#### Lingnan University Digital Commons @ Lingnan University

Theses & Dissertations

Department of Philosophy

2014

# Is there a distinction between a priori and a posteriori

Hiu Man CHAN

Follow this and additional works at: http://commons.ln.edu.hk/philo\_etd Part of the <u>Philosophy Commons</u>

#### **Recommended** Citation

Chan, H. M. (2014). Is there a distinction between a priori and a posteriori (Master's thesis, Lingnan University, Hong Kong). Retrieved from http://commons.ln.edu.hk/philo\_etd/10

This Thesis is brought to you for free and open access by the Department of Philosophy at Digital Commons @ Lingnan University. It has been accepted for inclusion in Theses & Dissertations by an authorized administrator of Digital Commons @ Lingnan University.

# Terms of Use

The copyright of this thesis is owned by its author. Any reproduction, adaptation, distribution or dissemination of this thesis without express authorization is strictly prohibited.

All rights reserved.

#### IS THERE A DISTINCTION BETWEEN A PRIORI AND A POSTERIORI

CHAN HIU MAN

MPHIL

LINGNAN UNIVERSITY

#### IS THERE A DISTINCTION BETWEEN A PRIORI AND A POSTERIORI

by CHAN Hiu Man

A thesis submitted in partial fulfillment of the requirements for the Degree of Master of Philosophy in Philosophy

Lingnan University

#### ABSTRACT

#### Is There A Distinction between A Priori and A Posteriori

by

CHAN Hiu Man

Master of Philosophy

This thesis studies whether there is a tenable distinction between a priori justification and a posteriori justification.

My research considers three possible conceptions of a priori: (1) Justification Independent of Experience, (2) Mere Meaning Based Justification and (3) Justification by Rational Insight, and examines whether they can provide a sound and significant distinction between a priori and a posteriori.

This thesis contains five chapters. Chapter 1 introduces the background knowledge of the a priori/a posteriori distinction. Chapter 2 analyzes the traditional conception of a priori, i.e. justification independent of experience, and considers whether the distinction based on it is tenable. Five approaches for defining "experience" are examined, but none of them succeed in providing a distinction between a priori and a posteriori. Chapter 3 focuses on the empiricist conception of the a priori, i.e. a priori as mere meaning based justification, and argues that the distinction based on it has a problem of classification. Chapter 4 concerns the rationalist conception of the a priori, i.e. a priori as justification by rational insight, and argues that neither the idea of justification by rational insight itself nor the distinctive features of rational insight could provide a distinction between a priori and a posteriori. Given that none of the current major accounts seem to work, we should not be optimistic about the potential for success in accounting for the distinction between a priori and a posteriori. In the last chapter, I will conclude the thesis and point out the implication of abandoning the a priori/a posteriori distinction: a need to reform our understanding of the nature of different sources of justification and knowledge.

#### DECLARATION

I declare that this is an original work based primarily on my own research, and I warrant that all citations of previous research, published or unpublished, have been duly acknowledged.

(Chan Hiu Man) Date:

#### CERTIFICATE OF APPROVAL OF THESIS

#### IS THERE A DISTINCTION BETWEEN A PRIORI AND A POSTERIORI

by

CHAN Hiu Man

Master of Philosophy

Panel of Examiners:

(Chairman)

(Prof. ZHANG Jiji)

(External Member)

(Dr. LEE Siu Fan)

(Internal Member)

(Prof. NADO Jennifer Ellen)

(Internal Member)

(Prof. SAUCHELLI Andrea)

Supervisor: Prof. NADO Jennifer Ellen

Approved for the Senate:

(Prof. SHARMA Shalendra) Chairman, Postgraduate Studies Committee

Date

### Contents

1.	Introduction 1		
2.	A Pric	ori as Justification Independent of Experience7	
	2.1.	Two Conceptions of "Independence"7	
	2.2.	Five Approaches of Defining Experience12	
	2.3.	Three Possible Responses	
3.	A Priori as Mere Meaning Based Justification25		
	3.1. Know	The Notion of Analyticity and the Analytic Approach of a Priori ledge	
	3.2.	Boghossian's Analyticity: Metaphysical and Epistemological28	
	3.3.	A Priori as Mere Meaning Based Justification	
	3.4.	The Notion of Grasp of Meaning	
	3.5.	The Notion of Mere Meaning Based Justification	
	3.6.	The Problem of Classification41	
	3.7.	A Possible Response and Its Failure46	
	3.8.	Some Possible Objections	
4.	A Pric	ori as Justification by Rational Insight52	
	4.1.	A Priori and Rational Insight52	

	4.2.	The Notion of Rational Insight54	
	4.3.	A Simple Approach: Justification by Rational Insight59	
	4.4.	An Alternative: Distinctive Features of Rational Insight63	
	4.5.	Some Distinctive Features for Determining the Distinction	
	4.6.	Justification with Modal Qualities65	
	4.7.	Infallible or Indefeasible Justification	
	4.8.	Non-propositional Justification67	
5.	Conclusion71		
Bibliography74			

## **1. Introduction**

It is commonly accepted by philosophers that there is a distinction between a priori and a posteriori. Traditionally, a priori justification is conceived as a type of justification independent of experience; a posteriori justification as a type of justification dependent on experience. But, is there really a sound and significant distinction between a priori and a posteriori?

Before articulating the a priori/a posteriori distinction, let us start with the notion of justification. Generally, when people concede that a person has some sort of propositional knowledge, the person must hold some justified true beliefs. There are different views about what it is for a belief to be justified. These views divide into internalist and externalist views. On one common way to draw this distinction, an internalist justification would require that the person has some sort of access to his reason or evidence for holding the beliefs; in contrast, an externalist denies the sort of access as necessary for justification. One common form of externalism (i.e. reliabilism) requires that the person's beliefs are produced or caused by a reliable process. In this thesis, I am completely neutral on different views of justification. I have no assumption of a certain theory of justification. In fact, it does not matter what theory of justification is assumed. What does matter is, once a belief is justified, whether that justified belief is classified as involving a route to justification that is a priori or a posteriori. A belief that there is a tree might be justified by perception. Or, it might be justified by memory. From an internalist point of view, one is justified in believing that there is a tree because one has some sort of access to his perceptual information or to his memory. From an externalist point of view, it is because the belief is produced or caused in a reliable way. But, neither of these views answers the question of whether justification by perception or justification by memory is to be viewed as a priori or a posteriori. In short, what I am concerned with here is the a priori/a posteriori distinction which is broadly applied to categorize different ways of justification, not the criteria of justification.

I am neutral on different theories of justification, but I stand for the claim that the

sort of justification which I focus on is epistemic in nature: justification is truth conducive. We may accept beliefs because of pragmatic reasons or moral reasons or religious reasons. But beliefs which are formed on the basis of these reasons are not truth conducive. They would not be more likely to be true given these sorts of reason.

Let us articulate the traditional distinction between a priori and a posteriori. We might see the most common conception of it through introductory readings or encyclopedias of philosophy:

"The initial conception of a priori justification is that it is justification that does not depend at all on experience.....sensory experiences.....introspective experiences......memory experience......A priori justification, then, is supposed to be justification that is independent (in the relevant sense, not yet clarified) of experiences of all these various sorts." (Bonjour, 2010, p. 72)

"A priori knowledge is knowledge that rests on a priori justification. A priori justification is a type of epistemic justification that is, in some sense, independent of experience." (Russell, 2013)

"The terms "a priori" and "a posteriori" are used primarily to denote the foundations upon which a proposition is known. A given proposition is knowable a priori if it can be known independent of any experience other than the experience of learning the language in which the proposition is expressed, whereas a proposition that is knowable a posteriori is known on the basis of experience." (Baehr, 2006, para. 1)

"Roughly speaking, a priori entitlement is entitlement that is independent of experience." (Field, 2005, p. 70)

According to this conception of the a priori/a posteriori distinction, different sorts of justification and knowledge are categorized as either a priori or a posteriori. We have been practicing this traditional distinction for a long time. The most familiar practice is the way we categorize basic sources of justification or knowledge, i.e. perception, introspection, testimony, memory and rational intuition (if any). The way we

categorize them can be referred to as 'our common categorization of justification or knowledge.' Let us start with the a priori side.

The paradigm of a priori knowledge is knowledge by intuition or rational insight. Intuition or rational insight is often conceived as a kind of intellectual "seeing" of how the proposition in question is true solely by understanding that proposition (Bonjour, 1998, pp. 106-107 & 109; Bealer, 1998, pp. 213 & 223). Knowledge of logic, mathematics, and conceptual truths are often thought to be its targets. For instance, a person does not need to perceive anything in the world in order to be justified in believing a bachelor is an unmarried man, nor to introspect, nor to remember. All he needs is to understand the sentence and to have the intuition that a bachelor is an unmarried man. This process of justification by intuition is viewed as involving no experience. Some philosophers disagree that there is any knowledge by intuition, since no explanation of intuition has ever been generally agreed on. But if there is knowledge by intuition, it would undeniably be a paradigm case of a priori justification.

The paradigm of a posteriori justification is perceptual justification or knowledge. Consider the case of a person who holds the perceptual knowledge that there is a tree in front of him. In order to justify the belief that there is a tree in front of him, he needs to perceive the world, to see what is in front of him. If there is a tree in front of him, under normal circumstances he would have some sort of phenomenal experience, i.e. the experience of a tree, by which he could justify his belief that there is a tree in front of him. Phenomenal experience—something it is like to you, e.g. the experience of a tree—is involved here in the process of justification. A person is justified in believing there is a tree in front of him in virtue of his experience, or at least by appealing to his experience. So, he is a posteriori justified in believing that there is a tree in front of him.

Justification or knowledge by memory and by testimony are generally viewed as a posteriori. But, they are not as paradigmatic as perception. One reason might be that there is some suspicion about whether memory and testimony are a generative source of knowledge.

To begin with justification by memory, there are two different views for memory as a source of justification (Bernecker, 2011, pp. 330-332). According to preservationism, memory is only a preservative source of justification or knowledge, rather than a generative source. This means that memory provides no justificatory force, but only preserves the justificatory force from some non-memorial source, for instance, perception or introspection. The other view is generativism, which suggests that memory not only preserves the original justificatory force, but also provides additional justificatory force through the process of recollection (according to radical generativism) or releases the potential justification force by removing defeaters (according to moderate generativism).

From the point of view of preservationism, the question concerning whether justification or knowledge by memory is a priori or a posteriori might be viewed as illegitimate. "A priori" and "a posteriori" are terms for describing justifications, which are a kind of process in virtue of which a belief is justified. But, according to preservationism, memory or the process of recollection provides no justification but only preserves it. In other words, memory is not a genuine justificatory process. So, there is no fact about whether memory is a priori or a posteriori.

One way to legitimate the question is to interpret it as a question concerning the whole process of justification or knowledge by memory. It not only includes the process of recollection but also the original acquisition of knowledge. Again, the process of recollection is just irrelevant to the issue in question. So, on this interpretation, whether justification or knowledge by memory is a priori or a posteriori solely depends on the original sources. In other words, the question about justification or knowledge by memory would then turn out to be a question about justification or knowledge by other sources, for example by perception and by rational intuition. Hence, justification by memory, as a preservative source, could be a priori or a posteriori, according to its original source.

From the point of view of generativism, memory would be viewed as a kind of a posteriori source of justification or knowledge. Since memory does provide justification, whether memory is a priori or a posteriori depends on both the original

sources and the process of recollection.<sup>1</sup> Since the process of recollection is commonly viewed as experiential in nature, i.e. it involves phenomenal character, justification or knowledge by appealing to recollection would thereby be categorized as a posteriori.<sup>2</sup> Hence, justification or knowledge by memory is commonly thought to be a posteriori.

In the case of testimony, there is also a transmission view and a generation view. The transmission view conceives testimony as a transmission of sources of justification, rather than as a generative source of justification. So, in order for a hearer to be justified in believing a proposition by appealing to the testimony of a speaker, it is necessary that the speaker know the proposition. Conversely, the generative view conceives testimony as a generative source of justification. For example, as long as a speaker can reliably pass the information through his testimony or the speaker's testimony is reliable, even if the speaker does not know it, a hearer can still be justified in believing a proposition.

Clearly, to the question concerning whether justification by testimony is a posteriori, we could apply a similar consideration to the one which we made earlier in the case of memory. On the transmission view, justification by testimony could be a priori or a posteriori, depending on its original source. On the generation view, testimony would be viewed as a kind of a posteriori source of justification or knowledge, since knowledge by testimony appeals to the process of receiving testimony which is viewed as a kind of process with phenomenal character, e.g. we need to receive the testimony of others through perception.

Justification or knowledge by introspection is also generally viewed as a posteriori, even though the process of introspection is commonly thought to be distinctive, or at least to be greatly different form the process of perception. In the case of introspection, a person is justified in believing a proposition about his beliefs, desires,

<sup>&</sup>lt;sup>1</sup> Some generativism argues that it is possible that "a memory belief might be justified even if the original belief wasn't justified" (Bernecker, 2011, p. 331). In that situation, whether memory is a priori or a posteriori might solely depend on the process of recollection, since the original sources might provide no justification to the belief.

 $<sup>^2</sup>$  The appearance of phenomenal experience in all cases of recall might be arguable, but there is no doubt that the appearance of phenomenal experience is involved in some cases of recall.

judgments, intentions, emotions or sensory experience by appeal to, presumably, a kind of inner "seeing" or reflection. This kind of inner "seeing" or reflection is widely conceived as experiential, since it involves some sort of phenomenal character. So, justification or knowledge by introspection is viewed as posteriori.

In short, "a priori" is traditionally applied to justifications independent of experience, and "a posteriori" to justifications dependent on experience. Knowledge or justification by intuition is commonly viewed as a priori, even though some philosophers doubt or deny the existence of such justification. Knowledge or justification by perception, introspection, memory and testimony are commonly viewed as a posteriori, but there are some cases which are arguable.

The above paragraphs describe a general picture of the way we categorize justifications according to the traditional distinction between a priori and a posteriori. It constitutes 'our common categorization of justification or knowledge.' This picture may seem to be unproblematic on first impression. But in fact the notion of experience is not well defined for grounding the distinction. In the next chapter, I will examine the idea of "justification independent of experience" by specifying the notion of "independence" and "experience". I specify the relevant sort of independence by considering two common conceptions, i.e. the appeal condition and the irrefutability condition. I argue that the acceptance of the irrefutability condition entails the acceptance of the appeal condition, given a very plausible epistemic assumption. Then I examine five approaches to defining experience under the appeal condition. In chapter 3, I will consider the empiricist distinction, i.e. a priori as mere meaning based justification, and reveal its inconsistency by the problem of classification. In chapter 4, I will examine the rationalist distinction, i.e. a priori as justification by rational insight, and argue that it is untenable because of the problem of significance.

# 2. A Priori as Justification Independent of Experience

In last chapter, I have introduced the traditional a priori/a posteriori distinction and our common practice of it, i.e. how we categorize different sources of justification or knowledge, such as perception, introspection, memory, testimony and rational intuition, according to the traditional distinction. In this chapter, I will examine whether the traditional distinction between a priori and a posteriori, i.e. the experiential/non-experiential distinction, is tenable. I start with analyzing the traditional distinction. The two most common conceptions of the relevant sort of independence, i.e. the appeal condition and the irrefutability condition, will be discussed. I argue that the acceptance of the irrefutability condition entails the acceptance of the appeal condition, given a very plausible epistemic assumption. Then, with the appeal condition, I examine five different approaches for defining "experience": (1) phenomenological features, (2) content of beliefs, (3) the objects of sense experience (4) the (causal) relation between cognizer and object of experience, and (5) the natural kind approach. I argue that none of them is successful in providing a tenable distinction between a priori and a posteriori. At the end, I will summarize this chapter and raise some possible responses to the failure of the traditional distinction between a priori and a posteriori.

#### 2.1. Two Conceptions of "Independence"

What is commonly accepted about the notion of "independence of experience" is that it does not mean a complete independence of experience. Some a priori beliefs involve concepts which can only be acquired through experience. Experience is needed in order to hold those a priori beliefs. For instance, in order to be justified in believing that nothing can be all over red and green at the same time, the believer needs to possess the concepts RED and GREEN, but it is quite plausible that they can be only acquired by having the experience of red and green.<sup>3</sup> If we insist on a complete absence of experience, it would restrict a priori knowledge to propositions only containing innate ideas or concepts, i.e. ideas or concepts that people are born with and have not acquired through experience (Russell, 2013). In short, the requirement of "independence of experience" only concerns the process of justification, rather than the process of concept acquisition. Experience involved in the latter is non-evidential in the sense that it plays no justificatory role. It just enables us to possess certain concepts, rather than justifying a belief. Therefore, the involvement of experience in the latter sense does not affect the apriority of justification.

