure principle of knowledge should be valid in his first Arithmetical Calculation Case; or, Audi does not know that if his wife says the answer is wrong then she is wrong but he does not know the sum is 10,952 either, which may be regarded as a *modus tollens*

---

<sup>15</sup> I.e., (the sum is 10,952)→(if Audi's wife says the answer is wrong then she is wrong).

application of the closure principle on knowledge—neither situation favors Audi’s proposal of the failure of the closure principles on knowledge.

In sum, the Dretskean approach gives no good reason for us to deny the validity of closure principles such as (CKI-AS) and (CKI-CW).

### **5.2.3 A NOZICKEAN APPROACH TO THE FAILURE OF CLOSURE**

In this section I will take Robert Nozick as the representative for the second approach toward the failure of closure. Unlike Dretske, who explicitly denies that solving the skeptical puzzle is the crucial motivation for his denial of closure, Nozick admits that his denial of closure is (at least partially) motivated by fear of the skeptical argument AI.

According to Nozick, both statements that I know that O and that I don’t know that not-H are intuitively right. Since the plausibility of the statement that I know that O normally attracts no suspicion, the crucial point to be established here is the plausibility of the statement that I don’t know that not-H. Here is Nozick’s comment on the skeptical premise in the argument AI,

The skeptic asserts we do not know his possibilities don’t obtain, and he is right. Attempts to avoid skepticism by claiming we do know these things are bound to fail. The skeptic’s possibilities make us uneasy because, as we deeply realize, we do not know they don’t obtain; it is not surprising that attempts to show we do know these things leave us suspicious, strike us even as bad faith (Nozick 1981, 201).

Thus, if Nozick wants to dissolve the skeptical puzzle, the only way available for him is to abandon closure, because, otherwise, “if our notion of knowledge was as strong as we naturally tend to think (namely, closed under known logical implication) then the skeptic

would be right” (ibid., 242). Since Nozick does not want the skeptic to win, the only available way out of the skeptical puzzle while still preserving the other two intuitively “plausible” statements is to give up closure. However, as Keith DeRose shows in his brilliant remarks on Nozick’s position (cf. DeRose 1995, especially 27-29), Nozick’s treatment of the skeptical argument AI is really problematic. Firstly, Nozick himself realizes that we do naturally tend to hold some version of the closure principle, so we may wonder why Nozick thinks it is less intuitive than the other two statements, even granted that “further exploration and explanation is needed of the intuitive roots of the natural assumption that knowledge is closed under known logical implication” (Nozick 1981, 242). Since Nozick does not provide adequate reasons on this issue, we may suspect that his position on the denial of closure, which is based upon an obscure comparison among the intuitive appeals of the three statements, is quite dogmatic. Secondly, Nozick’s affirmation of the skeptic’s being right that we do not know his possibilities don’t obtain seems also quite dogmatic. It should be noted that, in presenting his skeptical argument AI, the skeptic actually endorses both premises; so, why is the skeptic *only* right about the first premise but not right about the second premise (i.e., closure on knowledge)? Without providing further justification, Nozick’s position seems to be no better than that of those Moorean anti-skeptics who (dogmatically) hold the idea that we do know that the skeptical possibilities don’t obtain. Lastly, but more importantly, Nozick’s denial of closure would actually commit him to an abominable conjunction, namely, we don’t know we are not handless brains in vats (BIV), but we still know that

we have hands. Thus, even granted that Nozick's account "does quite well on the relevant particular intuitions regarding what is and isn't known, it yields an intuitively bizarre result on the comparative judgment the second premise embodies" (DeRose 1995, 28). Therefore, Nozick's approach to the failure of closure by appealing to the intuitiveness of the three statements in the skeptical puzzle does not seem to be successful.

However, even if we establish the failure of Nozick's strategy of denying closure, this does not imply that Nozick's whole case against closure is doomed to collapse, since he does have another approach, which is the reason why I picked him as the representative for the second kind of approach to the failure of closure. This second kind of approach is a methodological one, which suggests that if one of the necessary conditions on knowledge is not closed under known deductive implication, neither is knowledge itself. Nozick explicitly has such an idea in mind, when he considers the belief condition on knowledge,

A belief's somehow varying with the truth of what is believed is not closed under known logical implication. Since knowledge that  $p$  involves such variation, knowledge also is not closed under known logical implication (Nozick 1981, 208-209).

However, one clarification is needed here: Nozick's methodological approach toward the failure of closure on knowledge here is a different issue from our discussion of the belief problem in the first section when we discussed different versions of closure principles of knowledge. In that section, when we suggested that  $S$  may not know that  $q$  even if she/he does know  $p$  and does know that  $p$  logically implies  $q$ , because  $S$  may fail to believe that

$q$ , we do not (explicitly or implicitly) draw any conclusion concerning the transmissibility of knowledge under known logical implication by inferring from the failure of the necessary conditions on knowledge to the failure of knowledge itself. But, Nozick takes a more general methodological perspective here. His approach can be illustrated by his discussion of his newly added third necessary condition on knowledge. After he introduces his third condition on knowledge namely that “(3) if  $p$  were false,  $S$  wouldn’t believe that  $p$ ” (Nozick 1981, 206), Nozick goes on to explain that,

This failure of knowledge to be closed under known logical implication stems from the fact that condition 3 is not closed under known logical implication; condition 3 can hold of one statement believed while not of another known to be entailed by the first. It is clear that any account that includes as a necessary condition for knowledge the subjunctive condition 3,  $\text{not-}p \Box \rightarrow \text{not-}(S \text{ believes that } p)$ , will have the consequence that knowledge is not closed under known implication (Nozick 1981, 207).

As Brueckner remarks, Nozick here endorses a methodological doctrine which implies that “knowledge is closed under known logical implication only if each necessary condition for knowing is so closed.... any correct analysis of knowledge must contain a belief condition, then it seems that the closure-defender’s project is doomed from the outset. This is because belief is apparently not closed under known logical implication” (Brueckner 1985, 91). As Ted A. Warfield correctly identifies, this argument against closure has the following form,

Where  $X$  is a proposed necessary condition on knowledge and  $R$  is a specified closure relation,  
 (P1)  $X$  is a necessary condition for knowledge.



(P2) X is not closed under R.

So, (C1) Knowledge is not closed under R (Warfield 2004, 38).

However, the above argumentation form actually is invalid, as Warfield indicates, because (P1) and (P2) together are compatible with the negation of (C1) and therefore arguments of this type commit the fallacy of composition. Warfield suggests that actually we can imagine at least two scenarios in which we can keep both (P1) and (P2) true but (C1) false:

In one simple scenario, knowledge could have the property while some necessary condition for knowledge lacks the property, if knowledge has the property in virtue of its possession by some distinct necessary condition for knowledge. In an alternative scenario, knowledge could have the property without any (proper) necessary condition on knowledge having the property if the property attaches to knowledge because of the interaction of two or more necessary conditions on knowledge. These possible ways for knowledge to have a property while some necessary condition for knowledge lacks the property are obvious and do not exhaust the ways that this situation could obtain (Warfield 2004, 38).

Back to Nozick's necessary condition 3 on knowledge, Warfield finds an even stronger counterexample to Nozick's idea. As he indicates, we can have a consistent set that involves the following four statements (cf. Warfield 2004, 39):

Sensitive belief is a necessary condition on knowledge;  
Sensitive belief fails to be closed under known logical implication;  
Knowledge is closed under known logical implication; and,  
Belief in the consequences of the subject's previous knowledge is also sensitive.

Given the consistency of these four statements, we can rule out all potential counterexamples against closure on knowledge that are constructed from the sensitivity

condition. In sum, the Nozickian approach toward the failure of closure on knowledge itself is committed to the fallacy of composition and therefore cannot provide us any conclusive reason to abandon closure principles on knowledge.

Since neither Dretske nor Nozick provides a good argument for abandoning the closure principles of knowledge, such as (CKI-AS) and (CKI-CW), in the following section I will introduce contextualism, which is claimed to be able to preserve closure on knowledge and dissolve the skeptical puzzle at the same time without violating our intuitions (too much).

### **5.3 CONTEXTUALISM AND CLOSURE**

In this section, I will first provide a rough sketch of the contextualist treatments of both closure on knowledge and the corresponding solution to the skeptical puzzle. Then, I go on to examine a contrastivist version of closure principles on knowledge, which provides us with a more formal and precise account. However, with some counterexamples to the contrastivist version of closure on knowledge, I will show that contrastivism cannot handle both closure on knowledge and the skeptical puzzle nicely at the same time. Thus our eagerness to preserve closure on knowledge and to solve the skeptical puzzle does not inevitably force us to take a contrastivist or a non-contrastivist contextualist position on knowledge ascriptions, since these theories do not work well either.

#### **5.3.1 A GENERAL SKETCH OF CONTEXTUALISM ON CLOSURE AND SKEPTICAL PUZZLES**

As I mentioned before, epistemic contextualism is, by its nature, a semantic thesis of

knowledge ascriptions, which urges that the sentence ‘S knows that *p*’ expresses different propositions in different epistemic contexts. Epistemic contextualists try to use their semantic theory of knowledge ascription to preserve the universal validity of closure principles of knowledge (cf., Stine 1976; and Cohen 1988). According to them, the fact that we rule out only relevant alternatives rather than skeptical possibilities in our ordinary practices does not necessarily imply that the epistemic closure principle is false and Dretske’s interpretation of his own Zebra Case is therefore wrong. Recall the Zebra case. According to Dretske, both statements seem to be intuitively plausible, especially when evaluated individually: on one hand, S knows that those animals are zebras; on the other hand, S does not know that those animals are not cleverly disguised mules. It is these two statements that lead Dretske to deny the epistemic closure principle. But epistemic contextualists suggest that Dretske’s intuition is wrong, because his intuition sways between two different kinds of semantic standard concerning ‘S knows that *p*.’ According to epistemic contextualism, epistemic contexts determine the semantic standards of knowledge ascriptions; thus, the ordinary context determines a semantic standard of knowledge ascriptions (let us call it the O-Standard) and any knowledge claim that is raised in that context should be evaluated by the O-Standard. Thus, if the question whether S knows that those so-called “zebras” are cleverly disguised mules is raised in this ordinary context, keeping the same standard constantly, it is utterly right to say that S is in a position to know that they are not cleverly disguised mules according to the O-Standard, because this (potential) knowledge can be inferred from S’s (O-Standard)

knowledge that those animals are zebras. On the other hand, a skeptical context would determine a skeptical semantic standard (i.e., the S-Standard); in this skeptical scenario, according to the S-Standard, S knows neither there are some zebras in the zoo nor that they are not cleverly disguised mules. So, Dretske's intuition does not show that we should abandon the epistemic closure principle but rather the inconsistency between the two standards that are fixed in their contexts respectively. Thus, according to the contextualist view, as long as we can distinguish epistemic contexts clearly and hold each semantic standard constantly in its corresponding context, there would be no ground for us to deny the epistemic closure principle.

Contextualists also claim that a similar idea can solve the skeptical puzzle as well. Recall the argument AI. In normal epistemic contexts, S does know that O according to the O-standard; but, when skeptical scenarios come to work, the standard is raised to such a demanding level, that no human beings can reach it. So, it is true that S does not know either that not-H or that O in the skeptical context. Thus, when the skeptical context is distinguished from the ordinary context, skeptics cannot use the closure principle to undermine our ordinary knowledge claims. So, epistemic contextualists think they have successfully preserved both the insights of our epistemic practices and the epistemically valuable epistemic closure principle.

However, such a rough outline of the basic idea of contextualism (which appeals to the shifts between high or low standards on knowledge) and its treatment of the epistemic closure principle, as Stephen Schiffer indicates, is insufficient, since it only

reveals how the epistemic closure principle can be preserved in a single context. We may wonder what version of the epistemic closure principle it is when we consider different contexts of knowledge ascription. Schiffer goes on to indicate that, according to this rough kind of contextualism, there are (at least) four kinds of combinations concerning the closure on knowledge ascriptions across different contexts. Suppose we express that ‘S knows that  $p$  according to a lower standard on knowledge’ by ‘S knows that  $p$  relative to Easy;’ and, ‘S knows that  $p$  according to a higher standard on knowledge’ by ‘S knows that  $p$  relative to Tough.’ And suppose further that it is known that  $p$  deductively implies  $q$ . Since the term ‘it is known that ...’ is used here, according to the current discussion, it should also be split into the following two notions, namely, ‘to be known relative to Easy’ and ‘to be known relative to Tough.’ This will generate some perplexity of the discussion concerning whether the entailment from  $p$  to  $q$  is known relative to Easy or is known relative to Tough. Schiffer himself also realizes the problem and sets up a convention that the deductive entailment from  $p$  to  $q$  is known in the strictest sense, which is formulated by Schiffer as  $K^*s(p \rightarrow q)$ .<sup>16</sup> Thus there are four possible closure principles, namely:

Given that  $K^*s(p \rightarrow q)$ ,

- (a) If S knows that  $p$  relative to Easy, then S knows that  $q$  relative to Easy.
- (b) If S knows that  $p$  relative to Tough, then S knows that  $q$  relative to Tough.
- (c) If S knows that  $p$  relative to Tough, then S knows that  $q$  relative to Easy.
- (d) If S knows that  $p$  relative to Easy, then S knows that  $q$  relative to Tough (Schiffer 1996, 320, with adaption).<sup>17</sup>

<sup>16</sup> For a relevant discussion, also see my footnotes 17 and 18 in this chapter.

<sup>17</sup> As mentioned before, Schiffer sets up a convention that, rather than “to be known relative to Easy” or “to be known relative to Tough,” the deductive implication from  $p$  to  $q$  is known\*, where “a proposition  $x$

The closure principles (a), (b) and (c) seem to be intuitively plausible and acceptable provided some reasonable suppositions about the relationship between the standard Easy and the standard Tough. The only counter-intuitive principle is (d), which is explicitly dropped by contextualists. Here are Schiffer's remarks on them,

The first two propositions [i.e., (a) and (b)] have their truth secured by the closure principle together with the supposition that [S] knows\* that  $p$  implies  $q$ . The third proposition [i.e., (c)] has its truth secured by the closure principle together with the supposition and the fact that satisfaction of Tough entails satisfaction of Easy. But the fourth proposition may well be false (Schiffer 1996, 320).<sup>18</sup>

However, Schiffer himself does not devote too much effort to providing a more detailed and thorough discussion of the contextualist version of closure principles on knowledge, because the contextualists who are discussed in Schiffer's paper do not themselves provide any systematic and detailed account of the contextualist version of closure principles on knowledge. But I want to add some remarks here on Schiffer's idea. Schiffer's last comment on the falsity of (d) is based on a correct understanding of epistemic contextualism: epistemic contextualism is supposed to keep epistemic modesty

---

is known\*" is defined as "x is known in a way that conforms to the strictest standards of knowledge." Thus, Schiffer's full account of a relativised closure principle would be this: "If S knows that  $p$  relative to standard  $N$  and S knows\* that if  $p$ ,  $q$ , then S knows that  $q$  relative to standard  $N$ " (cf. *ibid.*, 320, with some symbols adapted) where "S knows\* that  $p$ " means "S knows [that  $p$ ] in a way that conforms to the strictest standards of knowledge" (*ibid.*, 320). Granted the convention that it is known\* that  $p$  deductively implies  $q$ , we can merely focus on those four closure principles that Schiffer proposes. It should be also noticed that Schiffer uses 'know\*' in a quite instrumental way and he does not specify the difference between 'know\*' and 'know relative to Tough.' For the purpose of our current discussion, we can harmlessly regard 'know\*' as 'know relative to Tough' so that we need not treat 'know\*' as the third independent 'know.' (If we treat 'know\*' as a different term from either 'know relative to Tough' or 'know relative to Easy,' the perplexity of epistemic closure principles will re-occur.)

<sup>18</sup> It should be noticed that, given the supposition that "satisfaction of Tough entails satisfaction of Easy," (c) is no longer an independent principle, since (b) implies (c).

as well as to protect our ordinary knowledge against skeptical attack. In order to preserve epistemic modesty, contextualists think they, unlike their (neo-)Moorean rivals, concede that there is some plausibility in denying that we have any knowledge relative to a too tough (skeptical) standard. In this sense, contextualists propose that we do not know that we are not handless BIVs even granted that it is known\* that being handless BIVs is inconsistent with having hands (which is known relative to Easy). But, on the other hand, epistemic contextualists happily claim that our everyday knowledge would not be undermined as long as we insist that our everyday knowledge is held relative to Easy. Thus, it is crucial for contextualists to hold (a) and to reject (d) so that they can obtain their supposed theoretical advantage. However, as will be shown, I argue that there is an unsolvable tension between preserving the contextualist style of epistemic modesty, holding a reasonable account of closure principle and providing a plausible interpretation of knowledge ascription. This problem is prominently reflected in Jonathan Schaffer's contrastivism; and, as will be shown, this challenge is able to be extended to other forms of non-contrastivist epistemic contextualism as well. This provides us with the key issues for the next two sections (i.e., §5.3.2 and §5.3.3). So, let us first switch our attention to Jonathan Schaffer's contrastivism in the next section.

### **5.3.2 CONTRASTIVISM AND CLOSURE**

As mentioned in Chapter 3, contrastivism, as a kind of contextualism about knowledge ascriptions, suggests that knowledge, by its nature, is a triadic relation between a knower (S), a proposition known (*p*) and a *contrast proposition* (*q*) that one must eliminate in

order to know; correspondingly, the verb ‘knows’ has a third argument place for a contrast proposition. Thus, a full articulation of a knowledge ascription would be formally expressed as ‘ $Kspq$ ,’ which can be translated into everyday English as that ‘S knows that  $p$  rather than  $q$ .’ For example, when a contrastivist confronts the statement that Moore knows that he has hands, the fully articulated statement should be that Moore knows that he has hands rather than stumps.<sup>19</sup> Recently, Jonathan Schaffer, one of the most prominent advocates of contrastivism, has provided us with a very precise formulation of a set of closure principles of knowledge in his ternary account of knowledge ascription.

According to Schaffer (2007, 234), there are two basic assumptions that serve as the foundation of contrastivism:

- (A1) Contrastivism: The knowledge state is  $Kspq$ , where  $q$  is a contrast proposition, and whose evidential component  $Espq$  is the elimination of the  $q$ -worlds.
- (A2) Closure:  $Kspq$  satisfies some closure schema.

It seems that Schaffer treats the evidential component  $Espq$  that can eliminate the contrast-worlds as the same thing that is expressed by the terminology that ‘S is in a position to know that  $p$  rather than  $q$ ,’ since he uses  $Espq$  to formalize both claims. In accordance with the symbols that I used in §5.1 of this chapter, I will use  $[[K]]spq$  to replace Schaffer’s ‘ $Espq$ ’ in order to avoid unnecessary confusion, so that:

<sup>19</sup> However, it is an abbreviated statement in accordance with the everyday convention of English expressions. A more literal articulation should be that Moore knows that he has hands rather than that he has stumps. But, for the sake of convenience and conventional expression, I will use the abbreviated statement in the main body of the paper.



[[K]] $spq$  =<sub>df.</sub> S is in a position to know that  $p$  rather than  $q$ .

