Perceptual Experience and Understanding Language

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UNIVERSITY OF MIAMI

PERCEPTUAL EXPERIENCE AND UNDERSTANDING LANGUAGE

By
Seong Oh

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PERCEPTUAL EXPERIENCE AND UNDERSTANDING LANGUAGE

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Can we literally see and hear meanings? In my dissertation, I argue first that we have a conscious understanding experience which is (1) non-inferential, (2) cognitively impenetrable, and (2) with a specific sensory modal. Under the characterization of the experience, I conclude that the experience is literally perceptual. Thereafter, I argue that this characterized understanding experience is conceptual by virtue of being a high-level perceptual experience, and then plays the role of epistemic justifier for the belief of what an utterance means just as high-level perceptual experience in general performs as a justifier for perceptual belief.
For My Parents
Acknowledgements

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Overview

When we hear a speech made in our own language, we understand it. This is a fact about our linguistic understanding. When we gaze at the moment of understanding, we come to know that it is a sort of conscious experience just like, for example, seeing a rainbow. This dissertation is aimed at showing the nature of understanding as an experience and a perceptual state as well. In chapter 1, I argue that understanding is a perception-like experience, depending on the best explanation to the phenomenal difference between the understanding and the non-understanding experience. In chapter 2, I argue that understanding is literally perceptual experience tied to a specific sensory modality, and it is a kind of higher-level perceptual experience. In arguing this, I provide a more plausible explanation for the phenomenal difference than one provided in chapter 1. Chapter 3 shows that higher-level perceptual experience and understanding experience in particular has conceptual content by virtue of being cognitively penetrated by a set of implicit beliefs which are about the concepts of what the target experience represents. In chapter 4, I argue that the idea of perceptual experience with conceptual content gives a great support for a dogmatist theory: There is an independent level of belief-formation in which the understanding experience solely justifies the belief of what an utterance means.
Chapter 1. Understanding and Phenomenal Contrast

1.1. Summary

This chapter purports to argue that understanding an utterance is a sort of perception-like conscious experience, which is pre-doxastic. To argue for this, I appeal to the famous *phenomenal contrast argument*. Phenomenal contrast argument asks us what is the best explanation to the phenomenal difference between the phenomenology of the understanding experience and the phenomenology of the non-understanding experience. According to the standard understanding of the phenomenological contrast argument, which I call *Phenomenal Contrast Argument-Neutral*, some extra-phenomenology only added to the understanding experience makes that phenomenal difference. I will argue that two rival views about the extra phenomenology that imply the non-existence of perception-like understanding experience are seriously flawed. Therefore, it will be concluded through an argument by elimination that the extra phenomenology is due to the perception-like understanding experience.

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1 Siegel (2006)
2 *The phenomenological contrast argument-Neutral* is what I think most widely accepted explanation for the phenomenological difference but what I end up throwing away in chapter 2. The new argument attributes the phenomenological difference not to some extra phenomenology but to the fact that the understanding experience is qualitatively different from the non-understanding experience on the whole. This new argument does not even allow the room for the rival view to be considered but I will consider all of them under the neutral contrast argument in this chapter as a respect for existing theories.
1.2. Phenomenal Contrast Argument

One way to show that there exists extra phenomenology of understanding is through the Phenomenal Contrast Argument. Although the reliability of this argument is sometimes challenged for the reason that it solely relies on our introspection, no doubt it is still powerful. So, I follow a standard structure of the phenomenal contrast argument in the rest of this chapter, and look for the most plausible explanation for the alleged phenomenal difference made apparent by the introspective method. The following is a version of the phenomenal contrast argument which shows how competence in a language changes the phenomenology of hearing speech made in the target language.

The contrast is usually made either between two different temporal parts of one and the same subject, say, S(t1) and S(t2) or between two different subjects at the same time, say, O(t1) and O’(t1). In each case, either both S(t1) and S(t2) or both O(t1) and O’(t1) hear one and the same speech made by another person. S(t2) is set to be S(t1)’s future self who comes to understand the target language as a consequence of long-term language learning. In the same way, O(t1) doesn’t understand the language in which the speech is made whereas O’(t1) does. The two cases are the possible realistic cases that we can think of when we need to compare the experiences of comprehensible and non-comprehensible language. Though it is not a contrast between the same subject at the same time, it is not difficult to imagine the phenomenological difference between the two experiences that the two subjects would have in each case. I call the experience of S(t1), E1 and that of S(t2),

3 Schwitzgebel (2008) deals with the unreliability of introspective method.
4 Several versions of phenomenal contrast argument were given. See Peacock (1992), Siegel (2006), etc. Understanding does change not just the phenomenology of speech but also that of written sentences, and also that of braille and any other perceivable form of linguistic particulars.
E2. (I will not consider the experience of O(t1) and O’(t1) because they are reasonably considered to be similar to E1 and E2 if the spoken utterance is the same.)

A neutral version of phenomenal contrast argument is formalized as the following:

- **Phenomenal Contrast Argument-Neutral**
  (1) The phenomenology of E1 and that of E2 are different.
  (2) All phenomenal properties that constitute E1 are also part of E2 since they are about the same spoken utterance and S(t2) hears all that S(t1) hears.
  (3) Hence, some other phenomenal properties that are not part of E1 constitute part of E2.
  (From (1) and (2))

As can be seen from the above argument, once E1 and E2 are phenomenally different, this phenomenological difference is attributed to additional phenomenology which is constitutive of the phenomenology of E2. What we take this argument to demonstrate depends on how we characterize the additional phenomenology.

There are at least three ways to explain the additional phenomenology of E2. Some may believe that S(t2) actually hears a set of phonemes which S(t1) is unable to hear—such things as subtle tones and particular vocal sounds that are likely to be hearable only to those who are competent in the target language. This is true considering that a native English speaker who becomes capable of auditorily detecting the complicated tones of Mandarin Chinese through learning must have been unable to auditorily detect the complexity of the tones before learning. However, the difference may be caused by the simple fact that S(t2) understands what is spoken whereas S(t1) does not. Namely, the experience of understanding which is part of E2 only makes difference between E1 and E2. Of course, even those who hold the first position would not object to that S(t2) understands

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5 The version of phenomenal contrast argument which is alleged to show that one can represent semantic properties in one’s experience is provided by O’Callaghan (2011)
but S(t1) does not understand the speech. However, they disagree about whether understanding plays a constitutive role in forming the experience E2. They would believe that understanding has only a causal role in the formation of E2 in the way that understanding causes the hearer to catch up phonological properties that she could not catch up before. On the other hand, those who hold the second position would claim that understanding itself is constitutive part of E2, not just is it a causal factor in forming E2. The second position is again split into two depending on how they identify the nature of understanding as an experience. Understanding can be either a perceptual or an extra-perceptual experience.6

Therefore, at least three positions are likely to be held in explaining the phenomenological difference between E1 and E2:

(PD1) The difference between E1 and E2 is due to the phenomenology of the auditory experience that represent extra low-level properties.
(PD2) The difference between E1 and E2 is due to the perceptual phenomenology of understanding that represent meaning or appropriate semantic properties.
(PD3) The difference between E1 and E2 is due to the extra-perceptual phenomenology of understanding that represent meaning or appropriate semantic properties.

In the above theoretical choices, it is presupposed that the phenomenal character of each experience supervenes on its intentional, or representational, content. So, the additional phenomenology is due to some extra property that only E2 represents.7 Whether PD1 or PD2 or PD3 is true depends on what properties E2 represents additionally and what sort of mental state understanding is.

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6 A proper answer to whether the understanding experience is perceptual or extra-perceptual somewhat concerns a preceding question of whether an experience can be extra-perceptual at least in part because some allegedly refuse to accept that extra-perceptual experiences exist.
7 This assumption will be also refuted in chapter 2.
What I will do in the following sections is to argue against PD1 and PD3. My argument against PD1 turns on the fact that a prominent argument for PD1, the argument from homophones given by O’Callaghan (2011) fails, and that the phenomenal contrast lasts even when there is no difference in represented low-level properties. Afterwards, I will refute PD3. The idea that understanding is extra-perceptual implies that understanding is a sort of thought, specifically, belief. I will argue that understanding can never be a kind of belief because it is not something that can be assessed in terms of whether it is justified. Rather, it serves as a justifier for belief. Since understanding serves as evidence for the belief about the meaning of the given utterance, it cannot itself be the belief. Also, I argue that its content is significantly different from the content of belief. After I argue against PD1 and PD3, I will be left with a more fundamental question in accepting the perceptual view of understanding: Is understanding perceptual at face value? Or is it perceptual only in a deeper and broader sense? I will answer this question in the next chapter.

1.2.1. Against PD1

1.2.1.1. Attention or Understanding

Those who hold PD1 would claim that the phenomenal properties of E2 do not include understanding. They agree that S(t2) understands the speech but does not agree that such understanding is part of the auditory experience that S(t2) has in hearing the speech. According to the proponents of PD1, S(t2) certainly hears more than S(t1) does, more low-level properties. How can S(t2) hear what S(t1) is unable to hear? This is because of an attention shift caused by language learning. Anybody who understands a foreign language
knows that she can hear as much as she understands. Suppose, for instance, that a monoglot English speaker begins to learn Mandarin Chinese. At first, her attention is not focused enough to catch up the five different tones of it. ‘Mā’ and ‘Mā’ just sound the same to her since in her own language a tonal difference has no role in the practice of the language. On the other hand, in Mandarin Chinese, the tonal difference actually makes a phonological difference. ‘Mā’ and ‘Mā’ though they are made of exactly the same consonant and vowel sounds, they are phonologically distinguished due to the difference in tones. Although the monoglot English speaker was unable to detect the phonological difference at first, she ends up catching it up through learning to speak and listen to Chinese. While learning, her attention to tonal patterns change and she can hear different tones and the accompanying phonological difference of ‘Mā’ and ‘Mā’. So, it is fair to say that people can *learn to hear* specific phonemes through practice.

However, it is one thing that E2 is constituted by additional phenomenology of low-level properties that is not part of E1, and it is another that the additional phenomenology of E2 is fully attributed to the phenomenology of low-level auditory properties such as pitches and tones. What the opponents continue to argue is that a proprietary phenomenology of understanding still contributes to the whole E2.

PD1 is ultimately based on the idea that non-physical properties are not representable in conscious experience. Several articles deal with the controversy over this idea.\(^8\) Since nothing simple can be said on this issue, I will set it aside for now and come back to it later.

\(^8\) The issue is generally about which properties are representable in conscious experiences. For the view which holds that abstract and high-level properties are representable, see Siegel (2006), Bayne (2009). Such ideas that one sees something as X can be found in Lyons (2005), van Gulick (1994), Fodor (1983). Also, Peacock (1992) argues that concepts can appear in conscious experiences. For those who reject the representation of high-level perception, see Prinz (2005, 2007, 2011), Tye (1995), Tye&Wright (2011)
Here my primary concern will be to argue against some specific arguments for refuting the idea that understanding can be a kind of phenomenological experience.

1.2.1.2. Against Argument from Homophones

Casey O’Callaghan has presented an intriguing argument against the view that the phenomenological difference is best explained by the perceptual, particularly auditory, awareness of meanings. Although he does not want to argue that there is no such thing as perception of meanings, it is still true that this kind of argument can be used for arguing against the perceptual view of understanding.⁹ So, in this section, I will specify why the argument does not lead us to the conclusion that the perceptual view is false. O’Callaghan’s Argument from Homophones runs as follows:

(AH1) Suppose that three homophonic words, “poll”, “pole”, “poll” are uttered in a row.

(AH2) If a competent hearer were able to detect the meaning of the homophones auditorily, the homophones would sound all different to the hearer because the meaning of three homophones differs from each other.

(AH3) However, the three words sound all the same to the hearer who is a competent speaker of English.

(AH4) Therefore, a competent hearer is not able to auditorily detect the meaning of the homophones.

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⁹ I appreciate Casey O’Callaghan for giving me a chance to clarify where he stands.
According to O’Callaghan, the hearer does not detect any auditory difference even when she is told what each word means in each instance.

Suppose now that I tell you the first word I uttered means *a long slender piece of rigid material*, the second means *a place on the surface of Earth at its axis of rotation*, and the third means *a vote*. When I utter them again you clearly grasp or associate each specific meaning with its word. Still, it is most plausible that no detectable auditory difference exists. (O’Callaghan (2011), pp. 797)

The argument itself is neutral enough that no fixed conclusion follows from it. However, it is still true that the kind of argument may lead one to arguing that there is no phenomenology of understanding. However, one of the most important point regarding this case is that *one actually hears the words to mean something*.

There is good reason to think that they sound like they have some *meaning or other*, even if they don’t sound like they mean something specific, or to have the specific meaning they are intended to have. More precisely, it seems plausible that the three homophones would sound as if they were three tokens of the same word. Specifically, a hearer might hear the speaker uttering either ‘poll(1)’, ‘pole’, or ‘poll(2)’ three times repetitively.