If the notion of independence only concerns the process of justification, there are at least two conceptions of independence:

- A. The Appeal Condition: A priori justifications are processes providing justification to beliefs in a way without appeal to experience.
- B. The Irrefutability Condition: A priori justifications are processes providing justification in a way immune to refutation by experience.

The appeal condition negatively mentions how beliefs are justified a priori: no matter what gets the beliefs justified a priori, it must not involve experience. What is required in the processes of a priori justification is the absence of appeal to experience. By "without appeal to experience" I mean that experience does not play any justificatory role in the process of justification. It does not rule out the enabling role of experience, i.e. to acquire concepts by experience. Hence, perceptual justification is the paradigm case of a posteriori justification, e.g. a person is justified in believing that there is a tree by appeal to his experience of seeing a tree; in other words, the experience plays the justificatory role. Compared to the appeal condition, the irrefutability condition does not directly mention how beliefs get justified a priori.

<sup>&</sup>lt;sup>3</sup> This view implies that people born to be blind cannot have the concepts RED and GREEN, at least, in the way we have – i.e. perhaps, they have some sort of blind-concepts of RED and GREEN which are different from ours intrinsically but pick up the same properties in the world as ours. But, what is important is that people born to be blind still need some sort of experience (non-visual) to acquire the concepts RED and GREEN.

What is directly mentioned is the indefeasibility of justification in terms of experience. What is required is the experiential indefeasibility of justifications.

Further, there are two possibilities for justifications immune to refutation by experience: (B1) it is impossible to have resistant experience, and (B2) it is possible to have resistant experience, but they cannot override the justification, since a priori justification always has more epistemic weight than counter experience or empirical considerations. So, a priori justifications are those that cannot be overridden by resistant experience.

There are two ways to interpret (B1). One is to deny that there is genuine counter experience to a priori justified beliefs. For instance, S may keep having the experience that whenever he puts 2 apples into a box with 3 apples the box appears to have 6 apples in total. But such an experience is viewed as a consequence of carelessness in counting or a hallucination. In other words, S tends to think that it is impossible to be the case that whenever he puts 2 apples into a box with 3 apples the box appears to have 6 apples in total; there is no possibility for what S perceive in the apple case to be real. So, even if S keeps having the experience that whenever he puts 2 apples into a box with 3 apples in total, the experience would still be ignored or explained away. In this sense, S's a priori justification for the belief 2+3=5 is immune to refutation by experience, since no genuine counter experience exists.

A similar case has been raised by Ayer, in which people tend to refuse to admit that there is a genuine counter experience to the mathematical proposition "2x5=10": "when I came to count what I had taken to be 5 pairs of objects, I found that they amounted only to 9......[Given this experience,] one would not say the mathematical proposition "2x5=10" had been confuted. One would say that I was wrong in supposing that there were five pairs of objects to start with..." (Ayer, 1952, p. 75)

The other interpretation of (B1) is to deny that our experience is epistemically relevant to a priori justified beliefs. In the earlier apple case, S might have an assumption that what he perceived is epistemically relevant to the belief that 2+3=5.

So, S needs to explain what he perceived as not genuine or not real, if S wants to rationally maintain his belief that 2+3=5. But, there is another rational option for S. S could take what he perceived as genuine, but still rationally ignore it, since he might view what he perceived in the apple case as epistemically irrelevant to the mathematical proposition that 2+3=5. More generally, S takes no experience as epistemically relevant to the a priori justified belief that 2+3=5. So, it is impossible to have resistant experience. In this sense, S's a priori justification is immune to refutation by experience, since no experience is epistemically relevant.

The idea of (B2) is that some experience might be epistemically relevant to a priori justified beliefs, but a priori justification always has more epistemic weight than resistant experience. For instance, S may keep finding that putting 2 apples into a box with 3 apples turns out to have 6 apples in total, and such an experience is viewed as a counter experience to the statement 2+3=5. However, S's a priori justification has more epistemic weight than the resistant experience. So S's a priori justified belief 2+3=5 cannot be overridden by the resistant experience.

I think there is no reason to single out any one of the possibilities. Cases falling into either situation should be counted as satisfying the condition of experiential Irrefutability.

It is clear that (A) the appeal condition and (B) the irrefutability condition are not equivalent. But, is there any entailment relation between them? If there is an entailment relation between (A) and (B), say acceptance of (A) entails acceptance of (B) or conversely, then it would simplify the consideration of the condition of independence of experience, since the failure of one implies the failure of other.

Does the acceptance of (A) entails acceptance of (B)? No. It seems possible that non-experiential justifications can be refuted by experience. For example, I am a priori justified in believing a certain number N is the result of a complicated arithmetic problem, but my justification may turn out to be refuted by the result provided by a computer. Does the acceptance of (B) entail acceptance of (A)? Yes. Granted a very plausible epistemic principle, i.e. premise 2, we could have an argument as follows:

- If P is justified a priori, then P is justified and cannot be refuted by experience.
  (by the definition of The Irrefutability Condition)
- If P cannot be refuted by experience, then P cannot be justified by experience.
  (Since all empirically justified beliefs can be refuted by experience.)
- 3. Therefore, If P is justified a priori (in the sense of The Irrefutability Condition), then P is justified and P cannot be justified by experience. (by 1 and 2)
- 4. If P is justified, then either P is justified by appealing to experience or without appealing to experience.
- Therefore, If P is justified a priori (in the sense of The Irrefutability Condition), then P is justified without appealing to experience (which is equal to The Appeal Condition). (by 3 and 4)

Given the above argument, we may conclude that all experientially irrefutable justified beliefs are also non-experientially justified beliefs (justification without appeal to experience). And therefore any justified belief that satisfied (B) the irrefutability condition would also satisfy (A) the appeal condition. So, granted the very plausible epistemic principle, the acceptance of (B) entails acceptance of (A). In short, the entailment relation between (A) and (B) is that the acceptance of (B) entails acceptance of (B) entails acceptance of (A) but not vice versa.

In the following part, I will just conceive of the a priori as meeting (A) the appeal condition, and consider whether there is a definition of experience by which we could draw a significant distinction between a priori and a posteriori by the idea of justification independent of experience. Two reasons for only considering the appeal condition are that, first, all experientially irrefutable justifications are non-experiential justifications (justification without appeal to experience), and second, there are only a few philosophers who adopt both (A) the appeal condition and (B) the irrefutability condition as the right interpretation of the idea of independence of experience, since there are counterexamples showing that a priori

justification or knowledge could be defeated or refuted by experience.<sup>4</sup>

If the idea of justification independent of experience is conceived as the appeal condition suggests, then whether the traditional distinction between a priori and posteriori is tenable would depend on the way we conceive the notion of experience or the notion of experiential process. If the distinction between experiential and non-experiential process does not stand, then neither does the traditional distinction between a priori and posteriori. In the next section, I will consider five different approaches for defining experience. I will argue that none of them is successful.

#### 2.2. Five Approaches of Defining Experience

Before discussing the five approaches, we might first exclude some implausible definitions of experience. When we talk about experience, there are two natural conceptions, i.e. sensory experience and phenomenal experience.

Sensory experience refers to the experience from our five senses, i.e. sight, hearing, touch, smell and taste. Clearly, this conception of experience would be too narrow for drawing the distinction between a priori and a posteriori. Introspection and memory would be excluded from sources providing a posteriori justifications, since they involve some sorts of experience other than sensory experience. Most philosophers would not accept it as a definition of experience which follows the traditional conception of a priori and a posteriori. Moreover, such a definition would just reduce the a priori/a posteriori distinction into the perceptual/non-perceptual distinction. As a consequence, the a priori/a posteriori would be insignificant: why should we value or prefer the perceptual/non-perceptual difference more than others, such as the introspective/non-introspective distinction? It seems there is no good reason to prefer one rather than the other.

Phenomenal experience refers to all kinds of experience - something it is like to you. As a consequence, it would include introspection and memory as sources providing a

<sup>&</sup>lt;sup>4</sup> Philip Kitcher (1980) is one of the philosophers who insists that a priori justification or knowledge should also be indefeasible or irrefutable by experience.

posteriori justification. Clearly, this conception of experience is too broad. Intuition would be included among sources providing a posteriori justification, since it also involves phenomenological experience. Consider the moment when you suddenly find that a logical statement, for which you didn't "see" its validity before, is valid. There is a kind of experience of intellectual seeing of the truth of the logical statement (Bealer, 1998, p. 213).<sup>5</sup> Moreover, this conception would leave nothing on the 'a priori' side; the concept of the a priori would be empty. So, these two natural conceptions of experience cannot help us to draw the distinction between a priori and a posteriori. Is there any alternative conception of experience?

Given that perception is the paradigm source of a posteriori justification, sensory experience must be included if there is any plausible way to define experience for specifying the distinction between a priori and a posteriori. Albert Casullo (2003, p. 150) examines four features of sensory experience which might be used in defining "experience": (1) phenomenological features, (2) content of beliefs, (3) the objects of experience and (4) the (causal) relation between cognizer and object of experience. Although Casullo concludes that none of them is successful in providing a definition of experience, he does not think that there is no hope to define "experience". Instead, he provides an approach, namely (5) the natural kind approach for defining experience. I agree with Casullo's criticism of defining "experience" in terms of the four features of sensory experience, and I will offer some additional or further considerations for rejecting the first four approaches. Moreover, I will argue that Casullo's natural kind approach also fails.

The first approach, according to Casullo (2003, p.150), tries to identify "experience" by appeal to some general phenomenological features common in all forms of perception, introspection, memory and testimony. In other words, this approach appeals to the phenomenological features common in all forms of justification which are alleged to be a posteriori. Those phenomenological features are not only common in experience of the five senses, but also in experience of introspection and recall. The biggest problem with this approach is that no one has been successful in finding

<sup>&</sup>lt;sup>5</sup> For more detail, see section 4.2 on the notion of rational insight.

any phenomenological features common in all forms of sense experience, let alone in all forms of justification which are alleged to be a posteriori (Casullo, 2003, p. 150). And, Plantinga (1993, p. 59) mentioned that "in some people, indeed, memory seems to work with no sensuous phenomenology."

I think Plantinga's point is right, but in some cases there is not only no sensuous phenomenology but also no clear phenomenal experience. Consider some cases such as the recalling of a password or phone number. It is not rare to find that we could enter, for instance, our own email password or some good friend's phone number without any thought, or say any clear phenomenal experience of recalling, if we are extremely familiar with it (e.g. we have entered it many times). This sort of case seems to show that recalling does not necessarily involve phenomenal experience. And the search for phenomenological features common in all forms of alleged a posteriori justification would be doubtful in the case of memory.

The second approach appeals to the distinct content of empirical beliefs. A posteriori justification seems to only concern beliefs about the actual world; and a priori justification seems to concern beliefs about all possible worlds. So, one may say that "experiential sources are those that provide information about only the actual world" (Casullo, 2003, p. 151).

Casullo thinks that there are two problems for the second approach. First, it rules out the possibility of a priori justified contingent beliefs and a posteriori justified necessary beliefs. We may appreciate Casullo's point by considering the belief that I exist (or I am here) and the belief that 12x12=144. The former is widely thought to be plausibly justified a priori and to be contingent.<sup>6</sup> The latter is also widely thought to be potentially justified a posteriori, for example by computer calculation, and to be necessary. These counterexamples show that the second approach is even wrong on its assumption of the scope of a priori and of a posteriori justification. The second problem Casullo brings out is that the second approach lacks an explanation of the intrinsic difference between of a priori and a posteriori justification, which leads to

<sup>&</sup>lt;sup>6</sup> I might come to know that I exist (or I am here) by merely considering the proposition itself.

the consequence that "it cannot explain the epistemic significance of the distinction between a priori and a posteriori justification" (Casullo, 2003, p. 151).

Casullo does not specify what exactly he means by "the epistemic significance of the distinction between a priori and a posteriori." So, it is not clear why the failure of explaining the intrinsic difference between priori and a posteriori leads to the failure of explaining the epistemic significance of the distinction between a priori and a posteriori. It seems that a distinction in terms of the difference between the content of a priori justified beliefs and of a posteriori justified beliefs is not completely epistemically meaningless or insignificant. For it at least tells us the scope of a priori and of a posteriori justification.

Three are two possible ways to interpret Casullo's "epistemic significance of the distinction between a priori and a posteriori." First, given that the distinction between priori and a posteriori is a sort of distinction that concerns the intrinsic difference between justifications, if a proposed distinction fails to point out the intrinsic difference between justifications, it would just fail to be the priori/a posteriori distinction; in other words, the proposed distinction is not about the a priori and the a posteriori. So, the proposed distinction is insignificant from the point of view of the original purpose of setting up the distinction. Second, instead of interpreting Casullo's idea from the point of view of the original purpose of the distinction, we may interpret his idea from the point of view of epistemology. The proposed distinction could indeed *be* the a priori/a posteriori distinction, but it might be useless and insignificant for the goal of epistemology. Perhaps, Casullo assumes what is more important for the goal of epistemology is information about the intrinsic nature of justification rather than information about the scope of justification, and therefore a distinction in terms of content of beliefs is not useful or not significant for the goal of epistemology (since it misses the central issue of epistemology); it tells us nothing about the intrinsic nature of justification: how a priori beliefs are justified in a way different from a posteriori justified beliefs. Of course, it is possible to question why we should accept such a view which only, or more, values the kind of distinction concerning the intrinsic difference between justifications. But, I guess the only answer we could give is that this is what epistemology concerns.

The third approach appeals to the features of the object of experience:

"Sense experience.....involves a relation between a cognizer and a physical object. Introspection involves a relation between a cognizer and a psychological state of that cognizer. Memory involves a relation to some earlier beliefs of the cognizer or, perhaps, some past events. The objects of the various forms of experience, according to the third approach, have a common feature: they are all concrete. Non-experiential sources, by contrast, all involve a relation to abstract objects." (Casullo, 2003, p. 152)

In short, the third approach suggests that experiential sources (or experience) only involve a relation to concrete objects, while non-experiential sources only involve a relation to abstract objects.

Casullo thinks that the third approach has the same problem as the second. First, it rules out the possibility of beliefs about abstract objects justified a posteriori and beliefs about concrete objects justified a priori. Again, we may appreciate Casullo's point by considering the belief that I exist (or I am here) and the belief that 12x12=144. The former is widely thought to be plausibly justified a priori and to be about concrete objects, and the latter to be plausibly potentially justified a posteriori and to be about abstract objects. Second, it lacks an explanation of the intrinsic difference between a priori and a posteriori, i.e. an explanation of how justifications of necessary beliefs are different from justifications of contingent beliefs, and thereby fails to explain the epistemic significance of the distinction between a priori and a posteriori (as I mention earlier, the main concern of epistemology is the intrinsic nature of justification).

I think there is one more problem for the third approach. The distinction between concrete and abstract objects is not clear enough for defining experience. We might grant that physical objects are concrete, but why are psychological states and earlier beliefs concrete? If they are not concrete, then introspection and memory would be ruled out of sources providing a posteriori justification. If they are, then we need an explanation of how they are concrete as physical objects. Physicalists might have an explanation of it, but first, we should not assume a physicalist position, and second, physicalists might reject the existence of anything abstract, if the notion of concrete is conceived as physical and the notion of abstract as non-physical.

Furthermore, there are cases in which the target of intuition is concrete. Consider the belief that the Gettier case is not a case of knowledge. Isn't the Gettier case something concrete? It might be argued that the Gettier case is imaginary. But why could we not have intuitions when we encounter a real or actual instance of the Gettier case? Or consider a case where someone, Tom, is torturing an infant. When I see it, I might have the intuition that Tom action is immoral. Isn't Tom's action also something concrete? Or consider the case that I might be justified in believing that I am here by intuition. If the perceptually justified belief that Peter is here is about concrete objects, then I see no reason why my intuitionally justified belief that I am here is not about concrete objects. Same reason goes for the belief that I exist.

The fourth approach appeals to the causal relation between the cognizer and the object of experience. In a posteriori justification, the subject matter of our beliefs seems to causally relate to our justifications or to our cognitive processes; on the other hand, in a priori justification, the subject matter of our beliefs seems to involve no such causal relations. Consider our mathematical knowledge. It appears that the object of mathematical intuition, e.g. numbers, is something which cannot be involved in any causal relation. So, there is no causal relation between numbers and us. Casullo considers two versions of this approach, one by Colin McGinn and the other by Laurence BonJour (Casullo, 2003, p. 152).

The version suggested by McGinn is that a justification is experiential iff the subject matter of the reason or ground for S to believe P causes S to believe P. For instance, S believes P, there is a tree, on the basis of believing that there appears to be a tree. In this case, the tree-like-appearance (the subject matter of the reason or ground for S to believe P) causes S to believe P, there is a tree. So, the justification is experiential, or say, dependent on experience.