Then, Schaffer introduces and lists a set of standards for an adequate closure schema as such (cf. Schaffer 2007, 234-237):

- (C1) An adequate closure schema should provide a plausible rendering of how knowledge extends under entailment.
- (C2) An adequate closure schema should explain how proof extends knowledge.
- (C3) An adequate closure schema should block abominable conjunctions.<sup>20</sup>
- (C4) An adequate closure schema should block lack-of-omniscience counterexamples.<sup>21</sup>
- (C5) An adequate closure schema should block lack-of-belief counterexamples.<sup>22</sup>
- (C6) An adequate closure schema should block irrational-basis counterexamples.<sup>23</sup>
- (C7) An adequate closure schema should concern the contrastive  $Kspq$  state.
- (C8) An adequate closure schema should preserve epistemic modesty.<sup>24</sup>
- (C9) An adequate closure schema should fit knowledge-*whether*.<sup>25</sup>

<sup>20</sup> The term ‘abominable conjunction’ was first introduced by Keith DeRose (1995, especially 27-29), which refers to conjunctions such as, S does not know that he is not a handless brain-in-a-vat but S knows that he has hands. According to Schaffer, an adequate closure schema should never lead one to embrace any abominable conjunction like this.

<sup>21</sup> ‘A lack-of-omniscience counterexample’ is a counterexample to (CKI) that we indicated in §1 of this chapter, which suggests one is not logically omniscient about all the propositions entailed by her previous knowledge. According to Schaffer, an adequate closure schema should not require a person to know all the propositions that are logically entailed by her previous knowledge.

<sup>22</sup> ‘A lack-of-belief counterexample’ is a counterexample against (CKI) that we indicated in §1 of this chapter, which suggests that one may fail to form the belief in  $q$  even though she knows both that  $p$  and that if  $p$  then  $q$ . According to Schaffer, this counterexample is avoided by weakening the consequent to “[[K]] $spq$ .”

<sup>23</sup> According to Schaffer, one cannot know something if her corresponding belief is only formed from some irrational basis. For instance, one cannot have knowledge of a forthcoming event if her corresponding belief is only formed from “reading tea leaves” (cf. *ibid.*, 235).

<sup>24</sup> ‘Epistemic modesty’ means not only that “we possess modest knowledge of the external world” (and therefore that Moore knows that he has hands) but also that “we ... suffer modest ignorance of the external world” (and therefore that Moore does not know that he is not a brain-in-a-vat.) (*Ibid.*, 236). But this does not imply that Schaffer will embrace an abominable conjunction, since, according to contrastivism, “know” is a ternary operator and different contrast propositions can block the abominable conjunction. For instance,

Moore knows that he has hands rather than stumps.

Moore does not know that he has hands rather than a-handless-brain-in-a-vat’s image of hands.

No abominable conjunction is generated by these two claims.

<sup>25</sup> According to Schaffer, “S knows whether  $p$  or not” can be articulated by “ $Kspq$ ” when an appropriate contrast proposition  $q$  is picked up.

- (C10) An adequate closure schema should allow extension from  $\text{knowledge}_{R1}$  that  $p$ , to the position to  $\text{know}_{R2}$  that  $p$ , where  $R1 \subset R2$ .<sup>26</sup>
- (C11) An adequate closure schema should allow extension from  $\text{knowledge}_R$  that  $p_1$  and  $\text{knowledge}_R$  that  $p_2$ , to the position to  $\text{know}_R$  that  $p_1$  and  $p_2$ .
- (C12) An adequate closure schema should allow extension from  $\text{knowledge}_{R1}$  that  $p$  and  $\text{knowledge}_{R2}$  that  $p$ , to the position to  $\text{know}_{R1 \cup R2}$  that  $p$ .<sup>27</sup>

Then, Schaffer provides a set of four schemas and confirms that “contrastive knowledge extends by Expand- $p$ , Contract- $q$ , Intersect- $p$ , and Union- $q$ ” (Schaffer 2007, 246), where those schemas are,

**(Expand- $p$ )**  $(Ksp_1q \ \& \ (p_1 \rightarrow p_2) \ \& \ \{p_2\} \cap \{q\} = \emptyset) \rightarrow [[K]]sp_2q$  (ibid., 243).

(Expand- $p$ ) secures the expansion of knowledge. The idea here is that if S knows that  $p_1$  rather than that  $q$ ; and, if  $p_1$  logically implies  $p_2$ ; and, if the intersection of the set involving  $p_2$  and the set involving  $q$  is empty, then, S is in a position to know  $p_2$  rather than  $q$ .

**(Contract- $q$ )**  $(Kspq_1 \ \& \ (q_2 \rightarrow q_1) \ \& \ \{q_2\} \neq \emptyset) \rightarrow [[K]]spq_2$  (ibid., 244).

(Contract- $q$ ) guarantees that contrastive knowledge is preserved under contraction of the contrast proposition, which means that, if S knows that  $p$  rather than that  $q_1$ ; and, if  $q_1$  is logically entailed by  $q_2$ ; and, if the set containing  $q_2$  is non-empty, then S is in a position to know that  $p$  rather than that  $q_2$ .

**(Intersect- $p$ )**  $(Ksp_1q \ \& \ Ksp_2q) \rightarrow [[K]]s_{(p_1 \ \& \ p_2)}q$  (ibid., 245).

(Intersect- $p$ ) is the analogue to the classical principle of closure under conjunction introduction, and means that, if S knows that  $p_1$  rather than that  $q$  and S also knows that  $p_2$  rather than that  $q$ , then S is in a position to know that both  $p_1$  and  $p_2$  rather than that  $q$ .

**(Union- $q$ )**  $(Kspq_1 \ \& \ Kspq_2) \rightarrow [[K]]sp_{(q_1 \ \vee \ q_2)}$  (ibid., 246).

(Union- $q$ ) indicates that contrastive knowledge is preserved under the union of contrast propositions, which prescribes that, if S knows that  $p$  rather than that  $q_1$  and she/he also knows that  $p$  than that  $q_2$ , then S is in a position to know that  $p$  rather than ( $q_1$  or  $q_2$ ).

Thus, we have two different sets of principles that Schaffer endorses, namely, the set

<sup>26</sup> Here  $R1$  and  $R2$  represent different sets of relevant alternatives. S knows $_R$  that  $p$  =<sub>df.</sub> “S knows that  $p$ ” is true in a context  $c$  with relevant alternatives  $R$ . (cf. Schaffer 2007, 239).

<sup>27</sup> Here “S know $_{R1 \cup R2}$  that  $p$ ” =<sub>df.</sub> “S knows that  $p$ ” is true in a context  $c$  with relevant alternatives that comprise a union of both  $R1$  and  $R2$  (cf. Schaffer 2007, 239-240).

{(C1), (C2), ..., (C12)} and the set {(Expand- $p$ ), (Contract- $q$ ), (Intersect- $p$ ), (Union- $q$ )}. I doubt that Schaffer can hold both sets consistently; in particular, it is doubtful whether (C8) is compatible with (Contract- $q$ ). Since (C8) and (Contract- $q$ ) are so crucial to our evaluation of Schaffer's theory, they both deserve more detailed explanations.

As shown above, the term 'epistemic modesty' is crucial to contextualism, which, according to contextualists, separates them from their (neo-)Moorean rivals and explains why skeptical hypotheses are able to undermine our knowledge (in some contexts, i.e., the skeptical contexts). According to Schaffer, on the one hand, we possess modest knowledge of the external world and therefore it is true that Moore knows that he has hands rather than stumps; on the other hand, we also suffer modest ignorance of the external world and therefore it is also true that Moore does not know that he has hands rather than that he is a handless brain-in-a-vat. It is this 'epistemic modesty' that distinguishes contrastivism (as one type of contextualism) from Moorean dogmatism and skepticism. And this is also the crucial reason for us to group Schaffer with Cohen, DeRose and Lewis, because their theories of knowledge ascriptions all share this supposed 'epistemic modesty.' Thus, Schaffer has to propose that a satisfactory closure schema should not lead one to know that  $p$  rather than  $q$  when the contrast proposition  $q$  represents a skeptical hypothesis. Schaffer even suggests that one is not in a position to know that  $p$  rather than  $q$  when the contrast proposition  $q$  is a skeptical hypothesis. This is the main reason why Schaffer thinks that the non-contextualist binary account of knowledge ascriptions, together with its (CKI-CW) closure principle, is unsatisfactory,

because in some cases the non-contextualist binary account of knowledge ascriptions and its (CKI-CW) closure principle would position a person “to know whether he has hand or is a brain-in-a-vat, which of course he is in no position to know” (Schaffer 2007, 236). According to Schaffer, his contrastivism is advantageous because it can avoid this problem. And this is why Schaffer thinks ‘epistemic modesty’ is the crucial, attractive feature of his contrastivist account of knowledge ascriptions.

(Contract- $q$ ), on the other hand, can be directly derived from the contrastivist account of knowledge ascriptions. The antecedent of (Contract- $q$ ) is a conjunction that is composed by  $Kspq_1$ ,  $q_2 \rightarrow q_1$  and  $\{q_2\} \neq \emptyset$ . According to the contrastivist definition of knowledge ascriptions, the first conjunct  $Kspq_1$  means that S knows that  $p$  rather than  $q_1$ , because  $q_1$  is ruled out by S’s evidence. Since  $q_1$  is eliminated, we can infer that  $q_1$  is not the case. Using the second conjunct that  $q_2 \rightarrow q_1$ , together with  $\text{not-}q_1$ , we can derive that  $q_2$  is not the case by *modus tollens*. Thus,  $q_2$  is also eliminated. In this sense, S is in a position to know that  $p$  rather than  $q_2$ , namely,  $[[K]]spq_2$ , which is exactly the consequent of (Contract- $q$ ). It should be noticed that the third conjunct in the antecedent of (Contract- $q$ ), i.e.,  $\{q_2\} \neq \emptyset$ , is a technical restriction, which guarantees that the proposition that  $[[K]]spq_2$  is a genuine saturated ternary knowledge claim. If  $\{q_2\} = \emptyset$  then the third argument in the ternary knowledge operator  $[[K]]$  is left empty. In sum, we can see that (Contract- $q$ ) actually is a straightforward principal closure schema in Schaffer’s theory of contrastivism. Based on the above explanation, it seems to be unnecessary to introduce any further restriction on (Contract- $q$ ). But, as will be shown,

Schaffer has to introduce some further restriction on (Contract-*q*), when a counter-example to his account is composed. I think, when these restrictions are imposed upon (Contract-*q*), the newly generated (restricted) closure schema of (Contract-*q*) may lose the straightforward and the contrastivist support that the original (Contract-*q*) has. Furthermore, since (Contract-*q*) is directly derived from contrastivism, if (Contract-*q*) should be restricted, then this implies that the general contrastivist account of knowledge ascription should be restricted as well. Thus, when Schaffer proposes some new restriction on (Contract-*q*), I will question the legitimacy of the added restriction.

With the above explanations of both (C8) and (Contract-*q*), it will be shown that there is a general methodology that makes it easy for us to compose a series of counterexamples which would force Schaffer either to drop (C8) or to abandon (Contract-*q*)— neither situation is good news to contrastivists. If (C8) is given up, contrastivism loses an important feature that its advocates find attractive. But, if (Contract-*q*) is dropped, then contrastivism cannot provide us a full account of closure on knowledge. Worse, the connection between (Contract-*q*) and the contrastivist account of knowledge ascriptions is so tight, dropping (Contract-*q*) would require Schaffer to undertake a major revision of his contrastivist account of knowledge as well.

Christoph Kelp provides a general methodology by which we can construct a series of counterexamples to the conjunction of (C8) and (Contract-*q*) via the following argument schema:

- (P1) S knows that  $p$  rather than that  $q$ .  
(P2) If S is in a skeptical scenario where she/he is deceived (by an evil demon) into believing that  $p$  but as a matter of fact  $q$ , then  $q$ .  
(P3)  $(Kspq \ \& \ (q_2 \rightarrow q) \ \& \ \{q_2\} \neq \emptyset) \rightarrow [[K]]spq_2$ , i.e., an instantiation of (Contract- $q$ ), where  $q_2$  is the proposition that S is in a skeptical scenario where she/he is deceived into believing that  $p$  but as a matter of fact  $q$ .  
(P4)  $\{q_2\} \neq \emptyset$   
 $\therefore$  (C) S is in a position to know that  $p$  rather than that she/he is in a skeptical scenario where she/he is deceived into believing that  $p$  but as a matter of fact  $q$  (cf. Kelp 2011, 290).

A formalization of the schema can be more illuminating. Let us symbolize the statement that ‘S is in a skeptical scenario where she/he is *deceived* into believing that  $p$ ’ by ‘Dsp.’  
Then, a formal schema of the inference is derived:

- (P1)  $Kspq$   
(P2)  $(Dsp \ \& \ q) \rightarrow q$   
(P3)  $(Kspq \ \& \ ((Dsp \ \& \ q) \rightarrow q) \ \& \ \{Dsp \ \& \ q\} \neq \emptyset) \rightarrow [[K]]sp(Dsp \ \& \ q)$ <sup>28</sup>  
(P4)  $\{Dsp \ \& \ q\} \neq \emptyset$   
 $\therefore$  (C)  $[[K]]sp(Dsp \ \& \ q)$

(C) is an overt violation of epistemic modesty in (C8) but the above inference is explicitly validated by the closure principle (Contract- $q$ ). According to Kelp’s report, Schaffer himself does not want to completely give up either (C8) or (Contract- $q$ ) and therefore suggests some further restrictions on (Contract- $q$ ) based upon a contextualist treatment of ‘the content of that-clauses’ as such,

Which scenarios are denoted by a given that-clause depends in part on the domain of quantification. In consequence, there will be contexts in which the

<sup>28</sup> (P3) is an instantiation of (Contract- $q$ ) schema.

clause ‘that  $q$ ’ at issue in (P1) denotes a set of possibilities that includes the scenario depicted in the antecedent of (P2). In such contexts, the relevant contrastive knowledge attributions will turn out false. On the other hand, there will also be contexts in which the very same clause denotes a set of possibilities that is restricted to non-deception scenarios<sup>29</sup>. In such contexts, as the above argument shows, the relevant contrastive knowledge attributions can continue to be true (Kelp 2011, 291).

There are some confusing statements involved in Schaffer’s above remedy.<sup>30</sup> Someone may complain about Schaffer’s new restriction by suggesting that Schaffer’s above remark (as reported by Kelp) muddles propositions and sets of worlds, which may generate some serious problems. For instance, in what sense does “...the *clause* ‘that  $q$ ’ at issue in (P1) *denote* a *set* of possibilities...?” Since the clause ‘that  $q$ ’ is a proposition, it cannot denote a *set* of possibilities. Here let us just temporarily put this objection aside and try a tentative paraphrase of Schaffer’s above idea by using possible-world language. Furthermore, suppose that, like Schaffer, we also use ‘denote’ in a less accurate sense. According to contrastivism, in  $Kspq$  (P1) means that S knows that  $p$  rather than  $q$ , in other words, by claiming this contrastivist knowledge, S rules out all  $q$ -worlds from being actualized. So, we can define a set of possible worlds  $\mathbf{Q}$  that is ruled out by S as follows:

$\mathbf{Q} =_{df.} \{ \mathbf{x} \mid \mathbf{x} \text{ is a possible world where ‘that } q \text{’ in (P1) is the case.} \}$

Correspondingly, the contrast proposition ‘ $Dsp \ \& \ q$ ’ (i.e., the antecedent of (P2)) in the conclusion  $[[K]]sp(Dsp \ \& \ q)$  also indicates that S is in a position to rule out some possible

<sup>29</sup> Although the term explicitly used here is ‘non-deception scenarios,’ on a charitable interpretation it should be ‘non-*skeptical* scenarios,’ because the crucial issue is how to avoid the problem of putting S in a position to know something that can rule out the skeptical alternatives.

<sup>30</sup> I owe this critique to Prof. Nicholas Griffin.

worlds where the conjunction that  $Dsp \ \& \ q$  is the case. So, we can also define another set of possible worlds  $\mathbf{D}$  that  $S$  is in a position to rule out as follows:

$$\mathbf{D} =_{df.} \{ \mathbf{x} \mid \mathbf{x} \text{ is a possible world where 'Dsp \ \& \ q' in the antecedent of (P2) is the case.} \}$$

With the above two sets  $\mathbf{Q}$  and  $\mathbf{D}$  in hand, we can then define a third set of possible worlds  $\mathbf{Q}^*$ , which is the difference of  $\mathbf{Q}$  and  $\mathbf{D}$ :

$$\mathbf{Q}^* =_{df.} \mathbf{Q} - \mathbf{D}$$

Thus, Schaffer's newly restricted (Contract- $q$ ) would be as such:

$$\text{Given that } q^* \text{ denotes } \mathbf{Q}^*, \\ (\mathbf{Contract-}q^*) (Kspq^* \ \& \ (q_2 \rightarrow q^*) \ \& \ \{q_2\} \neq \emptyset) \rightarrow [[\mathbf{K}]]spq_2$$

Schaffer thinks this (Contract- $q^*$ ) will block the conclusion (C)  $[[\mathbf{K}]]sp(Dsp \ \& \ q)$ , since the possible world, where  $Dsp \ \& \ q$  is the case, is an element of  $\mathbf{D}$  and  $Dsp \ \& \ q$  no longer entails  $q^*$  because there is no intersection between  $\mathbf{D}$  and  $\mathbf{Q}^*$ . The crucial revision that Schaffer proposes here is to *more precisely specify* the contrast clause  $q$  in the first conjunct of the antecedent of the original (Contract- $q$ ). In other words, Schaffer suggests that it is the precision of the contrast clause  $q$  that needs to be explicitly specified.

However, three problems should be indicated here. (1) Once again, the skeptic wins! According to the above possible-world interpretation, even for the everyday contrastivist knowledge, we have to distinguish what possible worlds are ruled out by the contrast proposition: we can only rule out those possible worlds that are not corroded by



any skeptical hypothesis such as  $Dsp$ , where the contrast proposition remains true. That is, from  $S$  knows that  $p$  rather than  $q$ ,  $S$  only rules out those possible worlds where  $q$  is the case without  $Dsp$ 's being true. For instance, from Moore knows that he has hands rather than stumps, Moore cannot think he unrestrictedly rules out the possible worlds where he has stumps, because he is in no position to rule out those possible worlds where Moore is a brain-in-a-vat who is equipped with stumps—he is able to rule out only those possible worlds where he has stumps but no skeptical hypothesis is true. (2) Schaffer's new restriction on the contrast proposition confirms my prediction: if the original (Contract- $q$ ) has to be restricted, the general ternary contrastivist account of knowledge ascription should also be revised correspondingly. Evidently, Schaffer's clarification on the contrast proposition proposes that the original  $Kspq$  should be more precisely specified as  $Kspq^*$ . This amounts to a (major) revision of Schaffer's original contrastivist account of knowledge ascription. But, this new restriction leads to a serious problem: the contrastivist knowledge ascription with the full-fledged form 'S knows that  $p$  rather than  $q$ ' suffers from the less accurate specification of the contrast proposition, since the contrast proposition  $q$  actually should be understood as something similar to  $q^*$ . In other words, the supposed context-sensitivity of 'know' is not fully captured by Schaffer's ternary contrastivism of knowledge ascription—there remains some ambiguity left with the contrast proposition!<sup>31</sup> Schaffer's restriction also *implausibly* accuses a competent English speaker of the incautious, loose use of the contrast proposition  $q$  when it is

---

<sup>31</sup> This also confirms my criticism of Schaffer's contrastivism of knowledge ascription in Chapter 3.

actually  $q^*$  that should be put into the third argument of the ternary operator ‘know.’ (3) Under the above interpretation Schaffer’s new restriction on (Contract- $q$ ) is completely *ad hoc*, because this new restriction is adopted by Schaffer purely for his purpose of saving his contrastivism with epistemic modesty from Kelp’s counterexamples without any independent rationale concerning why the contrast proposition that ‘ $D_{sp} \& q$ ’ should be treated so differently.