But, why do they sound as one and the same word even after the hearer was told that each homophone stands for three different words? The answer is relevant to *how understanding differs from belief*. I will offer a more detailed argument for this thesis later. But for now, let me just make a distinction between knowledge of what is said based on
understanding and that based on testimony.\textsuperscript{10} There are two ways in which one understands what others say. When one is competent in the language in which the speech is made, one mostly relies on one’s own competence and one’s own understanding. One the other hand, one will be told what the speech means by another competent speaker and then come to know what the speech means when one doesn’t know the language well. Then, what will happen if the two paths are mixed? Imagine a fictional language Winglish. Winglish shares all grammatical rules and most words with English but there are some exceptions. Specifically, for example, in Winglish, ‘a pencil’ means an umbrella. Suppose that a monoglot English speaker travels to the country in which Winglish is spoken, and that she was told, “you should carry a pencil since it is raining now”. Also, she was immediately told by the speaker who are competent in both English and Winglish that ‘a pencil’ means an umbrella in Winglish. How would she understand the utterance before reflecting on its meaning? Would she understand it to mean that she should carry an umbrella as she was told that the term pencil means an umbrella in Winglish? Probably not. She would take the utterance to mean that she should carry a pencil but she would come to believe that the utterance actually means that she should carry an umbrella. Understanding is solely based on hearing the utterance by oneself, not on what another person tells you about the meaning.

Let’s return to O’Callaghan’s case. When one hears “pole(1), poll, pole(2)”, one would automatically understand what it means insofar as one is a competent speaker of English. Even if one was told that each homophone represents each different word and then what one was told competes with one’s own understanding, one cannot stop but hear and understand it to mean what one has understood it to mean. So, once one understands the

\textsuperscript{10} I borrowed the distinction from Fricker (2003).
utterance as repeating the same word three times, one would continue to understand it that way. It is another that one, based on what one was told, makes a belief that the three homophonic words actually mean all different.

As we’ve seen above, the testimony on what an utterance actually means, even if it is given before one hears the speech, does not change the content of one’s own, sometimes wrong, understanding of what it means. It seems that such thing as cognitive impenetrability works in the process of understanding.\textsuperscript{11} Specifically, no recently updated beliefs can change the way we understand an utterance. It is just like that the term pencil does not sound to mean an umbrella even after one agrees to use the word pencil to mean an umbrella.

One may point out that the case of Winglish word and that of homophones are different because in the case of homophones, the meaning of each word informed before hearing is not something new and reconstructed, but it is one of the pre-existing meanings that one is already familiar with from daily use. In fact, the meanings of all the three words are already stored in one’s language box. In understanding a speech, when a series of phonemes can mean several different things, namely poly-semantic in terms of phonemes, a hearer automatically picks up one of many different meanings a particular phoneme can stand for, relying on the context in which the speech is made. Understanding meaning requires semantic disambiguation. As O’Callaghan rightly points out, understanding the meaning of a homophonic word is not like representing disjunctions of all possible meanings of that word.\textsuperscript{12} So, when one hears a polysemantic word, insofar as she

\textsuperscript{11} At least a short-term cognitive impenetrability is a mark of perceptual experience. This is why I argue that understanding is at least quasi-perceptual.

\textsuperscript{12} O’Callaghan (2011), pp. 799
understands it, one disambiguates it based on given context. Then, isn’t it that the one who tells the meaning of each instance of homophonic word provide the context and the hearer actually relies on it? It seems that the contextual element that must be considered first and foremost in order to understand the meaning of the uttered homophones is what the informer tells you about the meaning because it constitutes a genuine context of an utterance. However, the fact is somewhat different. The content fixed by that context is not represented in the hearer’s experience because in their experience the homophones sound all the same! Doesn’t this just beautifully indicate that understanding is not part of one’s conscious experience?

Two points can be made in response to this line of argument: First, what’s important is that the hearer hears the serially spoken homophones as standing for one and the same word, all meaning the same rather than as strings of sounds without any meaning. Second, we can think of the context which determines the meaning of the word differently other than what’s constituted by that the informer tells the hearer. It is likely that the context that the hearer automatically refers for the disambiguation is not one given by the informer, but one determined by other components. Of course, by the standard of rationality an appropriate context which ultimately fixes the content of utterance is speaker’s intention, which is determined by the informer’s testimony in this given case. However, that does not work in our immediate understanding of a speech. And, this is the way we understand the speech. And, this is the fact of our psychology. At a higher level of her psychology, the hearer will judge that she misunderstood what was communicated and believe that the homophonic words have different meanings respectively, but not at the level of understanding.
What I want to point out is that there clearly is an intermediary state in which a hearer experiences “pole, poll, pole” to mean either [pole, pole, pole], [poll, poll, poll] or [pole, pole, pole]. This means that there’s a sort of a hidden context which gets the hearer to disambiguate the homophonic speech to mean, for example, [pole, pole, pole], rather than [poll, poll, poll]. This context for some reason is not influenced by informer’s disambiguating remarks.

We hear the three homophones as meaning something. But then, how does the hearer come to understand /pohl/ to mean either poll, pole or poll? What determines the context that fixes the content of understanding? It seems to me that at least two contexts can work here: (i) the context of conversation during which the utterance is made. (ii) a wider context which the hearer frequently faces in her everyday language use. As regards (i), although the given case is not about an utterance during a particular conversation, let’s suppose that the utterance is made during a conversation: two people were talking about a recent presidential election. The speaker, out of an anger about the mismatch between the actual result and the exit poll report, yells, “poll, poll, poll!” When the hearer hears what the speaker says, she might take it to mean a sampling of opinions in general. It is very unlikely that she will take the speaker to mean a long slender cylindrical object or the southern or northern extreme of the world because the utterance is made in a particular conversational context which is about a recent and publicly salient presidential election. But what if the utterance is just randomly made without any context of conversation just as in the original case? Is there still a context due to which the hearer understands the utterance to have some particular meaning? I would say that it is (ii) a wider-long-term context built up by hearer’s familiar language habit. Suppose that Brit randomly hears the
/pohl/ sound on the road. She has not recognized who the speaker was but she has heard the /pohl/ sound only. In what way she would understand the random sound? Probably she would hear the /pohl/ sound to mean poll, the sampling of opinions, if she has been interested in the presidential election recently. Or she could hear it to mean pole since she is an enthusiastic environmentalist who cares about the decrease of the number of polar bears. When there is no such conversational context determined by involving conversation and preceding utterances, the hearer would automatically figure out the meaning based on her recent language habits. She is more likely to hear /pohl/ to mean poll if she has been more interested in the presidential election than in the polar bear issue. In this way, when one hears a word which has several different meanings, one hears it to have one of different meanings based on which context the utterance is made, and how familiar each word is to oneself.

The second kind of conversational context should be examined more thoroughly. Although I regard it as a kind of wider context, it is not the context that particularly determines the utterance meaning if the utterance meaning essentially includes speaker’s intention. The quasi-context works even when the linguistic particular is obviously not used. For example, suppose that one sees letters carved on a huge rock, being figured, “God exists”. It has been proved that the collection of letters is not an intended utterance but nature’s own product randomly and miraculously made.\(^\text{13}\) Although the sentence-like collection of letters is not used to mean what it can mean for English hearer-readers, any English hearer-reader would immediately understand what the carved letters mean.

\(^{13}\) I borrowed this example from Azzouni (2013)
When we recognize the aspect of hearer’s phenomenology that she actually hears the homophonic words to mean something, we should not stick to the view that the phenomenal difference between the understanding and the non-understanding experience is due to additional phonological properties that constitute the understanding experience only. Of course, it is true that one usually learns to detect more specific phonological properties as one learns language. However, accepting that one hears the homophonic words as meaning something, we must agree that the phenomenal contrast is at least due to the difference both in the represented low-level auditory properties and in the represented higher-level properties, i.e., meaning properties. Brogaard (2018) points out that the words with the same phonological characteristics are actually heard differently when it is actually used differently in specific conversational contexts. According to her, for example, the experience of the word ‘poll’ in the Danish sentence ‘Giv dukken til Poll’ is clearly different from the experience of any used English word with the same phonological properties. I also agree with Brogaard that the meaning properties recognized by the hearer at first is the linguistic meaning, not the utterance meaning because the context including speaker’s intention does not immediately affect speaker’s experience. When the word is used, the word is disambiguated by a mechanical rule of disambiguation, which enables a polysemantic word to be heard as having one fixed meaning. (This point will be specified and theorized in chapter 4.) Also, even when the word is not used, so that there is no specific context of usage determined by preceding utterances and so on, when one hears the series of homophones “Poll, Pole, Poll” one ascribes a broader context which is determined by one’s own past linguistic experiences. So, the homophones do not just
sound as “sounds associated with different lexical entries”\textsuperscript{14} but as \textit{a word with a specific meaning}.\textsuperscript{15}

1.2.1.3.Against Blind Flailing Argument

In his (2014), Kevin Connolly presents an argument focused on giving an explanation to \textit{the phenomenal shift}, which can alter the idea that the shift is due to the representation of high-level properties. According to him, the phenomenal shift is caused by a so-called \textit{blind flailing process} through which the subject develops a particular type of attentional pattern to a particular type of object without recognizing what the object is. The whole blind flailing process solely relies on an evolutionary standard according to which a certain pattern of attention is selected based on how useful and efficient the pattern is. Since the attention shift is not caused by the object recognition but by the blind flailing process, it is not necessary that the altered phenomenology is contributed by the representation of the kind property to which the perceived object belongs.

My argument against Connolly is based on two points: first, he does not fully explain what the utility that produces a patterned attention is. When I delve into the notion of utility, I find that it is the utility of object recognition. Second, even if he can show the

\textsuperscript{14} Brogaard (2018)

\textsuperscript{15} One may ask again why the hearer is more likely to hear uttering homophones as repeats of one and the same word than hearing it as uttering three different homophonic words. I assume that there are at least two reasons for this. First, to understand a word is to grasp a meaning based on her own experience. When one hears uttering homophones, one has no clue to distinguish them from each other only through the sounds of the utterance. So, one hears them meaning the same out of her own indistinguishable experience. Second, uttering homophones sound as repeats of the same word because of a common rhetoric we use: The art of speaking which repeats a word several times for the purpose of emphasis. For a competent speaker, it is not an awkward thing to repeat a word because she and people in her language community always do so in order to emphasize one word. It would be more awkward thing to her if anyone repeats a phoneme three times to mean three different homophonic words.
phenomenal shift without the representation of kind properties, he cannot explain why a subject recognizes a certain type with the occupied phenomenology without an exception.

Connolly argues that a particular way of attending to an object enables a subject to discriminate a type of object from other types. This may be his most explicit remarks about the utility of a patterned attention. In other words, it is useful to get the attention patterned in a particular way in order to discriminate the type of object the attention is directed towards from other types. However, doesn’t one have to identify and recognize one kind in order to discriminate it from another? Also, in some way the idea of patterned attention or a particular way of attending to an object already presupposes that the subject is already recognizing the kind of object. For, if the subject did not recognize the object as it is belonging to a particular type, for her the object would be a random object to which she does not know how to attend particularly. In other words, the fact that a subject is attending to an object in a particular way presupposes that she recognizes the object. So, it is nonsense to say that a subject attends to an object with a particularly useful pattern without recognizing it.

My second point focuses on the fact that there’s indeed no realistic case in which one experiences the phenomenal shift with zero recognition of the object type. Those who agree with Connolly may answer that the recognitional disposition is automatically produced after the blind flailing process. However, if it were so, and producing the recognitional disposition were a sort of neurologically automatic process coming after the blind flailing process, there would have been some pathological cases in which one clearly experiences phenomenal shift after repetitive exposures to a type of stimulus without recognizing what the stimulus is. However, whenever one recognizes that one experiences
X differently now than the past, one recognizes what X is. Isn’t it more plausible to say that the way one experiences X has changed because one gets to recognize X?

1.2.1.4. The Simple Explanation

Those who hold PD1 may still claim that they prefer the simplest explanation. Specifically, they could argue that the given phenomenal difference is just explained by the difference in represented low-level auditory properties. So, it is explanatorily redundant to appeal to the alleged difference coming out of the understanding experience.

My response is clear and simple: Since there is an understanding experience, it is not redundant but necessary to talk about it in explaining the phenomenal difference. This can be shown by another version of phenomenal contrast argument here: It is known that a monoglot Japanese adult does not differentiate the ‘l’ sound and the ‘r’ sound since the difference does not appear in Japanese language. However, children under a certain age can hear all the foreign sound. It is well evidenced by the fact that they are certainly better than adults at imitating foreign utterances which they do not understand. Suppose that a monoglot Japanese speaker aged around five hears “To learn how to run is not easy”, and an English speaker also aged around 5 hears the same utterance. Do they have different experiences in hearing the utterance? Intuitively, yes. However, the difference is at least not from the difference in hearable consonant sounds because the (likely ideal) monoglot Japanese child can hear all the unique consonant sounds in English. It seems that their experiences share all the physical auditory properties. It is hard to imagine the presence of some other physical auditory properties only represented in the experience of the young
English speaker while lacked in the experience of the Japanese child. So, the phonological properties they perceive are really identical. The only difference is that the English speaker understands the utterance while the Japanese speaker does not.

1.2.2. Against PD3

1.2.2.1. Summary

In section 1.2, I argued against the view that the phenomenal difference between the experience of understanding speech and that of non-understanding is solely due to the difference in low-level auditory properties; and then I concluded that when a hearer understands an utterance, she has the phenomenology of understanding, which makes the two experiences different. In this section, I will assume the conclusion of section 2. The goal here is to determine what’s the nature of the understanding experience is. In the process of doing so, I will that PD3 is false. Those who hold the view PD3 claim that the apparent phenomenal difference is due to the extra-perceptual phenomenology of understanding that represent meaning or appropriate semantic properties.