Casullo provides a counterexample in showing that McGinn's version will count

justifications by intuition as a posteriori. Suppose that S believes P, nothing can be both red and blue all over at the same time, on the base of believing himself to "see" P intellectually. In this case, intellectually seeing P (the subject matter of the reason or ground for S to believe P) does cause S to believe P. So, the belief that nothing can be both red and blue all over at the same time is justified by intuition and also justified a posteriori according to McGinn's version. Clearly we would not allow this possibility.

McGinn's version could be revised by adding a further condition that the subject matter of P causes the subject matter of the reason or ground for S to believe P. So, the above counter example does not work, since the subject matter of 'nothing can be both red and blue all over at the same time' is redness and blueness which presumably cannot be involved in a causal relation; what can be involved in a causal relation are, for instance, particular instances of red and blue things. However, Casullo argues that the revised version also faces a counterexample. Suppose that S is standing in front of a fireplace and S believes P, there is smoke coming out, on the basis of believing that there is a fire. Clearly, the smoke (the subject matter of the reason or ground for S to believe P) does not cause the fire (the subject matter of P) and thereby the additional condition is not satisfied. The result is that, in this case, according to the revised McGinn version, the belief that there is smoke coming out is justified a priori, and clearly we would object to this result.

Another version of the fourth approach is from Bonjour: a process is experiential iff "it is a causally conditioned response to particular, contingent features of the world" (Bonjour, 1998, p. 8). So, S's belief that P is justified a posteriori iff the belief that P is produced by a process which is a causally conditioned response to particular, contingent features of the world, and S's belief that P is justified a priori iff it is not.

Casullo points out that knowledge by intuition would produce a problem for Bonjour's version. "An apprehension that p is necessarily true is a causally mediated response to considering the proposition in question and understanding it, both of which are contingent features of the world" (Casullo, 2003, p. 155). The idea is simply that in the case of knowledge by intuition the belief that P or that P is necessarily true is a causally mediated response to the consideration or understanding of P. If it is true, then, according to Bonjour's account, justification by intuition would be viewed as a posteriori. Clearly, we would object to this result.

In my view, the fourth approach is wrong in the first place in that it supposes that the subject matter of a priori justified belief cannot have a causal relation with us or our justifications, and the subject matter of a posteriori justified belief can. For the latter, consider some beliefs about future. For example, I might know by testimony that I will have a seminar tomorrow. Since a fact about events in the future does not causally affect the present, my seminar tomorrow cannot cause me to have the belief that I will have a seminar tomorrow. For the former, consider some self-fulfilling beliefs. For example, by purely considering the proposition 'I am thinking', I know a priori that 'I am thinking.' The subject matter 'my thinking' does cause me to have the belief that I am thinking. Similarly, the a priori justified belief that I do not come to know that 'I am thinking' or 'I am in a certain mental state' by introspection, but by pure reasoning).

The fifth and the last approach is the natural kind approach suggested by Casullo. Compared to the above approaches, the natural kind approach is distinctive by its empirical nature. All the four approaches, in Casullo's words (1998), are "a product of a priori reflection on introspectively accessible features of cognitive experience" (p. 158). If all these a priori approaches fail to define experience properly, it might be a sign that we should try some empirical approaches:

"[The] suggestion is that "Experience" be viewed as a putative natural kind term whose reference is fixed by local paradigms. The local paradigms are cognitive processes associated with the five senses, which are identified in terms of (surface) characteristics such as providing information about the actual world, involving a casual relation to physical objects, and perhaps having a distinctive phenomenology" (Casullo, 2003, p. 159).

The idea of this approach is to view experience as a natural kind and study it in the

way scientists do. For example, the reference of "water" is fixed by the chemical structure H2O which is discovered by scientific investigation of the paradigms which are identified in terms of surface characteristics such as colorless, tasteless, odorless liquid from river or oceans. It should be noticed that these surface characteristics are neither sufficient nor necessary conditions for a substance to be water. A substance could possess these properties without being water, or could be water with none of these properties.

If we study "experience" as scientists do water, then we need to first investigate the local paradigms of experience. According to Casullo, these paradigms would be our cognitive processes associated with the five senses and identified by "(surface) characteristics such as providing information about the actual world, involving a casual relation to physical objects, and perhaps having a distinctive phenomenology." The reason for Casullo to restrict the local paradigms in terms of these properties is that, as I mentioned earlier, perception is the paradigm source of a posteriori justification. Any definition of experience for drawing the distinction between a priori and a posteriori must include justifications by perception.

The first problem with the natural kind approach is that the discovery of the nature of experience is not enough to determine the distinction between a priori and a posteriori. The purpose of defining experience or experiential processes is to specify the distinction between a priori and a posteriori. As I mentioned earlier, the distinction is epistemic in nature, i.e. it concerns how a priori beliefs are justified in a way different from a posteriori beliefs. Suppose that we discover the underlying property of experiential processes. Now, even if there is such a property to be found, we may still ask a question: is that the property in virtue of which a belief is justified, or is that the sort of epistemic property must be the sort of property in virtue of which a belief is justified; it might be epistemically irrelevant. What is guaranteed in the scientific research, if successful, is only a sort of property which is common in the process of perception, introspection, memory and testimony. Furthermore, scientific research itself cannot tell us whether the underlying property is epistemically relevant; that is a philosophical question, or more precisely, an epistemically

question. In short, in order to determine the a priori/a posteriori distinction, the underlying properties (the nature of experience) must be epistemically relevant. Otherwise, these properties cannot show the epistemic difference between a priori and a posteriori justification, even if we can fix the reference of experience or experiential process by them. Hence, if the natural kind approach is successful, it needs to assume the underlying properties are epistemically relevant. But we have no reason to make this assumption.

What kinds of underlying properties would be epistemically relevant? It depends on what theory of justification we take for ground. From an externalist point of view, the underlying properties must be the sort of property which makes the process (for instance, perceptual process) reliable. From an internalist point of view, the underlying properties must be the sort of property by which one's belief is rational, in the sense that one has access to the relevant reasons for holding his beliefs. If the above consideration is right, then it leads to the second problem with the natural kind approach: on some theories of justification, the assumption that the underlying properties are epistemically relevant will be doubtful. It seems what makes a process reliable is how it is causally connected to reality. It is doubtful how a property could be, on the one hand, common in all types of experiential process, and on the other hand, account for how each type of experiential process is causally connected to reality, since perceptual processes and introspective processes are presumably causally connected to reality in different ways.

The final problem is that the natural kind approach is a pseudo-suggestion. The present concern is how experience should be defined for the purpose of specifying the distinction between a priori and a posteriori. In order words, we are considering what properties could be used in defining experience. But, what the natural kind approach suggests is the following: "Let's find the properties which are common in all process of perception. If we find them, we can draw the distinction between a priori and a posteriori." This approach makes no real progress on the issues. Moreover, as Casullo (2003, p. 159) notices, there is no guarantee that there are some properties common to all cognitive processes that we take as paradigms. This makes the natural kind approach more out of the point. It fails to point out a plausible

property for defining experience.

Before ending this section, there is a view which should be considered. It might be suggested that the notion of "experience" is vague. Therefore, there is no clear definition of experience. As a consequence, the distinction between a priori and a posteriori is also vague. But, although the distinction is vague, it does not mean that it should be abandoned. It could be vague but useful.

We may consider the above view as a concern about the whole notion of a priori/a posteriori distinction, rather than just a concern about the notion of "experience". Is the a priori/a posteriori distinction vague? It does not seem vague to me. It does not seem that there is any plausible borderline case. There are clear borderline cases for vague terms like "bald" and "crowd". For example, we can find borderline cases when we consider the spectrum from obviously bald to obviously not bald. But, it seems that the same move cannot be made for the terms "experience", "a priori", and "a posteriori". And, as I describe in the introduction, there is a common categorization of justification or knowledge when we apply the traditional distinction between a priori and a posteriori. The common categorization does not result in any borderline cases. So, it does not seem very plausible to have borderline cases for the a priori/a posteriori distinction.

#### **2.3.** Three Possible Responses

The traditional distinction between a priori and a posteriori is based on the idea of an experiential/non-experiential distinction, and is often specified by the contrast between sources alleged to be the paradigms of the a posteriori, such as perception and introspection, and sources alleged to be the paradigm of the a priori, such as intuition.

However, after reviewing five different approaches to define "experience", it appears that there is no definition of experience good enough for determining the distinction between a priori and a posteriori. In other words, the traditional distinction between a priori and a posteriori is baseless. How should we respond to this fact? We may have three different ways to respond.

First. might insist the traditional distinction. the we on i.e. experiential/non-experiential distinction, and adjust our common categorization of sources of knowledge (or justification). For instance, by defining "experience" as phenomenological experience, we include knowledge by intuition as a posteriori, or by defining "experience" as sensory experience, we exclude knowledge by introspection as a posteriori. This response is obviously possible, but it leads to some questions: why should we define experience in this way, or why should we divide justifications according to this definition? Is there any epistemic significance if we draw such a distinction? The answer to these questions probably would be about how some sources of knowledge or ways of justification are different or distinct from others in a way which forces us to reform our understanding of the nature of justification or knowledge.

Second, we might stick to our common categorization of sources of knowledge (or justification) and draw a priori/a posteriori distinction according to it. The very implication of this response is that we value or prefer our common categorization more than the traditional distinction; we would rather give up the traditional distinction than our common categorization. But, again, why should we categorize justifications in this way? For a long time, our common categorization has been thought to be supported by the traditional distinction. If someone asks why we make such a categorization, the default answer would be that there is an essential and epistemic difference between the two sides, which is pointed out by the traditional distinction. Now, this default answer, as I have argued, is no longer available. The notion of experience is too ambiguous to lead to our common categorization. Clearly, we cannot just value or prefer our common categorization with nothing but the intuition that this is how we should categorize justifications. Hence, it is necessary to find out the essential and epistemic difference between the two sides, if any, if we want to insist the significance of our common categorization. There are two further possible approaches to get this done. One is to follow empiricists who appeal to the notion of analyticity. The other is to follow rationalists who appeal to the notion of rational intuition. The analytic approach will be considered in chapter 3, and the intuitional approach in chapter 4.

Third, we might give up the whole idea of a priori/a posteriori distinction, and admit the contrast between sources alleged to be a posteriori and sources alleged to be a priori is just not significant. This response would be the final option for one who endorses the a priori/a posteriori distinction, if the first two responses turn out untenable. The impact of this response is not only that we abandon some useless conceptual framework, but also that we need to reform our understanding of the nature of different sources of justification and knowledge. This approach will be discussed in the conclusion chapter.

# 3. A Priori as Mere Meaning Based Justification

Some philosophers try to account for a priori knowledge by appealing to the notion of analyticity. In particular, they claim that a statement could be known a priori because of its analyticity. The conception of analyticity is diverse among different philosophers, but they are united on a position that analytic statements can be known by merely knowing the meaning of the statements in question. This position indicates a view on the distinction between a priori and a posteriori; the distinction should be drawn by the notion of analyticity, or at least by the notion of grasp of meaning.

My concern here is neither the tenability of the analytic account of a priori knowledge nor the notion of analyticity itself, but rather whether there could be any epistemologically significant distinction between a priori and a posteriori provided by the notion of analyticity or of grasp of meaning. It is true that both the notion of analyticity and the analytic explanation of a priori knowledge have been criticized (for instance, Quine, Two Dogmas of Empiricism). But, for the sake of argument, I will grant that those worries can be answered. In this chapter, I will explore the possibility of a mere meaning based distinction between a priori and a posteriori. My conclusion is that it is untenable because of the problem of classification: there is no consistent way to categorize all sources of justification or knowledge.

# 3.1. The Notion of Analyticity and the Analytic Approach of a Priori Knowledge

Kant is the one who first explicitly introduces the notion of analytic and synthetic judgments:

"Either the predicate B belongs to the subject A, as something which is (covertly) contained in this concept A; or B lies outside the concept A, although it does indeed stand in connection with it. In the one case I entitle the judgment analyticity, in the other synthetic. Analytic judgments (affirmative) are therefore those in which this connection of the predicate with the subject is thought through identity; those in

which this connection is thought without identity should be entitled synthetic. The former, as adding nothing through the predicate to the concept of the subject, but merely breaking it up into those constituent concepts that have all along been thought in it, although confusedly, can also be entitled explicative. The latter, on the other hand, add to the concept of the subject a predicate which has not been in any wise thought in it, and which no analysis could possibly extract from it; and they may therefore be entitled ampliative (Kant, 2007, p. 48)."

As Ayer criticizes, one of the defects of Kant's account of the analytic/synthetic distinction is that he has two distinct criteria, i.e. a logical criterion and a psychological criterion (Ayer, 1952, p. 78). Kant exemplifies analytic judgments by "all bodies are extended" and synthetic judgments by "7+5=12." According to Kant, the former is analytic because the predicate "extended" is covertly *contained* in the subject "bodies" (a denial of it leads to a contradiction) and the latter is synthetic because "the concept of 12" is by no means already *thought* in merely thinking the union of 7 and 5 (Kant, 2007, p. 53)." In these two examples, Kant appeals to two distinct criteria. In the former example, that "all bodies are extended" and "bodies". In the latter example, that "7+5=12" is synthetic based on a criterion concerning the logical relation between "extended" and "bodies". In the latter example, that "7+5=12" is synthetic based on a criterion concerning the logical relation between "extended" and "bodies one might not, for example, think of '12' when he thinks of '7+5' but it does not mean that a denial of '7+5=12' does not lead to a contradiction.

Although Ayer (1952) disagrees with Kant's account of the analytic/synthetic distinction, he preserves the logical import of Kant's view and provides an alternative definition:

"We say that a proposition is analytic when its validity depends solely on the definitions of the symbols it contains, and synthetic when its validity is determined by the facts of experience." (p.78)

According to Ayer's definition, the truth of an analytic proposition is solely determined by the meanings of the words it contains. In contrast, the truth of a

synthetic proposition is determined by "the facts of experience". In short, Ayer's account of the analytic/synthetic distinction is a matter of how the truth of a proposition is determined.

If, in Ayer's mind, the analytic/synthetic distinction is a matter of how the truth of a proposition is determined, then it is natural for him to think that analytic propositions could be justified on the basis of mere grasp of the meaning of propositions, while synthetic propositions cannot. Since the truth of the former is merely determined by the definitions of the words, it entirely devoid of factual content (i.e. truths about the world). As a consequence, it does not owe its "validity to empirical verification" (Ayer, 1952, p. 75).<sup>7</sup> In contrast, since the truth of the latter is not entirely determined by definition of words, but at least partly by "the facts of experience", it owes part of its validity to empirical verification. In short, analytic propositions and synthetic propositions are not only different in the way their truths are determined, but also different in the way they can be known. Ayer (1952) provides an example to illustrate the difference between the way to justify analytic propositions and synthetic propositions:

"The proposition "Either some ants are parasitic or none are" is an analytic proposition. For one need not resort to observation to discover that there either are or are not ants which are parasitic. If one knows what is the function of the words "either," "or," and "not," then one can see that any proposition of the form "Either p is true or p is not true" is valid, independently of experience." (p.79)

Clearly, Ayer believes that the justification of analytic propositions is entirely based on grasp of meaning. Since Ayer believes that all (and only) a priori knowledge (knowledge of mathematics, logic and conceptual truths) is analytic, he believes that a priori justification entirely depends on grasp of meaning.

The importance of Ayer's view is that he provides a general picture of an analytic theory of a priori knowledge, i.e. a mere meaning-based explanation of a priori

<sup>&</sup>lt;sup>7</sup> For more details about empirical verification (how the validity of synthetic propositions is determined), see Ayer (1952, p. 90-102).
knowledge, even if he might be wrong in claiming that a priori knowledge must be necessary, empty of factual content and indefeasible by experience. Proponents of the analytic approach may have different views of the notion of analyticity, but most of them endorse the claim that grasp of meaning suffices for a priori justification. So, one possible conception of the distinction between a priori and a posteriori would be that a priori is the sort of justification that is solely dependent on our grasp of meaning, while a posteriori is not.

#### **3.2.** Boghossian's Analyticity: Metaphysical and Epistemological

As I mention in the last section, Ayer endorses the idea that all (and only) a priori knowledge (knowledge of mathematics, logic and conceptual truths) is analytic; knowledge of mathematics, logic and conceptual truths are true in virtue of meaning. This idea has been the core idea of analytic account of a priori knowledge. However, a lot of philosophers gave up the notion of analyticity after Quine's famous criticism of the analytic/synthetic distinction.