I think it is really difficult for Schaffer to find a reasonable resolution to the above problems (1) and (2). However, someone may wonder whether Schaffer’s new restriction can evade the third problem concerning the *ad hoc* treatment of the skeptical alternative ‘ $D_{sp} \& q$ .’ At first glance, it seems possible to resolve the third problem when Schaffer’s new restriction is able to be interpreted in a more generalized form. In order to explore this issue, let us put the first two problems aside for the moment and concentrate on the consideration of a possible solution to the third problem.

Superficially, a solution to the third problem seems possible, because Schaffer’s new restriction on the contrast proposition amounts to a qualification on the general contrastivist account of knowledge ascription. The crux here is whether there is any general contrastivist idea hidden in Schaffer’s (*ad hoc*) treatment of ‘ $D_{sp} \& q$ .’ Schaffer’s denying of ‘ $[[K]]_{sp}(D_{sp} \& q)$ ’ is probably based upon the following consideration: when the alternative ‘ $D_{sp} \& q$ ’ is in play, S’s evidence for his knowledge claim that ‘ $K_{sp}q$ ’ would be neutralized and therefore become insufficient for the claim ‘ $[[K]]_{sp}(D_{sp} \& q)$ .’ Thus, if there is an alternative that is able to neutralize S’s evidence for his claim ‘ $K_{sp}q$ ,’

and if the contrast proposition  $q$  is deductively entailed by this alternative, then the set of possible worlds where the alternative is true should be excluded from the set of the possible worlds that is denoted by  $q$ .<sup>32</sup> In other words, with his evidence for his original contrastivist knowledge ascription, S cannot eliminate the possible worlds where the alternative is that case.

Suppose the original contrastivist knowledge ascription is  $Kspq_1$  where  $q_1$  denotes a set of possible worlds  $Q_1 =_{df.} \{x \mid x \text{ is a possible world \& } q_1 \text{ is true in } x\}$ ; furthermore, suppose there is an alternative  $a$  that not only entails  $q_1$  but also is uneliminated by S's evidence for ' $Kspq_1$ .' Let us define a set of possible worlds  $U =_{df.} \{x \mid x \text{ is a possible world \& } a \text{ is true in } x\}$ . The proposition  $q_1^*$  denotes a set of possible worlds  $Q_1^* =_{df.} Q_1 - U$ . Thus,

**The Restricted (Contract- $q$ ):**  $(Kspq_1^* \& (q_2 \rightarrow q_1^*) \& \{q_2\} \neq \emptyset) \rightarrow [[K]]spq_2$

Under this interpretation, the skeptical alternative ' $Dsp \& q$ ' becomes a specific instantiation of the general idea of the uneliminated alternative  $a$ . In other words, when the general contrastivist idea hidden in Schaffer's treatment of ' $Dsp \& q$ ' is identified, Schaffer seems to be able to explain some epistemic phenomenon with respect to non-skeptical, everyday knowledge ascription. In order to see this, let us consider the following case in a non-skeptical context:

**(The Estimator Case):**

Suppose S is a reliable estimator of the length of an object with his naked eyes, who is especially good at telling whether an object is 1 meter long. S is reliable in doing so, not only because in most cases his estimation concerning whether an object is 1 meter long is always true, but also because he is quite sensitive to the length of an object— he is able to tell the difference between 1 meter from 1.005

<sup>32</sup> Admittedly, this solution still suffers from the first two aforementioned problems. This solution is especially objectionable when the second problem is considered. Hereafter, I shall follow the convention that is set up and simply ignore these worries here.

meters by seeing an object with his naked eyes. Now S is presented with a 1-meter long stick and he is asked to estimate whether the stick is 1 meter long (and, of course, S does not have any information concerning the length of the stick in advance). After carefully examining and estimating the length of the stick, S claims: "I know that the stick is 1 meter long rather than that the stick is longer than 1 meter." In this situation, the following contrastivist knowledge ascription is true:

(e<sub>1</sub>) S knows that the stick is 1 meter long rather than that the stick is longer than 1 meter.

Mathematically speaking, if the stick is 1.000001 meters long, then it is longer than 1 meter. It is also true that if the stick is 1.01 meters long, then it is longer than 1 meter. Now, the question is: Are the following contrastivist knowledge ascription true as well?

(e<sub>2</sub>) S is in a position to know that the stick is 1 meter long rather than that the stick is 1.000001 meters long.

(e<sub>3</sub>) S is in a position to know that the stick is 1 meter long rather than that the stick is 1.01 meters long.

According to the unrestricted (Contract-*q*), both (e<sub>2</sub>) and (e<sub>3</sub>) should be true, since they are both able to be derived from the premises of (e<sub>1</sub>) and the unrestricted (Contract-*q*). But, this result is worrisome. Even granted that S is a reliable estimator of the length of 1 meter, it is implausible to suggest that (e<sub>2</sub>) is true in the given situation, since S is unable to tell a length of 1.000001 meters from a length of 1 meter purely with his naked eyes. But (e<sub>3</sub>) should be true anyway, because S, as a reliable estimator, is able to tell the difference between the length of 1 meter and the length of 1.01 meters with his naked eyes. Thus, the Estimator Case calls for a restricted version of (Contract-*q*), which is able to make (e<sub>2</sub>) false but make (e<sub>3</sub>) true.

It is quite evident that the restricted (Contract-*q*) is able to satisfy the aforementioned requirement. According to the restricted (Contract-*q*), the contrast proposition in (e<sub>1</sub>) actually only denotes the set of possible worlds where the stick is

longer than 1.005 meters, since this is the length that S is able to reliably tell from the length of 1 meter. With the restricted (Contract- $q$ ), ( $e_2$ ) is no longer derivable from ( $e_1$ ), because the stick's being 1.000001 meters long does not entail that the stick is longer than 1.005 meters (and therefore the second conjunct in the antecedent of the restricted (Contract- $q$ ) cannot be satisfied). But, on the other hand, ( $e_3$ ) remains derivable from both ( $e_1$ ) and the restricted (Contract- $q$ ), since that the stick is 1.01 meters long deductively entails that the stick is longer than 1.005 meters.

It should be emphasized that the Estimator Case does not invoke any consideration of skeptical scenarios or hypotheses. The Estimator Case is constructed with respect to the everyday epistemic practices of human beings. Thus, it seems quite plausible to replace the original unrestricted (Contract- $q$ ) by the restricted (Contract- $q$ ), because the latter not only provides a better explanation of the phenomenon-to-be-explained but also absorbs the skeptical hypotheses as some specific instantiations of the general epistemic ideas in Schaffer's contrastivism so that the 'ad hoc' problem is resolved.

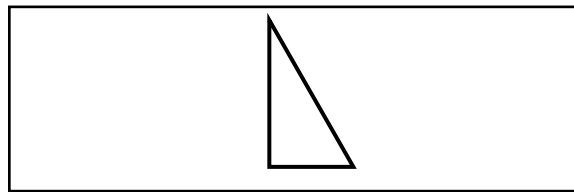
But, as emphasized repeatedly, Schaffer's new restriction on the contrastive knowledge ascription in the first conjunct of the antecedent of the original (Contract- $q$ ) also amounts to a general revision of his contrastivist account of the contrast clause in the third argument of the ternary operator 'know.' This requires that the contrast clause has to be precisely specified. Thus, the following clarification of the contrastive clause could be added to Schaffer's contrastivism:

(c-c) ‘ $Kspq_1$ ’ in the antecedent of the unrestricted (Contract- $q$ ) is true if and only if ‘ $Kspq_1^*$ ’ in the antecedent of the restricted (Contract- $q$ ) is true.<sup>33</sup>

Since the restricted (Contract- $q$ ) remains regarded as a general closure schema on knowledge, Schaffer has to concede that (c-c) should be generally applicable to all contrastive knowledge ascriptions that are able to take the position of the first conjunct of the antecedent of the restricted (Contract- $q$ ). Another requirement concerning ‘ $q_1^*$ ’ is this:  $q_1^*$  cannot denote an empty set; otherwise, the third argument of the ternary operator ‘know’ would not be saturated. However, as will be shown, this newly added clarification of the contrast clause leads to a serious counterexample to Schaffer’s contrastivism, which can be constructed as follows:

**(The Geometry Case):**

Suppose S is a person with little knowledge about Euclidean geometry apart from the fact that S is competent in identifying a figure as a triangle and she knows that a triangle is a closed plane figure with three straight sides. Besides the above information, S barely knows any other terminology in Euclidean geometry. Now S is presented with a piece of paper on which there is exactly one triangle (as shown in Figure 5.1).



**Figure 5.1 a Piece of Paper with a Triangle on It**

After a careful examination, S comes to believe that the figure on the paper

<sup>33</sup> However, by introducing (c-c), I do not imply that there is any philosopher who actually defends this principle. What I do here is to indicate the necessary component so that Schaffer’s proposal of revision may not be committed to the *ad hoc* accusation. It is also worth noting that the strategy that I employ is *reductio ad absurdum*, which eventually indicates that Schaffer’s proposal of the revision is seriously problematic.

is a triangle rather than a figure with four equal sides. Therefore, the following contrastive knowledge ascription is true:

(g<sub>1</sub>) S knows that the figure on the paper is a triangle rather than that it is a figure with four equal sides.

Since S does not know any other terminology in Euclidean geometry, S *does not* know the term ‘rhombus,’ which is defined as ‘a closed plane figure with four equal straight sides.’<sup>34</sup> Evidently, the following statement is false:

(g<sub>2</sub>) S is in a position to know that the figure on the paper is a triangle rather than that it is a rhombus.

We cannot derive (g<sub>2</sub>) from (g<sub>1</sub>) because the restricted (Contract-*q*) prevents us from doing so, which in turn requires that the contrast clause in (g<sub>1</sub>) actually denotes a set of possible worlds where *a figure has four equal straight sides but without being a rhombus*.

According to (c-c), (g<sub>1</sub>) can only be true, when the contrast clause in it denotes a set of possible worlds where a closed plane figure with four equal sides is not a rhombus; but such a set of possible worlds is empty, because ‘a closed plane figure with four equal sides is not a rhombus’ is contradictory. Thus, we can see that, with the new restriction, Schaffer’s theory cannot truly and meaningfully talk about (g<sub>1</sub>) in the Geometry Case. In other words, the theoretic prediction concerning the truth value of (g<sub>1</sub>), which is derived from the restricted contrastivist theory, is completely absurd. Thus, we can conclude that the new restriction that Schaffer proposes does not provide any real help for his contrastivism.

An even worse fact is that there is a tension between Schaffer’s restricted (Contract-*q*) and his unchanged general principles of contrastivism. This tension cannot be easily resolved unless Schaffer indicates what changes have to be done with respect to

<sup>34</sup> Let us also note that a square is one specific kind of rhombus, namely, a square is a rhombus with four right angles.

the general principles of contrastivism. If the unrestricted (Contract-*q*) is straightforwardly derived from the general principles of contrastivism, then any newly added restriction to the original version of (Contract-*q*) would in turn imply that some corresponding revision of the general principles of contrastivism has to be undertaken. Unfortunately, according to my knowledge, Schaffer does not provide any further revision of his general principles of contrastivism

In sum, siding with Kelp, I think Schaffer cannot preserve both (C8) and (Contract-*q*) (restricted or not) in his contrastivist theory of knowledge ascriptions. Schaffer has to drop either (C8) or (Contract-*q*) so that he can keep his contrastivist theory consistent. But it should also be noticed that dropping either principle would seriously undermine Schaffer's contrastivism: if Schaffer drops (C8), then he gives up one of the most attractive features that his theory originally had. This also blurs the boundary between his contrastivist position and non-contextualist positions such as Moorean dogmatism and skepticism. It also undermines one motivation for taking the contextualist position if epistemic modesty is abandoned, since epistemic modesty was supposed to be a great virtue of contextualism. On the other hand, if Schaffer abandons (Contract-*q*), he also loses one key component of contrastivism, because (Contract-*q*) is straightforwardly derived from his contrastivist account of knowledge. (Contract-*q*) is so tightly linked to his contrastivist theory that any further restriction on (Contract-*q*) would be either *ad hoc* or awkward. The dilemma that Schaffer confronts cannot be easily solved. The case study on Schaffer's contrastivist project on closure principles of



knowledge also implies that our eagerness to preserve closure on knowledge and to solve the skeptical puzzle should not incline us to either contrastivism or contextualism more generally, since they cannot consistently preserve both epistemic modesty and a reasonable account of the closure principle.

However, someone may complain that it is premature to conclude that even non-contrastivist contextualism is also confronted with some similar problems, since I only discuss Schaffer's contrastivism and its problems in this section. Nevertheless, I think the problems that I identify in Schaffer's contrastivism hint that non-contrastivist contextualism will also have to face some similar difficulty in the end, since the roots of the problems of contrastivism (i.e., the elimination of the error possibility, epistemic modesty, etc.) reflect the general spirit of the contextualist account of knowledge ascription. In order to back up my diagnosis, in the next section, I will show how non-contrastivist contextualism involves similar problems.

### 5.3.3 NON-CONTRASTIVIST CONTEXTUALISM AND CLOSURE

In order to present a parallel argument in this section, let us set up two conventions for the sake of the current discussion: (1) I will use the contextualist version of (CKI-CW) as an example throughout the discussion in this section. The contextualist version of (CKI-CW) can be stated as such:

(C-CKI-CW): For any given context  $C_i$ , if  $S$  knows that  $p$  in  $C_i$ , and if  $S$  knows that  $p$  deductively entails  $q$  in  $C_i$ , then  $S$  is in a position to know that  $q$  in  $C_i$ . In symbols: For any given context  $C_i$ ,  $\{K_{C_i}sp \ \& \ K_{C_i}S(p \rightarrow q)\} \rightarrow [[K]]_{C_i}Sq$ .

(2) Following Stephen Schiffer, I also hold that some logical truths and logical rules (such as,  $(p \ \& \ q) \rightarrow q$ ,  $\text{not-}q \rightarrow \text{not-}(p \ \& \ q)$ , *modus ponens*, *modus tollens*, etc.) are known in the strictest sense; that is, the knowledge of some logical truths and logical rules is held in most (if not all) contexts of knowledge ascription, when the subject explicitly thinks about them. I think even skeptics would accept this convention, if they want to undermine our knowledge by the skeptical argument.

With the above two conventions in hand, we can now present a problem for non-contrastivist contextualism. Non-contrastivist contextualists, such as Keith DeRose, David Lewis, et al., also talk about the elimination of the error possibilities or alternatives when some knowledge is ascribed to a subject in a context. They hold the doctrine of epistemic modesty as well; i.e., there is no one who is in a position to know skeptical hypotheses are false, because human beings have insufficient evidence for knowledge in the skeptical context. Now consider the following case:

**(The Mont Blanc Case):**

Suppose, in a perfect ordinary context  $C_0$ , S is an ordinary person who is sitting in front of her computer in her living room and her house is located in Hamilton, Ontario, Canada. S is perfectly aware of the surroundings in her living room and she is composing a philosophy paper with her computer. S forms a belief that she is sitting in her living room (and let us use ' $l$ ' to stand for the proposition that S is sitting in her living room). She explicitly thinks about and rules out the alternative that she is climbing Mont Blanc (and let us use ' $b$ ' to stand for the proposition that S is climbing Mont Blanc). Therefore, S truly knows that  $l$  in  $C_0$ . Since S explicitly eliminates the Mont-Blanc-climbing alternative, S also knows that if  $l$ , then not- $b$ . Thus, according to (C-CKI-CW), S is in a position to know that not- $b$  in  $C_0$ . Admittedly, this kind of inference is quite trivial. But, the crucial point here is: Both S's knowledge that  $l$  and her knowledge that not- $b$  are true in  $C_0$  and there is no factor that brings about any change of the context.

Suppose in  $C_o$ , S also knows that if not- $b$ , then it is not the case that she is deceived by an evil demon into believing that  $l$  (hereafter,  $Dsl$ ) but as a matter of fact  $b$ . S knows this entailment in  $C_o$ , simply because this entailment is an instantiation of the logical truth that  $\text{not-}q \rightarrow \text{not-}(p \ \& \ q)$ . Now, the question is: is S in a position to know that  $\text{not-}(Dsl \ \& \ b)$  in  $C_o$ ?

If non-contrastivist contextualists want to preserve epistemic modesty, they have to deny that S is in a position to know that  $\text{not-}(Dsl \ \& \ b)$  in  $C_o$ . In order to solve the problem, non-contrastivist contextualists have to choose from the following three options: (i) they have to abandon epistemic modesty and accept that S is in a position to know that  $\text{not-}(Dsl \ \& \ b)$  in  $C_o$ ; or (ii) they have to give up or restrict (C-CKI-CW); or (iii) they have to indicate there is a change of the context in question together with a plausible explanation of how the context changes.

If non-contrastivist contextualists take option (i), my critique of Schaffer's contrastivism can be easily extended to their theory: contextualism also loses one attractive feature and the distinction between it and its (neo-)Moorean rivals is obscure (especially when everyday knowledge ascription is considered). Even worse, when non-contrastivist contextualists abandon epistemic modesty and accept that S is in a position to know that  $\text{not-}(Dsl \ \& \ b)$  in  $C_o$ , they are confronted with a dilemma: either they endorse some implausible idea similar to the proposition (d) in Stephen Schiffer's remarks in §5.3.1, because, according to non-contrastivist contextualism,  $\text{not-}(Dsl \ \& \ b)$ , as a negation of a skeptical hypothesis, can be known *only* relative to Tough but both  $l$  and not- $b$  are known *only* relative to Easy, which in turn implies that non-contrastivist contextualists themselves are confused with  $C_o$  and the skeptical context; or they have to

revise their general contextualist theory and tell us how not-( $Dsl \ \& \ b$ ) can be known in  $C_o$ , but I think this kind of revision is either *ad hoc* or mysterious: it would be *ad hoc*, if they deny that not-( $Dsl \ \& \ b$ ) is a negation of a skeptical hypothesis, because I fail to see there is any significant difference between ( $Dsl \ \& \ b$ ) and some typical skeptical hypothesis (such as, that  $S$  is deceived by a Cartesian evil demon in believing that  $l$ ). The supposed revision would be mysterious, if non-contrastivist contextualists concede that not-( $Dsl \ \& \ b$ ) is a negation of a skeptical hypothesis but bite the bullet that it can still be known in  $C_o$ , because we may wonder either why the negation of other typical skeptical hypotheses cannot be known in  $C_o$ , or what magical factor is in not-( $Dsl \ \& \ b$ ) that makes not-( $Dsl \ \& \ b$ ) be known in  $C_o$ .