What state is going to represent the meaning of speech if the meaning is not represented by the accompanied perceptual state? Some would immediately answer that there might be a sort of cognitive judgment on the meaning of the speech. Specifically, it

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16 Whether one can hear certain sounds which don’t exist in one’s own language may be a matter of attention. One’s experience induced by the same stimulus can be articulated by learning and repetitive encounters of the same kind of experience because such learning and repetitive encounters can make one more attentive to that kind of experience. According to recent empirical research, the brain region called “nucleus basalis of Meynert” is responsible for one’s attention. And, in children under a certain age, that brain region is fully activated without any further effort. (Doidge 2007) What this research and the children case show is like this: even when learning does not cause one to be more attentive, just as in children’s case, it still makes one have some extra phenomenology in one’s own experience. This is a kind of phenomenology that can be induced only through conceptual learning.
is probable that one gets to grasp the meaning of a speech by decoding what’s given by raw perceptual data. Such a decoding mental process is a judgment, and the ensuing mental state might be a thought, a grasping or a belief. To say that a state is a thought is to say that its nature is determined primarily by its content, not its phenomenology. While it’s an ongoing debate whether there is a distinct cognitive phenomenology, there is broad agreement among philosophers that the phenomenology of a thought or belief doesn’t provide much, if any, information about its content.\footnote{More about cognitive phenomenology, see Chudnoff (2015a)} Some people clearly argue against the idea that there exists the phenomenology of thoughts.\footnote{For example, Prinz (2011) thinks that thoughts brought into consciousness only through the vehicles of mental images such as the mental images of written sentences and speeches.} The issue clearly affects our current issues especially when it turns out that there is no such thing as cognitive phenomenology. For, if one has a fair reason not to accept cognitive phenomenology, one does have an independent ground not to accept PD3. However, I do not want to make a general account of cognitive phenomenology here. Rather, what I want to argue at this point is quite simple. It is that the experience of understanding is not a sort of belief. In other words, even if there are such things as the phenomenology of thoughts and beliefs, the phenomenology of understanding is not constituted by it.

States with propositional content have been called attitudes. Attitudes include beliefs, thoughts, and desires, and arguably also perceptual experiences and emotions, such as anger, sadness or regret. Belief is a specific kind of attitude which is truth-apt (unlike e.g. desire), by representing the way the world is. Since grasping the meaning is largely a matter of what the external world is like, what represents meaning, i.e., the understanding state would be a sort of belief if it is extra-perceptual.
There is no doubt that not all beliefs are conscious. Although the historical belief that the United States of America was founded in 1776 is stored in my memory, I am not always conscious of it. Clearly, I have more unconscious beliefs than conscious ones. I can often recall the beliefs stored in my memory if I so desire. Even when I have difficulties retrieving a memory, I might have a metacognitive feeling of what its content is. This is also known as the tip-of-the-tongue phenomenon. But arguably we also have beliefs that are harder, if not impossible, to retrieve.\(^{19}\)

When we speak of bringing a stored belief into consciousness, we do not mean that the state itself necessarily is brought into consciousness. But the state and its content are stored in memory in a distributed fashion. To see this, take the state of regret. Suppose I regret that I didn’t go to my colleague’s party. Suppose further that I remember this. If I merely recall the state’s content, viz. that I didn’t go to my colleague’s party, then what I remember is something quite distinct from remembering the regret. Or to take another example, if I wish that I had bought the dress I looked at earlier, and I remember this wish, then recalled the proposition that I bought the dress I looked at earlier would be a false memory. To remember correctly I need to recall both the propositional content, viz. that I bought the dress I looked at earlier, and the attitude I directed toward that content, which in this case is a wish. So, for memory to be correct, the state must be stored in a form that connects it to its content. The same goes for belief. If I retrieve the memory that the U.S. was founded in 1776, I don’t merely retrieve the information but also my endorsement of this claim, which is a belief.

\(^{19}\) Mandelbaum (2016)
The structure of my argument is as follows: Given the fact that to understand speech is to represent the meaning of the speech, the understanding experience is either a perceptual experience or a belief. As we will see, understanding experiences turn out to have the marks of perceptual experiences rather than those of beliefs.

1.2.2.2. Justification Condition and Evidence for Belief

When understanding is either a perception-like experience or a belief, the way to prove it as one of them is to argue that it is not the other. What I will do in this section is to show that understanding is a perception-like experience by arguing that it is not a belief. The argument is made two-folds: first, understanding does not satisfy the condition of being a belief that it admits of being justified. Unlike belief, there is no such thing as a justified understanding. Second, there must be a pre-existing experiential state which serves as evidence for the belief about the meaning of the speech because a belief is not justified without evidence unless it is a logically (or metaphysically) true belief. Since the understanding experience is the only introspectively tractable experiential state, it must serve as the evidence for the belief. Therefore, understanding is not a belief.

Belief is a mental state which represents what the world is like, so that it is either true or false. It is not always true. When it is made somewhat inappropriately by a subject, a belief fails to be true. When it fails to be true, it gets false. Whether a belief is justified is a matter of if it is made appropriately. In other words, the matter of justification is relevant to the way the belief is produced. The matter of justification is important because it is at least a necessary condition for a belief to be taken as knowledge. (Gettier 1963) Although
there are different views on how to understand the notion of justification, people largely agree that belief is what can be justified. According to internalists, a subject is justified in having a belief when the belief is supported by good reasons or a good reason; and according to externalists, a belief is justified when it is produced by a reliable subject who tends to produce true beliefs. In both cases, the fact that a belief is justified is relevant to subject’s rationality. If a subject would not base her belief on good reasons, she cannot be termed as rational. Also, she would be described as irrational when she tends to produce false belief as an unreliable subject. However, understanding has nothing to do with such justification and rationality. What we can do here is to show that understanding is not a standard of subject’s rationality or irrationality. If a subject were either justified or not justified to understand a speech, she would be either rational or irrational by either understanding or misunderstanding it. However, is it a sign of my irrationality that I misunderstood what my friend said about a minute ago? Obviously not. As to my misunderstanding, I would be judged either that I just occasionally misheard what my friend said or that my ability to understand English (if my friend spoke in English) is not very good. Understanding is not a matter of rationality; it is rather a matter of functioning or a capacity. On the other hand, belief is certainly a matter of rationality as much as it is something to be justified. This reassures us the fact that beliefs are inherently connected to reasons, whereas understandings are not.

Second argument relies on a specific epistemic observation that the belief about the meaning of a speech is justified by the state of understanding. Suppose that Sally

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20 This point is made by Hunter (1997)
understands what the given speech, “nobody in this room trusts raccoons” means. Then, it can be said that,

Sally understands what “nobody in this room trusts raccoons” means

This leads us to believe also that

Sally believes that “nobody in this room trusts raccoons” means that nobody in this room trusts raccoons.

This is true because it is in fact not possible that one understands a speech but does not form a belief about it. Once one has an understanding experience, one automatically forms a belief based on it. This is why many people just take understanding meaning of a speech and believing what it means, identical. However, as it is pointed out by several writers such as Elizabeth Friker (2003) and Pettit (2009), they are not the same because one can believe what speech means but cannot still understand what it means. The cases are exemplified when one hears a language one does not understand but gets to know what the speech means relying on the testimony of the other who understands the language. That’s why I can be successful on an international business with a Turkish buyer even though I do not speak Turkish, when my Turkish interpreter does intend to be truthful.

As to the supporting relationship, there seems a clear supporting relationship between my belief about the meaning of the speech and what my interpreter said to me. My belief that a Turkish utterance “S” means S is justified by my interpreter’s testimony that “S”
means S, and other relevant background beliefs such that she is reliable, trustworthy and so on. The supporting relationship or the relationship of being justified can be specified in the following way:

My belief that the Turkish utterance “S” means S is justified by my another belief that my interpreter testifies that “S” means S.

It is not very controversial that a belief is justified by another belief because how one can reasonably justify the other is quite clear in terms of its content. So, my belief based on testimony is on a quite firm ground in this sense.

However, the belief about the meaning of a speech which is justified by another’s testimony is less than usual. In most cases, one’s belief about what speech means is based on one’s own understanding of the speech. Also, even when the belief is justified by testimony, the person who receives the information and forms a belief on the basis of it ends up being justified by her own understanding of the speech. So, the justification of the belief about speech meaning fundamentally relies on understanding. But what is understanding at all?

When we suppose that understanding is a sort of belief, it is just the belief about what the given speech means, not another belief which justifies the belief. It is awkward to suppose such an intermediary belief because hardly one can characterize the content of such an intermediary belief, which is distinguished from the content of the belief about the meaning of the given speech. Then, what we have is only the state of belief which is also called understanding. However, what then justifies that very belief at all? Any self-
justifying beliefs must be either logically or metaphysically true. The belief about speech meaning does belong to neither of them. In this way, understanding must not be a sort of belief because if it were a belief it would have been a self-justifying one, which is not. Therefore, understanding must serve as an intermediary and non-doxastic state which justifies the belief about speech meaning. Such a state of understanding will turn out to be a kind of high-level perceptual experience throughout chapter 2.

1.2.2.3. Content Gap

In this section, I will argue that there is a genuine content gap between understanding and the belief that \( u \) means \( p \). My argument for the content gap is fundamentally based on the idea that unlike a belief which is either true or false, an understanding is evaluated as a matter of degree. Since understanding is not something to be true or false but what is to be full or partial, the state is distinguished from beliefs. In order to characterize what kind of state understanding is, we can first characterize the state of belief to which the state of understanding is sometimes alleged to be identical. A state of belief is called a propositional attitude by being in an inherent relationship to propositional content. When we characterize and individuate a belief, we illustrate the belief through its content with the form of the belief that \( p \), in which \( p \) stands for propositional content. A proposition represents a particularly structured meaning and coheres to a particular type of sentence. By being a structured semantic entity, a proposition

\[ \text{In what way understanding experiences play the role of the intermediary evidential state will be specifically shown in chapter 3 and chapter 4.} \]

\[ \text{Kvanvig (2003)} \]
is either true or false. A belief with a propositional content inherits truth value from the proposition to which it is towards. So, a belief becomes either true or false by virtue of having proposition which is also true or false, as its content.

However, a state of understanding is different from the corresponding state of belief. Complete understanding and a complete lack of understanding can be compared to true and false belief, respectively, but there are varieties of understanding that are less than complete. For example, even a Ph.D. student who is writing her dissertation on quantum mechanics doesn’t have complete understanding of this area. If she did, then she might as well retire rather than continue working on her dissertation. The reason that one can be properly said to understand something without having complete understanding is that the notion of understanding comes in degrees. In other words, there are several different degrees of understanding that fall below the threshold of complete understanding but that nonetheless count as understanding, simpliciter.

In some cases, the content gap is induced by conversational context in which speaker’s intention is involved. The content of an utterance is what’s usually called pragmatic content. Pragmatic content is distinguished from semantic content in that it is intended by the speaker, to convey some different meaning than the original expression. Wide context in which speaker’s intention is involved as an important component, is considered in order to fix pragmatic content.\(^{23}\) So, in order to grasp what the utterance means, any hearer needs to grasp speaker’s intention involving wide context. However, understanding does not even satisfy the requirement considering that one has an understanding experience towards \(u\) even with no identifiable intention of the speaker.

\(^{23}\) Recanati (2004) introduced the distinction between narrow/wide context, being indebted by the terminology used by Bach’s talk delivered in 1996.
sometimes. In other words, understanding is independent of grasp of the speaker’s intention. Here’s an example:

a. Random leaf graffiti: Suppose that in a small town of North East colored leaves fall on the ground, randomly drawing a figure which by happenstance resembles the figure of written word, “LOVE”. Immediately when they see the figure they read it as meaning love while believing that it is just a consequence of a random work of nature.

b. Blurt during Conversation: Your neuron system is connected to a machine which gives you a signal to blurt a random word or a sentence with no specific pattern. Sitting in a room, you have a conversation with your friend. While you’re talking to her, the machine causes you to blurt “a puzzle piece has been missed!” Your friend immediately understands what you mean and she asks back, “what puzzle do you mean?”. However, obviously you had no intention to talk about a puzzle at all.

Both (a) and (b) present the case in which there’s no pragmatic intention of the speaker, which makes what is said in the two cases totally meaningless. In fact, there is nothing *said* in both (a) and (b). Psychologically, however, we read or hear as if something has been said in (a) and (b). We find a clear gap between what’s actually said and what we read or hear to be said. *This gap* is our main issue here.

I will call this gap the “content gap.” It’s a gap between the content of understanding and that of belief about the meaning of an utterance. Insofar as an utterance is used by a speaker, speaker’s intention is a constitutive part of its content, which is what she tries to convey. Then, however, why do we read or hear some meaningless utterances to mean something? We either mistake speaker’s intention for something other than what really is
or do not take speaker’s intention in understanding. I think that the reason for the gap would be the latter rather than the former. For as we can see in the examples (a) and (b), one can correctly track speaker’s no-intention but fail to represent such no-intention at the level of her understanding. So, it would be more plausible to say that the hearer does not represent speaker’s occurrent intention at the stage of understanding. If this account holds in general, the content of understanding ultimately differs from the content of the belief about what is said in that the former is constituted lacking speaker’s intention while the latter is constituted by speaker’s intention. Even when there is continuity in content, the gap between understanding and belief is inherent. Suppose that someone actually intended the leaf word “love” and drew it on the ground. In this case, there would be a quite similarity between the content of what is understood and what is said. Can we say that the contents are the same? I do believe that they are not the same because as we proved above, the speaker’s intention is constitutive of the content of belief about what is said while it is not constitutive of the content of understanding. The content gap is indeed inherent.