Paul Boghossian argues that an analytic explanation of a prior knowledge is tenable, given a minimal realism about meaning. He distinguishes two different notions of analyticity, *epistemological* and *metaphysical*, and argues that Quine's criticism only targets the metaphysical notion:

"On [one] understanding, then, 'analyticity' is an overly *epistemological* notion: a statement is "true by virtue of its meaning' provided that grasp of its meaning alone suffices for justified belief in its truth. Another, far more *metaphysical* reading of the phrase 'true by virtue of meaning' is also available, however, according to which a statement is analytic provided that, in some appropriate sense, its owes its truth value completely to its meaning, and not at all to 'the facts'." (Boghossian, 1996, p. 363).

The two notions can be specified as follows:

 A. S is *epistemologically analytic* iff a mere grasp of S's meaning by T suffices for T's being justified in holding S true; B. S is *metaphysically analytic* iff the truth of S is fixed entirely by its meaning and not by the facts.

According to Boghossian, the two notions of analyticity are distinct. For the notion of epistemological analyticity, it concerns the epistemological issue of what gets some sort of statements justified; and for the notion of metaphysical analyticity, it concerns the metaphysical issue of what makes some sort of statements true. In short, the notion of analyticity could be conceived in an epistemological sense or a metaphysical sense. As we mention earlier, Ayer thinks that the truth values of analytic propositions are merely determined by the definitions of the words. So, Ayer's notion of analyticity involves the metaphysical sense. Moreover, according to Ayer's example of how we justify "Either some ants are parasitic or none are," his analyticity also involves the epistemological sense. It is not clear whether Ayer notices that his account includes both senses of analyticity. But, the metaphysical sense seems to be primary for Ayer. Given that he links his ant example to his definition of analyticity entails epistemological analyticity, i.e. sentences true in virtue of meaning could be known solely by S's grasp of its meaning.

The aim for Boghossian to introduce two different notions of analyticity is to argue that an analytic explanation of a priori knowledge is tenable. He argues that the two notions are independent in the sense that one may accept either of them without the other, and the analytic explanation of a priori knowledge only requires the epistemological notion of analyticity. In fact, he agrees that there is no metaphysically analytic sentence, since it is just hard to defend the claim that "S is true iff for some p, S means that p" or "our meaning p by S makes it the case that p" (Boghossian, 1996, pp. 364-365). He illustrates this point by quoting Harman's 'copper is copper' example: doesn't the truth of 'copper is copper' partly depend on the feature of the world that everything is self-identical (Boghossian, 1996, p. 364)? It seems to him so obvious that S is true because S means that p and p is true, rather than just because S means that p.

There is an objection to the idea that a sentence could be epistemologically analytic

without being metaphysically analytic:

"If p really is an independent fact that makes S true, then just knowing that S means that p couldn't suffice for the needed justification; one would also need to be justified in believing that p. In other words, so long as the truth of S isn't merely a matter of what it means, then grasping its meaning can only be (at best) part of the story about why one is justified in holding it to be true. The other part – and by far the more important part – concerns one's epistemic access to p itself and why one is justified in believing p." (Margolis & Laurence, 2001, p. 294)

The idea of the objection is that if the truth of S is dependent on whether S means p and whether it is the case that p, then knowing that S means P must not suffice for justification in believing S; we also need to know that p. So, if the sentence S is not metaphysically analytic, it is just impossible for us to be justified in believing it merely on the basis of knowing that S means p. As I mention earlier, Boghossian accepts the truism that S is true because S means that p and p is true, but he rejects the claim that we need to be justified in believing p if we want to know S. He argues that

"[The objection expresses a epistemic principle that] so long as the truth of S isn't merely a matter of F, but is also a function of G, then being justified in believing F can only be (at best) part of the story about why one is justified in holding S to be true; one would also need to be justified in believing G. But this is not in general a sound epistemic principle. The truth of the sentence "this is water" isn't merely a matter of how some substance looks or feels; it is also a matter of its being H2O. However, it doesn't follow that I could never be justified in holding some stuff to be water without my first justified in believing it to be H2O." (Boghossian, 2003, pp. 17-18)

Boghossian's example does not seem to be a sound counterexample. A counterexample showing that the epistemic principle in question is not sound should be a case in which the truth of the sentence S is determined by both F and G. But Boghossian's example does not satisfy this condition. The truth of "this is water" has

nothing to do with how some substance looks and feels, but a matter of its being H2O (and also what the sentence "this is water" means), although the way that some substance looks and feels is a reliable indicator of whether it is water.

Perhaps, what Boghossian wants to express is that the fact that S means p could play a role as the indicator of the truth of S, such as we could know some stuff is water by knowing how it looks and feels. So, in order to know that S, it is not necessary to have direct epistemic access to the fact that p, if the truth of S depends on the fact that S means p and the fact that p is true. Clearly, there would be a question of how the fact that S means p could play a role as the indicator of the truth of S. A complete response involves a discussion of Boghossian's analytic theory of a priori knowledge. I will not address this question, since my concern is the distinction between a priori and a posteriori rather than Bogohossian's theory or the notion of analyticity. No matter whether epistemological analyticity implies metaphysical analyticity or not, it would not affect my project here. All I need to assume, for the sake of argument, is that the notion of epistemological analyticity is tenable. In the next section, I will try to specify a distinction between a priori and a posteriori on the basis of the idea of epistemological analyticity.

## **3.3.** A Priori as Mere Meaning Based Justification

The main impact from Boghossian, for the purpose of this project, is that his view in some sense reveals a way to make the distinction between a priori and a posteriori: we may draw the distinction by the notion of epistemological analyticity. Boghossian's analytic explanation of a priori knowledge is proposing a view that our a priori knowledge is solely based on our grasp of meaning. We are justified in believing S a priori merely by our grasp of the meaning of S. If this is the case, then we may make a distinction between a priori and a posteriori as follows:

- A. S's belief that P is justified a priori iff S's justification for P solely depends on S's grasp of P's meaning (or, S's grasp of the meaning of P suffices for S to justify P).
- B. S's belief that P is justified a posteriori iff S's justification for P does not solely

depend on S's grasp of P's meaning (or, S's grasp of the meaning of P does not suffice for S to justify P).

The main idea behind the distinction of grasp of meaning is that a priori justification should be conceived as a type of justification which appeals to nothing more than our grasp of the meaning of the statement in question; in contrast, a posteriori justification should be conceived as a type of justification which requires more than appeal to our grasp of the meaning of the statement in question. For example, my justification for the statement "all bachelors are unmarried men" would be a priori, if my grasp of the meaning of "all", "bachelors", "are", "unmarried", and "men" suffices for me to justify the statement. In contrast, my justification for the statement "I am in pain" could not be a priori, since no matter how deep and complete my grasp of the meaning of "T", "am" and "in pain" is, it still cannot suffice for me to justify the statement. In pain" is something beyond my grasp of the meaning of the statement. I need to access my mental state to find out whether I am having the experience of pain.

Intuitively, the distinction by the idea of grasp of meaning appears to capture our daily practices of a priori and a posteriori justifications. It seems that all we need for priori justification is to grasp the meaning of the sentence in question, and a posteriori justifications need something more. However, rationalists probably disagree with this distinction, since they would not agree that our grasp of meaning suffices for us to a priori justify a belief, say "all bachelors are unmarried men". In other words, they believe that a priori justification cannot merely depend on grasp of meaning. They think that some sort of intuition or rational insight is needed in order to a priori justify a belief. The rationalist distinction between a priori and a posteriori will be considered in chapter 4. For the sake of argument, let us put aside the rationalist point of view and suppose that grasp of meaning suffices for a priori justification; there is no need to talk about intuition or rational insight in a priori justification.

#### **3.4.** The Notion of Grasp of Meaning

Before considering whether the distinction by the idea of epistemological analyticity is successful, we need to specify what it is for a justification to be solely based on grasp of meaning. This leads to the issue of how the notion of grasp of meaning should be conceived and how grasp of meaning suffices for us have justified beliefs. Let us start with the former. The latter will be discussed in the next section.

How should we conceive the notion of grasp of meaning? The notion of grasp of meaning of a concept or a sentence may have different requirements in various contexts. A relatively high standard for T to grasp the meaning of sentence S might be that T could correctly state the meaning of S, or T has a second-order belief about the meaning of S. A relatively low standard might be that T simply needs to be able to form the thought that S. If we view the a priori as a type of justification solely depending on our grasp of meaning, then the lowest or the allowable standard of grasp of meaning has to suffice for performing a priori justifications. So, what is the necessary grasp of meaning for a priori justification?

In Boghossian's defense of his analytic explanation of a priori knowledge, he distinguishes three types of grasp of meaning:

"In one sense, a thinker T grasps S's meaning just in case T means some determinate thing or other by his use of S. Call this notion of grasp "*mere grasp of meaning*." In a second sense, T grasps S's meaning when he can correctly and knowledgeably state what S means. In this sense, it is not enough that T mean something by S---he must also have second-order knowledge of what S means. Call this notion of grasp "*knowledge of meaning*." In the third and most demanding sense, T's grasping S's meaning implies not only that T is able to state S's meaning knowledgeably but also that he understands that meaning well enough to know whether or not it means that same as some other sentence. Call this "*understanding of meaning*" (Boghossian, 2003, pp. 16-17)."

According to Boghossian's distinction, the possession condition of "mere grasp of

meaning" concerns whether a certain token mental state or utterance of T succeeds in meaning P. If a certain token mental state or utterance of T succeeds in meaning P, then T grasps the meaning of S in the sense of "mere grasp of meaning". The second sense of grasp of meaning concerns whether T has "second-order knowledge of what S means", which presumably are justified true beliefs about the meaning of S in the form that "S means P". The third sense of grasp of meaning concerns whether T knows the semantic difference between two sentences or concepts, presumably in the form that "S and C are synonymous" or "S and C are not synonymous". In short, we could specify the three types of grasp of meaning as follows:

- T grasps the meaning of S in the sense of "*mere grasp of meaning*" iff T means P by his use of S.
- T grasps the meaning of S in the sense of "knowledge of meaning" iff T knows that S means P, and grasps the meaning of S in the sense of "mere grasp of meaning".
- 3. T grasps the meaning of S in the sense of "understanding of meaning" iff T knows that "S and C are synonymous" or "S and C are not synonymous", for every possible C, and grasps the meaning of S in the sense of "knowledge of meaning."

If we follow Boghossian's distinction of grasp of meaning, then which type of grasp of meaning is the one that suffices for a priori justification? In order to perform a priori justification, a "mere grasp of meaning" seems to be not enough. First, it is common to find that a person could successfully mean, for instance, some mathematical proposition P by his use of S without having any justification for believing S or without being able to justify the belief that S on the basis of his grasp of the meaning of S. Second, it seems that there is a difficulty to explain a priori justification merely on the basis of "mere grasp of meaning". "Mere grasp of meaning" seems obviously non-propositional, i.e. when T successfully grasps the meaning of P in the sense of "mere grasp of meaning", T does not possess propositional knowledge about the meaning of P.<sup>8</sup> If it is the case, then the explanation of how mere grasp of meaning justifies belief in S cannot appeal to the model of a premise in an argument (the inferential model) whose conclusion is S, since premises need to be propositional. Given that "mere grasp of meaning" excludes the inferential modal, it is hard to see how we could make sense of a priori justification merely based on "mere grasp of meaning": how could T justify P simply on the basis of T meaning P by S? For instance, how could the fact that T means P by S provide any justification for T to believe P? It seems very implausible. So, "mere grasp of meaning" does not suffice for performing a priori justification.

The lowest standard of grasp of meaning (the minimal grasp of meaning) for a priori justification would be to possess "understanding of meaning." First, apparently, when a person T could correctly and knowledgeably state what S means, and understands S's meaning well enough to know whether or not it means that same as some other sentence, it seems that no more or further grasp of meaning is required for T to have a priori justification of S, assuming that S is a mathematical, logical or conceptual truth. Second, there is an initial explanation, by Boghossian, of how a priori knowledge could be justified on the basis of "understanding of meaning" which will be discussed in the next section. Given these considerations, we might grant that

<sup>&</sup>lt;sup>8</sup> According to the definition of "mere grasp of meaning", T grasps the meaning of S in this sense just in case T means P by his use of S. It is essentially a kind of mental activity or mental state but not a kind of propositional knowledge. We may see this point by considering how "mere grasp of meaning" would look like in meaning externalism and internalism.

Suppose that T is trying to justify his belief that water is water. So, he needs to grasp the meaning of it in the sense of "mere grasp of meaning". Suppose that meaning internalism is true, i.e. one's mental content is purely individuated by intrinsic properties such as what the state of one's brain and body is in. Given the assumption of meaning internalism, if T successfully means water his use of "water", T needs to in a proper mental state and physiological state. Are those states themselves some sort of propositional knowledge? It seems no. Perhaps, it might be argued that, in order for T to successfully mean P by S, T needs to hold some beliefs or justified beliefs about P. But, even if it is the case, it does not imply that the fact that T means P by S is identical to that propositional knowledge. It would be clearly wrong to view T means all bachelors are unmarried by his utterance "all bachelors are unmarried" identical to T holds a set of beliefs or justified beliefs.

Suppose that meaning externalism is true, i.e. one's mental content is partly individuated by external properties such as how one is related to the external environment he is in. Given the assumption of meaning externalism, if T successfully means water by his use of "water", T not only needs to in a proper mental state and physiological state but also in a proper relation to water (or say H2O). Do those external properties involve propositional knowledge? It seems no too, since the proper relation between T and water is clearly some sort of causal property, rather than propositional knowledge.

Hence, when T successfully grasp the meaning of P in the sense of "mere grasp of meaning", T does not possess propositional knowledge about the meaning of P.

"understanding of meaning" is the minimal grasp of meaning for performing a priori justification.

Of course, someone might object to granting "understanding of meaning" as the minimal grasp of meaning for a priori justification. One might argue that "understanding of meaning" (or even "knowledge of meaning") is too demanding, since it requires the possession of propositional knowledge of meaning. In order to avoid this sort of objection, let us distinguish grasp of meaning into two types: propositional grasp of meaning and non-propositional grasp of meaning. Clearly, "knowledge of meaning" and "understanding of meaning" fall into the first kind and "mere grasp of meaning" into the second kind. It is not clear to me that how non-propositional grasp of meaning suffices to generate a priori justification of S. But, in section 3.6, I will argue that, no matter whether propositional or non-propositional grasp of meaning is assumed, the mere meaning based distinction between a priori and a posteriori has to face the problem of classification. Before that, let us examine some ideas of how propositional grasp of meaning suffices for a priori justification.

#### 3.5. The Notion of Mere Meaning Based Justification

How could a priori justification be performed merely on the basis of propositional grasp of meaning (e.g. "understanding of meaning")? Boghossian provides an explanation of how a priori knowledge is justified on the basis of "understanding of meaning." He illustrates it by two templates (Boghossian, 2003, p. 18-19 & 21)<sup>9</sup>:

<sup>&</sup>lt;sup>9</sup> There is a simple argument for explaining how a priori knowledge is justified (Boghossian, 1996, p. 386). It goes as follows:

<sup>1.</sup> If [logical constant] C is to mean what it does, then [argument-form] A has to be valid, for C means whatever logical object in fact makes A valid.

<sup>2.</sup> C means what it does.

<sup>3.</sup> Therefore, A is valid.

According to Boghossian, the premises of this argument can be known a priori (i.e. independent of experience). He argues for the aprioriy of the second premise:

<sup>&</sup>quot;Surely, we know, for any given C, that it means whatever it means. Suppose C is the word "and"; then, surely, we know a priori that "and" means whatever it means. Indeed, isn't it clear that we know a priori precisely what it does mean, namely, *and*? For any given mentioned constant, isn't disquotation guaranteed to state its meaning accurately?" (Boghossian, 1997, p. 359)

The Synonymy Template:

- 1. S means that P. (Knowledge of meaning)
- 2. S is synonymous with S'. (Understanding of meaning)
- 3. S' means that Q, where Q is some logical truth. (Knowledge of meaning)
- 4. If F is synonymous with G, then F is true iff G is true. (Conceptual link between meaning and truth)
- 5. Therefore, S is true iff Q.
- 6. Q (Logic)
- 7. Therefore, S is true (Deductive reasoning)
- 8. Therefore, P. (Deductive reasoning)

The Implicit Definition Template:

- 1. S(f) means that P (By knowledge of meaning)
- 2. If S(f) means that P, S(f) is true (By knowledge of the contents of one's stipulations)
- 3. Therefore, S(f) is true
- 4. If S(f) means that P, then S(f) is true iff P (By knowledge of the link between meaning and truth)
- 5. S(f) is true iff P

I think Boghossian's point is right if we read "C means what it does" in the *de dicto* sense. In the de dicto reading, the phrase "what it does" is not specific, and one can know that, for instance, 'and' mean what it does, without knowing what the word 'and' exactly means. But, in the de re sense, I see no way to know the second premise a priori. In the de re reading, the phrase "what it does" is specific, and one have to know what the word 'and' exactly means if he knows that 'and' means what it does. But, how could one know a priori (i.e. independent of experience) what the word 'and' exactly means? Perhaps, the only possibility is that we are born with the knowledge that 'and' means what it does. Now, the main point of the above consideration is that it seems we cannot explain a priori knowledge, for instance the validity of the inference that 'A and B, A', on the basis of knowing the second premise in the de dicto sense. If we accept the Boghossian's argument in the de dicto sense, then it implies that one can justify any logical inference without knowing what exactly the relevant logical constant means. For example, One can justify 'A and B, A' without knowing what exactly 'and' means. But, it seems intuitively not a valid case for one to have a priori justified beliefs. One might not share my intuition that one has to know the meaning of the proposition, or say the concepts it contains, if one is justified in believing it. I agree that the sort of intuition I have does not apply to all cases of knowledge, but it does apply to a priori knowledge. Since a detailed discussion of it would be beyond the scope of this thesis, I will not address it here.