If non-contrastivist contextualists take option (ii), I don't think they can simply abandon (C-CKI-CW), because giving-up (C-CKI-CW) amounts to giving up a closure principle on knowledge in general. Since non-contrastivist contextualists, unlike Schaffer, do not provide any further sub-rules of epistemic closure,<sup>35</sup> the situation becomes worse for non-contrastivist contextualists, if they give up (C-CKI-CW). Giving-up (C-CKI-CW) would impose an unaffordable cost upon non-contrastivist contextualism. So, non-contrastivist contextualists have to restrict or revise (C-CKI-CW). But, I know of no attempts by them to do so. One reminder that I want to make for them is this: they should not adopt any maneuvers similar to Schaffer's to more precisely specify the eliminated

---

<sup>35</sup> Besides (Contract- $q$ ), Schaffer also provides the rules of (Expand- $p$ ), (Intersect- $p$ ) and (Union- $q$ )

relevant alternatives<sup>36</sup>, because doing so would generate a serious problem: First, they would concede too much to skeptics and skeptics win eventually. Second, the contextualist semantics of knowledge ascription would become enormously complicated— not only is ‘know’ context-sensitive, but the proposition in which the eliminated alternative is denied is also semantically ambiguous— another ambiguity of which they would have to claim competent speakers were semantically blind. Third, the restriction would be *ad hoc*, if non-contrastivist contextualists only concentrate on skeptical hypotheses similar to *Dsl*. If they want to avoid the *ad hoc* restriction they also have to make sure that their new general treatment is not confronted with counterexamples similar to the Geometry Case.

If non-contrastivist contextualists take option (iii), they have to specify a reasonable rule that tells us how the context changes and the rule should not be *ad hoc*. In the literature of non-contrastivist contextualism, David Lewis’ Rule of Attention may provide an indication and an explanation of the change of the context in the Mont Blanc Case. But, as shown in Chapter 2, Lewis’ Rule of Attention is unsustainable and problematic— non-contrastivist contextualists have to devise some other rule to explain the supposed change of the context in the Mont Blanc Case. Again, I know of no attempt by them to do so.

Given the above remarks, it can be concluded that non-contrastivist

---

<sup>36</sup> Namely, in the Mont Blanc Case, non-contrastivist contextualists cannot propose that when S eliminates the possible worlds where *b* is the case, in a precise sense, S only eliminates those *b*-worlds where (*Dsl* & *b*) is not the case.

contextualism is also confronted with some serious difficulties that are parallel to the ones faced by Schaffer's theory. The difficulty that I present in this section to non-contrastivist contextualism is hardly resolved, which in turn suggests that non-contrastivist contextualism is not sustainable.

#### **5.4 CLOSURE AND THE SKEPTICAL PROBLEM: SOME LESSONS TO BE LEARNED**

There is one residual problem that pervades our discussion of closure on knowledge and is not directly addressed in this chapter. It is the solution to the skeptical puzzle that is originally introduced by the AI argument in the section §5.2.1. However, I think, it is understandable why I do not talk too much about how to plausibly resolve skepticism in this chapter. Firstly, the investigation of the nature of and the solution to the skeptical puzzle is too huge an issue to be pursued here. Secondly, my efforts in this chapter are devoted to the investigation of closure principles of knowledge, which can be quite independent of the discussion of the nature of skepticism. However, since the issue of skepticism does emerge in my discussion every now and then, it seems best for me to very briefly gesture at some lessons that we should learn about closure with respect to skepticism, which may serve as a closing section of my discussion on closure here.

First of all, it should be noted that the rejection of some versions of closure is not necessarily motivated by the fear of the skeptical puzzle— there are other independent reasons for such rejection as well. For instance, CKI requires a person to be logically omniscient about all logical consequences of her knowledge, which is absurd.

The crucial point I want to emphasize here is that, granted that the abandonment of closure on knowledge is not an advisable candidate, an epistemologist should pick up a weaker version of closure on knowledge (for instance, CKI-AS or CKI-CW) in her/his theory of knowledge, if she/he does not want to be easily embarrassed by the skeptical puzzle.

Secondly, based upon the hints presented in the first point, we may make a further suggestion that, as long as we pick up a weaker version of closure on knowledge (for instance, CKI-AS or CKI-CW), it is not so easy for a skeptic to construct an appealing skeptical argument by utilizing the weaker closure principle. I think there is quite convincing evidence that indicates that closure is not the primary cause of the skeptical puzzle. There are at least two different approaches that can establish my idea: (1) the first approach is based upon our epistemic mechanism concerning the epistemic priority between the beliefs in *ordinary* statements about the external world (and let us use ‘O’ to label this kind of statement hereafter) and the ruling-out of skeptical hypotheses (and let us use ‘not-H’ to label this kind of statement hereafter). However, the situation is this: if the belief in not-H has epistemic priority<sup>37</sup> over (or equal epistemic priority to) our belief in O, the skeptical puzzle will arrive anyway without the need to appeal to closure principles, because the lack of knowledge of not-H would immediately

---

<sup>37</sup> One way to understand epistemic priority is this: since our everyday knowledge ascriptions presuppose the truth of some important propositions (such as, that there is an external world, that there are physical objects, etc.) which are seriously threatened by skeptical hypotheses, we have to establish the truth of the corresponding knowledge concerning the denial of the skeptical hypotheses in the first place. In this sense, establishing knowledge concerning the denial of the skeptical hypotheses should be epistemically prior to establishing everyday knowledge. In other words, knowledge of not-H should be established in a way that is epistemically prior to knowledge of O.

lead us to total ignorance; if the belief in *O* has epistemic priority over the belief in not-*H*, we actually can derive our knowledge of not-*H* by using our knowledge of *O* and some satisfactory version of some closure principle, that is, we can favor a Moorean reply to skepticism. In either case, closure would not directly provide support to skeptical arguments.<sup>38</sup> (2) The second approach is based upon the argumentation schema of skeptical arguments: if skeptics also think a weaker version of the closure principle is correct, then they cannot easily derive the skeptical conclusion by using the weaker version of the closure principle. The very rough idea can be illustrated as follows: Suppose skeptics accept CKI-AS. Apply CKI-AS to *O* and not-*H*,

$$(a) \{ K_S O \ \& \ K_S(O \rightarrow \text{not-}H) \ \& \ B^*_{S \text{not-}H} \} \rightarrow K_S \text{not-}H$$

Skeptics, by suggesting not- $K_S \text{not-}H$ , derive the negation of the antecedent of (a) here, which implies that at least one of the conjuncts in the antecedent of (a) has to be false. Since it is the case that  $K_S[(O \rightarrow \text{not-}H)]$ , the skeptics conclude  $[\text{not-}K_S O \vee \text{not-}B^*_{S \text{not-}H}]$ . Thus, without providing a reasonable principle to explain how *S* believes\* that not-*H*, skeptics actually cannot derive the conclusion that we do not have knowledge about the external world.

An even worse fact is that skeptics are trapped by a dilemma: if skeptics cannot provide a reasonable explanation of how *S* believes\* that not-*H*, they cannot directly derive the undermining conclusion that *S* does not know that *O*; but, on the other hand, if

<sup>38</sup> Peter D. Klein is one of the most prominent advocates of this kind of argument. Cf. the following papers: Klein 1995; Klein 2002; Klein 2004; and, Klein 2009.



skeptics provide a reasonable explanation of how S believes\* that not- $H$  (which not only indicates that it is true that  $B^*_{\text{snot-}H}$ , but also provides some justification or evidence concerning why  $B^*_{\text{snot-}H}$  is true), by recognizing the intrinsic relation between  $B^*_{\text{snot-}H}$  and  $K_{\text{snot-}H}$ , we shall surely doubt how skeptics can reasonably establish not- $K_{\text{snot-}H}$  in the first place. Thus, we can see that in either case, skeptics have no decisive advantage that favor their skeptical conclusion.

Generally speaking, along the approach of CKI-AS, we introduce several new conjuncts that are added to the antecedent of the closure principle and this serves as a resistant device against the skeptics' attacks on our everyday knowledge.<sup>39</sup>

Thirdly, following from the above comments on not- $B^*_{\text{snot-}H}$ , I think the intuitive power of the skeptical argument may be derived from the mechanism of doxastic formation rather than closure (or knowledge of  $O$  and not- $H$  themselves). Admittedly, our beliefs may be quite sensitive to the salient error possibilities. Skeptics, by suggesting a skeptical hypothesis to  $S$ , may make such a radical error possibility so salient to  $S$  that she becomes reluctant to affirm that she knows that not- $H$ . This kind of phenomenon may just reflect the fact that the saliency of skeptical error possibilities may affect  $S$ 's beliefs in not- $H$ . The crucial point here is whether  $S$ 's belief (and her corresponding knowledge) in  $O$  is withdrawn or not. If, in some situations,  $S$ 's belief in  $O$  gets so significantly damaged that  $S$  cannot continue to hold it, this will cause the collapse of  $S$ 's original

---

<sup>39</sup> Recently, Marian David and Ted A. Warfield provide a series of thorough arguments for this kind of treatment against skepticism (cf. David & Warfield 2008).

knowledge in O. But, in some other situations, S's belief in O may be still intact and S can still hold such a belief and therefore preserve the original knowledge in O. In this case, S can be in a position to know that not-H.<sup>40</sup> In either situation, the relevant epistemic mechanism (e.g., the mechanism concerning the sensitivity of belief, the subject's relevant psychological states, etc.) is more complex than the one the closure principle depicts.

All in all, what I want to emphasize is this: the evaluation of the closure principle can be done independently of the diagnosis of the nature of the skeptical argument. Our eagerness to reject skepticism is not the proper motivation for abandoning reasonable closure principles such as (CKI-AS) or (CKI-CW). As I've shown in this chapter, reasonable closure principles (e.g., (CKI-AS) or (CKI-CW)) should be preserved. It has also been shown in this chapter that contextualism fails to preserve a reasonable closure principle and the reasons are these: (1) There is no theoretical evidence that shows that contextualism is the best option if we want to hold a reasonable closure principle. (2) There is an intrinsic tension between the closure principles, contextualist epistemic modesty and the contextualist account of knowledge ascription. In this sense, contextualism does not provide us a satisfactory defense of reasonable closure principles such as (CKI-AS) or (CKI-CW).

Since skepticism can be introduced without directly appealing to the closure

---

<sup>40</sup> I think this may be considered as one of the reasons why Hawthorne would emphasize S's "retaining knowledge of *p* throughout" the performance of the inference in both his accounts for "Single-Premise Closure (SPC)" and "Multi-Premise Closure (MPC)" (cf. Hawthorne 2004, 33-34).

principle, we should search somewhere else for the solution of the skeptical problem. If we can find and reject the fundamental doctrine on which skeptics depend, we will not suffer from skepticism any longer. According to many epistemologists, the root of skepticism is infallibilism which is completely abandoned by contemporary fallibilist epistemologists. This will lead us to the next chapter, which is devoted to the investigation of contextualism and fallibilism.

## **CHAPTER 6: CONTEXTUALISM AND FALLIBILISM**

### **6.1 SKEPTICISM AND FALLIBILISM**

A general reflection on epistemic skepticism suggests that there is an underlying principal epistemic requirement that is endorsed by skeptics, namely, that if someone  $S$  knows that  $p$ ,  $S$  should be able to rule out all possibilities of error concerning  $p$ . If epistemologists do entertain such a requirement on knowledge, it seems hopeless for them to find a way out of the skeptical trap. In other words, any theory of knowledge that endorses “the principle that  $S$  knows  $p$  on the basis of reason  $r$  only if  $r$  entails  $p$ , is doomed to a skeptical conclusion” (Cohen 1988, 91, with some symbols adapted). Many contemporary epistemologists recognize that we should reject such a principle since (1) it is too demanding and is directly incompatible with the fact that we do know many things; (2) such a principle neither captures nor reflects the nature of our knowledge and everyday cognitive practices. The direct rejection of such a principle leads to a fallibilist principle that “allows that  $S$  can know  $p$  on the basis of  $r$  where  $r$  only makes  $p$  probable” (ibid., 91, with some symbols adapted). Some contemporary epistemologists are happy to suggest that “we are all fallibilists now” (Siegel 1997, 164). Since contextualists claim that their contextualist account of knowledge ascriptions provides a good solution to the skeptical problem, they also claim that their contextualism provides a good interpretation of the fallibilist view. Some contextualists even suggest that if someone wants to be a real fallibilist, she has to embrace a contextualist view of knowledge ascriptions (see Cohen 1988, 91-123). So, in the next section, I will introduce Stewart Cohen’s contextualist

view on how to be a fallibilist.

## 6.2 COHEN'S CONTEXTUALIST ACCOUNT OF FALLIBILISM

Among all contemporary contextualists, Stewart Cohen is probably the most prominent defender of both contextualism and fallibilism—he even suggests that to be a fallibilist is to embrace contextualism. According to Cohen, a general fallibilist view can be regarded as a rejection of ‘The Entailment Principle’:

The Entailment Principle: S knows that  $p$  on the basis of reason  $r$  only if  $r$  entails  $p$ . (ibid., 91)

Thus, a fallibilist theory of knowledge can avoid the skeptical problem simply by allowing that “S can know  $p$  on the basis of [reason]  $r$  where  $r$  only makes  $p$  probable” (ibid., 91). In other words, a fallibilist allows that “S can know  $p$ , even though there is a chance of error (i. e., there are alternatives compatible with his reasons)” (ibid., 106), where an alternative to a proposition  $p$  is a proposition incompatible with  $p$ . Thus, on one hand, by rejecting ‘The Entailment Principle,’ a fallibilist suggests that S can know that  $p$  on the basis of reason  $r$  that rules out only *some* (rather than *all*) alternatives to  $p$  so that there may be some other alternatives which are not ruled out by  $r$ ; but these un-ruled-out alternatives do not prevent S from knowing that  $p$ . In this sense, we have to distinguish these un-harmful alternatives from those ones that do rob S of her knowledge that  $p$ . So, “a fallibilist theory, at minimum, is committed to a distinction between conditions in which S’s epistemic position with respect to alternatives consistent with  $r$  precludes

knowledge and conditions in which S's epistemic position with respect to alternatives consistent with  $r$  does not preclude knowledge" (ibid., 101).

In order to draw the above distinction properly, Cohen borrows the term 'relevant alternative' from the relevant-alternative theory of knowledge and interprets the term 'relevant alternative' in a context-sensitive way.<sup>1</sup> Cohen proposes a definition of 'relevant alternative' as follows,

An alternative (to  $p$ )  $h$  is relevant (for S) in a context  $C$  =<sub>df.</sub> S's epistemic position with respect to  $h$  precludes S from knowing  $p$  in the same context  $C$ . (cf. Cohen 1988, 101)

Cohen also emphasizes that the term 'relevant' in the above definition is a *technical* term and "the standards that govern relevance are context-sensitive" (ibid., 96). Generally speaking, the contextualist account of relevant alternatives is designed to reflect two important aspects of the standards that govern relevance: (1) A relevant alternative should bear some relation to the nature of S's reason for believing  $p$  and S's epistemic circumstance. For instance, if either S's reason causes him to believe an alternative  $h$  or certain features of the circumstances constitute a reason for S to believe  $h$ , then this alternative is relevant. Alvin Goldman's Fake Barn Case is a good example to illustrate the point here: the total number of barn facades in the field would affect whether a fake-barn alternative is relevant for an agent to have the knowledge that she is looking at

---

<sup>1</sup> The relevant-alternative theory of knowledge, by its nature, does not necessarily commit to any epistemic contextualism of knowledge ascriptions. For instance, Fred I. Dretske (1981, especially, Chapter 5, 107-111), a proponent of relevant-alternative theory of knowledge, explicitly denies that propositional knowledge ascriptions are in any way context-sensitive.

a real barn. In order to cash out the above idea, Cohen introduces an external condition on the criterion of relevance, which is:

**The External Condition on the Criterion of Relevance:** an alternative (to  $p$ )  $h$  is relevant, if the probability of  $h$  conditional on reason  $r$  and certain features of the circumstances is sufficiently high (where the level of probability that is sufficient is determined by context). (ibid., 102)

With the above external condition in hand, cases similar to Alvin Goldman's fake-barn case can be handled properly in Cohen's contextualist account of relevant alternatives. (2) More crucially, Cohen thinks it is quite plausible to suggest that a relevant alternative bears a certain relation to the agent's cognitive, doxastic states, etc. This leads to the specification of an internal condition on the criterion of relevance:

**The Internal Condition on the Criterion of Relevance:** an alternative (to  $p$ )  $h$  is relevant, if  $S$  lacks sufficient reason to deny  $h$ , i. e., to believe not- $h$ . (ibid., 103)

According to Cohen, the above internal condition also provides a measurement of the strength of  $S$ 's epistemic position, since the internal condition determines "a standard that governs how strong  $S$ 's total reasons to believe  $p$  must be in order for  $S$  to know  $p$ " (ibid., 103).

Although there is no explicit occurrence of a context parameter  $C$  in the above two conditions, Cohen still stresses that both internal and external conditions on the criterion of relevance are context-sensitive (cf. ibid., 103). There is another important assumption that Cohen holds here; that is, that "each context selects *one* standard for

every proposition-alternative pair” and this assumption “determines how strong S’s [reason] must be to deny the alternative, in order for S to know the proposition” (ibid., endnote 29, 120). Thus, according to Cohen’s contextualist theory of relevant alternatives, in a given context *C*, there may not be a significant difference between the standard for how strong the reason for denying *h* must be in order for S to know *p* and the standard for how strong the reason for denying *h* must be in order for S to know not-*h*. Cohen thinks that readers should bear in mind that ‘relevant’ in his system is used as a *technical* term; so, given his definition of ‘relevance,’ there is nothing odd in suggesting that not-*p* is not always a relevant alternative to *p*.<sup>2</sup>

With his definition of relevant alternative together with the external and the internal conditions in hand, Cohen claims that his theory is much better than the traditional theory of relevant alternatives. Cohen compares his own theory with Fred Dretske’s theory and indicates that the contextualist theory preserves the closure principle that knowledge is closed under known entailment. Recall the Zebra case again.

**The Zebra Case:** S takes his son to the zoo, sees several zebras and, when questioned by his son, S tells him that the animals are zebras. Suppose S does know what zebras look like, and this is the city zoo, and the animals are in a pen clearly marked ‘ZEBRAS.’ In this sense, S is plausibly to claim that he knows that the animals are zebras. And it seems quite evident that something’s being a zebra implies that it is not a mule cleverly disguised by the zoo authorities. Let us suppose S also knows this evident entailment. But, does S know that the animals are not mules cleverly disguised by the zoo authorities?

---

<sup>2</sup> For instance, in Endnote 29, Cohen explicitly suggests that “the reader should bear in mind that ‘relevance’ is used here as a technical term. Given my definition of ‘relevance’, there is nothing odd about the negation of a proposition *q* not being a relevant alternative to *q*” (ibid., 120).