At this stage, it is not easy to characterize the form of semantic properties represented by understanding experiences. Specifically, it is quite unclear to figure out whether it is always at least propositional or sometimes less than propositional. What I point out here is this: Even if understanding experiences represent semantic properties or meaning in propositional form without an exception, there’s still a content gap between understanding and belief.
1.3. Conclusion

So far, I suggested a line of arguments against two possible explanations for the phenomenal contrast argument-neutral presented in section 2. According to my counter argument, the phenomenal gap due to the nature of understanding is neither due to the perception of extra low-level properties nor due to the understanding experience which is extra-perceptual. Therefore, I accept that the phenomenal gap is due to the understanding experience which is at least quasi-perceptual. Although understanding experience is analogous to perceptual experience in several respects, they cannot be easily equated. In chapter 2, I will mainly argue that understanding experience is literally perceptual in that sensory phenomenology represents semantic properties. In arguing this, I will provide with a more plausible explanation for the phenomenal contrast than the explanation given by the phenomenal contrast argument-neutral. According to this new explanation, the phenomenal difference is not attributed an additional phenomenology but a broad phenomenological difference.
Chapter 2. Source of Genuine Phenomenal Contrast

2.1. Summary

Part of conclusions I had in chapter 1 was that understanding is more akin to perception than to belief. In this chapter, I will argue that understanding is literally a kind of perception, not perception-like. This idea faces some immediate challenges. First, it is against one’s intuition that understanding meaning is more cognitive rather than perceptual. Second, it cannot easily explain how meaning, the abstract entity, is part of perceptual experiences whose objects are usually observable objects.

In this chapter, I will first argue why understanding is not the form of higher cognitive representation such as thought. Since no part of understanding experience requires thoughts, the experience would rather be perception-like. What I take up is the sort of high-level perception view according to which some kind properties and abstract properties can be represented in perceptual experiences. However, I will argue that the existing theory which only talks about the intentional content of modal specific perceptual experiences is insufficient. For it does not give a clear picture of what it is like to have a higher-level visual or auditory experience. Specifically, we can ask what it is like to hear meaning and how it is possible. I will give a satisfactory analysis of the phenomenology of higher-level perception. In doing this, I will refute the Phenomenal Contrast Argument-Neutral, which I provided in previous section, pointing out that the argument is based on an unexplained assumption according to which the phenomenal difference is simply due to an additional phenomenology. This gives us a clearer reason not to accept previous views.
trying to explain *additional phenomenology* such as O’Callghan’s additional low-level property view and the quasi-perception view of understanding.

### 2.2. Is Understanding Thought?

Galen Strawson (1994/2010) once pointed out that there’s a form of non-sensory and intentional *understanding experience*. He derives this characterization of understanding experience directly from the phenomenal difference between hearing speech made in subject’s familiar language and one made in her non-familiar language. When we follow the idea Strawson had, he seems to think that understanding experience is a kind of thought, which is characterized by its distinctive form of content. In other words, when we say that we have a thought, we are saying that we have a certain propositional content in our mind whatever forms the thought is. Strawson was even led to the conclusion that there’s a distinctive form of phenomenology of thought which is not reduced to the phenomenologies of other states. This idea is shared by many different people with several other persuasive arguments. (Siewert 1998, Pitt 2004; 2011) However, it is just too hasty to conclude only through the given phenomenal difference that understanding experience is a kind of thought experiences. The idea is based on the assumption that understanding is inherently non-sensory. However, is understanding experience a sort of thought experience? And, is it inherently non-sensory? My answers to both questions is no.

There are at least two features which give us the view that it is not easy to claim that understanding is partially composed of thought. The first important feature of understanding experience is its cognitive impenetrability which would not have been
manifest if it were a kind of thought. Remember that we usually have non-removable afterimages or aftersounds when we are updated with the meaning of the terms we have known differently. Suppose that I mistakenly grasp the meaning of the term “boys” referring to girls. Even after I was corrected by my friend and I am perfectly persuaded, I cannot stop seeing and hearing the term as referring to girls at least for a while. The content of my understanding experience here is constituted by girls, unlike the content of my further belief about the correct meaning of the utterance including the term—which is constituted by boys rightly. The added correct belief that “boys” refers to boys or the defeater cannot revise the content of my understanding experience. The experience is cognitively impenetrable in the sense that it is not altered by newly added beliefs. If understanding experience were thought and thus belief, the content of it would be modified by the defeater belief. But it was not. Therefore, understanding experience is not any form of thought and belief.

The second feature of understanding which makes it ill-suited as a candidate to be a kind of thought is that understanding is a total experience of hearing the speech, not a separable experience of grasping meaning. Remember that understanding is an experience had by one when one hears (or sees) another’s speech in a specific occasion. So, the experience is always partly constituted by the experience of the sensory features of the speech itself, which is straightforwardly perceptual. So, we have a mixture of two very distinctive parts in one and the same experience if we take the grasping part as the cognitive form of representation, i.e., thought. However, then, we are left with a difficult task of figuring out the relationship between the two different parts of experiences and how they are combined in one and the same experience. It is not allowed to say that the understanding
experience is a separate one followed by the sensory experience of the sensory properties of the speech. For if they were two different experiences, there is no reason to accept the initial set-up of the phenomenal contrast argument that there exists phenomenal difference between the understanding and the non-understanding experience. It is just very hard to think that understanding experience is constituted by an intact form of thought and perception together.

2.3. High-Level Perception

2.3.1. High-Level Perception: Perceptual? Quasi-Perceptual?

As it is already put, the phenomenal difference between the novice experience and the expert one is manifest and widespread. Just as one who is competent in a language has different phenomenological experience from the other who is not competent in the language, when both hear a speech made in the very language, one who has an expertise in pine trees has different phenomenological experience from the other who has never seen pine tree before when they both see a pine tree in the forest. As the best explanation for the phenomenal difference induced by a sort of expertise, Siegel (2006; 2010) suggests the idea that what she calls a K-property is represented in the visual experience of the expert. Specifically, in the pine tree case, the person who knows well about pine tree represents the property of being a pine tree in her visual experience whenever she sees a pine tree. Siegel argues for the high-level perception thesis with an argument by elimination according to which the competing views which are supposed to explain the phenomenal
difference are not persuasive. She concludes that the phenomenal difference is due to the K-property represented in the whole visual experience, arguing against the view that the difference is due to extra low-level properties only represented in the expert’s experience and the view that it is due to cognitive phenomenology annexed by the existing sensory phenomenology. The argument I gave in chapter 1 specifically for understanding experiences takes the analogous argumentative structure to what Siegel did in her paper. As a consequence, I was left with a conclusion that understanding experiences are perception-like.

This conclusion must be specified more thoroughly. Although the argument by elimination showed that the kind of experiences considered here is neither a completely cognitive one nor a representation of low-level properties, it does not completely show that it is a kind of perception in a literal sense. And, there exists an obvious difficulty in arguing for it: It is hardly understandable what it is like to have a sensory phenomenology of the experience of K-properties. Is the phenomenology of hearing meaning analogous to the phenomenology of hearing sounds, tones and pitches in a significant way? For this obvious difficulty, some people who prefer the perception-based model of understanding hesitate to call it literally perceptual. (Fricker 2003) Some of them just prefer to use the expression “experiencing meaning” over “hearing meaning” in order to avoid such an issue. (Azzouni 2013) In this way, those who are in favor of the perception-based model of understanding tend to take a view that understanding is just quasi-perceptual in that the understanding experiences are really perception-like, sharing some important characteristics with perceptual experiences, but they are not literally perceptual.
However, when we take up the view that understanding experiences are quasi-perceptual, we face a challenge akin to that of determining whether the phenomenology of understanding is partly of the irreducible cognitive variety. When understanding is quasi-perceptual, the whole experience of hearing a speech has two very distinctive parts in one experience: the mixture of visual phenomenology and non-sensory perception-like phenomenology. However, shouldn’t they be counted as two different experiences rather than counted as two different parts of one and the same experience? If they are two different experiences had almost simultaneously, nothing can be said about the phenomenal difference between the experience of one who is competent in the language and that of the other who is not competent in the language. For there is no difference between the perceptual experiences they have.

Some might refute this point, by being skeptical on the phenomenal contrast argument itself. Specifically, the alleged phenomenal difference could be not a genuine one but a fake one which derives from the simultaneity of two different experiences in competent speaker’s phenomenology. This point seems pretty persuasive, considering that the phenomenal contrast argument is relying on our introspection. No introspective observation gives a ground to determine whether the phenomenology of competent speaker’s experience is from one and the same experience or from two different simultaneous experiences.24

I believe that the phenomenal contrast between the non-competent speaker’s experience and the competent speaker’s experience is a genuine one because the competent speaker’s phenomenology is from one and the same experience towards a target object.

24 I appreciate Elijah Chudnoff to point out this.
Suppose that the phenomenology of competent speaker’s understanding experience is from two different simultaneous experiences. What should be noticed is that the two experiences are not random ones which are independent of each other. When the expert experience is comprised by the perceptual experience of the sensory features of the speech and the cognitive experience of the meaning of the speech, the cognitive one is dependent on the perceptual one. For, otherwise, one could isolate the cognitive experience, by separating it from the perceptual one, under a certain condition. However, there is no case in which only the cognitive experience takes place in consciousness when a subject experiences a speech. So, the cognitive experience derives from the perceptual one. However, it is hardly specifiable what kind of derivative relationship they are in. It could be an inferential relationship. But, one difficulty with this idea is that no trace of inference can be found in the subject’s consciousness. What’s more: the two experiences seem to be inseparable. There are some factors which can hinder a broad derivation process such as an inference: drinking, drugging and tiredness belong to them. However, no such factors cause one to have the perceptual experience only without the allegedly derivative cognitive experience. The experiences either appear or disappear altogether. Isn’t it more plausible to take them as one and the same experience?

There’s another approach to show this one and the same experience view. The proponents of the quasi-perception view would argue that we can have such an experience with two different kinds of phenomenology—for example, the visual and the quasi-perceptual. Consider a multi-modal experience had by one with sound-to-color synesthesia. The synesthete has accompanied color phenomenology whenever she hears a certain pattern of sounds. What she has seems not a mixture of two different experiences, but one
and the same experience with distinctive modals. In this way, we can have a cross-modal experience. Isn’t the understanding experience a kind of multi-modal experience then?

Let us check whether understanding experience examined as a mixture of perceptual phenomenology and quasi-perceptual phenomenology is a kind of multi-modal experience like synesthesia. The answer is fundamentally relevant to the issue of *how to individuate an experience*. Specifically, if the understanding experience examined as the mixture of visual or auditory phenomenology and the quasi-perceptual phenomenology satisfies a condition under which the experience is one and the same experience, the experience with the hybrid phenomenology is one and the same experience.

Despite its multi-modal features, a synesthetic experience is intuitively counted as one and the same multisensory experience, rather than a mixture of two single modal experiences. What factor makes such a non-regular experience one and the same experience? One possible answer is to say that it is the phenomenological simultaneity that makes such two different sorts of phenomenologies part of one and the same experience. According to this standard, a synesthetic experience is one and the same experience because no standard tells us that one phenomenology is ahead of the other. However, are all the phenomenological properties appearing in subject’s consciousness simultaneously at a certain time constitute one and the same experience? It is not always the case. Look at the case of watching movies. Since we hear sounds and see moving images simultaneously while watching a movie, watching a movie is no doubt a multi-modal sensory experience. However, is this hearing-seeing individuated as one and the same multisensory experience just as a synesthetic experience is individuated? Not really. What strikes us as intuitive is that hearing sounds and seeing images are a set of two different experiences though the
two experiences take place at the same time. Then why? Why do we feel that watching a movie is a mixture of two different experiences whereas synesthesia is one single multi-modal experience, though both experiences are multi-modal and simultaneous.  

The fundamental difference between the two experiences is what each experience is about. In other words, the difference fundamentally boils down to what each experience represents. When it comes to a synesthetic experience, what it represents is restricted to one and the same object that is not different than what’s represented by its normal counterpart experience. Suppose a person has the visual experience of seeing blue whenever she hears note C. When she is asked what her experience is about, she would answer that it is about note C, not about any blueness even in part. In other words, although the experience is multi-modal, it is clearly about one and the same object. Although such a synesthetic number-color experience can represent a number more in detail in terms of its properties, what it represents is not different from what the counterpart non-synesthetic number experience represents.

Such a synesthetic experience can be compared to a similar multi-modal experience which is not synesthetic at all. Suppose that a non-synesthete hears note C and somebody else sheds a blue light before her eyes at the same time. What she has is the mixed experience of hearing note C and seeing blue, which is quite similar to what the previous synesthete has. However, this experience is fundamentally different from the synesthetic experience in that it is about two different things, the sound of note C and the color of blue light. It seems intuitively correct to say that one has two different experiences, hearing note C and seeing blue at the same time, rather than to say that one has a single experience.