#### 6. Therefore, P

The target of the *synonymy template* is to explain how Frege-analytic truths, i.e. truths which are transformable into logical truths by substitution of synonyms for synonyms, could be justified on the basis of "knowledge of meaning" and "understanding of meaning".<sup>10</sup> For example, via "understanding of meaning" of "unmarried men" and "bachelors" we justify the transformation from "bachelors" to "unmarried men." And the belief "all bachelors are unmarried men" is then justified on the basis of the transformation from "all bachelors are unmarried men" to "all unmarried men are unmarried" and the knowledge of the logical truth that "all unmarried men are unmarried."

Boghossian notices that the synonymy template is an incomplete account for explaining a priori knowledge, since it cannot explain knowledge of logical truths and truths which are not transformable into logical truths by substitution of synonyms for synonyms. In the synonymy template, some transitions from premises to conclusion appeal to logic and deductive reasoning. Given the assumption that circular reasoning is not acceptable, the synonymy template cannot explain our a priori knowledge of logic and deductive reasoning. So, Boghossian tries to give an account of knowledge of logic based on knowledge of meaning. In particular, he provides the *implicit definition template* which focuses on explaining truths of logic.

The main idea of implicit definition is that, according to Boghossian, we could attach a meaning to logical constants by implicitly stipulating the sentences of logic, or logical inferences, to be true or valid. As opposed to explicit definition, a sentence or interference is *implicitly* stipulated by a person's behavior with the term, e.g. to accept that certain sentences or inferences containing the term as true or valid. So, for instance, we could fix the meaning of "and" by implicitly stipulating that 'from A and B, we can infer A', 'from A and B, we can infer B' and 'from A, B, we can infer A and B' are valid.

<sup>&</sup>lt;sup>10</sup> Boghossian summarizes the notion of 'Frege-analyticity' as follows (1996, p. 366):

<sup>&</sup>quot;According to Frege, a statement's analyticity (in my epistemological sense) is to be explained by the fact that it is transformable into a logical truth by the substitution of synonyms for synonyms. When a statement satisfies this semantical condition, I shall say that it is 'Frege-analytic'."

Given the idea of implicit definition, we could know S is true by merely knowing S means P. And that is the idea behind premise (2) of the implicit definition template. Since S(f) is fixed to mean P by stipulating that S(f) is true, it follows that if S(f) means that P, S(f) is true.<sup>11</sup> And, presumably, all the transitions involved in the implicit definition template or the synonymy template are claimed to be justified a priori; otherwise the explanation fails.

Perhaps, it might be questioned whether the two templates succeed in providing a mere meaning-based explanation of a priori knowledge. It might be questioned if all transitions from premises to conclusion in the synonymy template and the implicit definition template are justified "a priori" (i.e. merely on the basis of grasp of meaning), especially the apriority of the appeal to "conceptual link between meaning and truth," "knowledge of the contents of one's stipulations" and "knowledge of the link between meaning and truth" in the templates.

Boghossian claims that "each of [three types of grasp of meaning] has been thought to be attainable without the benefit of empirical knowledge. Given this assumption, it becomes easy to see how the existence of epistemically analytic sentences might contribute to demystifying the phenomenon of a priori knowledge" (2003, p. 17). It is clear that Boghossian believes that the three types of grasp of meaning could be attained in a non-empirical way and thereby his analytic explanation could explain a priori knowledge.

The aim of this paper is not to defend Boghossian's analytic theory of a priori knowledge. The purpose of mentioning his analytic theory is just to have an initial understanding of how the a priori could be conceived as justification solely on the basis of grasp of meaning. So, here I would just provide a brief consideration of how Boghossian could respond.

There are two possible ways to defend Boghossian's templates. One is to argue that the kinds of knowledge mentioned in the two templates are all merely based on our

<sup>&</sup>lt;sup>11</sup> 'S(f)' refers to a sentence 'S' which contains an implicitly defined word 'f'. For example, the sentence that 'A and B, A' contains an implicitly defined word 'and'.

grasp of meaning. The other is to argue that when we talk of the idea that grasp of meaning "*suffices*" for us to justify a belief, what we mean is that grasp of meaning plays a role in collection of material which suffices for performing a priori justification. It does not imply that there is no need to appeal to some kind of capacity or mechanism for processing what we collect.

The second way would not be a favored choice to Boghossian and empiricists, since it sounds like a rationalist point of view. The second way suggests that a priori justification appeals to some kind of capacity or mechanism for processing what we grasp. In other words, it suggests that the grasp of meaning does not suffice for a priori justification; something other than the grasp of meaning is needed. This point of view is perfectly acceptable to rationalists, and they would call the sort of capacity or mechanism which provides a priori justification to beliefs "intuition" ("rational intuition" or "rational insight"). But, the appeal to something other than the grasp of meaning is exactly what Boghossian and empiricists cannot accept.

Perhaps, the first is the only option we could have. But, according to Boghossian (2003), it is not easy to explain the conceptual link between meaning and truth:

"Even if we can correctly say that we know that [']if S means that P then S is true iff P['] because we have stipulated it to be true, we cannot hope to explain why the stipulation grounds the knowledge via the Implicit Definition Template, because that template relies on our knowledge of that link." (p. 24)

As I mention earlier, I am not trying to defend Bogohossian's view. But, for the sake of argument, let us grant that the kinds of knowledge mentioned in the two templates are all merely based on our grasp of meaning. Now we have a general understanding of how a justification might merely depend on propositional grasp of meaning. A priori justification is conceived as a type of justification that merely depends on "understanding of meaning". In the next section, I will argue that such a mere meaning based distinction between a priori and a posteriori is not tenable, no matter if it is based on propositional or non-propositional grasp of meaning, since it faces *the problem of classification*.

## **3.6.** The Problem of Classification

Does the mere meaning based account provide a tenable a priori/a posteriori distinction? No. In this section, I will argue that the distinction by the mere meaning based account has a problem of classification, i.e. a difficulty to classify sources of justification or knowledge by which we grasp the meaning of a proposition for performing a priori justification. As I argued in section 3.5, "mere grasp of meaning" is not sufficient for a priori justification. One of the reasons is that it is non-propositional. But, it might be argued that non-propositional grasp of meaning suffices for a priori justification in some way other than the inferential model. In order to avoid this sort of objection, the problem of classification will be constructed as a dilemma. Either grasp of meaning is propositional or non-propositional. A priori justification based on either of them has a problem of classification.

Let us start with the first horn with propositional grasp of meaning. Assume that a priori justification is a sort of justification which is merely based on propositional grasp of meaning. For example, T needs to acquire "knowledge of meaning" or "understanding of meaning" of S. But, how could T acquire "knowledge of meaning" or "understanding of meaning" of S? More generally, how could T acquire the propositional knowledge of the meaning of S? A possible answer would be that T could know by perception, introspection, testimony or memory.<sup>1213</sup> For example, T could successfully grasp the meaning of "bachelor" in the sense of "understanding of meaning" because someone told T that "bachelor" and "unmarried men" are synonymous. However, if these are the ways T can acquire "understanding of meaning", then how should we classify knowledge by perception, introspection,

<sup>&</sup>lt;sup>12</sup> There is no doubt we could acquire "understanding of meaning" purely by testimony. It is also possible through pure introspection: by reflection of our own mental states about meaning. The detail will be discussed in section 3.7. Pure perception might not suffice for acquiring "understanding of meaning", but perception with the assistance of introspection seems to be sufficient. It is hard to rule out perception could play some role in the grasp of meaning; otherwise I see no way to explain how children come to acquire their first-language. Finally, if the above considerations are right, it would be hard to deny memory as one of the ways for acquiring "understanding of meaning".

<sup>&</sup>lt;sup>13</sup> In a mere meaning based account of a priori, there is presumably no room for intuition. For it would reduce the mere meaning based account to a rationalist account. Moreover, if there is justification or knowledge by intuition, then the mere meaning based definition of a priori would fail to point out how a priori justification is intrinsically different from a posteriori, since what really plays the justificatory role would be intuition.

testimony and memory?

Let us consider the case of testimony. If "understanding of meaning" can be acquired by testimony, then how should we classify knowledge by testimony? Clearly, there are four possible options:

- 1. All knowledge by testimony is a posteriori.
- 2. All knowledge by testimony is a priori.
- 3. Some knowledge by testimony is a priori and some a posteriori.
- 4. Knowledge by testimony is neither a priori nor a posteriori.

Option (1) would be the obvious choice according the meaning based definition of a posteriori, since T acquires propositional knowledge of the meaning of S by hearing someone's utterance which presumably is something other than grasp of meaning. But option (1) would lead to the consequence that the notion of the a priori becomes empty. First of all, it should be noticed that a priori knowledge, by definition, cannot involve any a posteriori justification. If T acquires propositional knowledge of the meaning of S by testimony, then according to option (1) T is a posteriori justified in believing some proposition about the meaning of S. If T is justified in believing S merely based on his propositional knowledge of the meaning of S which is known a posteriori, then T is justified in believing S a posteriori. The same reasoning goes for perception, introspection and memory. As a consequence, the acquisition of propositional knowledge of the meaning of S to be a priori. If this is the case, then there would be no a priori justification. The notion of the a priori would be empty. So, option (1) needs to be rejected.

Of course, one might argue that the apriority of the justification of propositional knowledge of the meaning of S is irrelevant to the apriority of the justification of S, since the former is not part of the justification of the latter. In other words, one might argue that when we consider whether the justification of S is a priori or not we only need to consider the nature of the justification of S independently.

I think the above argument is implausible. This argument implies that even if my justified belief that all bachelors are unmarried men is merely based on my propositional grasp of meaning of S ("bachelor" means "unmarried man") which I know a posteriori (e.g. by testimony), my justified belief that S (all bachelor are unmarried men) is still a priori. However, if how we come to know the premise that "bachelor" means "unmarried man" is irrelevant to the apriority of the conclusion that all bachelors are unmarried men, then it leads to a counter-intuitive result that a number of our justified beliefs in science are a priori in nature. Suppose we apply this same form of reasoning to argumentation. It is not rare for scientists to infer their conclusions from a set of a posteriori justified beliefs in science are a priori. But, justified beliefs in science are obviously not a priori. Hence, the argument fails to show my rejection to option (1) is invalid.

How about option (2)? First, this option violates the mere meaning based distinction of a priori. When one acquires knowledge by testimony (perception, introspection or memory), it is clear that this involves something other than mere reliance on grasp of meaning. Second, it makes the idea of the a posteriori empty. If all knowledge by testimony is classified as a priori, then the same argument would have to be run for each source (perception, memory, introspection and other sources of knowledge). If we classify justification or knowledge of testimony as a priori to avoid the problem with option (1), then we will also need to make the same move with other sources. As a consequence, there would be no a posteriori justification or knowledge. Perhaps, only perception could be claimed to be a posteriori, if someone could successfully argue that it is impossible for us to acquire "understanding of meaning" of S by perception. Third, it forces us to accept a very implausible result that knowledge by perception, introspection, memory and testimony are a priori in nature, since we need to apply option (2) to other sources of knowledge consistently. So, option (2) should be rejected.

Option (3) is very implausible. First, this option implies a very implausible possibility: a single source of justification could provide two different kinds of justification, i.e. some a priori in nature and others a posteriori. In other words, it is

possible that T is justified in believing P and Q both, for instance, by testimony but one is a priori and the other is a posteriori. How could it be? If both P and Q are justified by testimony, then they share the same way of justification. How could it turn out that one is a priori and the other is a posteriori? It could happen only when justifications by testimony are not united as a single kind, but this seems extremely implausible. Second, this option just violates the mere meaning based distinction. According to the distinction, *all* knowledge by testimony should be categorized as a posteriori, since T acquires propositional knowledge of the meaning of S by hearing someone's utterance which presumably is something other than grasp of meaning. To categorize some knowledge by testimony as a priori just violate the current distinction.

Option (4) should be rejected. If we adopt option (4), then we need to apply it to other sources of knowledge, since we could also acquire propositional knowledge of the meaning of S by them. The immediate consequence is that the distinction between a priori and a posteriori collapses. Nothing is a priori and nothing is a posteriori. The idea of a priori and a posteriori would be nearly empty.

Given the above considerations, all four options should be rejected. And it is not hard to see that the same argument runs for other sources of justification or knowledge. Hence, if the a priori is a sort of justification which is merely based on propositional grasp of meaning, then there is no consistent way to classify knowledge by testimony, perception, introspection and memory.

Let us turn to the second horn with non-propositional grasp of meaning. Assume that non-propositional grasp of meaning suffices for a priori justification and the a priori is a sort of justification which is merely based on non-propositional grasp of meaning. Since the sort of grasp of meaning is non-propositional (i.e. no propositional knowledge is formed), there is no fact about whether non-propositional knowledge of meaning is justified a priori or a posteriori. But, it does not mean that there is no problem of classification.

As we already assumed that non-propositional grasp of meaning suffices for a priori

justification, there cannot be any propositional knowledge of meaning involved in what justifies the belief in question. For example, there cannot be propositional knowledge that "bachelor" means "unmarried man" involved in what justifies the belief that all bachelors are unmarried men. In other words, as I mentioned in section 3.4, the inferential model is not available for explaining the case of non-propositional grasp of meaning. But what exactly would a priori justification be, if it is merely based on non-propositional grasp of meaning? One possible way is that I have some sort of awareness of my non-propositional grasp of the meaning of S by which my belief S is justified. For instance, I have some sort of awareness to my non-propositional grasp of the meaning of "all bachelors are unmarried men" by which I am justified in believing that all bachelors are unmarried men. However, if this is the case, then isn't this a kind of justification by introspection? The problem of classification rises again: how should we classify introspective justification?

Let us consider the case of introspection. Clearly, there are four possible options: (1) all knowledge by introspection is a posteriori, (2) all knowledge by introspection is a priori, (3) some knowledge by introspection is a priori and some a posteriori, and (4) knowledge by introspection is neither a priori nor a posteriori

Option (1) should be rejected, since a priori knowledge, by definition, cannot involve any a posteriori justification. How about option (2)? Here we would not have to apply option (2) to other sources of knowledge, since we already assume that there is only introspection involved as a possible source of justification. But, it is still problematic. First, option (2) violates the mere meaning based definition of the a priori. Introspective justification is something other than grasp of meaning, and therefore it should be classified as a posteriori. Second, there is an implausible result that all knowledge by introspection is a priori. Suppose that I am justified in believing that "I am in pain" by introspection. Are we going to accept that it is a case of a priori justification, i.e. my grasp of meaning suffices for me to justify in believing it? But how could my belief that "I am in pain" be justified merely on the basis of my grasp of the meaning of the sentence "I am in pain"? And how could my introspective justification for believing that "I am in pain" be the same sort of a priori justification as my mere meaning based justification for believing that "all bachelors are unmarried men"? It is even inconsistent with our traditional and common agreement about what cases are a priori. So, option (2) needs to be rejected.

Option (3) should be rejected. First, this option just violates the mere meaning based distinction. According to the distinction, all knowledge by introspection should be categorized as a posteriori. Second, it implies a very implausible possibility: a single source of justification could provide two different kinds of justification, i.e. some a priori in nature and others a posteriori. Third, again, it is not allowable to make some cases of knowledge by introspection exceptional. So, option (3) is rejected.

Option (4) should be rejected. Given that it is legitimate to ask whether knowledge by introspection is priori or a posteriori, it is impossible for knowledge by introspection to be neither of them. The distinction between a priori and a posteriori is a kind of A or not-A distinction. It is impossible that certain kinds of justification do not fall into either of them.

Given the above considerations, all four options should be rejected. Hence, if the a priori is a sort of justification which is merely based on non-propositional grasp of meaning, then there is no consistent way to classify knowledge by introspection.