Dretske does not think S knows that the animals are not mules cleverly disguised by the zoo authorities. This leads him to reject the closure principle that knowledge is closed under known entailment, since S knows that the animals are zebras and S knows that if the animals are zebras then they are not cleverly disguised mules but S fails to know that the animals are not cleverly disguised mules. According to Dretske, the rejection of the closure principle is simply derived from the following fact: On the one hand, the alternative that the animals are cleverly disguised mules is *not* relevant to S's first knowledge that the animals are zebras and therefore S does not need to use his reason (or evidence) to rule out this *irrelevant* alternative. On the other hand, when the question about whether S knows that the animals are not cleverly disguised mules is raised, the alternative that the animals are cleverly disguised mules becomes relevant; since S's reason (or evidence) fails to rule out this relevant alternative, S does not know that the animals are not cleverly disguised mules. Since he holds both that S knows that the animals are zebras and that S does not know that the animals are not cleverly disguised mules, Dretske has no other option but to reject the principle that knowledge is closed by known entailment.

However, Cohen thinks giving up the closure principle is an unaffordable cost. According to Cohen's diagnosis, Dretske is wrong since he fails to appreciate the context-sensitivity of knowledge ascriptions and the context-sensitivity of relevance. According to Cohen, a contextualist theory of relevant alternatives does not need to reject the closure principle—the crucial hinge here is the *context*. Let us name the context  $C_1$

where S truly knows that the animals are zebras. When S correctly claims that he knows that the animals are zebras, Cohen actually agrees with Dretske that the alternative that the animals are cleverly disguised mules is *not* relevant to S's knowledge that the animals are zebras. But, Cohen emphasizes that it is the context that determines that the alternative is not relevant. Namely, in  $C_1$ , S knows that the animals are zebras on the basis of the above-mentioned reasons, even though these reasons are compatible with the *irrelevant* alternative that the animals are disguised mules. Thus, the alternative that the animals are disguised mules is determined by  $C_1$  not to be relevant and therefore it should not preclude S from having the corresponding knowledge. Given  $C_1$  fixed, S can derive his knowledge that the animals are not cleverly disguised mules from his knowledge that the animals are zebras and the known entailment from something's being a zebra to its not being a cleverly disguised mule. Since in  $C_1$  the alternative that the animals are disguised mules remains irrelevant, it should not preclude S from knowing that the animals are not cleverly disguised mules either. Thus, within one and same context, the known-entailment closure principle is preserved.

From the above argument, we can see what an important role the context plays in Cohen's theory. According to Cohen, it is these contextual factors that give the contextualist theory of relevant alternatives an advantage over its traditional counterpart. This is not the only advantage that Cohen claims for the contextualist theory of relevant alternatives—he claims it even provides us a better account of fallibilism. As mentioned in the beginning of this chapter, traditional fallibilism, by rejecting the Entailment

Principle, rejects skepticism as well. But Cohen thinks that traditional fallibilism owes us an explanation concerning why we are easily impressed by the skeptical argument, and that the explanation is plausibly provided by his contextualist theory of relevant alternatives.

According to Cohen, the skeptics deliberately use their skeptical scenarios to trigger contextual shifts surreptitiously and our failure to identify such shifts leads us into the skeptical traps. Thus, our tendency to say both that S knows that  $p$  and that S does not know not- $h$  (where  $h$  represents some skeptical possibility, such as, S is a brain-in-a-vat, S is deceived by an evil demon, etc.) results from “our failure to hold the standards of relevance fixed” (ibid., 106). More precisely, skeptics, via their skeptical scenarios, surreptitiously change the ordinary context, where the chance of error is *not* salient and the skeptical alternative is totally *irrelevant*, to the skeptical context. In doing so, skeptics make their alternatives relevant “by forcing us to view the reasons in a way that makes the chance of error salient” (ibid., 108). This kind of contextual shift, bringing about a change of relevance, makes even a fallibilist become reluctant to ascribe knowledge.

Here is Cohen’s remark:

Although, as fallibilists, we allow that S can know  $p$ , even though there is a chance of error (i. e., there are alternatives compatible with his reasons), when the chance of error is salient, we are reluctant to attribute knowledge. (ibid, 106)

Cohen thinks it is contextualism that can help us to identify the crux of the skeptical paradox— skeptical arguments and skeptical scenarios exploit the fact that certain

considerations can shift the standards of relevance by changing the contexts of knowledge ascriptions. “Failure to recognize the shift can lead us into paradox” (ibid., 110). Thus, Cohen claims contextualist fallibilism is able to solve the skeptical problem nicely as long as we keep clear the distinction between the ordinary context (and its corresponding standard of relevance) and the skeptical context (and its standard of relevance). Cohen suggests that a fallibilist can readily concede that we do not know anything relative to skeptical standards (cf. ibid., 117) and it is not a big deal: as long as a fallibilism is able to firmly deny that “skeptical standards normally govern our everyday knowledge attributions” (ibid., 117), our (ordinary) knowledge would be preserved and protected quite well. In this sense, Cohen thinks his contextualist account of fallibilism not only preserves all the merits that traditional fallibilism has, but also interprets the concept in a more plausible way. And that is why Cohen suggests that the best way to be a fallibilist is to embrace contextualism.

But is Cohen’s contextualist interpretation of fallibilism as good as Cohen suggests? We will find the answer in the remainder of this chapter. However, since we have already taken up the issue of the closure principle and contextualism in the previous chapter, I will not repeat my discussion here. In the next section, I will propose two challenges to Cohen’s contextualist account of fallibilism: the first one is to argue that contextualist fallibilism is not an improvement on traditional fallibilism. The second one is the oddity of the fully articulated statement of the fallibilist view.

## **6.3 CHALLENGES TO CONTEXTUALIST FALLIBILISM**

### **6.3.1 CONTEXTUALIST FALLIBILISM VS. TRADITIONAL FALLIBILISM**

According to Cohen, skeptics, when constructing their skeptical arguments or scenarios, exploit “the fact that certain considerations can lead to a shift in the standards of relevance” (ibid., 110) by surreptitiously changing the contexts of knowledge ascriptions so that we would fall victim to them if we fail to identify the change of context or the shift of relevance. But does this contextualist story really reveal the nature of the skeptical tricks? I don’t think so. In order to see my worry about Cohen’s story, let us recall Cohen’s Airport Case or DeRose’s Bank Cases that we discussed in Chapter 2. By such cases, these contextualists try to convince us that ordinary people with competency are able to *intuitively* tell the difference between the contexts and *intuitively* make different knowledge ascriptions correspondingly. I emphasize the term ‘intuitively’ because these contextualists neither provide any convincing analysis of their cases nor try to argue that their cases reflect the reality of our cognitive practice. They probably think their cases are so evident and intuitive that no one can plausibly argue against them. Although, as I indicate in Chapter 2, these cases are highly debatable, for the sake of the current discussion, let us just suppose the contextualists’ claim is plausible. Let us suppose, therefore, that we are able to intuitively tell the difference among contexts of knowledge ascription and we are able to ascribe knowledge differently according to our intuitive understanding of the contexts. In this sense, we, as competent knowledge

attributors, are in fact sensitive to the contextual shifts. But why, then, do we suddenly lose our ability to track the contextual shifts when we are confronted with skeptics? I do not think Cohen provides a plausible explanation of the skeptical paradox but rather tells us a myth, if he is unable to ease the tension between our supposed sensitivity to contextual shifts in our ordinary knowledge ascriptions and our insensitivity to skeptical contextual shifts. Even within a context-theoretic framework, there is something important that is missing from Cohen-style explanations. The task that a contextualist has to accomplish here is *not* merely to reduce the skeptical paradox to contextual shifts, but rather to indicate how skeptics, by using such *simply-structured* arguments and scenarios, are able to deceive us and make us lose track of contextual shifts. If the supposed contextualist intuition that is used to support the Airport Case or the Bank Cases is so reliable, how can skeptical arguments or skeptical scenarios so easily cause the malfunction of our intuition and lead to our failure to track the contextual shifts? But, sadly, we see nothing about this in Cohen's theory. In this sense, even a philosopher who deeply sympathizes with contextualism has to concede that Cohen's story of skeptical paradox is incomplete (if not totally wrong). And, incidentally, I want to further point out that the above challenge that I indicate here is not isolated merely in Cohen's contextualist theory— this problem *generally* penetrates contextualist accounts of knowledge ascriptions. So far as I know, there is not one contextualist epistemologist who provides a satisfactory account to resolve it.

However, the proponents of contextualist fallibilism may think their theoretic

position is better than traditional fallibilism, since after all they add some incomplete story there— something is always better than nothing, isn't it? This kind of reply leads me to a much deeper worry about contextualist fallibilism. Since Cohen explicitly indicates that, when the contextualist component is added to the traditional fallibilist view, a (contextualist) fallibilist would concede that we know nothing relative to the skeptical standard but we still know many things relative to the ordinary standard. According to the contextualist view, when skeptics use the word 'know,' they mean something different from what ordinary people mean when we use the word 'know;' namely, the skeptics define 'know' so differently and their standard for knowledge is so demanding that (probably) no human being can know anything. But, does this imply that we have to concede to them and acknowledge their *re-definition* of 'know?' No! I think Barry Stroud's case of the re-definition of 'physician' can illustrate the point:

Suppose someone makes the quite startling announcement that there are no physicians in the city of New York. That certainly seems to go against something we all thought we knew to be true, It would really be astonishing if there were no physicians at all in a city that size. When we ask how the remarkable discovery was made, and how long this deplorable state of affairs has obtained, suppose we find that the bearer of the startling news says it is true because, as he explains, what he means by 'physician' is a person who has a medical degree and can cure any conceivable illness in less than two minutes. We are no longer surprised by his announcement, nor do we find that it contradicts anything we all thought we knew to be true. We find it quite believable that there is no one in the whole city who fulfils all the conditions of that peculiar 're-definition' of 'physician.' Once we understand it as it was meant to be understood, there is nothing startling about the announcement except perhaps the form in which it was expressed. It does not deny what on first sight it might seem to deny, and it poses no threat to our original belief that there are thousands and thousands of physicians in New York. (Stroud 1984, 40)

I hardly think there is anyone who sympathizes with the too demanding re-definition of ‘physician’ in the above case— there is no need for us to concede to that guy in the above case and there is no reason for us to acknowledge his re-definition at all. A similar thought can be applied here: Since other than telling us a vivid skeptical scenario (or simply structured skeptical argument), the skeptics seldom provide any further reason for thinking their re-definition of ‘know’ is plausible, there is no evidence for their re-definition of ‘know’ to be acknowledged.<sup>3</sup> On the contrary, we can probably accuse skeptics of misunderstanding or distorting the nature of knowledge, just as we can accuse the guy in the above case of misunderstanding the word ‘physician.’

The contextualist concession to skeptics that Cohen proposes also leads to some potential danger in mis-interpreting fallibilism. To be frank, traditional fallibilism by itself is never an elegant *theory* of knowledge; for instance, it does not even specify the scope and the type of fallibilist knowledge. Merely from the statement of traditional fallibilism, we are not even clear about the answers to these questions: Is all propositional knowledge acquired in a fallibilist way? Are there any propositions that can be known infallibly? How can a necessary truth be known fallibly? Most importantly, fallibilism is merely a reasonable counter-statement against skepticism: it simply reflects the fact that in many (if not most, if not all) cases we human beings, with neither omniscience nor omnipotence, are only able to rule out some rather than all logically possible alternatives

---

<sup>3</sup> In contemporary epistemology, it remains controversial concerning whether the skeptics really re-define ‘know’ or not. But this is not the central issue for my current discussion. The crucial point here is, I think, that my account provided here fits the contextualist theory of knowledge ascriptions.



when we make knowledge claims and this is the real nature of human knowledge ascriptions. Thus, from a fallibilist point of view, skeptics really misunderstand the concept of knowledge, since skeptics think we know only if we can rule out all possible alternatives. In this sense, a fallibilist should regard her fallibilist statement as a remedy that corrects and eliminates the skeptics' mis-conception of knowledge. So, without any further explanation concerning why a fallibilist would embrace contextualism and make the corresponding concession, we may wonder why a fallibilist has to take contextualism seriously, for she rejects skepticism from the outset. If we just focus on the rejection of skepticism, the contextualist addition seems to be an idle wheel for fallibilism, even if we want to concede to the contextualists that they add something to traditional fallibilism.

According to the above clarification that I provide, traditional fallibilism is just a statement about the nature of human knowledge; and most importantly, it is a *true* one. And, as a single true statement (rather than a theory) about the nature of human knowledge, nothing would surprise us when we find that this traditional fallibilist statement is *unable to explain* a much more complicated and puzzling problem like skepticism. The fallibilist *statement* by its nature is not expected to provide us with any detailed explanation of the skeptical paradox as the contextualist theory is supposed to. I think all fallibilists, no matter whether they embrace contextualism or not, should be happily satisfied with their discovery of a *true* fallibilist statement about the nature of human knowledge. Thus, when contextualists accuse traditional fallibilism of failure to provide an explanation of the skeptical paradox, the accusation is really inappropriate

since it is made out of thin air. The above observation also implies that there is plenty of room between being a fallibilist and being a contextualist; since traditional fallibilism is just a statement about the nature of knowledge, it can be introduced to any theory of knowledge as long as it is consistent with other theoretic claims in the theory. In this sense, I think Cohen's general project fails, since there is no necessity for one to be a contextualist if she wants to be a fallibilist. So, it is also inappropriate to suggest that contextualist fallibilism is better than traditional fallibilism, since it is really unfair to suggest a contextualist theory plus the fallibilist statement is better than the fallibilist statement on its own. If he really wants to convince us that to be a fallibilist is to be a contextualist, Cohen has to show us that his theory is better than all other fallibilist theories of knowledge. Clearly, Cohen does not do so in his paper.

From the above analysis, we observe that Cohen's contextualist interpretation of fallibilism is not an improvement on traditional fallibilism. As we are about to see in the next section, David Lewis presents another challenge to Cohen's contextualist fallibilism. Lewis thinks fallibilism is not a good theoretical option, because he thinks the general statement of fallibilism sounds odd. This is the second challenge that will be discussed in section §6.3.2.

### **6.3.2 THE ODDITY OF FALLIBILISM**

Although fallibilism is discussed hotly in contemporary epistemology, it seems that epistemologists use the fallibilist statement loosely— different philosophers formulate fallibilism differently and sometimes an epistemologist even uses several different

statements to express the fallibilist idea in one paper. For instance, Cohen, in his paper “How to Be a Fallibilist,” offers (at least) the following different statements of fallibilism:<sup>4</sup>

- S fallibly knows that  $p$  if and only if S knows that  $p$  on the basis of reason  $r$  but  $r$  does not entail  $p$ .<sup>5</sup>
- S fallibly knows that  $p$  if and only if S knows  $p$  on the basis of reason  $r$  where  $r$  only makes  $p$  probable. (cf. Cohen 1988, 91)
- S fallibly knows that  $p$  if and only if S knows that  $p$  even though there is a chance of error. (cf. *ibid.*, 106)
- S fallibly knows that  $p$  if and only if S knows that  $p$  even though there are alternatives compatible with S’s reasons. (cf. *ibid.*, 106)

There is sufficient textual evidence to suggest that Cohen uses the above definitions of fallibilism somewhat indiscriminately. This suggests that Cohen thinks that they can express the fallibilist view equivalently. This kind of phenomenon is widespread in contemporary epistemology. For instance, John Hawthorne uses the following two definitions of fallibilism without discriminations:

- S fallibly knows that  $p$  if and only if S knows that  $p$  but there is a chance that not- $p$ . (cf. Hawthorne 2004, 26)
- S fallibly knows that  $p$  if and only if S knows that  $p$  but there is a chance that  $q$  (where  $q$  is known to be incompatible with  $p$ ). (cf. *ibid.*, 26)

Since I will take both Hawthorne and Lewis as representatives of those who think

---

<sup>4</sup> All of these four definitions are adapted from Cohen’s statements (Cohen 1988), since he never explicitly puts his account of fallibilism into a definition. Henceforth, I only provide reference page numbers without repeatedly emphasizing that the corresponding definition of fallibilism is adapted.

<sup>5</sup> Cf. Cohen’s formulation of the Entailment Principle (Cohen 1988, 91).

fallibilism sounds odd, I should list Lewis' account of fallibilism as well so that we can make a comparison:

S fallibly knows that  $p$  if and only if S knows that  $p$  but S has not eliminated all possibilities of error. (cf. Lewis 1996, 550)

When we compare all of the above definitions, we can easily see that they are different, since different key terms are used by different authors to define fallible knowledge. All three philosophers treat their own statements as genuine expressions of the fallibilist view. Because in what follows I will mainly use Lewis' objection to fallibilism, I will simply take his definition of fallibilism as the representative. Let us label the proposition after the 'if and only if' in Lewis' account of fallibilism as (PF), that is:

(PF): S knows that  $p$  but S has not eliminated all possibilities of error.

Bearing the above conventions in mind, we will go on with the introduction of the second challenge to fallibilism.

John Hawthorne, a famous proponent of sensitive moderate invariantism, indicates that it sounds extremely odd to assert some statement like (PF) (cf. Hawthorne 2004, 26). Although he does not provide a thorough diagnosis of the cause of the oddity in (PF), Hawthorne does take the oddity seriously, since he regards the oddity and the unease in (PF) as an indication that (PF) is unsustainable. It becomes more interesting when we find that even some contextualists share a similar worry about (PF). For instance, Lewis thinks there is a persistent unease in (PF), although he concedes that "if

forced to choose, I choose fallibilism,” since “[b]etter fallibilism than scepticism” (Lewis 1996, 550). But Lewis does not think fallibilism is a genuinely good option for epistemologists, because “it seems as if knowledge must be by definition infallible;” and in this sense, “to speak of fallible knowledge, of knowledge despite uneliminated possibilities of error, just *sounds* contradictory” (ibid., 549). Two points should be emphasized here: (1) Lewis would like to think (PF) explicitly expresses the concept of fallible knowledge, since the concession clause ‘S has not eliminated all possibilities of error’ is a precise indicator of the fallibilist idea. When we consider Lewis’ comparison between fallibilism and skepticism, Lewis actually indicates that it is the rejection of skepticism that motivates fallibilism. And, more importantly, (2) Lewis’ remark does not imply that (PF) *is* contradictory, since throughout his paper “Elusive Knowledge” what Lewis maintains about fallibilism is that fallibilism (only) *sounds* odd. This interpretation of Lewis’ view on (PF) is even more plausible, when we consider Lewis’ remark on fallibilism that implies fallibilism is better than skepticism. Since skepticism does not explicitly involve any contradiction, how can fallibilism be better than skepticism if (PF) *is* contradictory? The above considerations suggest that we shall not pursue an explanation of the oddity in (PF) by invoking any specific semantic theory that *directly* renders (PF) contradictory. This consideration will protect us from a misunderstanding of Lewis’ famous remark on fallibilism:

If you are a contented fallibilist, I implore you to be honest, be naïve, hear it afresh. ‘He knows, yet he has not eliminated all possibilities of error.’ Even if

you've numbed your ears, doesn't this overt, explicit fallibilism still sound wrong? (ibid., 550)

Although I am not quite sure how many readers share the similar uncomfortable feeling about fallibilism and (PF), at least it seems that there are some other philosophers who sympathize with Lewis' view.<sup>6</sup> However, for the sake of the current discussion, I would pragmatically assume that the oddity of (PF) is not, in any obvious manner, derivable from an inconsistency between 'knowledge of  $p$ ' and the 'un-eliminated possibility of error.'