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25 In Brogaard & Chudnoff (forthcoming), they characterize multisensory perceptual experience which is distinguished from mere co-consciousness of features.
which is about both note C and the color blue. For in the experience or the experiences, seeing is not about note C and hearing is not about the color blue. In other words, we tend to identify and individuate an experience as the experience about something. So, if a set of phenomenologies are part of the same experiences is neither a matter of whether they occur in consciousness simultaneously nor a matter of whether they are combined in a single modal experience. What matters is what they are about when the set of phenomenologies constitute an experience or experiences.

Now, let’s see an understanding experience to check whether it is the pure whole of a single experience or a weird mixture of two different experiences. When we analyze an understanding experience into the sensory part and the non-sensory perception-like part, the sensory part is only about some physical surface of the speech. Specifically, when it comes to understanding a speech, the sensory part of an understanding experience would represent the speech as an auditory entity only, not as a semantic entity. For if the sensory part represented the speech as a semantic entity as well, we would not have had to appeal to the non-sensory phenomenological part of the speech. So, an understanding experience constituted by sensory and non-sensory phenomenology is a mixture of two different experiences which represent two different things. However, why should we accept the idea of this weird mixture? To say that one has two different experiences simultaneously is to say that one’s consciousness is towards two different things. However, aren’t we just experiencing one and the same speech when we hear it? Why should we say that our conscious experience is split whenever we hear a speech and then it suddenly gets to two different things? Also, if we identify the experience as a blend of two different experiences, there might be no room for a genuine phenomenal difference. The individual sensory
experience of competent hearer is just the same as the individual sensory experience of non-competent hearer, representing the same object with the same properties. What’s different is that the competent hearer just gets to have additional quasi-perceptual experience, not just additional phenomenology in one experience.

Again, the quasi-perception view is just another extension of the understanding-cognitive phenomenology view. To argue that some quasi-perceptual phenomenology represents meaning in understanding a speech, one must argue that understanding is a mixture of two different experiences towards two different objects, which end up making the phenomenal contrast meaningless.

Now we are left with one and the same option if my previous arguments are persuasive: Understanding experiences are literally perceptual, having sensory phenomenology since it cannot be quasi-perceptual. In what follows I will provide with a plausible model which explains in what way people represents meaning and a set of K-properties in sensory manner.

2.4. Phenomenology of High-Level Perception: A Proper Way to Explain Phenomenal Contrast

Some inherent challenge to the high-level perception view might be the idea that abstract and kind properties are only represented by concepts and complexities of concepts. And, the way concepts occur to conscious experience, if they can occur anyway, is definitely not by sensory way because concepts are inherently amodal. However, is it necessary that we have concept itself in our consciousness in order to represent associate
abstract and kind properties? Some evident examples show that this is not so. For example, we sometimes have the image of a concept symbol such as “3” in order to represent an abstract entity like number 3. In this case, it is just redundant to say that we must have the concept 3 itself in our experience in order to represent number 3. Only the image “3” does its work. So, it seems at least not necessary that associate concepts must be present in high-level perceptions.

One might still say that although it is not necessary to have a concept phenomenology in subject’s experience in order to represent a relevant kind or an abstract property, it is still true that a subject has a concept phenomenology in her experience to represent a relevant property in some cases. For example, in the case of representing the property of being a pine tree, no concept symbol seems accompanied in the experience. Introspectively, imagining that I am in that situation, I do not have any image of the written or the spoken word “pine tree” in my experience. Nor do I have a sort of standard pictorial image of pine trees which is sufficient to refer to the property of being a pine tree. Doesn’t it mean that when I represent the property of being a pine tree in seeing the forest among which a beautiful pine tree is included, I have a concept of pine tree which directly occurs to consciousness? There are two relevant issues. The first issue is whether concepts can be represented in consciousness by its nature. If one accepts cognitive phenomenology, there is no reason to refute the concept phenomenology because a thought consists of concepts. However, even if we accept the idea of concept phenomenology, it is another problem whether I represent the property of being a pine tree through the experience the phenomenology of which is partly constituted by the phenomenology of the concept pine tree.
Although there is no concept symbol involved in the experience of seeing a pine tree, there is still a visual perception of that very pine tree in front of one’s eyes. Isn’t the visual image capable of representing the property of being a pine tree?

One would immediately interrupt with my suggestion, pointing out that what the visual image represents is the physical features of the pine tree, such as colored brown and green, having leaves, being 10 feet tall, etc., not the kind property of being a pine tree. However, this suggestion is just unaware of how even concept symbols in sensory experiences represent. What does a concept symbol occurred in a visual experience represent? It represents a relevant abstract property no doubt. But it also represents a certain visual figure at the same time. Look at the following concept symbol (or grapheme).

![TIGER]

Having the visual image of the above symbol in one’s conscious experience is sufficient to represent the particular species of a carnivorous animal with black striped yellow hair. However, by having the image of the symbol, the experience also represents a certain grapheme figure “Tiger”. It is more obvious when we compare our experience to the experience of another who doesn’t know English words at all. When the person sees the written figure and images the written figure based on what she saw, what she represents through her mental imagery is just what’s compared to a meaningless drawing. She just represents that figure drawn in black lines. Now suppose that she learns how to read and use the term “Tiger”. How can we describe the phenomenal shift she might have? There are two ways to describe it: (i) Having the symbol image of “Tiger” in her experience, the
person represents the animal kind only. (ii) Having the symbol image of “Tiger” in her experience, the person represents the animal kind and the figure of that written word at the same time. Which way between (i) and (ii) is more plausible to describe the phenomenal shift gotten through knowing what the written figure “Tiger” refers to?

First and foremost, it is unnatural to say that the phenomenology of the lined figure suddenly goes away when one learns it to be used as a linguistic symbol. If it were so, it would not have been possible to reproduce the symbol image to use it for a communication. How can one draw a figure which one is unable to consciously represent? Admittedly, there could be a difference in attention. Specifically, one can give a more attention to the fact that the symbol image in one’s experience is representing the tiger kind rather than of the fact that it is representing a certain lined figure. However, it is just a matter of attention. Since it is just a matter of attention, one can pay more attention to the lined figure than to the kind property in having the same kind of experience whenever she wants. Switching the attention and focusing on another part of representation is under subject’s voluntary control. Again, if the phenomenology of the lined figure were what has gone away with learning, no work relevant to the reproduction of the symbol image would have been possible. Therefore, it is reasonable to claim that having the symbol image of “Tiger” in her experience, the subject represents the animal kind and the line figure of the written word at the same time.

Now let us go back to the pine tree case. As we have seen in the symbol image case, a mental imagery can represent different properties at the same time. So, the fact that the perceived image of trees is representing low-level properties of the trees does not rule out the possibility that the imagery can also represent the kind property of being a pine tree.
Some might still doubt how a perceptual image of a random pine tree can represent a kind property. Unlike a concept symbol which is designed to stand for a particular kind of property by its origin, a perceptual image of a random pine tree is not so designed. There are millions and billions of pine trees in the world and they are all different in a certain sense. Sizes, the number of leaves and branches are all different. Then how can the perceptual imagery of each different pine tree represent the same kind property of being a pine tree?

Here, we should recall that the experience of pine tree experts is different from that of non-experts. The experts immediately catch up several recognizable features of pine trees, such as the texture of barks, the shape of leaves, and fruits and so on. And, every pine tree recognized by her comes in her experience with a distinctive feature of pine trees just as every concept symbol comes in concept user’s experience with a distinctive feature of the concept symbol though the drawn image has some variety in reality. (We should remember that not everyone is a good hand writer.) Therefore, the experts’ experiences can work in the way the image of concept symbols work.

Let me give another example. There’s an irregular perceptual experience called synesthesia. People with synesthesia, synesthetes, have an extra sensory experience in addition to what they are supposed to have towards particular sensory stimuli. For example, some have an associated color experience whenever they hear a note. There are several different types of synesthesia. Although many of them are cross-modal since the extra sensory experience is from another modal, some of them are intra-modal. Among the intra-modal synesthetic experience, there’s number-color synesthesia, people with which see a particular color whenever they see a grapheme of a particular number. According to Matey
(2014), there are two types of number-color synesthesia. People with the first type of number-color synesthesia, the lower synesthesia, see color only with a certain type of number grapheme whereas people with the higher synesthesia see color with any type of number grapheme. It seems that the higher number-color synesthesia is accompanied by numbers themselves rather than by a certain type of grapheme. So, it is not surprising if the color represents something about numbers in the higher synesthesia. Matey actually gives some persuasive hypothesis that colors accompanied by numbers represents the structure of numbers more in detail because for some with such a type of synesthesia, Daniel Tammet notably, the color experiences help him to calculate numbers far faster than normal people do.

She also argues that when a person with the number-color synesthesia has a color experience only which is usually associated with a particular number, that color experience only can represent that particular number. To show this, she cites a type of stroop effect experiment: The synesthete is asked to what number she is seeing, in front of the number grapheme colored differently from what she usually sees through the number. Her answer tends to be delayed compared to when she is asked with the number matched to its color. It is fair to conjecture that the delay is caused by two conflict judgments, one coming out of the number grapheme and the other out of the color. If the color did not represent any component of numbers in her experience, there would not have been any delay in identification of the number. This case gives us an idea that even colors can represent numbers, an abstract property, under a certain condition.

Now, I want to generalize the idea of how sensory phenomenology can represent some kind properties or abstract properties. The phenomenology of high-level perception
is explicated in the following way: In the experience of a particular subject, a certain type of sensory phenomenology such as sensory images or simple sensory properties represents not only the relevant low-level property it is supposed to represent but also a certain kind or an abstract property under either a certain genetic condition or a certain condition of practices and learnings.

Here, an immediate challenge follows. Some might point out what would make the phenomenological difference at all if only sensory phenomenology constitutes the phenomenology of a high-level perception. Between the expert’s experience and the novice experience on the same object, there’s phenomenal difference intuitively, and there must be phenomenal difference theoretically. There must be phenomenal difference because the phenomenology of an experience supervenes on the intentional (or representational) content of the experience. Since there’s a difference in intentional content between the two experiences in that one represents an abstract property and the other is not, there must be a difference in phenomenology between the two experiences. But, since the phenomenology of high-level perception is constituted only by sensory phenomenology, what makes the difference must be sensory phenomenology. This means that some extra sensory phenomenology is added to the high-level perceptual experience. Isn’t it the view that we were trying to refute in Chapter 1?

This challenge is quite plausible. And, in order to answer it, we give a correct account of how each part of experience comes together in order to make one and whole experience. What I want to argue is the following:

The difference in sensory phenomenology between the expert experience and the novice experience is not from some additional sensory phenomenology but from the fact
that the phenomenologies of two experiences are qualitatively different as a whole. Let me
give a more detailed analysis in what follows. Suppose that two people, one who has
expertise in pine trees and the other who does not, look at the forest among which there’s
one pine tree. The experiences of two people will be different in terms of both
phenomenology and intentional content. Let each experience be $Ee$, the expert experience
and $En$, the novice experience. The intentional content of $Ee$ and $En$ can be specified as the
following:

$$Ee = \{p_1, p_2, p_3, p_4, \ldots, p_n, \text{being a pine tree}\}$$
$$En = \{p_1, p_2, p_3, p_4, \ldots, p_n\}$$

The content of an experience is constituted by the properties it represents. So, $p_x$ in each
set stands for the physical properties perceived. $Ee$ may or may not have some more of $p_x$
compared to $En$, but what makes a decisive difference is the property of being a pine tree
represented only in $Ee$. So, it is fair to say that the content of an experience is a mereological sum of the properties it represents. What makes the difference in content
between $Ee$ and $En$ is the property of being a pine tree represented only in $Ee$. However, is
it the same for the phenomenologies of $Ee$ and $En$? Has their phenomenological difference
come out of the phenomenology of being a pine tree since the phenomenology of each
whole experience is a mereological sum of the phenomenologies of each property the
experience represents? Not necessarily. What’s obvious is that the two experiences are
phenomenally different since their contents are different. It is not obvious how the
phenomenal difference is formed. The phenomenal difference and the identity supervenes
on the difference and the identity in content. But it does not imply that the part of
phenomenology supervenes on the part of content. Indeed, such a non-examined assumption that an extra phenomenology in accordance must be added drove many people devoted to the idea of non-perceptual phenomenology. The logic is like this: Since we represent abstract entities in our experience, we must have some non-perceptual phenomenology which is sufficient to construct that sort of experience. This logic is inherently flawed since no phenomenal properties must be added in order to make a phenomenal difference between the experience which represents low-level properties only and the experience which represents an additional abstract property. I would argue that the phenomenology of high-level perception is entirely reconstructed and its phenomenology is qualitatively different from the phenomenology of low-level non-expert perception on the same object. They are neither similar nor partly the same. They are just different. Now let us see how the phenomenal contrast argument-neutral given in Chapter 1 is flawed, and how to reconstruct it.

- **Phenomenal Contrast Argument-Neutral**

  (1) The phenomenology of E1 and that of E2 are different.

  (2) All phenomenal properties that constitute E1 are also part of E2 since they are about the same spoken utterance and S(t2) hears all that S(t1) hears.

  (3) Hence, some other phenomenal properties that are not part of E1 constitute part of E2. (From (1) and (2))

This argument is based on the assumption that E2 gets an additional phenomenological property by representing a relevant abstract property. However, there is no proper way to describe such an additional phenomenology. It is neither perceptual nor
extra-perceptual. For no additional perceptual phenomenology only is responsible for representing a given abstract property. Also, there is no way to construct one and the same experience constituted by both sensory and non-sensory phenomenology. So, it is right to construct a new phenomenological contrast argument.