We may summarize the problem of classification as a dilemma. Either grasp of meaning is propositional or it is non-propositional. If a priori justification is merely based on propositional grasp of meaning, then there would be a difficulty to classify sources of justification or knowledge such as perception, introspection, testimony and memory. If a priori justification is merely based on non-propositional grasp of meaning, then there would be a difficulty to classify justification or knowledge by introspection. Hence, the mere meaning based account fails to provide a tenable distinction between a priori and a posteriori.

## 3.7. A Possible Response and Its Failure

Is there any way to solve the problem of classification? Perhaps, the only solution is to claim that that "understanding of meaning" is acquired by some "non-experiential

or non-empirical" way, i.e. a way not by perception, introspection, memory and testimony (the term "non-experiential or non-empirical" here is not used as there is a distinction between experiential and non-experiential, but as a term referring to the collection of sources of justification or knowledge, including perception, introspection, memory and testimony).

One possibility is that one might acquire "knowledge of meaning" or "understanding of meaning" through "mere grasp of meaning." Since "mere grasp of meaning" is, as I argued in footnote 8, non-propositional, there is no fact about whether the acquisition of "mere grasp of meaning" is a priori or a posteriori; the terms "a priori" and "a posteriori" are only used to describe justification or knowledge in which propositional beliefs are necessarily involved. And therefore, the acquisition of "mere grasp of meaning" is free from the problem of classification.

I think it is plausible to acquire "knowledge of meaning" or "understanding of meaning" through "mere grasp of meaning".<sup>14</sup> But, the problem of classification cannot be avoided. Although we might grant the acquisition of "mere grasp of meaning" is free from the problem of classification, the problem still arises from the transition from "mere grasp of meaning" to "knowledge of meaning" or "understanding of meaning". If the acquisition of "knowledge of meaning" or "understanding of meaning" from "mere grasp of meaning" is plausible, then it

<sup>&</sup>lt;sup>14</sup> The most obvious way to transition from "mere grasp of meaning" to "knowledge of meaning" would be through accessing or reflecting on the "mere grasp of meaning". For example, T acquires "knowledge of meaning" of S by accessing or reflecting on his "mere grasp of meaning" of S, i.e. to access the mental fact that T means P by his use of S (or the mental fact that S means P). But, such an access is some sort of process of introspection. T accesses the metal facts about meaning in the way he often does for knowing his beliefs, desires, judgments, intentions, emotions or sensory experience. If it is the case, then the acquisition of "knowledge of meaning" through "mere grasp of meaning" involves the use of introspection.

The same reasoning goes for the transition from "mere grasp of meaning" to "understanding of meaning". According to the definition of "understanding of meaning", it is a type of knowledge concerning the semantic difference between two concepts or sentences. If T wants to acquire 'understanding of meaning" of S, he needs to access his "knowledge of meaning". For example, T might reflect on his knowledge concerning the meaning of S and C, i.e. S means P and C means Q, and thereby grasp the meaning of S and C in the sense of "understanding of meaning," that is T could tell that "S and C are synonymous." Again, such an access is some sort of process of introspection. If this is the case, then the acquisition of "knowledge of meaning" through "mere grasp of meaning" by directly accessing to his "mere grasp of meaning," but that does not present any problem to my argument).

cannot appeal to the inferential modal, since "mere grasp of meaning" is non-propositional. Again, it would need to appeal to the non-inferential way, for instance that we reflect on our "mere grasp of meaning" and thereby gain a propositional belief from it. But, this is a case of introspection and the problem of classification rises again. In short, the acquisition of "knowledge of meaning" or "understanding of meaning" through "mere grasp of meaning" cannot avoid the difficulty of classification. It faces a similar difficulty as the second horn of the dilemma (the horn with non-propositional grasp of meaning) presented in the section 3.6.

#### **3.8.** Some Possible Objections

Before turning to the section concerning the distinction by rational insight, let me try to rule out some possible objections to my argument. The first possible objection challenges whether there is any fact about whether grasp of meaning (including "mere grasp of meaning", "knowledge of meaning" and "understanding of meaning") is priori or a posteriori, since it might be argued that grasp of meaning only plays an enabling role rather than a justificatory role. The second objection argues for the impression that the distinction by the idea of mere grasp of meaning seems appealing.

Let me start with the first one. One might challenge that there is no fact about whether grasp of meaning (including "mere grasp of meaning", "knowledge of meaning" and "understanding of meaning") is priori or a posteriori, since it might be argued that grasp of meaning only plays an enabling role rather than a justificatory role. If there is no such a fact, then there is no difficulty to classify the sources of our grasp of meaning.

Of course, there is a difference between concept acquisition and justification. The former enables us to acquire concepts and the latter provides justified beliefs. Given that the application of "a priori" and "a posteriori" is limited to the process of justification, if grasp of meaning is only a process of concept (or meaning) acquisition, then it is neither a priori nor a posteriori. In other words, there is no fact

about whether grasp of meaning is priori or a posteriori. And there would be no worry of how to classify the sources of our grasp of meaning, since the apriority of justification for T to believe S would not be affected by the (a priori or a posteriori) way that T grasps the meaning of S. So, there would be no problem of classification.

It is right that the application of "a priori" and "a posteriori" is limited to the process of justification, but it is wrong in assuming that in the case of justification by mere grasp of meaning the grasp of meaning is merely playing the role of concept (or meaning) acquisition. In fact, the grasp of meaning here is playing a dual role. It plays a role of concept (or meaning) acquisition, but it also plays a justificatory role, a role which is supposed to provide justification to belief. If we solely view the grasp of meaning here as a process of concept acquisition and deny that it plays any justificatory role, then there will be two problems. First, it cannot explain what justifies a priori beliefs. Since a priori is a type of justification, there must be something playing the justificatory role, otherwise the belief would not get justified. If we solely view the grasp of meaning here as a process of concept acquisition, what could play the justificatory role? Any answer beyond the idea of grasp of meaning would undermine the meaning based distinction. Second, the distinction itself becomes lacking an explanation of the intrinsic difference between a priori and a posteriori justification. If we solely view the grasp of meaning here as a process of concept acquisition, then the mere meaning based distinction only points out a non-epistemic difference between a priori and a posteriori justification. Hence, the mere meaning based definition would miss the central issue of the a priori/a posteriori distinction. Therefore, it is necessary to assume a justificatory role to the grasp of meaning. If the grasp of meaning plays a justificatory role in the case of justification by mere grasp of meaning, then there is a fact about whether grasp of meaning is priori or a posteriori, and the apriority of justification for T to believe S would be affected by the (a priori or a posteriori) way that T grasps the meaning of S. As a consequence, the problem of classification arises.

The second possible objection argues for the impression that the distinction by the idea of mere grasp of meaning seems appealing. It may seem intuitively to some people that the mere meaning based distinction does point out an epistemologically

significant difference between justifications. For example, according to the distinction, T's introspective justification of "I am in pain" is a posteriori, because T cannot justify it merely by his grasp of the meaning of "I am in pain"; rather T needs to introspect or access his mental state of pain. By contrast, T's mere meaning based justification of "all bachelors are unmarried men" is a priori, because T only needs to introspect or access T's mental state concerning the meaning of "all bachelors are unmarried men". Isn't it an epistemically significant difference between them?

I think the intuition misses a crucial point. There is no fundamental difference between T's justification of "I am in pain" and T's justification of "All bachelors are unmarried men," since both of them are knowledge by introspection. The two beliefs are justified through the same type of process. It might be true that in the two justifications there are two different types of mental states that need to be accessed; one is a mental state concerning physiological experience such as pain and itch, and the other is a mental state concerning meaning. But why does this make an epistemologically significant difference between the two justifications? Isn't it true that introspection of what I am thinking and introspection of my feeling of pain also target different kinds of mental states? Why should we prefer the difference between the state of pain and the state of meaning, rather than the difference between the state of what I am thinking and the state of pain?

A final point that needs to be mentioned is about Boghossian's conception of the a priori. He holds a conception different from the traditional one: "T knows p a priori is to say that T's warrant for holding S true is independent of outer, sensory experience" (Boghossian, 1996, p. 362). And by "outer", he means: "The inclusion of the word "outer" here is partly stipulative. I have always found it natural to regard a priori knowledge as encompassing both knowledge that is based on no experience as well as knowledge that is based purely on inner experience" (Boghossian, 1996, p. 388).

Boghossian tends to think that both knowledge independent of experience and knowledge by inner experience are a priori. And presumably, he will view introspective experience as inner. Hence, knowledge by introspection, in Boghossian's view, would be a priori.

But, there are two problems. First, the line between inner and outer experience is not clear. Suppose that perceptual experience is outer and introspective experience is inner. How about intuition and memory?<sup>15</sup> Isn't it true that intuition and memory also involve some sort of phenomenal experience? Are they inner? If not, then why? In fact, all experience is inner in the sense that they are inside of our bodies.

Second, it seems there is no epistemically significant difference between justification by no experience or inner experience (the a priori side) and justification by outer experience (the a posteriori side). What is the epistemic difference which justifies putting 'none and inner' on the one side and 'outer' on the other? A proper answer cannot simply appeal to the phenomenal difference between inner and outer experience, since there would be a problem of significance: given that there are some phenomenal differences between various types of experience, why do we prefer one rather than the other? The details of the problem of significance will be discussed in section 4.3.

<sup>&</sup>lt;sup>15</sup> There is an interesting question concerning the distinction between justification by memory and justification by testimony. Is *self-testimony*, i.e. the speaker and the hearer is identical, possible? For instance, is it allowable for me to be justified in believing P by my own testimony, such as by reading my own diary and thereby knowing my past which I already forget? If it is allowable, then is memory just a type of testimony? If it is not allowable, then, given the impression that my own testimony seems to have the similar justificatory force as typical case of knowledge by testimony, why could not my own testimony justify myself to believe P?

# 4. A Priori as Justification by Rational Insight

We have been considering two conceptions of the a priori. The first one draws the distinction between a priori and a posteriori by the notion of independence of experience, while the second by the notion of epistemological analyticity. Both of them fail to provide a significant distinction.

As I mentioned at the end of part one, we may insist on the traditional distinction, i.e. the experiential/non-experiential distinction, and adjust our common categorization of sources of knowledge (or justification), or insist on our common categorization of sources of knowledge (or justification) and draw the a priori/a posteriori distinction according to it, for example to draw the distinction according to the notion of mere grasp of meaning. Both of the approaches need to face the question concerning the significance of the distinction. And it seems that they cannot really respond to it. If the question cannot be answered, we should doubt the rationale behind the distinction between a priori and a posteriori.

The most plausible approach to draw a significant distinction between a priori and a posteriori is to investigate the idea of justification by rational insight, given that it is the paradigm case of a priori. For if there is any significant difference between a priori and a posteriori, we should be able to discover it from the paradigm case of a priori. However, if we find that there is no significant distinction to be made even if we appeal to the paradigm case of a priori, then it would be the most decisive evidence to show that there is in fact no basis behind the distinction between a priori and a posteriori. Hence, the last and the most important distinctions we are going to consider are those based on the notion of rational insight.

## 4.1. A Priori and Rational Insight

In the discussion of the a priori, it is common for rationalists to talk of the a priori in terms of the negative conception and the positive conception. The negative conception is just the traditional one, i.e. justification independent of experience, which we have considered in the part one. The positive conception involves the notion of intuition or rational sight, which is, briefly to say, a kind of intellectual seeing of how the proposition in question is true or necessarily true solely by understanding a proposition. It is commonly accepted that these two conceptions are not conceptually equivalent; the positive conception implies the negative but not vice versa. But, as I argued in part one, it is not clear in what sense a justification by rational insight is independent of experience. Without a clear idea of experience independence, it is also hard to determine whether the negative conception implies the positive.

Although the relation between the positive conception and the negative conception is not clear, it might not really produce a problem for rationalists who hold that there is a distinction between a priori and a posteriori. They might insist that the distinction between a priori and a posteriori is not grounded on the experiential/non-experiential distinction but on the notion of rational insight. From a rationalist point of view, the notion of rational insight, as a conception of a priori, might be more significant and fundamental than the notion of independence of experience. One reason might be that the notion of rational sight provides a positive account of a priori, which is more precise and informative than the traditional one, at least from a rationalist point of view. The other reason might be that the notion of rational insight points out what should be concerned in the discussion of a priori. Bonjour (1998) points out that:

"One could always insist on a version of the negative conception according to which any proposition whose justification did not appeal to ordinary sense experience or perhaps, more narrowly, to ordinary sensory and introspective experience would count as a priori. Such a conception would perhaps not be mistake in any clear sense, but it would lump together kinds of justification that are very heterogeneous. More importantly, it would fail to highlight the epistemological issue that is, in my judgment, the most crucial: whether there is a mode of epistemic justification that depends only on pure reason or rational thought and not at all on any input of an experiential or quasi-experiential sort." (pp. 8-9)

Bonjour's point is that holding a version of the negative conception of a priori might be clear enough for us to confirm whether a justification is priori but it could not highlight the main or the real concern in the discussion of a priori; that is whether there is a kind of justification by "pure reason or rational thought". In other words, for Bonjour, or perhaps most rationalists, the significance of a priori justification is not only that it is independent of experience but also that it is by our "pure reason or rational thought". Hence. from а rationalist point of view. the experiential/non-experiential distinction might be a consequence of the rational-insight-account (or intuitional account) of the a priori, rather than the other way around. So, it is very plausible for a rationalist to hold the view that the distinction between a priori and a posteriori is grounded on or oriented from the notion of justification by rational insight, and therefore the failure of the experiential/non-experiential distinction does not imply that there is no real distinction between a priori and a posteriori. Presumably, the failure of determining the distinction on the basis of the idea of justification by mere grasp of meaning would only have a little impact to rationalists, since it is basically an approach originating from empiricist view of a priori knowledge.

In the following paragraphs, I will focus on the idea of justification by rational insight and consider whether it could produce a significant distinction between a priori and a posteriori, and for the sake of argument I will assume that we can justify some of our beliefs by rational insights.

## 4.2. The Notion of Rational Insight

In order to have a clear idea of justification by rational insight, we need to first have an idea about rational insight. The general idea of rational insight is that it is a kind of intellectual seeing of how the proposition in question is true or necessarily true solely based on one's understanding of the proposition. Consider the moment when you suddenly find or see in a mathematic proof how a certain transition from one step to another is valid, which you didn't see before. At that moment, you would be in the state of intellectually seeing that the proposition which concerns a certain transition from one step to another is true or necessarily true. According to this conception of rational insight, justification by rational insight could be defined as follows: S is justified in believing P by rational insight iff S intellectually sees how P is true or necessarily true solely based on S's understanding of P.

Before specifying the sort of intellectual seeing in question, it is worth spending a paragraph to talk about the distinction between the mere meaning based definition (which we have been considering in the chapter 3) and the rationalist definition of a priori. Although the rationalist definition of a priori involves some sort of "understanding" terminology, it should not be viewed as some sort of mere meaning based account. First, the rationalist definition is distinctive in its appeal to the notion of rational intuition which is presumably something beyond the grasp of meaning. Any proponent of the mere meaning based account would not accept it. Second, for rationalists, the justificatory force of the a priori is provided by rational intuition. In other words, S's belief P is a priori justified in virtue of S's rational intuition. Proponents of the mere meaning based account would also not accept it. In contrast, they think that what justifies a priori beliefs is the grasp of meaning. So, the mere meaning based definition and the rationalist definition of a priori should be viewed as different. And, for the sake of argument, I would assume that they are different.

It might be complained that the idea of intellectual seeing is unclear and thereby requires a further reductive account. However, most philosophers who approve the idea of rational insight, such as Bonjour (1998, p. 106) and Bealer (1998, p. 207) think that there is no further reducible way to talk about rational insight; in other words it is primitive. In fact, we could have a better understanding of the idea of intellectual seeing by comparing it to other kinds of seeing.

Bealer provides a primitive analysis for distinguishing intellectual seeing from physical intuition and sensory seeming. Physical intuition usually concerns what would happen given certain circumstances with the physical laws of our world. For example, we might have a physical intuition that a house will fall if it is undermined, or that a stone will sink if it is on the surface of water. Bealer (1998, p. 207) argues that rational intuition is not equivalent to physical intuition, since the former presents as itself necessary while the latter does not. We don't intuit that a house will necessarily fall if it is on the surface or that a stone will necessarily sink if it is on the surface or the stone or the surface or the stone or the surface or the stone or the stone or the stone or the stone or

surface of water. But rational insights always present themselves as necessary, i.e. it seems to us things could not be otherwise. Two possible interpretations of Bealer's idea should be ruled out, since they would make Bealer's idea implausible. First, we should not interpret Bealer's idea (intuitions present themselves as necessary) as the idea that intuitions only concern necessary truths i.e. propositions true in all possible worlds. Consider the case of 'I exist.' We could have a rational intuition that the belief that 'I exist' has to be true. And it is clearly false that 'I exist' is a necessary truth, since there are some possible worlds in which I do not exist. Second, we should not interpret Bealer's idea as the idea that rational intuition only presents itself in the form 'it is necessary that...' or 'it is possible that...' For it is often the case that we have rational intuitions without these forms, such as the intuition that 2+3=5.' It is hard to specify Bealer's idea that intuitions present themselves as necessary. But, what seems to be true is that whenever we have some rational intuition P, we would find (perhaps with some further reflection) that P is unthinkable to be false or is true without exception if we have some further reflection, while we would not find that in the case of physical intuition. Intellectual seeing is also different from perceptual seeing. Most things which could be seen perceptually cannot be seen intellectually, and conversely. For example, we can perceptually see a dog, but not intellectually, and we can intellectually see an axiom holds, but not perceptually (Bealer, 1998, p. 208).