However, it is unsurprising that Cohen did not deal with the problem of the oddity of (PF) in his paper, since his paper was published much earlier than Lewis' paper and Hawthorne's book. And according to my knowledge, epistemic contextualists who favor fallibilism or endorse (PF) never directly provide a reply to this challenge. But, it seems to be premature to conclude that contextualism cannot reply to this challenge. So, in the next section, I will examine whether, in a contextualist theory of knowledge ascription, there is a good explanation of the oddity of (PF). If the oddity can be explained away *by appealing to the contextualist mechanism of knowledge ascription*, then a Cohen-style of contextualist theory may be useful for the defence of fallibilism; otherwise, we have to conclude that, with the two challenges indicated in this section, contextualism is not the best way to defend fallibilism.

---

<sup>6</sup> For instance, Scott Soames (2003, 22) also suggests that "we would normally be quite uncomfortable with the claim *I know that S, but it is possible, given my evidence, that not S*" (emphasis originally).

## **6.4 THE EXPLANATION OF THE ODDITY OF (PF)**

In this section we consider whether contextualism can provide a satisfactory explanation of why (PF) sounds so odd. Since the contextualist theory of knowledge ascription is a semantic theory, the explanation that a contextualist seeks should mainly appeal to his semantic mechanism of context-sensitivity. If a satisfactory explanation of the oddity of (PF) is achieved by some semantic theory other than contextualism<sup>7</sup> (let alone a pragmatic account of the oddity in question), we have to conclude that the Cohen-style project fails and contextualism cannot provide us a good way of sustaining fallibilism.

### **6.4.1 A CONTEXTUALIST EXPLANATION OF THE ODDITY OF (PF)**

Since contextualists do not explicitly provide any explanation of the oddity of (PF) by themselves, we have to envisage what a plausible contextualist explanation would be. It will be useful to recall some important features of the contextualist theory of knowledge ascription.

According to the contextualist view, the truth of a certain knowledge ascription may vary in different contexts. A mention of specific possibilities of error can shift the context and therefore cause a change in the standard of knowledge attribution. Recall the Zebra Case. For the sake of the current argument, let us name the original ordinary context ‘ $C_o$ ,’ in which S knows that the animal is a zebra; and the later context with the

---

<sup>7</sup> For instance, Richard Feldman develops his semantic explanation of the oddity of (PF), which is completely independent from the contextualist theory of knowledge ascriptions. Feldman suggests that the oddity of (PF) is generated from the ambiguous scope of the possibility operator. See (Feldman 2003, 122-128) and (Feldman 1981, 266-282). My discussion of Feldman’s treatment of the oddity of (PF) is developed in Appendix 6.1 of this chapter.

disguised-mule possibility ' $C_s$ ,' in which S neither knows the animal is not a disguised mule nor knows that the animal is a zebra. Now we can evaluate the truth value of the fallibilist statement (Z): 'S (fallibly) knows that the animal is a zebra, but S has not eliminated all possibilities of error' in each context.

According to the view of contextualist fallibilism, in context  $C_o$  we would agree that the statement (Z) is true, since both 'S (fallibly) knows that the animal is a zebra' and 'S has not eliminated all possibilities of error' are true in  $C_o$ . But in context  $C_s$ , the statement (Z) is false because the first conjunct 'S (fallibly) knows that the animal is a zebra' is false in  $C_s$ . Thus, we can see that (Z) can be true in some contexts (for instance,  $C_o$  in the given example) but false in others (for instance,  $C_s$  in the given example). Since (Z) is an instantiation of (PF), a contextualist may suggest that the oddity of (PF) is derived from the ambiguity of the contexts. When (PF) is presented and evaluated, it does not *explicitly* indicate any specific information about contexts. Without such information about contexts, we may hesitate to assert (PF), since some tokens of (PF) may be true in some contexts while other tokens may be false in different contexts. However, these fallibilist contextualists emphasize that the changes of the truth values of the statement tokens are mainly brought about by the changes of the truth values of the tokens of the first conjunct, since the truth values of the tokens of the second conjunct are not so sensitive to the changes of contexts. Thus, contextualists think the oddity of (PF) is explained by the indeterminacy of the contexts of knowledge ascriptions.

Although those contextualists (such as Cohen) think there is a certain intrinsic



connection between contextualism and fallibilism, it does not seem that the above envisaged contextualist explanation is satisfactory, because the excuse that the mention of some un-eliminated possibility of error would automatically raise the standard of knowledge ascriptions does not seem to be a good diagnosis of the oddity in question. The reason can be briefly summarized as follows:

(1) The above contextualist explanation of the oddity of (PF) is not attractive even to some contextualists, because this contextualist explanation would accuse these non-fallibilist contextualists of failing to appreciate the change of the contexts of knowledge ascription. For instance, Lewis' discomfort with (PF) would be explained thus: Lewis, even as a contextualist, does not really appreciate the shift of the context of knowledge ascription and the oddity of (PF) suggested by him is due to his unawareness of the fact that the first conjunct in (PF) can be true in some context and false in others. I can hardly think there are any non-fallibilist contextualists who would find the above explanation satisfactory (let alone those invariantist epistemologists). This makes us doubt whether the oddity of (PF) is really derived from the confusion of the contexts.

(2) It should be realized that (PF) would be regarded as a quite general theoretical claim and when it is incorporated into a contextualist framework, it should be transformed into a meta-linguistic one, which can be exemplified as follows:

(C-PF): In any context  $C_i$ , S fallibly knows that  $p$  (in  $C_i$ ) but (in  $C_i$ ) S has not eliminated all possibilities of error.

In the above case, (C-PF) does not involve any ambiguity or confusion of context shifting.

But, I think, when (C-PF) is presented to Lewis or Hawthorne, they probably think (C-PF) still sounds odd. Thus, the contextualist explanation of the oddity simply cannot work well with this meta-linguistic version of fallibilism. It sounds too mysterious if some contextualists want to suggest that the oddity of (PF) simply vanishes when it is contextualized and expressed in a meta-linguistic form such as (C-PF). In this sense, I would suggest that even (C-PF) is haunted by the ghost of the oddity problem.

In sum, the contextualist semantic solution to the oddity problem does not work so well. We shall search somewhere else for a satisfactory explanation.

#### **6.4.2 GRICEAN APPROACH TO THE ODDITY OF (PF)**

As shown in the previous section, the contextualist (semantic) account of the oddity of (PF) fails. If (PF) is not contradictory, we should seek a pragmatic explanation of the oddity in question. This approach utilizes Gricean infelicity to explain the oddity of (PF) from a pragmatic perspective, which is forcefully proposed by Trent Dougherty and Patrick Rysiew (cf. Dougherty and Rysiew 2009).

Dougherty and Rysiew mainly utilize the Co-operative Principle in Paul Grice's theory of implicature; that is, "make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged" (Grice 1989, 26). More specifically, the Maxim of Quality is particularly crucial to the pragmatic explanation of the oddity in question. The Maxim of Quality prescribes: "do not say what you believe to be false" and "do not say that for which you lack adequate evidence" (ibid., 27). Or, to put them into corresponding

positive imperatives— “only say what you believe to be true” and “only say what you have evidence for.” However, before applying Gricean principles to (PF), it should be emphasized in advance that in order to explain the oddity successfully through the pragmatic view, it would require that (PF) should not be false, for were it, the subsequent pragmatic explanation of the oddity would be unnecessary. Granted this, it can be argued that the oddity is actually derived from the conversationally self-defeating assertion of the conjunction.

According to the Gricean theory, when a conversation participant sincerely asserts that ‘S knows that  $p$  but S has not eliminated all possibilities of error,’ she/he not only sincerely asserts both conjuncts but also makes both of them informative in the conversation; otherwise she/he would violate the Co-operative Principle. But the assertive utterance of the second conjunct would make the un-eliminated possibilities of error become salient to participants in the conversation and therefore, through shifting the participants’ psychological attention to the un-eliminated possibilities of error, pragmatically impart the implicature that the un-eliminated possibilities of error are significant and salient. It should be recognized that the assertive utterance of ‘S has not eliminated all possibilities of error’ does not *semantically* imply that un-eliminated possibilities of error are significant or salient, although the former does conversationally convey the latter. According to a fallibilist account of knowledge attributions, the un-eliminated possibilities of error should not be significant or salient to the person in question; otherwise, the person S does not know that  $p$ . In other words, if the

un-eliminated possibilities of error are significant for S then S does not know that  $p$ .<sup>8</sup> So, we can plausibly suggest that assertive utterances of ‘S has not eliminated all possibilities of error’ would conversationally impart that S does not know that  $p$  after all, since the utterance makes the epistemic possibility salient to the speakers in the conversation. But, on the other hand, the assertive utterances of the first conjunct would conversationally implicate that S does know that  $p$ . Combine these two parts together and we can see that the assertive utterance of the whole conjunction would conversationally impart self-contradictory and (therefore) self-defeating information. The following articulation of the pragmatic explanation makes the issue clear:

(PF) is semantically equivalent to the following conjunction:

(A1): (S (fallibly) knows that  $p$ ) & (S has not eliminated all possibilities of error).

The assertion of (A1) would pragmatically convey the following conjunction:

(A2): (S (fallibly) knows that  $p$ ) & (the un-eliminated possibilities of error are significant or salient).

Since the un-eliminated possibilities of error prevent S from knowing that  $p$  when they are significant or salient, (A2) eventually conveys (A3) as follows:

(A3): (S (fallibly) knows that  $p$ ) & (S does not know that  $p$ ).

It seems quite evident that (A3) is a self-undermining statement, from which the oddity of (PF) is generated.

Thus, Dougherty and Rysiew provide a successful *pragmatic* explanation of the oddity of (PF).<sup>9</sup> It is worth mentioning three remarks here: (1) This kind of pragmatic

<sup>8</sup> This is the general fallibilist account of knowledge ascription. For some relevant discussion, see Fantl and McGrath (2009a, 62-64; 2009b, 6-29).

<sup>9</sup> There is another pragmatic way to explain the oddity of (PF), which relies on the semantic implication of the first conjunct of (A1). The detailed discussion of this pragmatic explanation is in the Appendix 6.2 of this chapter.

explanation of the oddity of (PF) is constituted by both a semantic account of fallible knowledge and Gricean pragmatic factors of communication. One of the most valuable advantages of this treatment is to preserve an intuitive invariantist view of knowledge ascriptions, which does not induce any semantic ambiguity or complexity of knowledge ascriptions. (2) It does provide a good guideline for us to explain the source of some philosophers' discomfort with (PF). It does treat the oddity problem seriously and indicate that the oddity problem of (PF) is rooted in pragmatic infelicity rather than semantic inconsistency. This perfectly fits Lewis and Hawthorne's descriptions of their feeling of unease about (PF). (3) This treatment involves both a simpler, more stable semantics of knowledge ascriptions and a complex pragmatic mechanism of the assertions of knowledge ascriptions, which attains a sufficient explanatory power of the puzzling phenomena under discussion.

However, some philosophers may doubt the sustainability of the pragmatic explanation of the oddity of (PF), since, according to the Gricean theory of implicature, an implicature that is conveyed by some statement can be cancelled by an explicit articulation which indicates the conveyed implicature is not the case. Thus, a seeming counterexample may be constructed as follows:

According to the fallibilist view, 'S fallibly knows that  $p$ ' would imply that 'the un-eliminated possibilities of error are not salient or significant.' Thus, we can import this statement explicitly into (PF), which may give us a full-fledged account of the epistemic concept of fallibilism

(F-PF): S (fallibly) knows that  $p$  but S has not eliminated all possibilities of error, however, these un-eliminated possibilities of error are neither

significant nor salient.

The semantic form of (F-PF) is the following conjunction that involves three conjuncts:

(A1<sup>\*</sup>): (S (fallibly) knows that  $p$ ) & (S has not eliminated all possibilities of error) & (the un-eliminated possibilities of error are neither significant nor salient).

Thus, (A1<sup>\*</sup>) cannot pragmatically convey (A2) any longer, since the implicature that is expressed by the second conjunct in (A2) is canceled by the third conjunct of (A1<sup>\*</sup>). Since (A1<sup>\*</sup>) cannot pragmatically convey (A2), (A1<sup>\*</sup>) would not continue to convey the further self-undermining information that is expressed by (A3). But, there is no convincing reason to suggest the oddity of (PF) can so easily vanish when it is just expressed in a more detailed form like (F-PF). In other words, (F-PF) should sound as odd as (PF) does. If the pragmatic explanation cannot work for the oddity of (F-PF), it cannot genuinely work for (PF) either. Therefore, if the suggested Gricean treatment cannot explain the oddity of (F-PF), it is too restricted to be regarded as a satisfactory explanation.

At the first glance, the above counterexample seems to pose a quite serious challenge to the Gricean pragmatic explanation of the oddity in question. But, this is actually not the case. Some further clarification of the second conjunct in (A2) is needed. Although the conveyed information that ‘the un-eliminated possibilities of error are significant or salient’ is expressed in a propositional form, such information should not be merely regarded as a purely verbal implicature—it is not a piece of implicature that can be easily cancelled by some other proposition that is inconsistent with it. It should rather be regarded as an explicit description of the cognitive or epistemic states of the participants who are involved in the conversation. In this sense, the conjunct that ‘the un-eliminated possibilities of error are significant or salient’ actually describes the psychological state of one of the conversational participants, and this cannot be easily cancelled by a counter-statement, since the cognitive, psychological states of participants cannot be so

easily changed by the statement that ‘the un-eliminated possibilities of error are neither significant nor salient.’ The participants cannot easily dismiss their *recognition* of the possibility of an error’s being significant or salient for S simply by hearing another statement that ‘the un-eliminated possibilities of error are neither significant nor salient.’ If I am correct, the self-undermining information occurs even earlier, since the assertion of (A1<sup>\*</sup>) would pragmatically convey (A2<sup>\*</sup>) as such:

(A2<sup>\*</sup>): (S (fallibly) knows that *p*) & (the un-eliminated possibilities of error are significant or salient) & (the un-eliminated possibilities of error are neither significant nor salient).

(A2<sup>\*</sup>) is self-undermining, since the second and the third conjuncts are inconsistent. So, the oddity of (F-PF) can be explained by the self-undermining information that is explicitly conveyed by (A2<sup>\*</sup>).

However, those philosophers who present the above counter-example may complain that my reply only asserts a counter-statement that the implicature ‘the un-eliminated possibilities of error are significant or salient’ is not easily cancelled, which is explicitly against the suggestion that Gricean theory gives us the right to cancel the very implicature. But independent evidence from psychological research is available to show that the implicature in question is not easily cancelled.

Actually, my reply is supported by Jennifer Nagel’s excellent paper (Nagel 2010b) on the psychological consequences of thinking about error.<sup>10</sup> As Nagel reports,

---

<sup>10</sup> Admittedly, even though Nagel does not explicitly indicate that her psychological theory can be used to defend the pragmatic explanation of the oddity of (PF), I think her conclusion can be extended and

many philosophers do not want to deny the feeling that we are reluctant to ascribe knowledge when we think about some un-eliminated possibilities of error, even though these philosophers do not think this kind of feeling is a reliable guide for us to construct a semantic account of knowledge ascription or a theory of knowledge in general. These philosophers suggest that the reluctance in question can be explained by theories of psychological bias. For instance, John Hawthorne and Timothy Williamson both propose that the reluctance can be explained by a psychological bias known as the availability heuristic. The availability heuristic is a distorting psychological influence on human judgments of risk, which inclines us to overestimate the likelihood of an event or a state of affairs when we are able to (relatively) easily recall or imagine it. As Hawthorne suggests, “when a certain scenario is made vivid, the perceived risk of that scenario may rise dramatically” (Hawthorne 2004, 164). Williamson also thinks that, when some considerations of some possibilities are psychologically salient to us, we normally give more weight to them; and this is why we feel reluctant to ascribe knowledge when un-eliminated possibilities of error are salient (cf. Williamson 2005, 226). However, Nagel does not think the availability heuristic is a satisfactory explanation of our feelings and she indicates two important reasons for thinking that Hawthorne and Williamson’s proposal fails (cf. Nagel 2010b, 291-301). (1) The availability heuristic is not always stable. The consideration of a possible situation does not always lead to an

---

borrowed to support my position here, because not only is her theory consistent with my position, but also we share a similar view on the psychological consequences of thinking about the possibility of error. I will explain this in detail in the subsequent discussion.



overestimation— sometimes it leads to an underestimation. (2) The psychological effects that are generated by the availability heuristic can be manipulated or cancelled by further instructions on how to dismiss the link between the feelings of the ease of imagining an event and the judgment of the likelihood of the event. There are important lessons that we can take from Nagel’s insights. If the oddity of (PF) is real, it amounts to our uneasiness in holding both conjuncts in (PF) simultaneously. But this does not imply that (PF) itself is false or contradictory, since the oddity and the corresponding uneasiness are generated by psychological bias, and this cannot be easily cancelled. According to Nagel, the correct account of the corresponding psychological bias effect is epistemic egocentrism, which “impairs our ability to suppress privileged information when evaluating the judgments of others” (ibid., 301). The best known, relevant instance of epistemic egocentrism is hindsight bias, under which “our capacity to recall our own less informed past states of mind is tainted by more recently acquired information— including information just mentioned— in a manner that is not at all evident to us at the moment of recall” (ibid., 302). Thus, epistemic egocentrism represents a broader psychological bias, which would affect both our judgments on our own mental (and epistemic) states and our judgments on other people’s mental states. Here is Nagel’s remark:

[E]pistemic egocentrism affects not only our efforts to reconstruct our own past mental states, but also our efforts to judge the mental states of less informed others: we overestimate the extent to which they share our beliefs, attitudes and concerns, even in the face of feedback to the contrary, and are surprisingly unaware of the extent to which we do this. (ibid., 302)

Nagel also reports that the psychological effects that are generated by epistemic egocentrism (especially, hindsight bias) are extremely robust and therefore cannot be easily cancelled (ibid., 304). This supports my pragmatic account of the oddity of (PF) and justifies my claim that the implicature that is conveyed by the concession clause in (PF) (i.e., the second conjunct in (A2)) cannot be easily cancelled.

Normally no one would use a statement with the explicit (PF) form to ascribe knowledge and this is true even for a fallibilist— a person, even if she is a fallibilist, normally only uses the abbreviated statement ‘S (fallibly) knows that  $p$ ’ to ascribe knowledge and leaves the concession clause ‘S has not eliminated all possibilities of error’ unstated. Since the default information of the concession clause is usually not to be explicitly expressed, we normally do not think about the concession clause; in other words, the concession clause usually does not occur to us. When the fallibilist claim is explicitly stated, we are psychologically inclined to think the statement ‘S (fallibly) knows that  $p$ ’ and the statement ‘S knows that  $p$  but S has not eliminated all possibilities of error’ are informationally inequivalent, even though, from the fallibilist point of view, they are semantically equivalent.<sup>11</sup> We are inclined to think the statement ‘S knows that  $p$  but S has not eliminated all possibilities of error’ provides more information, because the concession clause indicates some un-eliminated possibilities of error. We pay attention not only to the concession clause but also to the implicature that is conversationally conveyed by it. In this sense, we think that when the fallibilist knowledge claim is fully

---

<sup>11</sup> These two statements are semantically equivalent simply by the definition of fallibilism on knowledge.

articulated we have more information than when it wasn't. By the hindsight bias, we are unable to suppress the (privileged) added information and therefore we are unable to suspend the information we get from the conversational implicature. Thus, we are inclined to think the un-eliminated possibilities of error are significant or salient, since it is the implicature information that is conveyed by the explicit concession clause. Because epistemic egocentrism (especially, hindsight bias) is robust, the corresponding implicature information is also robust and cannot be easily cancelled by the third conjunct of (A1<sup>\*</sup>). This also explains why (F-PF) still conversationally conveys some self-undermining statement (i.e., (A2<sup>\*</sup>)). With this kind of psychological theory, I think my position on the pragmatic explanation of the oddity of (PF) remains sustainable.