- **Phenomenal Contrast Argument-New**

  1. The phenomenology of E1 and that of E2 are different.
  2. The phenomenology of an experience supervenes on the set of properties the experience represents.
  3. From (2), the phenomenological difference of E1 and E2 is due to the difference in the set of properties each represents.
  4. Therefore, E1 and E2 have qualitatively different phenomenology by having a different set of properties each.

2.4. The Content and Phenomenology of Understanding

According to what we have seen above, the phenomenology of higher-level perception is constituted only by sensory phenomenology. The phenomenal difference between a higher-level perception and a relevant low-level perception is explained not through an additional phenomenology of higher-level perception but through their having entirely different phenomenology as a whole. So, it can be said that through proper learning or practice, one’s experience of the same sort gets qualitatively reconstructed. For example, one’s experiences of pine trees before and after one’s becoming an expert are qualitatively different.
Now, let’s return to the case of understanding experiences with this model of higher-level perception. Considering that understanding experience is a sort of higher-level perception in which appropriate semantic properties are represented, the same sort of model can be applied to the case of understanding as well. Suppose that Descartes speaks, “Cogito ergo sum”. Kant understands what Descrates said and represents the content of the speech in his own experience. The representational content of his experience would consist of the acoustic features and the semantic features of the speech. Let his experience Ek, and the content of Ek is expressed as the following:

\[ Ek = \{ p_1, p_2, p_3, \ldots, p_n, \text{the understood meaning of “Cogito ergo sum”} \} \]

The properties p1…, and pn stand for the set of acoustic features of Descartes’ speech. In addition, Ek represents the understood meaning of the speech as well. I called it understood meaning because the meaning represented in an understanding experience can be different from the real meaning of the speech. Although it is a well-known pragmatic fact that the meaning of an utterance is proposition, it does not directly apply to the case of the meaning represented in an understanding experience. Suppose that Descartes was interrupted while speaking, and just says “Cogito ergo…”. What he says is not complete, never truth-apt, and thus non-propositional. Still, when Kant hears what Descartes says, he immediately understands the fragmented meaning of the speech and represents some semantic properties in his experience. What he represents in his understanding experience is not a full proposition but a meaning fragment whatever exactly it is. In this way, the semantic properties represented by understanding experiences include some incomplete fragment of meaning as well. This means that what represents such semantic properties as
part of the experience needs not be a thought whose content is a full-fledged proposition. This ensures the fact that understanding a speech is a sort of high-level perception which is understood under the model I explicated in the previous section. If understanding must be constituted by thought in representing the meaning of the given speech, the meaning represented is always the form of complete proposition. However, it is not. Therefore, if all understandings have a shared form, thoughts are not part of them.

It is an open question whether the represented meaning of a complete speech, for example, “Cogito ergo sum”, is a sort of complete proposition. There is no specific reason to claim that it is not. However, even if the meaning of the speech is represented in the form of a full proposition, this proposition is not the content of a belief. For as I pointed out earlier, understanding lacks the mark of truth-apt thought, i.e. belief, because its content is not corrected by the content of any defeater belief. So, even if the full-propositional content is represented by understanding experiences, the representing state is not a sort of thought but a perceptual state.

Let me delve in the phenomenology of understanding more in detail. The phenomenology of understanding is just like the phenomenology of concept symbols I’ve considered in the previous section because the words comprising speeches (and sentences) are concept symbols. To recall it, the phenomenology of concept symbols represents concepts without having independent phenomenologies of concepts. Given some imageries of concept symbols either spoken or written, it is impossible for one who understands the concept symbols to take the imageries as mere imageries without representing relevant concepts. Then, there are two possibilities with which one can represent a relevant concept whenever one has the imagery of a relevant concept symbol.
(1) Necessarily, under the condition that one understands a concept symbol, one has an
associate concept phenomenology together with the imagery of a relevant concept
symbol.

(2) Necessarily, under the condition that one understands a concept symbol, the imagery of a
relevant concept symbol one has in one’s experience represents the concept imagery and
the concept at the same time.

I have already argued that the kind of explanation shown in (1) is not desirable because it
requires us to have two different experiences, while having one and the same perceptual
object. Therefore, we should claim in the way (2) claims. As to an understanding
experience, the imagery of a speech in the experience represents the physical features of
the speech and the semantic features of the speech at the same time. To another who does
not understand the same speech, the speech is just heard entirely different. Her experience
represents the physical features of the speech only. However, her experience is not some
mereological part of understander’s experience. Their experiences are just qualitatively
different.

2.6. Conceptual Learning and High-Level Perception

This section is a brief prequel to the research on what makes high-level perception
possible. People are sometimes encouraged to think that one must have the concept itself
in one’s experience in order to have a relevant high-level perception. I’ve already shown
that the idea that either a thought or a concept immediately occurs to a perceptual
experience does not make sense. Occurring as an accompanied cognitive experience does not make sense either because the experience should be about one and the same object. However, the intuition that such a sort of experience is somewhat concept-relevant is hardly removable.

In order to answer such a worry, we should specify the way concepts involve high-level perception. First, concepts occur to consciousness immediately with its own phenomenology. Second, concepts’ possession influences one to have a different sort of experiences. What we can choose is the second kind. When we look at the cases of high-level perception, we saw that such high-level perceptual experiences are had by a subject through learning and practices which are all compared to conceptual learning. Conceptual learning is not such a thing as learning the meaning of the term “pine trees” but it is something like getting a discriminative ability---to discriminate pine trees from other kinds of trees. Conceptual learning of this kind is possible through a kind of long-term cognitive penetration. In the next chapter, I will argue that the product of perceptual learning is high-level perceptual experience, which can be regarded as a form of long-term cognitive penetration.
Chapter 3. Understanding: Non-Inferential but Cognitively Penetrated State with Conceptual Content

3.1. Summary

In this chapter, I argue that the content of higher-level perceptual experiences is conceptual due to substantial cognitive penetration. To argue this, I first show that the content of higher-level perceptual experiences is conceptual because the kind of experiences acquired through a repetitive exposure to the objects of the same kind, for example Pine trees, is the process in which a relevant concept, i.e., the concept of pine trees, is acquired. After I show that higher-level perceptual experiences are conceptual, I will argue that this is due to substantial cognitive penetration. I will characterize the process of cognitive penetration involved in the formation of understanding experiences in the following way: First, cognitive penetration is a sub-personal process which has nothing to do with any explicit forms of inference. Second, the content of a higher-level experience is penetrated by a set of implicit beliefs acquired through repetitive experiences of the objects belonging to one and the same kind. All the line of arguments purport to show what cognitive penetration is and how it gives rise to an irreversible change to the way the subject experiences a certain object.
3.2. Cognitive Penetration and Content

3.2.1. Three Ways of Concept Acquisition and Conceptuality of Higher-level Perceptual Experience

In this section, I want to argue that the content of higher-level perceptual experiences is conceptual. I will argue for the thesis in order to support the claim that high-level perceptual experience is a consequence of cognitive penetration.

In order to demonstrate the conceptuality of a certain experience, we need to determine (1) whether the possession of concepts is necessary for us to have the capacity for perceptual experience (state conceptualism), and (2) these concepts are constitutive part of that experience (content conceptualism). To determine (1), first and foremost, I will look at three different ways to acquire concepts. There are at least three ways of acquiring concepts. The first way is to learn a concept *through testimony* such as from conversation, from written books and from other medias. Suppose that there is a boy who was born in a forest town and that he has never seen the ocean his entire life. Let’s further imagining that the only way he could learn about the sea is to read books about oceanology in the library of his grandfather. What he could get through the books is only the verbal explanation of what seas and oceans are and what kind of environment they constitute. We can imagine that the book lack pictures. When the boy becomes an expert in the oceanology several years after his first exposure to the knowledge, he clearly has acquired the concept of the ocean though he has never seen the ocean in real life. In that case, the boy satisfies a condition under which he can be deemed to have a concept: He can use the concept correctly in his verbal practice.26

26 There is a certain parallel between the case I provided and Jackson’s Mary case (Jackson 1986) though what we want to show are not identical. Imagining a neuroscientist who knows all about the color red but has
The second way to possess concepts is *through experience*. Suppose that a girl who has never seen pine trees before gets exposed to pine trees several hundred times throughout a sufficiently long time period. Likely, she would acquire an ability to recognize pine trees among other trees after a repetitive exposure to pine trees unless she has a defect in her perceptual ability. Even though she may not develop or acquire any particular term for it, there is a minimal way in which she is able to refer to pine trees as a kind insofar as she recognizes them as such. The recognition may be strengthened by a certain utility generated by her interaction with an environment. Suppose that she has a practical reason to collect pine cones. Her practical goal will be achieved more easily once she recognizes pine trees and her ability to recognize pine trees will be strengthened whenever she succeeds in looking for a pine tree with a pine cone. However, the utility or the practical purpose is not necessary for recognition. In other words, one can develop such an ability to recognize pine trees even without an explicit utility produced by recognizing pine trees, e.g. getting pine cones, but only with the purpose of recognizing pine trees among trees of other kinds. In fact, one does not even need a purpose to recognize pine trees. What enables one to visually recognize a particular type of trees is just a suitable number of visual exposures to this kind of tree. When the girl in the example develops such an ability to recognize pine trees, she also seems to get a concept of pine trees in at least two respects. First, she can sort out a random tree as it belongs to the pine tree kind with a proper rate of successful recognition. Second, she can call an instance of it at least with a private name intended to refer to the kind. For example, she can call it just “that tree” or “the tree I

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not seen the color before, he argues that all the written knowledge about the color red does not suffice for the condition under which one knows what it is like to see red. On the other hand, I just argue that an isolated individual like Mary, or a boy in my case, has conceptual knowledge about the red or oceans even though she/he has not acquainted with the object.
always see in a certain region of my neighbor forest” even if she neither officially names it nor learns what others call it.

Thirdly, one can acquire concepts through inference as well. This is the way a language user acquires more substantial concepts by means of the concepts already acquired in the first and the second way. By applying the rules of inference, one can derive new concepts. For example, consider the concept of infinity. It is entirely possible that one can directly acquire the concept of infinity in the books of a relevant subject. On the other hand, one can just derive the concept of infinity by contemplating on the opposite concept, i.e., the bound or the limit. What one can do is just to add a negation to the concept one already knows while one plays with it in the way like no-bound or no-limit. In this case, the person just uses a concept already stored and the negation rule in order to acquire a new concept. So, some concepts can certainly be acquired only through inferences from existing concepts.27

Now let me answer the question (1), whether it is necessary to have a concept in order to have a relevant experience.28 To apply a specific example, we can ask whether it is necessary to have a concept of pine trees in order to have a visual experience of seeing a pine tree. It is true that having a concept is not a sufficient condition for having a relevant higher-level perceptual experience. Namely, possessing a concept of pine trees does not automatically get one to have a high-level visual experience of a pine tree. When one acquires the concept through books, independently of any experience of the relevant kind,

27 I hope that the distinctions would not be read to indicate any ontological basis of concept itself. Theories which claim either a metaphysical, a perceptual, or a broadly empirical ground of concept is not presupposed in this distinction. What I focus on here is conditions under which a subject can be termed to have a relevant concept.

28 In Piatti (2017), she also argues that high-level perceptual experience is conceptual because it is necessary to have a relevant high-level property concept to represent the property.
one will not have an ability to immediately recognize pine trees and thus not a higher-level experience of seeing pine trees. However, the other way seems to hold: if one has a higher-level perceptual experience, one has a concept of the kind represented in the experience since one has not had that higher-level perceptual experience without having the concept. Insofar as one sees an object as a pine tree, one represents the object as having the abstract property of being a pine tree. In this case, one is in no way not having the concept of pine trees. Throughout the experience of being exposed to the same kind of objects, one (i) develops a disposition to represent that kind in one’s experience and (ii) acquires a relevant concept which refers to the kind. The repetitive exposures constitute one and the same process in which both (i) and (ii) are achieved at the same time. So, the answer is yes. While having a concept of an object doesn’t suffice for being able to experience it as the kind of object it is, concept possession is necessary for one to have that kind of higher-level perceptual experience. Even when one learns the concept of pine trees through the way of testimony prior to developing a disposition to do a higher-level perceptual representation of pine trees, one still develops the disposition through the repetitive exposure to actual instances of pine trees and one gets to have a richer concept of pine trees as a consequence.

At this point it will be helpful to have a brief look at the notion of perceptual learning and its characterizations. Perceptual learning is an umbrella term which refers to a repetitive experiential process that results in a long-lasting and sometimes irreversible change to the way one perceives. A cognitively penetrated perceptual experience, if there is such a thing, is definitely a case of perceptual learning since the perceptual change which results from cognitive penetration is made in the process of repetitive exposures to the
objects of the same kind. Virtually, the way we experience an object of a certain kind is changed not explicitly by possessing beliefs about the concept of the kind, but by accumulated experiences towards the same kind of objects. However, the learned perceptual experiences are still deemed to be penetrated by the beliefs about the concept because there is a proper structural link between the beliefs and learned experiences and the processes they acquired indeed overlap. I will spell out this point further in the next section by showing how the experience is going to be penetrated by a set of implicit beliefs.