According to Bealer (1998, p. 208), intuition is different from belief and 'some sort of spontaneous inclination of belief'. Intuition must be different from beliefs, since for example some axiom might seem to me to be true but I don't believe it since my math teacher tells me that it is wrong; and I might believe some axiom even though it does not seem true to me. Intuition is also different from 'some sort of spontaneous inclination of belief.' First, the occurrence of intuition involves a distinctive phenomenon, which is something above and beyond a mere inclination (consider the case in which you have an inclination to believe that 7 is your lucky number and the case in which you have an intuition that 7 is a prime number). Second, there are some necessary truths which could only be known a posteriori, such as water is H2O, and clearly we could have a spontaneous inclination to believe it. If intuition is some sort of spontaneous inclination of belief, then we would be able to have intuitions about necessary truths which could only be known a posteriori. But it just seems implausible: we cannot be justified in believing that water is H2O by intuition (Bealer, 1998, p. 209).

Given the above considerations, the idea of rational intuition would be relatively clear for the purpose of discussing the issue of whether we can draw a significant distinction between a priori and a posteriori. But, before starting the discussion, I should mention the distinction between rational intuition and linguistic intuition.

Sometimes, rational intuition might be thought of as identical with linguistic intuition. In a narrow sense, the notion of linguistic intuition means the sort of intuition about words and their application in a particular language, e.g. English (Bealer, 1998, p. 211). In a broad sense, it means the sort of intuition concerning syntactic or semantic validity (which presumably is originated from our language-mastery), e.g. a linguistic intuition of the semantic "deviance of 'oculists are generally better trained than eye doctors" (Cassam, 2001, p. 51).

Our rational intuition could not be identical with the narrow sense of linguistic intuition. One main reason is that, according to Bealer (1998), "non-English speakers have...intuitions [for example, either snow is white or not], whereas non-English speakers do not have intuitions about English words and their applicability" (p. 211). If rational intuition is identical to the narrow linguistic intuition, then a non-English speaker cannot share the intuitions that English speakers have.

The case of the broad sense of linguistic intuition is not completely clear. According to Cassam (2001, p. 52), a sharp distinction between linguistic intuition and rational intuition is bound to be problematic, since language-mastery is either a necessary condition of the grasp of the necessity of analytic propositions or a sufficient condition. Language-mastery is a necessary condition of the grasp of the necessity of analytic propositions, since we cannot grasp the necessity of analytic propositions without understanding them, and understanding of the meaning of propositions obviously involves language-mastery. Language-mastery is a sufficient condition, since the grasp of meanings, as a consequence of language-mastery, would be

enough for us to grasp the necessity of analytic propositions, given the assumption that analytically necessary propositions are true in virtue of meanings. Given that rational intuition is a sort of grasp of the necessity of propositions, if language-mastery is either a necessary or sufficient condition of the grasp of the necessity of analytic propositions, then language-mastery would also be either a necessary or sufficient condition of the rational intuition of the necessity of analytic proposition. Hence, it is hard to draw a clear line between rational intuition and linguistic intuition in the broad sense, at least in the case of truths of analytic propositions.

I think that Cassam's argument does not really bring a problem to the identity of rational intuition. First, even if Cassam's argument is valid, his argument at most shows that rational intuition is based on or is originated from language-mastery, but not that they are identical. Second, his argument can only cover metaphysically analytic statements, but the existence of them is questionable according to Boghossian (1996, pp. 364-365). Third, as Bonjour (1998, pp. 57-58) points out, there are some rational intuitions independent of language; they are non-linguistic, e.g. nothing can be red and green all over at the same time, everything with shape has size, all three-sided rectilinear figures have three angles. These propositions, according to Bonjour, could be justified without possessing the relevant vocabulary (of course, as a consequence, one without the relevant vocabulary cannot linguistically formulate or express them, but can only indicate them indirectly).

Even if it is underdetermined whether rational intuition is identical to linguistic intuition in the broad sense, it does not really bring up an issue to our present purpose. The target is to question whether we can draw a significant distinction between a priori and a posteriori on the basis of the notion of justification by rational intuition. Even if we don't know whether there is a sharp distinction between rational intuition and linguistic intuition in the broad sense, we could still successfully target the idea of rational insight. We know that it is a kind of intellectual seeing of how the proposition in question is true or necessarily true solely on the basis of one's understanding of the proposition. It is different from physical intuition and sensory seeming. It is also not simply a kind of belief or of spontaneous inclination of belief. And it is not a kind of intuition which only concerns words and their application in a particular language.

In the following paragraphs, I will start to consider whether we can draw a significant distinction between a priori and a posteriori on the basis of the notion of justification by rational intuition. There are two possible approaches to draw the distinction. The first one simply and directly appeals to the idea of justification by rational insight itself, and the second appeals to the distinctive features of rational insight. I will argue that both of them are unsuccessful.

## 4.3. A Simple Approach: Justification by Rational Insight

The very first option for determining the distinction between a priori and a posteriori is to simply develop it by the notion of justification by rational insight. According to Bonjour's view of the role of "pure reason or rational thought" in the discussion of the a priori, what really makes a distinction between a priori and a posteriori might be grounded on the notion of rational sight, or more precisely, the notion of justification by "pure reason or rational thought". A very intuitive and simple way to draw the distinction between a priori and a posteriori as justification by "pure reason or rational thought" and a posteriori as justification not by "pure reason or rational thought". Could it provide a significant distinction between a priori and a posteriori?

Prima facie, one of the virtues of such a distinction would be that it is perfectly consistent with our common categorization of different sources of knowledge. Knowledge by perception, introspection, memory and testimony would be, by definition, a posteriori and knowledge by (pure) intuition or rational insight would be a priori. No counterexample could be provided, given the assumptions that, first, rational insight is the only source of a priori justification; and second, rational insight is distinct from other sources of knowledge, e.g. perception, introspection, testimony and memory.

The second assumption is far from controversial. Perception and introspection seem

to most philosophers to be different from rational intuition. Although there are some accounts of intuition or rational insight developed or argued on the basis of an analogy with perception or quasi-perception, there is no confusion between rational insight and perception. As Bealer (1998) points out, "most things that can seem intellectually to be so cannot seem sensorily to be so, and conversely" (p. 208). For example, we can perceive that there is a tree but cannot intellectually see it, and we can intellectually see two mathematical axioms are consistent but cannot perceive that they are so. Another position which might lead to the view that rational intuitions are not distinct from other sources of knowledge is to identify rational intuitions with a raising to consciousness of non-conscious background beliefs. This position might lead rational insights to be something similar to memory. According to Bealer (1998, p. 209), there are two problems with that position on rational intuition. First, if intuitions are identical to our raising to consciousness of non-conscious background beliefs, then why wouldn't we have intuitions, for example, that I am not a tree, given that most of us do have a background belief that I am not a tree? Second, if intuitions are identical to our raising to consciousness of non-conscious background beliefs, then how could we have no belief about some case but then come up with some intuition after a deep reflection or after someone's guidance?<sup>16</sup> In short, given the success of the arguments above, the second assumption is not controversial.

The first assumption is relatively controversial. On the one hand, empiricists would reject it, since they reject the whole idea of rational insight. On the other hand, rationalists do not necessarily commit to it, since to be a rationalist a person just needs to commit to the claim that rational insight is the source of some of our a priori justification. But, we may put aside empiricists' objection, for the sake of argument.

<sup>&</sup>lt;sup>16</sup> Bealer seems to offer one more argument. But that seems not promising. It goes as follows: we have some rational intuition in explicit contradiction with other raising to consciousness of non-conscious background beliefs. For example, we might have the intuition that all axioms of set-theory hold, but if someone ask me whether all axioms of set-theory hold, I would come up a conscious belief that it is not the case that all axioms of set-theory hold, since after learning Russell's paradox I formed a belief that it is not the case that all axioms of set-theory hold, and that became one of my background beliefs. If intuitions are identical to our raising to consciousness of non-conscious background beliefs, then I would have some relevant background beliefs backing up my intuition (that it is not the case that all axioms of set-theory hold). But then there would be two set of background beliefs in contradiction. Bealer's argument is valid but it seems fine for us to have two set of background beliefs in contradiction, since we, as creatures with limited intelligence, often hold beliefs in contradiction without recognizing it.

And since rational insight is the only account of the a priori provided by rationalists we might grant that rationalists accept the first assumption.

If there is no counterexample to this simple distinction between a priori and a posteriori, does it means that it is successful for drawing the distinction? No, since the simple distinction faces the problem of significance.

Consider a distinction in terms of the difference between perceptual justification and non-perceptual justification. This sort of distinction is very plausible, since the notion of perceptual justification seems sound. For similar reasons, we could draw a number of distinctions in terms of introspection, memory and testimony. These sorts of distinctions point out the same sort of difference between justifications as the distinction in terms of rational insight. If this is the case, then why do we prefer the distinction in terms of rational insight rather than the distinction in terms of other sources of justification? Isn't it true that the distinctions in terms of rational insight? It seems that there is no obvious reason to prefer one as the account of the a priori/a posteriori distinction rather than the others.

One might respond that we prefer the distinction in terms of rational insight because it is the one consistent with our common categorization of justification or knowledge (or our traditional conception of the a priori/a posteriori distinction): mathematical, logical and conceptual justification or knowledge are classified as a priori and the others as a posteriori. The distinction in terms of perception, for instance, would be inconsistent with our common categorization; perceptual justification is classified as a priori and non-perceptual justification (e.g. justification by introspection, memory, testimony and rational insight) as a posteriori.

This response reveals a more serious problem with the distinction between a priori and a posteriori. The above response provides a historical reason for choosing the account in terms of rational insight: it is how we have used the terms "a priori" and "a posteriori". But, if it is the only reason for preferring the account in terms of rational insight, then what is the point of the distinction between a priori and a posteriori? Again, the distinction in terms of other sources points out something as *epistemically important* as the distinction in terms of rational insight. But, it seems that the a priori/a posteriori distinction is something more than that. It seems that justification by perception, introspection, testimony and memory (the justification by non-rational insight) share some sort of property which is epistemically more important than the property shared by, for instance, justification by rational insight, introspection, testimony and memory (the justification by non-perception). In other words, the common categorization of justification or knowledge reveals an epistemically more important categorization, but the account in terms of rational insight fails to explain it: the property of "by non-rational insight" cannot explain it.

Of course, one might bite the bullet that the a priori/a posteriori distinction (in terms of rational insight) is not epistemically more important that the distinction in terms of other sources. But if it is the case, then why do we need to insist on the distinction between a priori and a posteriori? The whole idea of the a priori and a posteriori can be given up. We just need to concern ourselves with the distinctions in terms of sources, if they are important to epistemology.

Either the a priori/a posteriori distinction is epistemically more important than the distinctions in terms of sources or it is not. If it is epistemically more important than the distinctions in terms of sources, then the distinction in terms of rational insight cannot explain why. If it is not, then there is no reason to insist on the a priori/a posteriori distinction. Therefore, the account in terms of rational insight should be rejected.

Before ending this section, I want to talk about a possible definition of a priori which is in a position between rationalism and empiricism. The empiricist's view of the a priori has been discussed in chapter 4. The main idea of their view is to define a priori as a mere meaning based justification. In contract, rationalists hold an intuitional view of a priori. A priori is defined as justification by intuition. But, it should be noticed that rationalists do not deny that the grasp of meaning is not necessary for a priori justification; they hold that intuition is what plays the justificatory role in a priori justification, while the grasp of meaning is a kind of precondition of a priori justification. In contrast, as I argued in section 3.8, empiricists have to hold that the grasp of meaning plays the justificatory role in a priori justification. If the above view of rationalism and empiricism is correct, it is possible for one to hold a position in between the two views: a priori is a sort of justification which depends both on grasp of meaning and intuition (or some sort of capacity or mechanism for processing knowledge of meaning). Is this position tenable for drawing a distinction between a priori and a posteriori?

First of all, this middle position endorses that both grasp of meaning and intuition play some justificatory role. If only the grasp of meaning plays a justificatory role, then the middle position is just an empiricist position. If only intuition plays a justificatory role, then the middle position is just a rationalist position. And my argument for the empiricist position and the rationalist position would be able to respond to it. So, this middle position must endorse that both grasp of meaning and intuition play some justificatory role.

Given the above specification of the middle position, it would be easy to see that the problem of classification rises again. Since the middle position involves the grasp of meaning as a necessary part of a priori justification, the position would face the same difficulty as the mere meaning based definition: how to categorize knowledge by perception, introspection, testimony and memory. As a consequence, the middle position would be untenable for determining the distinction between a priori and a posteriori. Hence, the middle position should be abandoned. In the next section, I will start to consider an alternative which might be viewed as a refinement of the simple approach that we have been discussed in this section. I will argue that the alternative also fails for determining the distinction between a priori and a posteriori.

#### 4.4. An Alternative: Distinctive Features of Rational Insight

Although the distinction between a priori and a posteriori cannot be built in terms of sources of knowledge, it does not follow that there is no hope to draw the distinction on the basis of the notion of rational insight. The alternative would be to find out some distinctive features of rational insight or of the justification by rational insight,
and draw the distinction according to them. The search for distinctive features of rational insight could be viewed as a refinement of the intuitional/non-intuitional distinction. The problem of the intuitional/non-intuitional distinction is that it could not explain the significance of the a priori and a posteriori distinction: why the intuitional/non-intuitional distinction is more important than, for instance, perceptual/non-perceptual distinction. If we could find out some distinctive features of rational insight and successfully draw the distinction according to them, then we will be able to explain the how the intuitional/non-intuitional distinction could provide a significant conception of a priori and a posteriori. The significance of the intuitional/non-intuitional distinction could be explained or justified by the distinctive features of rational insight.

Presumably rational insight or justification by rational sight must have some features distinct from those sources alleged to be a posteriori, given that it is the paradigm case of the a priori. If the distinction between a priori and a posteriori is intellectual, we could find some distinctive features of rational insight which could explain how justifications by rational insight are epistemically different from those a posteriori justifications in a significant sense. The traditional conception of a priori might be an example of it. Suppose that there is a well-defined notion of experience. Traditionally, philosophers hold a rationalist view of a priori, and they tend to think that the distinctive feature of rational insight is that it is independent of experience; it seems to most philosophers that in the process of justification by rational insight there is not involved any kind of experience but only some kind of pure reasoning. And more importantly, it seems to most philosophers that the experiential/non-experiential distinction appears to be significant in the sense that it points out the significance of a posteriori justification (the use of experience) and of a priori justifications (the non-use of experience); presumably, experience possess some unique sort of justificatory force, or say, some epistemic value. Hence, the distinction between a priori and a posteriori could be determined by the experiential/non-experiential distinction.

In short, given that justification by rational insight is the paradigm case of a priori justification, there should be some distinctive features of rational insight which could be used to determine the distinction between a priori and a posteriori. So, in the following paragraphs, I will examine the features of rational insight which are commonly proposed as what make it distinct from a posteriori sources. Since I have argued in part one that the experiential/non-experiential distinction is problematic, I will not consider it in the following paragraphs.

### **4.5.** Some Distinctive Features for Determining the Distinction

The present target is to find some distinctive features of justification by rational insight by which we could draw a significant distinction between a priori and a posteriori. I will try to argue that most features, which are commonly viewed as the distinctive features of rational insight or justification by rational insight, cannot provide a significant distinction between a priori and a posteriori.