Although I do not think the implicature that is conveyed by (PF) is easily cancelled, I still want to briefly point out that the pragmatic treatment of the oddity would not be doomed, even granted that the implicature in question (i.e., the second conjunct in (A2)) may be cancelable by the explicit denial of the uneliminated possibilities of an error's being salient or significant. But this will not render the counterexample plausible. I would suggest that the counterexample itself is problematic from a Gricean theoretical perspective, because (F-PF) may lead to a violation of Gricean principles of conversation. For instance, since 'the un-eliminated possibilities of error are neither significant nor salient,' why would a participant purposely bother herself/himself in bringing the very possibility into the conversation by asserting (A1<sup>\*</sup>)? If the possibilities of error are neither significant nor salient for S, then they would not prevent S from knowing that *p*. In this

sense, by asserting the first conjunct in (A1) (i.e., S knows that  $p$ ), all participants in the conversation recognize that, whatever un-eliminated possibilities of error there may be, they are insignificant or unsalient for S. Thus, by asserting the third conjunct of (A1<sup>\*</sup>), the very participant actually asserts something that is totally evident for everyone who participates in the conversation. This violates one of the Gricean principles of conversations— “Be brief (avoid unnecessary prolixity)” (Grice 1989, 27). Since the counterexample is defective by itself, it should not be considered as a real objection to the pragmatic explanation of the oddity of (PF).

In sum, the pragmatic explanation of the oddity of (PF) is evidently superior to the contextualist explanation of the oddity. This indicates that there is no convincing reason for us to regard contextualism as the preferred way to present or defend a fallibilist account of knowledge.

## **6.5 CONCLUSION**

With the detailed inspection of the relation of contextualism and fallibilism, I conclude that contextualism cannot provide the best account or defense of epistemic fallibilism, since contextualism fails to resolve those two crucial challenges that I indicate in §6.3 of this chapter. This conclusively suggests that the Cohen-style project of contextualist fallibilism fails.

## **APPENDIX 6.1: THE AMBIGUOUS SCOPE OF THE POSSIBILITY OPERATOR AND THE ODDITY OF (PF)**

Richard Feldman once suggested that (PF) seemed to be equivalent to a denial of the intuitive statement that ‘if you know that  $p$  then you cannot be wrong,’ from which the oddity is generated. According to Feldman’s interpretation, the ‘cannot’ in the statement is to take a wide scope, which is actually expressing the statement that ‘it cannot be the case that you know that  $p$  but  $p$  is false.’ It seems quite evident that the statement with the wide scope of ‘cannot’ is true, since it merely expresses the (necessary) factivity of knowledge. To articulate Feldman’s suggestion more explicitly, (PF) can be interpreted in the following two logical forms:

- (F1) It is possible that [(S fallibly knows that  $p$ ) & (not- $p$  is true)], where the possibility operator takes a wide scope; and
- (F2) (S fallibly knows that  $p$ ) & (It is possible that not- $p$  is true), where the possibility operator takes a narrow scope.

It seems quite evident that (F1) is not the right interpretation of (PF), since, as Feldman correctly indicates, fallibilists are neither “saying that knowledge is compatible with actual error” nor “saying that you can know something that is not true” (Feldman 2003, 124). Because fallibilists are actually rejecting “the view that knowledge requires absolute certainty” (ibid., 124), (F2) should be regarded as the real fallibilist position; in other words, the scope of the epistemic possibility operator should always take the narrow scope. The oddity of (PF) may result from the scope confusion between (F1) and (F2).

Although it is admitted that Feldman’s clarification is in the true spirit of

fallibilism, it remains quite awkward and indirect if we seriously want to pursue such an approach to explain the oddity of concessive knowledge ascriptions, because Feldman's solution seems to suggest that those philosophers, such as David Lewis, simply get confused by the scope confusion between (F1) and (F2) and therefore do not genuinely understand (PF). But, this is simply not the case. According to our formulation of (PF), there is no clue to suggest that the Lewisian oddity is actually generated from the operator-scope confusion or a misidentification of the logical structure of the formulation. When we read his criticism concerning the oddity of fallibilism, Lewis does not seem to be committed to any (explicit) scope confusion, since he always explicitly addresses the possibilities of error throughout his discussion. Furthermore, when we stick to the standard formulation of (PF) that is given in this chapter, we actually rule out the scope-confusion interpretation in a quite explicit way, so there is no convincing evidence that suggests Feldman's approach is correct.

## **APPENDIX 6.2: ANOTHER PRAGMATIC EXPLANATION OF THE ODDITY OF (PF)**

(PF) is semantically equivalent to the following conjunction:

(A1): (S (fallibly) knows that  $p$ ) & (S has not eliminated all possibilities of error).

The assertion of (A1) would pragmatically convey the following conjunction:

(A2): (S (fallibly) knows that  $p$ ) & (the un-eliminated possibilities of error are significant or salient).

Since the first conjunct in (A1) indicates that S knows that  $p$ , according to the fallibilist theory of knowledge ascriptions, the un-eliminated possibilities of error should be neither significant nor salient. Thus, (A2) would imply (A4):

(A4): (the un-eliminated possibilities of error are neither significant nor salient)  
& (the un-eliminated possibilities of error are significant or salient).

Evidently, (A4) is a self-undermining statement. Therefore we can explain the oddity of (PF) by indicating that (PF) conversationally conveys some self-undermining statement like (A4).

## **CHAPTER 7: EPILOGUE**

I have argued in this thesis that epistemic contextualism does not provide a satisfactory semantic account of the context-sensitivity of ‘know’ and therefore should be rejected. To establish this I examined epistemic contextualism from two important perspectives. From one perspective, it has been shown that epistemic contextualism provides no plausible linguistic models for the supposed context-sensitivity of knowledge ascription, no matter whether ‘know’ is treated as a binary indexical term or a ternary contrastivist term. From the other perspective, when epistemic contextualism is evaluated in contemporary epistemology, it does not provide any genuinely powerful theoretical tools to help us solve any important epistemological problems. Thus, I conclude that we don’t need to embrace epistemic contextualism, since it does not have any real theoretical advantages over the classical invariantist semantic account of ‘know.’

In this last chapter, instead of reiterating the conclusions that were established in each previous chapter, I will propose a comparison between epistemic contextualism and its rivals, and this is the straw that breaks the camel’s back. This consideration will establish that there are serious flaws in the contextualist methodology, to which contextualists always appeal by constructing a series of thought experiments that are claimed to reflect our supposed intuitions about the context-sensitivity of ‘know.’ I think epistemic contextualism is inevitably doomed if their methodology is seriously flawed and has to be abandoned.

As shown in §2.4 and §2.5 of Chapter 2, there are three important theories that



go against epistemic contextualism, that is, experimental philosophy<sup>1</sup>, the pragmatic invariantist account of knowledge ascription and the psychological invariantist account of knowledge ascription. They all have different interpretations of (LS-NA) and (HS-A)<sup>2</sup> from the ones that are offered by epistemic contextualism. The differences among these four theories with respect to both (LS-NA) and (HS-A) are illustrated in Table 7.1 as follows:

Table 7.1 The Comparison among Four Theories with respect to (LS-NA) and (HS-A)

	Keith knows that the bank will be open tomorrow (i.e., Saturday)	
	TRUE	FALSE
(LS-NA)	Epistemic Contextualism Pragmatic Invariantism Psychological Invariantism Experimental Philosophy	(no theory in this position)
(HS-A)	Pragmatic Invariantism Experimental Philosophy	Epistemic Contextualism Psychological Invariantism

Table 7.1 explicitly shows that the above four theories take quite different positions with respect to the truth value of ‘Keith knows that the bank will be open tomorrow (i.e., Saturday)’ in case (HS-A). According to the report from experimental philosophy, most participants think Keith still knows that the bank will be open tomorrow (i.e., Saturday) even in (HS-A); the invariantists who use the pragmatic account to explain the conversational infelicity of the assertion concerning Keith’s knowledge in (HS-A) also think that it is true that Keith knows that the bank will be open tomorrow (i.e., Saturday)

<sup>1</sup> To be precise, experimental philosophy introduced in Chapter 2 is neither a theory of knowledge nor a semantic theory of ‘know,’ in which sense experimental philosophy is quite different from pragmatic invariantism and psychological invariantism. What experimental philosophy shows is simply that the reported experimental data contradict the claims made by epistemic contextualists.

<sup>2</sup> For the detailed discussions of (LS-NA) and (HS-A), see §2.4 of Chapter 2, especially pp. 48-52.

in the given case. But, on the other hand, both epistemic contextualism and invariantism with the psychological interpretation of evidence-based outright belief claim that Keith does not know the bank will be open in (HS-A). But it should be noticed that there is a significant distinction between epistemic contextualism and psychological invariantism: epistemic contextualism implies that its response on (HS-A) reflects semantic intuitions about the context-sensitivity of ‘know;’ but psychological invariantism proposes that Keith’s evidence-based outright belief is undermined in (HS-A) and there is no convincing evidence that entails the context-sensitivity of the knowledge ascription. When we consider the different attitudes towards the supposed context-sensitivity of ‘know’ in (HS-A), these four theories can then be positioned as follows:

Table 7.2 The Comparison among Four Theories with respect to (HS-A)

	‘Keith knows that the bank will be open tomorrow (i.e., Saturday)’ in (HS-A)	
	TRUE	FALSE
endorsing a context-sensitive semantics of ‘know’	(no theory in this position)	Epistemic Contextualism
rejecting a context-sensitive semantics of ‘know’	Pragmatic Invariantism Experimental Philosophy	Psychological Invariantism

The comparison shown in both Table 7.1 and 7.2 indicates that the disagreement among theorists is even more pervasive than we originally thought when we only compared each rival theory with epistemic contextualism: the crucial point here is not only that theorists

generally disagree with each other on whether ‘know’ is a context-sensitive term in the semantic sense, but also that they specifically disagree with each other on the truth values they ascribe to Keith’s knowledge claim about the opening of the bank on Saturday in (HS-A). It is also worth mentioning that experimental philosophy and psychological invariantism make quite different judgments on the truth value of Keith’s knowledge claim in (HS-A) even though they both appeal to their own empirical data respectively. This situation implies that the urgent project for epistemic contextualism is not to defend their semantic account of the context-sensitivity of ‘know’ but rather to save their supposed phenomena that are supposed to reflect the supposed semantic intuition about the context-sensitivity of knowledge ascription in the first place.

The above considerations actually impose a series of serious restrictions on the potential re-construction of the thought-experimental cases that are supposed to favor epistemic contextualism. First, as shown in §2.5 of Chapter 2 as well as §6.4.2 of Chapter 6, if the psychological mechanism proposed by Jennifer Nagel is correct, epistemic contextualists cannot freely introduce any presuppositions to their cases so that they may easily evade the counter-examples. For instance, when he originally composed his Bank cases (DeRose 1992, 913), Keith DeRose explicitly presupposed that even in (HS-A) the subject should “[remain] as confident as” he was before that the bank will open so that DeRose was able to preclude the psychological rival interpretation of the case of (HS-A). But now this presupposition is surely an implausible one since it only creates a psychologically *unrealistic* case that may favor epistemic contextualism in an *ad hoc* way

if Nagel's psychological theory of belief revision is true. Thus, if contextualists want to defend their theory by appealing to the re-construction of the cases such as the Bank cases (if such a re-construction is possible), they have to be sure that the re-constructed case is a realistic one that (at least) does not explicitly violate the empirical rules or psychological theories.

Second, epistemic contextualists have to explicitly provide a list of the contextual factors that are thought to affect the knowledge ascription in question. But most experimental philosophers suggest that neither the practical stakes nor the mere mentioning of an error possibility can automatically rob us of the knowledge ascription. If there are some further factors, contextualists have to explicitly indicate what they are. If there are some specific ways for the practical stakes and the mentioning of an error possibility to work together so that they undermine the knowledge ascription in question, contextualists also have to prescribe these ways explicitly. Furthermore, contextualists have to prove how we, as competent English speakers, are able to unpack these factors (or, the ways in which the supposed factors work together) in the given re-constructed case. Contextualists are no longer able to use the re-construction of the cases as a black box to favor their theory of knowledge ascription. In this sense, without the specification of the factors and their corresponding operative ways, contextualists cannot merely appeal to the re-construction of even more complicated and subtle cases to illustrate their supposed semantic intuition about the context-sensitivity of 'know.' For example, DeRose recently constructs a more complicated case that involves attributors in different

conversations talking about the same subject with respect to a target knowledge claim.

Here is DeRose's newly constructed case (DeRose 2009, 4):

*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.”

But I do not think the above complicated case really helps DeRose in establishing his contextualism, because we actually have no intuitive and reliable consensus on what the supposed contextual factors really are.

Third, if there are some further factors (or, some way in which the factors operate together), contextualists have to show that these factors and their corresponding operative ways do genuinely affect the semantics of ‘know’ rather than the pragmatics or psychology concerning knowledge ascription. I doubt whether contextualists are able to successfully rule out rival psychological interpretations. As shown in the previous chapters, the relevant psychological mechanism concerning belief formation is really complex. As William James points out, we have a dual goal in belief formation: to “believe truth” and to “shun error” (James 1896, 24). The goal to believe truth and the goal to avoid error sometimes conflict with each other.<sup>3</sup> When the goal to believe truth predominates, we are eager to ascribe knowledge; on the other hand, when the goal to

---

<sup>3</sup> See Cross (2010, 35-39) for some relevant discussion as well.

avoid error preponderates, we become more reluctant to issue the corresponding knowledge ascription. In this sense, even if contextualists are correct about our reluctance in ascribing knowledge to some subject, we may remain uncertain whether this is a hallmark of the supposed semantic context-sensitivity of ‘know’ or is just a reflection of our preference for avoiding error over believing truth.

Fourth, epistemic contextualists have to eliminate psychological effects (such as, the frame effect, the order of the presentation of (LS-NA) and (HS-A), etc.<sup>4</sup>) that may bias judgments of the knowledge ascription in question.

Lastly, even granted that knowledge plays an important role in our practical reasoning and therefore somehow responds to the subject’s practical environment, contextualists have to keep a minimal objectivity of the corresponding knowledge claims so that the truth values of our ordinary knowledge claims would not be arbitrarily affected by the practical stakes, interests or contexts. In this sense, when contextualists re-construct their cases, they should keep in mind that there should be “a kind of stabilizing effect on the ways that contexts can shift the standards” for knowledge ascription so that “the role of knowledge in practical reasoning insures that the standards for knowledge will not vary widely or wildly” (Greco 2010, 122). But, as John Greco correctly points out, this would “rob contextualism of its anti-skeptical force” (ibid., 122), because the standards for knowledge would not immediately rise unusually high when some skeptical considerations are in play. I think Greco’s comments here are parallel to

---

<sup>4</sup> The relevant discussion of these effects is presented in §2.5 of Chapter 2.

my critiques of both contrastivism and the binary contextualism in §5.3.2 and §5.3.3 of Chapter 5 where I argued that there is a tension in contextualism between its anti-skeptical strategy and its preservation of the closure principle (which can be regarded as a general normative rule on knowledge). The crucial point here is this: even granted that it is the supposed anti-skeptical strategy of epistemic contextualism that is attractive, if contextualists have to somehow reduce (or even abandon) their supposed anti-skeptical power, the resulting “new” contextualism would be definitely less attractive in epistemology.

From the above considerations, I think, we are able to conclude that there are serious challenges to contextualists when they construct the cases which are supposed to favor their theory of the context-sensitivity of ‘know.’ In this sense, the most pressing task for contextualism is to save the phenomena. As emphasized, the construction of the thought-experimental cases that are supposed to reflect the semantic intuition about the context-sensitivity of ‘know’ is the major methodology applied by epistemic contextualists. If this methodology is seriously flawed, epistemic contextualism is essentially doomed. And when we take a broader bird’s-eye view of my thesis, we are able to draw a conclusion in the end: epistemic contextualism is not only problematic in its theoretical construction but also obscure in presenting reliable data on the supposed initial phenomenon. Its inadequacy in solving these problems indicates that epistemic contextualism should not be considered as a promising semantics of knowledge ascription and therefore should be rejected.



## REFERENCES

- Audi, Robert. (1988). *Belief, Justification and Knowledge: An Introduction to Epistemology*, Belmont, CA: Wadsworth Publishing Company.
- Bach, Kent. (2005). "The Emperor's New 'Knows'," in [Preyer & Peter (eds.) 2005], 51-89.
- Baumann, Peter. (2004). "Lotteries and Contexts," *Erkenntnis*, Vol. **61**, No. **2-3**, 415-428.
- \_\_\_\_\_. (2005). "Varieties of Contextualism: Standards and Descriptions," *Grazer Philosophische Studien*, Vol. **69**, 229-245.
- \_\_\_\_\_. (2008a). "Contextualism and the Factivity Problem," *Philosophy and Phenomenological Research*, Vol. **76**, No. **3**, 580-602.
- \_\_\_\_\_. (2008b). "Contrastivism Rather than Something Else? On the Limits of Epistemic Contrastivism" *Erkenntnis*, Vol. **69**, No. **2**, 189-200.
- \_\_\_\_\_. (2010). "Factivity and Contextualism," *Analysis*, Vol. **70**, No. **1**, 82-89.
- \_\_\_\_\_. (2011). "PS: Response to Schaffer's Reply," in [Tolksdorf (ed.) 2011], 425-431.
- Binnick, Robert I., Alice Davison, Georgia M. Green & Jerry L. Morgan. (eds.) (1969). *Papers from the Fifth Regional Meeting of the Chicago Linguistics Society* (April 18-19, 1969), Chicago, IL: University of Chicago.
- Blome-Tillmann, Michael. (2009). "Contextualism, Safety and Epistemic Relevance," *Philosophical Studies*, Vol. **143**, No. **3**, 383-394.
- Brown, Jessica. (2005). "Adapt or Die: the Death of Invariantism?" *The Philosophical Quarterly*, Vol. **55**, No. **219**, 263-285.
- \_\_\_\_\_. (2006). "Contextualism and Warranted Assertibility Maneuvers," *Philosophical Studies*, Vol. **130**, No. **3**, 407-435.
- Brueckner, Anthony L. (1985). "Skepticism and Epistemic Closure," *Philosophical Topics*, Vol. **13**, No. **3**, 89-117.
- Buckwalter, Wesley. (2010). "Knowledge Isn't Closed on Saturday: A Study in Ordinary Language," *Review of Philosophy and Psychology*, Vol. **1**, No. **3**, 395-406.
- Burge, Tyler. (1973). "Reference and Proper Names," *The Journal of Philosophy*, Vol. **70**, No. **14**, 425-439.
- Campbell, Joseph Keim., Michael O'Rourke & Harry S. Silverstein. (eds.) (2010).