What matters here is how I can answer people who think that the learned perceptual experiences are not higher-level perceptual experiences. The proponents of perceptual learning without cognitive penetration ultimately argue that there is no concept involved in the experiential change. The view implies that the experience of recognizing a certain object is not conceptual even in a minimal sense. If the experience were conceptual, it is just an experience in which one represents the kind linked to a concept, i.e., a higher-level perceptual experience. However, is it possible that one develops such a recognizing disposition but does not develop a relevant concept? If it is possible, there must be cases in which one does not gain a concept of a kind after repetitive exposures to that kind of object. It is of course possible when one is just blindly exposed to the objects. However, is it possible to have a recognizing disposition through such blind exposures? It seems not possible. At this point, I am not claiming that the concept acquired through experience induces a recognizing disposition. However, it is at least true that both the concept possession and the recognizing disposition are caused by repetitive non-blind exposures to the same kind of objects. There seems to be no case in which one is non-blindly exposed but either of them is missing. So, it is more likely that the concept possession is linked to
the recognizing disposition. In other words, the following two theses seem to be true: (1) In all cases where one develops a disposition to recognize a certain kind of object, one has a concept of the kind. (2) In all cases where one acquires the concept of a kind through experiences, one develops a disposition to recognize the kind. So, insofar as there is no case in which only a recognizing disposition is acquired without the acquisition of the concept of a relevant kind, perceptual learning can reasonably be considered as a process that results in the acquisition of a capacity or disposition to form a higher-level perceptual experience.29

To conclude, the content of an experience which one forms as a consequence of non-blind and repetitive exposures to the kind of object to which the experience is directed is conceptual----for the experience is comprised in the process through which one acquires a relevant concept of the kind.

3.2.2. Being Penetrated by Implicit Beliefs

In the previous section, I argued that the content of a higher-level perceptual experience is conceptual because the experience that represents a certain kind property is constituted in a process in which the subject acquires a concept of that kind minimally through relevant experiences. This conclusion may suffice to lead us to the claim that the experience is cognitively penetrated. When Pylyshyn (2009) brought up the idea of

29 Siegel (2006) addressed a case in which cognitive penetration takes place without a process of perceptual learning. The case involves how we can understand the alleged case of short-term cognitive penetration, seeing the fact that a neutral face looks angry when one is told that the person is angry in ahead. I will answer the worry in Chapter 4. As far as I analyze, this is not a case of short-term penetration but a case of automatic disambiguation whose rule is practiced through a sufficiently long period of time.
cognitive penetration, his target state characterized as impenetrable was early vision, a representational output at subpersonal level. However, as Macpherson points out in her (2012), in philosophy and psychology, the term describes the penetrability/impenetrability of perceptual experience. Those characterizations are well captured by Siegel (2012a) and Macpherson (2012) like the following:

If visual experience is cognitively penetrable, then it is nomologically possible for two subjects (or for one subject in different counterfactual circumstances, or at different times) to have visual experiences with different contents while seeing and attending to the same distal stimuli under the same external conditions, as a result of differences in other cognitive (including affective) states. (Siegel 2012a, pp. 205-206)

The phenomenal character of perceptual experience, that is, what it is like to undergo a perceptual experience, cannot be altered in certain ways in virtue of the content of states of the cognitive system - states such as thoughts, beliefs, desires, and other propositional attitudes - that one may possess. (Macpherson 2012, pp.27)

Although there are many different ways an experience is influenced by other mental states such as emotions, beliefs, and thoughts, when an experience is cognitively penetrated genuinely, it only includes the cases in which some cognitive elements constitutes the content of a certain type of experience whose content would have been different otherwise.30

Considering the case of seeing a pine tree, the experience is cognitively penetrated in a loose sense because the content is constituted by the minimal concept of pine trees, a

30 Indeed, there is another way a relevant mental state influences and alters the content of perceptual experiences. Unlike normal cases of cognitive penetration in which an experience penetrated by cognitive states gets to represent that penetrating states at least in part, in some cases, experiences are influenced by cognitive mental states but in the way its content is not directly relevant to the content of the penetrating states. The latter cases are usually called top-down influences. There is a debate about whether top-down influences are kind of cognitive penetration as well. (Pylyshyn 1999, Brogaard and Chomanski 2015, Firestone & Scholl 2015) What's obvious is that there are two different kinds of influences by cognitive states on perceptual experiences. For the purpose of this dissertation, I only focus on the first kind.
cognitive element, and the subject would have experienced it differently without acquiring the concept from experiences. On the other hand, the experience of seeing a pine tree is cognitively penetrated in a stronger sense as well: The experience of seeing a pine tree and the like is cognitively penetrated in the sense that the content is constituted by relevant doxastic states, i.e., beliefs. Although I will argue that a higher-level perceptual experience is penetrated by a set of relevant beliefs, of course, it does not mean that the beliefs are all explicit. If the beliefs about pine trees have to be explicit to influence the way a pine tree is experienced, the subject who sees a tree as a pine tree must have at least one explicit belief about the look of pine trees such as the belief that pine trees have needle-shaped leaves. However, in the original case where one learns to recognize a pine tree one does not seem to have one single explicit belief about pine trees. In other words, although one believes that pine trees have needle-shaped leaves, it does not come into one’s consciousness when one recognizes a pine tree. What one has is the minimal concept of pine trees as one learns the concept newly only through the repetitive experiences of seeing pine trees, and relevant implicit beliefs.

The idea is straightforward and simple. When one learns to see a tree as a pine tree, one could not possibly have any explicit beliefs about the identifying looks of pine trees, but one could have a set of implicit beliefs about the look of pine trees, which would suffice for identifying the kind of tree in question. The implicit beliefs are not immediately accessed by the subject in an explicit form. Just as beliefs about specific grammatical rules are not immediately accessed by a competent speaker of a language in an explicit form, so the implicit beliefs are not immediately accessed by the subject in an explicit form. For

31 In this sense, Bayne (2009) called it rather doxastic penetration than cognitive penetration.
example, although a competent English speaker has no difficulty in applying articles ahead of nouns in a sentence rightly, she is unlikely to address the general grammatical rule that governs the usage of articles, ‘a’, ‘an’, and ‘the’. In the same way, one who has a skilled disposition to recognize pine trees is deemed to have the implicit belief about a certain recognizing property of pine trees, e.g., the peculiar shape of their leaves, while not having the belief in an explicit form. Some might question why such implicit beliefs are called beliefs at all while lacking explicit forms. My answer is like this: By having an ability to see a tree as a pine tree, one does possess the concept of pine trees, and a conceptual link between the concept PINE TREES and other concepts of recognizing properties, and such conceptual links comprise implicit beliefs which end up penetrating the experience of seeing pine trees.

Also, to have the concept PINE TREES is to have other linked concepts under PINE TREES, and implicit beliefs show the link between PINE TREES and other concepts. In this sense, the loose sense and the strong sense in which higher-level perceptual experiences are cognitively penetrated are neatly correlated. A higher-level perceptual experience is penetrated by a concept and by a set of implicit beliefs. The implicit beliefs are possessed automatically, because the subject implicitly endorses the rule or principle that the concept applies to the kind of object in question.

3.2.3. Non-Inferentiality of Higher-Level Perceptual Experience

In 3.2.2., I argued that a higher-level perceptual experience is the result of cognitive penetration. In other words, the experience is either penetrated by the concept of the kind
property represented in the experience or it is penetrated by a set of implicit beliefs that represent the link between the target concept and other relevant concepts. (e.g. The belief that a PINE TREE is a kind of TREES.) In addition to the conclusion that higher-level perceptual representation is a consequence of cognitive penetration, I will argue that it is in no way a consequence of any inferential processes. Higher-level perceptual experiences are non-derivative in the way that they are not derived from any other mental states.

When I call a conscious state inferential, what I have in mind is that it is derived from another conscious state. Although there may be several ways a state is derived from another one, one of the most uncontroversial and obvious cases are when the content of a state follows logically from that of another state. For example, suppose that I have the belief that P1 and the belief that P2, and P2 logically follows from P1. In this case, the belief that P2 is inferential or derivative by virtue of the logical fact that P2 follows from P1. In this way, the state which is no-doubt inferential is (1) whose content is propositional so that the law of logic can be applied to it. Also, the state is (2) truth-apt, and thus it preserves truth value in an inferential process, and (3) the contents from which the content of a given individual state derived are freely accessible by the subject in the form of belief content. Of course, there can be some cases in which the content of a belief does not logically follow from the content of another one, but the belief is still said to follow from another one. For example, suppose that Jill is angry whenever she is hungry. When, I see Jill, I get to know that she is angry. So, I believe that Jill is angry. Based on this belief, I formed a belief that Jill must be hungry. Isn’t the latter belief inferential more or less, though it is not the result of a valid logical inference? This point is very true. Our intuition tells us that the belief that Jill must be hungry somewhat follows from the belief that Jill is
angry though it is not a valid kind of inference. What I want to focus is this: Even if the contents of the two beliefs are not in a logically valid inferential relation, there still exists a certain inferential relation between the contents which can be present only when the contents are propositional, so that they are possibly a subject to the application of the law of logic.

But what about perceptual states? Among those who think that perception has content, some argue that it has content in a strong sense. According to them a perceptual experience is alleged to have propositional content. However, in this case, there will be no standard to distinguish the perceptual experience from a relevant higher-level state, i.e., a belief. Suppose that I have perceptual belief that I see a table. It is at least partly derived from a perceptual experience of my seeing a table. If the content of the perceptual experience is propositional, the content will be described no other than ‘that I see a table’. Then, what will be the point that we insist to have an intermediary state of perception rather than just to claim that I have a non-intermediary and immediately given perceptual belief that I see a table? This is why I think that the content of perceptual experiences is less than propositional.

The same argument goes for higher-level perceptual states. Although I showed that the content of higher-level perceptual experiences is conceptual, it is less than propositional. Otherwise, there would not have been any significant distinction between a higher-level perceptual experience and the corresponding perceptual belief. (e.g. the experience of

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32 It is not that all who hold the strong content view argue that perceptual experience itself has propositional content. For example, in Siegel (2010), she characterizes the strong content view as what’ claiming that an experience has a proposition as a content iff necessarily, the subject of the experience bears a propositional attitude towards the proposition. But people like Glüer (2014) seems to think that the perceptual experience itself has a propositional content.

33 Alex Byrne (2009) argues that experience is just belief.
seeing a pine tree and the belief that I see a pine tree.) Some would argue against me by pointing out that I already showed that higher-level perceptual experiences, in terms of its content, are penetrated by a set of implicit beliefs. Doesn’t it mean that the experiences are already propositional? I want to make two points here. First, unlike perceptual beliefs which the subject describes them as being based on such and such perceptual experiences and other non-perceptual beliefs, perceptual experiences including higher-level ones, do not have such things. In other words, the subject does not have conscious access to the implicit beliefs that cognitively penetrate the perceptual experience. Nor does the subject have conscious access to the penetrative process itself. Insofar as inference is considered as a mental process of derivation which the subject can consciously access, any perceptual states including cognitively penetrated ones are non-inferential. Let me put it in more detail. Suppose that Jeanne believes that the weight of a sparrow is less than 3oz and this belief derives from the belief that the weight of sparrows is 0.47-1.5oz. The process of this inference is so obvious that Jeanne can reconstruct the inference with a free accessibility to the belief from which another belief derived. However, the case of cognitive penetration is entirely different. Even if there is a sort of constructible inferential link between the set of beliefs which affect the content of the modulated perceptual experience, a subject cannot access the set of beliefs freely because they are non-explicit. Since the subject cannot access the set of beliefs from which the modulated perceptual experience derived, she cannot access the whole inferential process at personal level. In other words, the process of cognitive penetration is characteristically subpersonal.34 At this point, we wonder if we

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34 The personal/subpersonal distinction was first made by Dennett (1969). When he termed something as subpersonal, he meant it as subdoxastic. For seeing the variety of the distinction’s usage and application, see Drayson (2012).
should take such a subpersonal inference to be a genuine inference. I would say that we should not, especially because it is too far away from our standard understanding of inference which is oriented to the explicit kind of inferences.

Also, I do not take cognitive penetration to be an inference because the process lacks the standard of rationality by its being subpersonal. Generally, a subject is said to be rational when she does something following good reasons. In this way, she is rational in believing that p only when she has a good reason to believe that p. In most cases, a belief is offered as a good reason by another belief. So, having a belief can be rational by having another belief as good reasons in the way that the subject acknowledges that another belief justifies the target belief and the target belief inferentially derives from another belief. However, a perceptual experience which is cognitively penetrated has nothing to do with rationality. Can anybody say that a subject rationally represents the property of being a pine tree in her high-level perceptual experience? Will there be an irrational way of perceptual representation? There is no doubt that the subject will not answer when she is asked if she has a good reason for that penetrated experience. Even if we find a truth-preserving relation and a concept transfer relation between the set of background beliefs and the experience penetrated by those beliefs, we cannot find a rational relation between the two in that the beliefs do not play the reasons for the penetrated perceptual experience. Therefore, I conclude that cognitive penetration would not count as a kind of inference. So, high-level perceptual experiences which are cognitively penetrated by background beliefs, are non-inferential in anyway.
3.3. Understanding as Experience with Conceptual Content

In this section, I will analyze the content of understanding experiences more in detail. The experience of understanding the meaning of an utterance, i.e., understanding experience, is conceptual by virtue of its nature because the meaning-properties that all the understanding experiences are supposed to represent are conceptual anyway. Thus, the conceptuality of understanding derives primarily from its inherent conceptuality even without considering that it is a higher-level perceptual experience. So, the idea that higher-level perceptual experiences are conceptual coheres with the idea that understanding is a kind of higher-level perceptual experience because it is already given that understanding is conceptual. The higher-level perception view can be a good answer to those who doubt how conceptual understanding can be a perceptual experience which is alleged to be non-conceptual. Although some may be hesitant to assume that understanding is a perceptual state since it is inherently conceptual, if there is such a thing as higher-level perceptual experience, no non-perceptuality follows from the conceptuality of understanding experience. There is a good possibility that understanding is a higher-level perceptual experience with conceptual content.