## 4.6. Justification with Modal Qualities

It is common to view that justification by rational insight is distinctive in its modal qualities. There are two interpretations of this view. First, rational insight only concerns necessary truths, e.g. 'All bachelors are unmarried men' and 'nothing can be red and green all over at the same time.' Second, rational insight only represents itself in modal forms, i.e. insight in the form that 'it is necessary that...' or 'it is possible that...' Clearly, there are counter examples to both. First, some rational insight concerns contingent truths, e.g. 'I exist' and 'I am here.' Second, children without the concept of necessity cannot possibly have rational intuitions with the form that 'it is necessary that...' or 'it is possible that...' but they could still have rational intuitions, e.g. '2+3=5' and 'all triangles have three sides' (Boghossian, 2001, p. 638). So, the attempt by modal qualities fails. Perhaps, it might be argued that rational intuition is the only source of justification or knowledge which *can* concern necessary truths or represent itself in modal forms. But, some other sources of justification or knowledge, for instance testimony, can also concerns necessary truths or represent itself in modal forms. Couldn't I have a necessary belief that is justified through testimony? And, couldn't I have a belief in modal form that is justification through testimony? So, justification by rational insight is not distinctive in its modal

qualities.

### 4.7. Infallible or Indefeasible Justification

In the finding of some distinctive features of justification by rational insight, we might think of the features of infallibility and indefeasibility. When we claim that a priori justification is infallible, it means that if a belief is justified a priori then it cannot be false. In order words, a priori justified beliefs are always true. So, we might define a priori as such: S is a priori justified in believing P iff P cannot fail to be true. (Notice that if a belief is always true it does not follow that it is necessarily true. For example, the a priori justified belief that I exist is not necessarily true; in some possible world I may not exist) When we claim that a priori justification is indefeasible, it means that if a belief is justified a priori then the justificatory force cannot be overridden. In order words, a priori justified beliefs can never be defeated. So, we might define a priori as such: S is a priori justified in believing P iff S's justification for believing P cannot be overridden.

It had been a long tradition for philosophers to ascribe infallibility and indefeasibility to a priori justification. But nowadays there are only few people willing to define a priori justification as infallible or indefeasible, since there are some widely accepted counterexamples. For example, Kant was (plausibly) intuitionally justified in accepting that space is Euclidean in nature. However, developments of cosmology tell us that space is Non-Euclidean (Russell, 2003). Moreover, there are Russell's paradox, and countless cases of error in calculation, proof and reasoning. All these cases show that it is not rare to see that intuitionally justified beliefs turn out to be wrong and be defeated. Hence, rational intuition is neither infallible nor defeasible. If this is the case, then clearly the notion of a priori would be empty; there is no infallible or indefeasible justification. As a consequence, the distinction between a priori and a posteriori would be insignificant.

Someone might only ascribe experiential or empirical indefeasibility to a priori justification. First of all, as I argued in part one, the experiential/not experiential distinction is not clear. The notion of experiential or empirical indefeasibility depends on what it is to be an experience or an empirical process. If we do not have a clear idea of experience or empirical processes, we cannot determine what it is for a justification to be indefeasible by experience or empirical processes. One might try to solve this problem by defining a priori as such: S is justified a priori in believing P iff S's justification for believing P is indefeasible by any sources other than rational insight. But, again, most people would not like to adopt this definition, since there are counter examples, such as the belief that space is Non-Euclidean.

### 4.8. Non-propositional Justification

According to Bonjour, one feature of the most basic sort of rational insight is that it is non-propositional (2001, p. 677). Bonjour's general idea is that the most basic sort of rational insight is a kind of insight directly appearing the way reality is or must be, rather than a kind of insight appearing in propositional form, such as "nothing can be red and blue all over at the same time". Although Bonjour's view only covers the most basic sort rational intuition, it is possible that it might be expanded all rational insight. In other words, it is possible for one to argue that rational intuition is distinctive because of its non-propositional nature, and therefore justification by rational insight would be a kind of unique process which provides justification without appeal to any content in propositional form. Let us call justification without appeal to any content in propositional form *non-propositional justification*. A person who accepts the idea of non-propositional insight might suggest that the significant difference between a priori and a posteriori justification is that the former is a kind of non-propositional justification, while the latter is not. So, could the propositional/non-propositional distinction draw a line between a priori and a posteriori justification?

In order to fully appreciate the idea of non-propositional insight and what it is for a belief to be justified by such an insight, we may start with the reason for Bonjour to assert that rational insight is non-propositional. The very reason for Bonjour talking of non-propositional insight is that in his theory of a priori justification rational insight plays a role of justifying our most fundamental practices of logic and propositional insight, as Boghossian argues, cannot fulfil this job. Boghossian raises

a concern, which he thinks is fundamental, to the notion of rational insight developed by Bonjour. It seems to Boghossian (2001) that Bonjour develops a theory of rational insight which assumes that "our fundamental deductive practices are grounded in some species of propositional knowledge (p. 639)." And he offers two arguments to show that this assumption is implausible. The first argument points out that children who have no concept or belief of necessity or logical entailment could justify their use of the inference of modus ponens. And it is implausible for those children to justify their use of the inference of modus ponens on the basis of some sort of propositional knowledge, since they have no concept or belief of necessity or logical entailment. The second is a Lewis Carroll-inspired argument which shows that, in the case of justifying modus ponens, any justification which appeals to propositional knowledge linking the inferential relation between premises and conclusion of modus ponens must itself appeal to the very sort of transition of modus ponens. And this would lead to "an unstoppable regress" (Boghossian, 2001, p. 639). Boghossian (2001, p. 638) provides an example concerning the justification of modus ponens, to justify that if p and p>q then q. Let us suppose that we are going to justify our practices of modus ponens by appeal to the propositional knowledge that (p > ((p > q)))> q)). Undeniably, the propositional knowledge in question is sufficient for justifying modus ponens since it links up the premises and the conclusion of modus ponens. But in order to justify modus ponens on the basis of it, there is a need for appeal to a transition which is exactly the transition – modus ponens - we are trying to justify. In other words, we are appealing to modus ponens to justify modus ponens, and clearly, this move is unjustified.

According to Boghossian, the very moral of the second argument is that "at some point it must be possible simply to move between thoughts in a way that generates justified belief, without this movement being grounded in the thinker's justified belief about the rule used in the reasoning." So, if all rational insight is propositional in nature, then it would be impossible to justify our fundamental deductive practices.

In response, Bonjour (2001, p. 678) clarifies that he has no such assumption in his theory of rational insight. He agrees with the Carroll argument and argues that the idea of rational insight could perfectly fit with it:

"What the argument seems to me to show is not that a priori insight plays no role in such an inference, but rather that the most basic sort of insight involved is not and cannot be propositional in form. Instead, what I apprehend or grasp is the way in which the conclusion is validly related to the premises, how it validly flows from them, with the propositional sight that such a relation obtain being secondary and derivative at best.....Consider the [a priori insight] in the color incompatibility case. What is most fundamentally grasped or apprehended there, I would now suggest is the actual relation of incompatibility between the two colors, the way in which the presence of one excludes the presence of the other, with the propositional awareness that this is so, that nothing can be red and green all over at the same time, being again secondary and derivative." (Bonjour 2001, p. 677)

We might see that the idea of non-propositional insight in Bonjour's view is a way to respond to the Carroll argument. Although an insight in propositional form, or say with propositional content, could provide justification to our fundamental practices of logic, it could only get this job done through some logical transitions which are parts of our fundamental practices of logic. In order to avoid logical transitions in the process of justification, one possibility is to talk of non-propositional insight. According to Bonjour, the most basic sort of rational insight is non-propositional in the sense that it is a direct grasp of the necessity of propositions, for example the validity of the inference in question or the actual relation of incompatibility between the two colors. Since rational insights are non-propositional, the process of justification does not need to, and in fact cannot, appeal to logical transitions. Hence, there is no need to worry about the unstoppable regress raised by the Carroll argument.

What would justifications by rational insight be if rational insights are non-propositional? Since there is no logical transition involved in justifications by rational insight, those justifications presumably would be immediate or non-inferential; that is "your justification to believe P does not come from your justification to believe other propositions" (Bonjour, 2005, p. 183). These non-propositional insights would provide justification directly without appeal to logical transitions. I am not clear about what, in Bonjour's mind, such a direct process would be. But, a natural understanding would be to analogize it to our common conception of perceptual justifications; that is our perceptual experience directly provides justification to our beliefs.

Now, we may define a priori justification as non-propositional justification in the sense that it does not appeal to propositional knowledge or any resources in propositional form. Then a posteriori justification would be defined as propositional justification in the sense that in the process of justification it appeals to propositional knowledge or some resources in propositional form.

Is the above distinction successful? Clearly, the very first objection it faces is that perception could be non-propositional in nature. It is true that whether perceptual experience is propositional in form is controversial. For example, given that perceptual experience could justify beliefs, someone might insist that perceptual experience has to be propositional in form. But similar epistemological considerations could apply to the case of non-propositional insight. If rational insight is non-propositional and still be able to play a justificatory role, then it seems extremely plausible for perceptual experience to be non-propositional, and vice versa. More generally, since both rational insight and perceptual experience play the same role in justification, i.e. in virtue of which a belief is justified, any epistemological considerations supporting or objecting either of them to be non-propositional could apply to the other. Hence, the feature of being non-propositional is not distinctive of rational insight and therefore cannot draw the distinction between a priori and a posteriori.

We have been considered several features, i.e. model qualities, infallibility, indefeasibility, and the non-propositional, which might be thought as distinctive of rational intuition. However, none of them succeeds in providing a sound and significant distinction between a priori and a posteriori. It is not clear that there are any other obvious distinctive features of rational insight. Hence, the rationalist approach fails to draw a tenable distinction between a priori and a posteriori.

# 5. Conclusion

This thesis offers a detailed investigation of three main accounts of the distinction between a priori and a posteriori. A successful account must be both tenable and significant. But, all the accounts examined either fail to be tenable or fail to be significant. Therefore, no account meets both criteria.

Chapter 2 argues that the traditional account of the a priori/a posteriori distinction is untenable since there is no well-defined notion of experience available. The traditional account depends on the notion of the experience/non-experience distinction: a priori justification is independent of experience and a posteriori not. However, after examining five possible approaches for definition experience, it results that none of them is successful. The first four approaches fail in specifying a property by which the notion of experience/non-experience distinction is consistent with our common categorization of justification or knowledge. The fifth approach, i.e. the natural-kind approach, suggests the notion of experience could be determined by the scientific method: to fix the reference of "experience" by scientific investigations of the paradigms of a posteriori justification i.e. cognitive processes associated with the five senses. A worry of this approach is that the success of discovering the essence of "experience" does not necessarily determine the a priori/a posteriori distinction since the underlying property may be epistemically irrelevant. Moreover, the success of the natural kind approach is doubtful on externalist theories of justification. As a consequence, the traditional account provides no clear account of the distinction between a priori and a posteriori.

Chapter 3 concerns the empiricist account of the a priori/a posteriori distinction, i.e. the mere meaning based account. The empiricist account defines a priori by appeal to the notion of mere meaning based justification: a priori justification solely depends on grasp of meaning and a posteriori not. The mere meaning based account faces a dilemma in the problem of classification. Either grasp of meaning is propositional or non-propositional. If a priori justification is merely based on propositional grasp of meaning, then there would be a difficulty to classify sources of justification or

knowledge such as perception, introspection, testimony and memory. If priori justification is merely based on non-propositional grasp of meaning, then there would be a difficulty to classify justification or knowledge by introspection. Hence, the mere meaning based account fails to provide a tenable distinction between a priori and a posteriori.

Finally, chapter 4 considers the rationalist distinction between a priori and a posteriori, i.e. the intuitionalist distinction. The rationalist distinction appeals to the notion of rational intuition. It is the only proposed distinction which can successfully draw a tenable line between a priori and a posteriori, given a great benefit to this distinction that there are rational intuitions and they are a unique source of justification or knowledge. Although there is a real line between a priori and a posteriori, the rationalist distinction still needs to be rejected. The rationalist distinction or knowledge. It either cannot explain the epistemic importance of the a priori/a posteriori distinction, or it urges us to give up the whole idea of a priori and a posteriori. Hence, the rationalist distinction should be rejected as a plausible account of the distinction between a priori and a posteriori.

At the end of chapter 1, I have mentioned there are three possible ways to respond to the failure of drawing a distinction between a priori and a posteriori. First, we might insist on the traditional distinction, i.e. the experiential/non-experiential distinction, and adjust our common categorization of sources of knowledge (or justification). Second, we might stick to our common categorization of sources of knowledge (or justification) and draw a priori/a posteriori distinction according to it. Third, we might give up the whole idea of a priori/a posteriori distinction, and admit the contrast between sources alleged to be a posteriori and sources alleged to be a priori is just not tenable.

I have argued that the first option is implausible. Chapter 2 and 3 show the other two main accounts of the a priori/a posteriori distinctions are also not successful. Of course, I have not ruled out all possible accounts for the a priori. But, given that none of the current major accounts seem to work, we should not be optimistic about the

potential for success. Therefore, the second option seems not a very plausible one. Clearly, the only option left for us is the third one. We give up the whole idea of the a priori/a posteriori distinction, and admit the contrast between sources alleged to be a posteriori and sources alleged to be a priori is just either not tenable or not significant.

The final point I want to mention is the implication of the third option. The impact of the three options is not only that we abandon some useless conceptual framework, but also that we need to reform our understanding of the nature of justification and knowledge. The a priori/a posteriori distinction and our common categorization of sources of knowledge assumes that, first, mathematical, logical conceptual knowledge is justified in a way different form knowledge of perception, introspection, memory and testimony, and second, there is an epistemic property only common in justification of perception, introspection, memory and testimony. The abandonment of the a priori/a posteriori distinction does not affect the first assumption, since there are still clear distinctions between sources of justification, e.g. perceptual justification is different from introspective. But, the tenability of the second assumption needs to be reconsidered. It should be reconsidered whether justification by perception, introspection, memory and testimony are as epistemically close as we thought. It also leads us to reconsider whether we should put justification of mathematical, logical and conceptual beliefs opposite of other sources of justification. Perhaps, the epistemic difference between mathematical justification and introspective justification is not bigger than between perceptual justification and introspective justification.

# Bibliography

- [1] Ayer, A. J. (1952). Language, truth and logic. New York: Dover Publication.
- [2] Baehr, J.S. (2006). A Priori and A Posteriori. Internet Encyclopedia of Philosophy. Retrieved from http://www.iep.utm.edu/apriori/
- [3] Bealer, G. (1998). Intuition and the Autonomy of Philosophy. In DePaul, M. R., & Ramsey, W. (Eds), Rethinking intuition: The psychology of intuition and its role in philosophical inquiry (pp. 201-239). USA: Rowman & Littlefield.
- [4] Bernecker, S. (2011). Memory Knowledge. In Bernecker, S. & Pritchard, D. (Eds), The routledge companion to epistemology (pp. 326-334). New York: Routledge.
- [5] Boghossian, P. (1996). Analyticity reconsidered. Noûs, 30(3), 360-391.
- [6] Boghossian, P. (1997). Analyticity. In Hale, B., & Wright, C. (Eds), A Companion to the philosophy of language (pp. 331-369).
- [7] Boghossian, P. (2001). Inference and insight. Philosophy and Phenomenological Research, 63(3), 633-640. USA: Blackwell.
- [8] Boghossian, P. (2003). Epistemic analyticity: A defense. Grazer Philosophische Studien: International Journal for Analytic Philosophy, 66, 15-35.
- [9] BonJour, L. (1998). In defense of pure reason: a rationalist account of a priori justification. Cambridge: Cambridge University Press.
- [10] Bonjour, L. (2001). Replies. Philosophy and Phenomenological Research, 63(3), 673-698.
- [11] Bonjour, L. (2005). In Defense of the a Priori. In Steup, M. & Sosa, E. (Eds.), Contemporary debates in epistemology (pp. 98-121). Malden, Mass.: Blackwell Pub.
- [12] Bonjour, L. (2010). Epistemology: classic problems and contemporary responses. USA: Rowman & Littlefield Publishers.
- [13] Cassam, Q. (2001). Rationalism, Empiricism, and the A Priori. In Boghossian, P. & Peacocke, C. (Eds). New Essays on the A Priori (pp. 73-64). New York: Oxford University Press.

- [14] Casullo, A. (2003). A priori justification. Oxford: Oxford University Press.
- [15] Field, H. (2005). Recent Debates about the A Priori. In Gendler T.S. & Hawthorne J. (Eds.), Oxford Studies in Epistemology: Volume 1 (pp. 69-88). NY: Oxford University Press.
- [16] Kant, I. (2007). Critique of pure reason (Smith, N. K, Trans.). New York: Palgrave Macmillan.
- [17] Kitcher, P. (1980). A priori knowledge. Philosophical Review, 89, 3-23.
- [18] Margolis, E., & Laurence, S. (2001). Boghossian on analyticity. Analysis, 61(4), 293-302.
- [19] Plantinga, A. (1993). Warrant and proper function. NY: Oxford University Press.
- [20] Russell, Bruce. (2013). A Priori Justification and Knowledge. The Stanford Encyclopedia of Philosophy (Summer 2013 Edition). Retrieved from http://plato.stanford.edu/archives/sum2013/entries/apriori/