*Knowledge and Skepticism*, Cambridge, MA: The MIT Press.

Cappelen, Herman. & Ernest Lepore. (2005). *Insensitive Semantics: A Defense of Semantic Minimalism and Speech Act Pluralism*, Malden, MA: Blackwell Publishing Ltd.

Cappelen, Herman. & John Hawthorne. (2007). "Locations and Binding," *Analysis*, Vol. **67**, No. **1**, 95-105.

\_\_\_\_\_. (2009). *Relativism and Monadic Truth*, New York, NY: Oxford University.

Cohen, Stewart. (1988). "How to Be a Fallibilist," *Philosophical Perspectives*, Vol. **2**, 91-123.

\_\_\_\_\_. (1999). "Contextualism, Skepticism and the Structure of Reasons," *Philosophical Perspectives*, Vol. **13**, 57-89.

\_\_\_\_\_. (2000). "Contextualism and Skepticism," *Philosophical Issues*, Vol. **10**, 94-107.

Cross, Troy. (2010). "Skeptical Success," in [Gendler & Hawthorne (eds.) 2010], 35-62.

David, Marian. & Ted A. Warfield. (2008). "Knowledge-Closure and Skepticism," in [Smith (ed.) 2008], 137-187.

Davidson, Donald. (1967). "The Logical Form of Action Sentences", in [Rescher (ed.) 1967], 81-95. Reprinted in [Davidson 1980], 105-148.

\_\_\_\_\_. (1980). *Essays on Actions and Events*, New York, NY: Oxford University Press.

DeRose, Keith. (1992). "Contextualism and Knowledge Attributions," *Philosophy and Phenomenological Research*, Vol. **52**, No. **4**, 913-929.

\_\_\_\_\_. (1995). "Solving the Skeptical Problem," *The Philosophical Review*, Vol. **104**, No. **1**, 1-52.

\_\_\_\_\_. (1999). "Contextualism: An Explanation and Defense," in [Greco & Sosa (eds.) 1999], 187-205.

\_\_\_\_\_. (2002). "Assertion, Knowledge and Context," *The Philosophical Review*, Vol. **111**, No. **2**, 167-203.

\_\_\_\_\_. (2004). "Sosa, Safety, Sensitivity and Sceptical Hypotheses," in [Greco (ed.) 2004], 22-41.

\_\_\_\_\_. (2009). *The Case for Contextualism: Knowledge, Skepticism and Context* (vol. **1**), New York, NY: Oxford University Press.

Dougherty, Trent. & Patrick Rysiew. (2009). "Fallibilism, Epistemic possibility and

Concessive Knowledge Attribution,” *Philosophy and Phenomenological Research*, Vol. **78**, No. **1**, 123-132.

Douven, Igor. (2004). “The Context-Insensitivity of ‘Knowing More’ and ‘Knowing Better’,” *Canadian Journal of Philosophy*, Vol. **34**, No. **3**, 313-326.

Dretske, Fred I. (1970). “Epistemic Operators,” *The Journal of Philosophy*, Vol. **67**, No. **24**, 1007-1023.

\_\_\_\_\_. (1981). *Knowledge and the Flow of Information*, Cambridge, MA: The MIT Press.

\_\_\_\_\_. (2005a). “The Case against Closure,” in [Steup & Sosa (eds.) 2005], 13-26.

\_\_\_\_\_. (2005b). “Reply to Hawthorne,” in [Steup & Sosa (eds.) 2005], 43-46.

Fantl, Jeremy. & Matthew McGrath. (2009a). “Advice for Fallibilists: Put Knowledge to Work,” *Philosophical Studies*, Vol. **142**, No. **1**, 55-66.

\_\_\_\_\_. (2009b). *Knowledge in an Uncertain World* (New York, NY: Oxford University Press, 2009).

Feldman, Richard. (1981). “Fallibilism and Knowing that One Knows,” *The Philosophical Review*, Vol. **90**, No. **2**, 266-282.

\_\_\_\_\_. (1999). “Contextualism and Skepticism,” *Philosophical Perspectives*, Vol. **13**, 91-114.

\_\_\_\_\_. (2003). *Epistemology*, Upper Saddle River, NJ: Prentice Hall.

Feltz, Adam. & Chris Zarpentine. (2010). “Do You Know More When It Matter Less?” *Philosophical Psychology*, Vol. **23**, No. **5**, 683-706.

Gendler, Tamar Szabó & John Hawthorne. (eds.) (2005). *Oxford Studies in Epistemology*, Vol. **1**, New York, NY: Oxford University Press.

\_\_\_\_\_. (eds.) (2010). *Oxford Studies in Epistemology*, Vol. **3**, New York, NY: Oxford University Press.

Gettier, Edmund L. (1963). “Is Justified True Belief Knowledge,” *Analysis*, Vol. **23**, No. **6**, 121-123.

Gillies, Anthony S. (un.) “Shifty Epistemology” [unpublished manuscript].

Greco, John. (ed.) (2004). *Ernest Sosa and His Critics*, Malden, MA: Blackwell Publishers Inc.

\_\_\_\_\_. (ed.) (2008). *Oxford Handbook of Skepticism*, New York, NY: Oxford University Press.

- \_\_\_\_\_. (2010). *Achieving Knowledge: A Virtue-Theoretic Account of Epistemic Normativity*, New York, NY: Cambridge University Press.
- Greco, John. & Ernest Sosa. (eds.). (1999). *The Blackwell Guide to Epistemology*, Malden, MA: Blackwell Publishers Inc.
- Grice, Paul. (1989). *Studies in the Way of Worlds*, Cambridge, MA: Harvard University Press.
- Hawthorne, John. (2004). *Knowledge and Lotteries*, New York, NY: Oxford University Press.
- \_\_\_\_\_. (2005). "The Case for Closure," in [Steup & Sosa (eds.) 2005], 26-43.
- Hintikka, Jaakko. (1962). *Knowledge and Belief: An Introduction to the Logic of the Two Notions*, Ithaca, NY: Cornell University Press.
- Horn, Laurence R. (1969). "A Presuppositional Analysis of *Only* and *Even*," in [Binnick, Davison, Green & Morgan (eds.) 1969], 98-107.
- James, William. (1896). "The Will to Believe," reprinted in [James 1979], 13-33.
- \_\_\_\_\_. (1979). *The Will to Believe and Other Essays in Popular Philosophy*, Cambridge, MA: Harvard University Press.
- Kelp, Christoph. (2007) "The Case Against Contrastivism," unpublished draft of paper presented at the International Conference on Linguistics and Epistemology, University of Aberdeen (May 2007).
- \_\_\_\_\_. (2011). "A Problem for Contrastivist Accounts of Knowledge," *Philosophical Studies*, Vol. **152**, No. **2**, 287-292.
- Kenesei, Istvan. & Robert M. Harnish. (eds.) (2001). *Perspectives on Semantics, Pragmatics and Discourse: A Festschrift for Ferenc Kiefer*, Amsterdam, the Netherlands: John Benjamin's Publishing Co.
- Kennedy, Christopher. (1999). *Projecting the Adjective: The Syntax and Semantics of Gradability and Comparison*, New York, NY: Garland Publishing, Inc.
- King, Jeffrey C. & Jason Stanley. (2005). "Semantics, Pragmatics and the Role of Semantic Content," in [Szabó (ed.) 2005], 111-164.
- Klein, Peter D. (1995). "Skepticism and Closure: Why the Evil Genius Argument Fails," *Philosophical Topics*, Vol. **23**, No. **1**, 213-236.

- \_\_\_\_\_. (2002). "Skepticism," in [Moser (ed.) 2002], 336-361.
- \_\_\_\_\_. (2004). "Closure Matters: Academic Skepticism and Easy Knowledge," *Philosophical Issues*, Vol. **14**, No. **1**, 165-184.
- \_\_\_\_\_. (2009). "Skepticism," in [Zalta (ed.) 2009], <http://plato.stanford.edu/archives/spr2009/entries/skepticism/>.
- Knobe, Joshua. & Shaun Nichols. (eds.) (2008). *Experimental Philosophy*, New York, NY: Oxford University Press.
- Kripke, Saul A. (1977). "Speaker's Reference and Semantic Reference," *Midwest Studies in Philosophy*, Vol. **2**, 255-276.
- \_\_\_\_\_. (2011a). "On Two Paradoxes of Knowledge," in [Kripke 2011b], 27-51.
- \_\_\_\_\_. (2011b). *Philosophical Troubles: Collected papers*, Vol. **1**, New York, NY: Oxford University Press.
- Kruglanski, Arie W. & Donna M. Webster. (1996). "Motivated Closing of the Mind: 'Seizing' and 'Freezing'," *Psychological Review*, Vol. **103**, No. **2**, 263-283.
- Kvanvig, Jonathan L. (2008). "Closure and Alternative Possibilities," in [Greco (ed.) 2008], 456-483.
- Larkin, William S. (un.) "Assertion, Knowledge and Invariant Standards" [unpublished manuscript].
- Larson, Richard. & Gabriel Segal. (1995). *Knowledge of Meaning*, Cambridge, MA: The MIT Press,.
- Lewis, David K. (1973). *Counterfactuals*, Cambridge MA: Harvard University Press.
- \_\_\_\_\_. (1979). "Scorekeeping in a Language Game," *Journal of Philosophical Logic*, Vol. **8**, No. **1**, 339-359.
- \_\_\_\_\_. (1996). "Elusive Knowledge," *Australasian Journal of Philosophy*, Vol. **74**, No. **4**, 549-567.
- Ludlow, Peter. (2005). "Contextualism and the New Linguistic Turn in Epistemology," in [Preyer & Peter (eds.) 2005], 11-50.
- Luper, Steven. (2009). "The Epistemic Closure Principle," in [Zalta (ed.) 2009], <http://plato.stanford.edu/archives/spr2009/entries/closure-epistemic/>.
- Marti, Luisa. (2006). "Unarticulated Constituents Revisited," *Linguistics and Philosophy*, Vol. **29**, No. **2**, 135-166.

- May, Joshua., Walter Sinnott-Armstrong, Jay G. Hull & Aaron Zimmerman. (2010). "Practical Interests, Relevant Alternatives and Knowledge Attributions: an Empirical Study," *Review of Philosophy and Psychology*, Vol. **1**, No. **2**, 265-273.
- Moser, Paul K. (ed.) (2002). *The Oxford Handbook of Epistemology*, New York, NY: Oxford University Press.
- Nagel, Jennifer. (2008). "Knowledge Ascriptions and the Psychological Consequences of Changing Stakes," *Australasian Journal of Philosophy*, Vol. **86**, No. **2**, 279-294.
- \_\_\_\_\_. (2010a). "Epistemic Anxiety and Adaptive Invariantism," *Philosophical Perspectives*, Vol. **24**, 407-435.
- \_\_\_\_\_. (2010b). "Knowledge Ascriptions and the Psychological Consequences of Thinking about Error," *The Philosophical Quarterly*, Vol. **60**, No. **239**, 286-306.
- \_\_\_\_\_. (2011). "The Psychological Basis of the Harman-Vogel Paradox," *Philosophers' Imprint*, Vol. **11**, No. **5**, 1-55.
- Neta, Ram. (2008). "Undermining the Case for Contrastivism," *Social Epistemology: A Journal of Knowledge, Culture and Policy*, Vol. **22**, No. **3**, 289-304.
- Nozick, Robert. (1981). *Philosophical Explanations*, Cambridge, MA: Harvard University Press.
- Oakley, I. T. (2001). "A Skeptic's Reply to Lewisian Contextualism," *Canadian Journal of Philosophy*, Vol. **31**, No. **3**, 309-332.
- Partee, Barbara H. (2004), "Comments on Jason Stanley's 'On the Linguistic Basis for Contextualism'," *Philosophical Studies*, Vol. **119**, No. **1-2**, 147-159.
- Predelli, Stefano. (2005). *Contexts: Meaning, Truth and the Use of Language*, New York, NY: Oxford University Press.
- Preyer, Gerhard. & Georg Peter. (eds.) (2002). *Logical Form and Language*, New York, NY: Oxford University Press.
- \_\_\_\_\_. (eds.) (2005). *Contextualism in Philosophy: Knowledge, Meaning and Truth*, New York, NY: Oxford University Press.
- Pritchard, Duncan. (2005). *Epistemic Luck*, New York, NY: Oxford University Press.
- \_\_\_\_\_. (2010). "Contextualism, Skepticism and Warranted Assertibility Maneuvers," in [Campbell, O'Rourke & Silverstein (eds.) 2010], 85-103.

- Recanati, François. (2002). "Unarticulated Constituents," *Linguistics and Philosophy*, Vol. **25**, No. **3**, 325-326.
- Reed, Baron. (2009). "A New Argument for Skepticism," *Philosophical Studies*, Vol. **142**, No. **1**, 91-104.
- \_\_\_\_\_. (2010). "A Defense of Stable Invariantism," *No ûs*, Vol. **44**, No. **2**, 224-244.
- \_\_\_\_\_. (manuscript). "Contextualism and Reported Knowledge Attributions."
- Rescher, Nicholas. (ed.) (1967). *The Logic of Decision and Action*, Pittsburgh, PA: The University of Pittsburgh Press.
- Rysiew, Patrick. (2001). "The Context-Sensitivity of Knowledge Attributions," *No ûs*, Vol. **35**, No. **4**, 477-514.
- \_\_\_\_\_. (2007) "Speaking of Knowing," *No ûs*, Vol. **41**, No. **4**, 627-662.
- Schaffer, Jonathan. (2004). "From Contextualism to Contrastivism," *Philosophical Studies*, Vol. **119**, No. **1-2**, 73-103.
- \_\_\_\_\_. (2005). "Contrastive Knowledge," in [Gendler & Hawthorne (eds.) 2005], 235-271
- \_\_\_\_\_. (2007). "Closure, Contrast and Answer," *Philosophical Studies*, Vol. **133**, No. **2**, 233-255.
- \_\_\_\_\_. (2011a). "What Is Contrastivism?" in [Tolksdorf (ed.) 2011], 353-356.
- \_\_\_\_\_. (2011b). "Contrastive Knowledge," in [Tolksdorf (ed.) 2011], 357-394.
- \_\_\_\_\_. (2011c). "Contrastive Knowledge: Reply to Baumann," in [Tolksdorf (ed.) 2011], 411-424.
- Schiffer, Stephen. (1996). "Contextualist Solutions to Scepticism," *Proceedings of the Aristotelian Society*, Vol. **96**, 317-333.
- Siegel, Harvey. (1997). *Rationality Redeemed? Further Dialogues on an Educational Ideal*, New York, NY: Routledge Publishing Ltd.
- Smith, Quentin. (ed.) (2008). *Epistemology: New Essays*, New York, NY: Oxford University Press, 2008.
- Soames, Scott. (1986). "Incomplete Definite Descriptions," *Notre Dame Journal of Formal Logic*, Vol. **27**, No. **3**, 349-375.
- \_\_\_\_\_. (2003). *Philosophical Analysis in the Twentieth Century*, Vol. **1** (The Dawn of Analysis), Princeton, NJ: Princeton University Press.
- Sosa, Ernest. (2000). "Skepticism and Contextualism," *Philosophical Issues*, Vol. **10**,

1-18.

\_\_\_\_\_. (2007). *A Virtue Epistemology: Apt Belief and Reflective Knowledge*, Vol. **1**, New York, NY: Oxford University Press.

\_\_\_\_\_. (2011). *Knowing Full Well*, Princeton, NJ: Princeton University Press.

Stalnaker, Robert C. (1999). *Context and Content: Essays on Intentionality in Speech and Thought*, New York, NY: Oxford University Press.

Stanley, Jason. (2000). "Context and Logical Form," *Linguistics and Philosophy*, Vol. **23**, No. **4**, 391-434.

\_\_\_\_\_. (2002a). "Making it Articulated," *Mind and Language*, Vol. **17**, No. **1-2**, 149-168.

\_\_\_\_\_. (2002b). "Nominal Restriction," in [Preyer & Peter (eds.) 2002], 365-388.

\_\_\_\_\_. (2004). "On the Linguistic Basis for Contextualism," *Philosophical Studies*, Vol. **119**, No. **1-2**, 119-146.

\_\_\_\_\_. (2005a). *Knowledge and Practical Interests*, New York, NY: Oxford University Press.

\_\_\_\_\_. (2005b). "Semantics in Context," in [Preyer & Peter (eds.) 2005], 221-253.

Stanley, Jason. & Timothy Williamson. (1995). "Quantifiers and Context-Dependence," *Analysis*, Vol. **55**, No. **4**, 291-295.

Stanley, Jason. & Zoltán Gendler Szabó. (2000). "On Quantifier Domain Restriction," *Mind and Language*, Vol. **15**, No. **2-3**, 219-261.

Steup, Matthias. & Ernest Sosa. (eds.) (2005). *Contemporary Debates in Epistemology*, Malden, MA: Blackwell Publishing Ltd.

Stine, Gail C. (1976). "Skepticism, Relevant Alternatives and Deductive Closure," *Philosophical Studies*, Vol. **29**, No. **4**, 249-261.

Stroud, Barry. (1984). *The Significance of Philosophical Scepticism*, New York, NY: Oxford University Press.

Szabó, Zoltán Gendler. (2000). *Problems of Compositionality*, New York, NY: Garland Publishing Inc.

\_\_\_\_\_. (2001). "Adjectives in Context," in [Kenesei & Harnish (eds.) 2001], 119-146.

\_\_\_\_\_. (ed.) (2005). *Semantics versus Pragmatics*, New York, NY: Oxford University Press.



- Thalberg, Irving. (1974). "Is Justification Transmissible through Deduction?" *Philosophical Studies*, Vol. **25**, No. **5**, 347-356.
- Tolksdorf, Stefa. (ed.) (2011) *Conceptions of Knowledge*, Berlin, Germany: Walter de Gruyter GmbH & Co. KG.
- Warfield, Ted A. (2004). "When Epistemic Closure Does and Does Not Fail: a Lesson from the History of Epistemology," *Analysis*, Vol. **64**, No. **1**, 35-41.
- Weatherson, Brian. (2005). "Can We Do Without Pragmatic Encroachment?" *Philosophical Perspectives*, Vol. **19**, 417-443.
- Weinberg, Jonathan M., Shaun Nichols & Stephen Stich. (2001). "Normativity and Epistemic Intuition," *Philosophical Topics*, Vol. **29**, No. **1-2**, 429-460.
- Williamson, Timothy. (2000). *Knowledge and Its Limits*, New York, NY: Oxford University Press.
- \_\_\_\_\_. (2005). "Contextualism, Subject-Sensitive Invariantism and Knowledge of Knowledge," *The Philosophical Quarterly*, Vol. **55**, No. **219**, 213-235.
- Zalta, Edward N. (ed.) (2009). *The Stanford Encyclopedia of Philosophy* (Spring 2009 Edition), <http://plato.stanford.edu/archives/spr2009>.