As I showed earlier, a higher-level perceptual experience is conceptual insofar as it represents a kind property. Specifically, when a subject represents a kind property in her conscious perceptual experience, she is skilled to recognize a given object of perceptual experience as belonging to the kind. And the skilled experience is formulated in the process of the conceptual acquisition from experiences. In other words, the subject is enabled to represent a kind property as a consequence of the conceptualization of the group of
experiences which are about the objects of the kind. Will this explanation directly be applied to the case of understanding as well?

The main idea is the same but the case of understanding is a bit more complicated than the case of general high-level perceptual experience. The upshot is how to sort out the type of the object of understanding as we sort out the kind of normal perceptual objects. In other words, which utterances belong to the same type of utterances and then the subject automatically reacts to whenever she faces the utterance type? Certainly, an utterance is not typified by the specific physical form of the utterance itself. Suppose that one is hearing the utterance, “Simon Evnine danced with Ironman”. If only the utterances with exactly the same physical form of the given utterance are regarded as the same type, it is unlikely that any subject has a non-inferential understanding of the utterance. For most people might not have heard the physical copy of this utterance before. Indeed one of the most intriguing mysteries of linguistic competence is that a competent user of a language can understand a random well-formed utterance which she has never heard before.35 Insofar as a competent speaker of English understands the utterance, even though she has never heard exactly the same physical copy of it, she might have heard many utterances which are similar enough to belong to the same kind. What I want to do is to characterize the representable kind in an understanding experience which enables the competent language user to have a proper understanding experience.

First and foremost, there is the possibility that a competent language user just understands the meaning of a term since she has been exposed to the same term many times. Those who have heard the name of Simon Evnine would immediately understand what the

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35 The characteristics of language as such is usually called *compositionality*. 
term ‘Simon Evnine’ means in the above utterance. It is the name of a professor and graduate director of philosophy department at the University of Miami now in 2019. It is the same for the term ‘danced with’ and ‘Ironman’. So, a subject is in a minimal condition under which she can represent the linguistic meaning of each three term separately in her non-inferential conscious experience. However, certainly, this is not all about what’s happening in understanding. When a hearer understands the utterance “Simon Evnine danced with Ironman”, he is not representing the meaning of each term separately. Rather, he is representing the meaning of a whole utterance in his conscious understanding experience. This means that the utterance itself is typified in some way though the way it is typified is not in accordance with the exact copy of its physical form.

Although it is neither the full-utterance form nor each individual term which is recognized as the kind unit of an utterance, the physical feature is still an important standard in type-recognition of an utterance. When a subject understands an utterance, she seems to see or hear it as meaning something. So, an utterance is recognized as belonging to the same type since it wears a distinctive physical form. What would be the common form which allows the subject to recognize the same type of utterances? I think that it is the form of predicates by sharing which many utterances belong to the same type. More specifically, with respect to the two random utterances, “Simon Evnine danced with Ironman” and “Anarkin danced with Luke”, they can be viewed as the utterances of the same type since they share the predicate ‘dance with’. There is a theoretical advantage we can get when we understand that an utterance is recognized as an instance of a certain type in accordance with the predicate through which the sentence form of the utterance is comprised.
The advantage is coming out of the fact that a predicate has been understood as a semantic function. To understand a function, we can understand the infinite possibility of input and output of the function. In other words, the possible sentence forms which share one and the same predicate, say, ‘dance with’, can be understood just by understanding the predicate and each input and output term. One does not need to have seen the final form of sentences before.

A more specific dynamics is like the following: When a hearer understands a spoken utterance “Simon Evnine danced with Ironman”, she recognizes it as belonging to the kind of utterances with the auditory sentence form of the ‘danced with’ predicate type. Also, she recognizes another individual term with a certain phonological character as belonging to a certain kind as well. Specifically, the hearer recognizes ‘Simon Evnine’ as the sound pattern that means Simon Evnine. And, she recognizes “Ironman” as the sound pattern that means Ironman. As a result, she gets to recognize “Simon Evnine danced with Ironman” as a complexity of types which comprised of three different semantic kinds. When she understands an utterance, she recognizes the utterance as a functional composite of multiple semantic kinds. The meaning-property that the subject represents in her understanding experience is understood to be such a complex semantic entity build up in a functional way from each partial semantic kind.

Again, among her past experiences which formulate subject’s immediate understanding of the utterance “Simon Evnine danced with Ironman”, there would be no understanding experience of exactly the same utterance. However, she has been enabled to understand the never heard utterance by having been exposed to other utterances which include its parts, especially the utterances with the same predicate. More specifically, her
ability to understand “Simon Evnine danced with Ironman” is partly from her past experiences of understanding the utterances like

“Mary danced with John,”
“Tom danced with Jerry,”
and “Anakin danced with Luke.”

Also, her ability to understand the utterance is partly from her past experiences of understanding the utterances like

“Ironman has the arc reactor on his heart,”
“Ironman wears a red and gold metal suit,”
“Ironman is a famous marvel hero.”

In sum, the inherently conceptual content of understanding experience is more specifically explained as what represents a complex-semantic kind. The experience of understanding an utterance is conceptualized from subject’s past experiences of understanding its part, specifically, other utterances which include the constituents of the given utterance. Here, what must not be ignored is that the represented semantic complex is not necessarily an ontological entity. Rather, it is a pure empirical entity made up from a set of conceptualizations of its part.
In what follows, I will address this point in more detail. The issue boils down to one single question: what is the meaning-property that is represented in one’s understanding experience?

3.4. What’s Represented: Ontological Status

There are two clear issues with respect to the meaning properties presented in experiences. First, we want to know how to characterize them. There are several relevant issues. For example, are the meaning properties propositional or just conceptual? Also, secondly, what would be the ontological status of the meaning properties? Is it a sort of natural kind or something else?

In the section 3.3, I already answered the first issue partially. I argued that the presented meaning properties are sort of meaning-complexes. The subject’s ability to represent a meaning-complex is coming out of her ability to represent a simple semantic entity, which she acquired through repetitive exposure to the usages of each linguistic part. The linguistic parts perceivable by the subjects include proper nouns, names, demonstratives, indexicals, predicates, verbs, and idiomatic expressions. One can represent the meaning property of an utterance which one never heard before since one can do it by understanding the utterance form as a kind of semantic function. No-inference is involved when the meaning properties of the utterance whose form has a functional structure are represented. No doubt, the meaning properties are conceptual. When a person learns a language, she is exposed to the usages of a term or an expression several times. In the beginning the uttered term and expression would sound a mere noise from which she may
derive a proper meaning explicitly. However, as she hears the same expression more and more times, she gets to understand the type of expression immediately and non-inferentially. The terms and expressions are getting conceptualized in the experience of the language user.

The point we must focus here is that the understanding experience is a result of subject’s own conceptualization of a certain auditory pattern or a certain visual pattern. The connection can be formulated in the following way more in detail:

- One can represent the meaning property of an utterance $u$ if and only if one conceptualizes a pattern of expression to which $u$ belongs after a long-term and repetitive exposures to the pattern.

This formulation can give a clue to how to analyze an understanding experience ontologically. It must be noted that there are two ways we analyze understanding experiences. First, we can say that when one understands $u$, one represents a semantic type of $u$ or a complex of semantic types that comprises $u$. Second, we can say that when one understands $u$, one just sees or hears it as if $u$ has a matching meaning property together with other visible and auditory properties of $u$. The first understanding presumes that we have an ability to grasp and represent the semantic type of an utterance at a perceptual level, whereas the second understanding just says that what we represent in our experience is the result of an artificial mental performance which is not necessarily relevant to a semantic type. The formulation, by providing a fundamental connection between subject’s conceptualization and her understanding experience, supports the second way of analysis. In other words, such an understanding experience does not reach to the experience of
representing natural kind but it is fundamentally relying on the way subject conceptualizes. So, what’s represented is initially an *empirical entity* made by the subject through a conceptualization.
Chapter 4. Understanding and Dogmatist Theory of Justification

4.1. Summary

As I showed in Chapter 3, the fact that a subject acquires non-inferential but conceptual experiences as a result of perceptual learning, or long-term cognitive penetration, gives significant merit to the dogmatist theory of perceptual knowledge according to which the fundamental justification of a perceptual knowledge falls on perceptual experiences. Higher-level perceptual experiences characterized as non-inferential and conceptual can give a proper justification for relevant perceptual beliefs. This version of dogmatism is free from a type of challenge according to which a perceptual experience is unable to support a relevant perceptual belief without a circulation.

4.2. Understanding and Dogmatist Theory of Justification

In chapter 3, I argued that the experience of understanding an arbitrary utterance \( u \) represents a complex meaning property which the subject recognizes \( u \) to have. Each pattern of sound or written letter in an uttered sentence form is recognized as belonging to a certain semantic kind; as a result, the subject gets to represent multiple semantic kinds all together as one functional entity with the fixed input and the output. There is an inherent gap between the semantic complex represented in the understanding of \( u \) and the meaning of \( u \) itself because the subject cannot access to speaker’s occasional intention without an explicit inference but the semantic complex is represented characteristically non-inferentially.
The understanding experience is cognitively penetrated by a set of beliefs about what the given expression type means. In subject’s long-term belief system, there might be many beliefs which penetrated her understanding experience but not the belief about the speaker’s occasional intention. For the belief is too recently acquired to penetrate a relevant perceptual experience. In what follows, I will show that the meaning-complex represented in an understanding experience is a consequence of the primary pragmatic process, not of the secondary one.

Although we call it the primary ‘pragmatic’ process, it is not a genuine pragmatic process. It is because the primary pragmatic process that involves disambiguation and semantic saturation takes place automatically at a subpersonal level, without taking into account the wider context.

Let me explain the way primary pragmatic process takes place. Consider a sentence, “she passed the bar”. When the sentence is uttered, a hearer is supposed to assign a referent of ‘she’ and disambiguate the word “the bar,” that is, determine whether it refers to the bar exam or a place for selling alcohol beverages. When the utterance is made during a conversation in which the utterer is talking about Michelle Obama and her bibliography, the utterance likely means that Michelle Obama passed the bar exam unless she intended to convey something interesting about a bar in the “pub” sense that she passed. This process of saturation and disambiguation happens automatically and non-inferentially, so that a subject is not required to make an inference. If it were an inference, there must have been intermediary semantic items represented in the experience of understanding and the meaning complex would have been derived from them. However, no such thing can be tracked introspectively. As I pointed out earlier, any inferential process must be
consciously accessible. Unless such intermediary items show up in consciousness, the semantic complex that partly consists of the Michelle Obama and the bar exam is given non-inferentially.

Just as it is due to long-term cognitive penetration that the subject is able to represent meaning-complexes in her experience, it is a consequence of cognitive penetration as well that the pronoun “she” is saturated by Michelle Obama, given the context of utterance, and that “the bar” gets a fixed meaning in the conversational context. Then, we need to specify exactly which beliefs penetrated the experience, so that it gets to represent a meaning complex that is already saturated and disambiguated. One may think that they are a set of contextual beliefs that “she” refers to Michelle Obama in the context of conversation and “the bar” means “the bar exam” in the very context of conversation. However, as I already argued, beliefs must be stored in subject’s long-term cognitive system, in either an explicit or an implicit form. Beliefs about the occurrent context of conversation do not constitute such long-term storage of beliefs. It is just nonsense to say that the subject has known that “she” refers to Michelle Obama in the context of the conversation made just a minute ahead. So, what penetrates the understanding experience is certainly not the beliefs about the conversational context. But then, what made the immediate and non-inferential saturation and disambiguation possible if it is not due to occurrent beliefs about the context? The penetrating beliefs, if there are such things, must have been stored in one’s cognitive system for a long-enough duration. The beliefs must be something (i) context neutral and (ii) what can give guidelines through which the subject assigns and fixes meanings for indexical and ambiguous terms.
One may still argue that what fixes the referent of indexical and ambiguous terms are just beliefs about the context so that the meaning-complex minimally derived from saturation and disambiguation is not perceptually and immediately given but inferentially given. However, first and foremost, there is no introspective evidence that it is inferentially derived. No intermediary items through which the fixed meanings are inferred are present in our consciousness. Second, if the primary pragmatic process is an inference from the beliefs about the context, there is no standard to draw a clear distinction between the primary and the secondary pragmatic process. It is no doubt that the primary pragmatic process which includes saturation and disambiguation is non-inferential. We need to identify and characterize the kinds of beliefs that enable the primary pragmatic process.

The kind of belief which comes to my knowledge as what is responsible for primary pragmatic process is a sort of belief about rules, not about specific instances. In other words, it can be beliefs about general rules of saturation and disambiguation instead of specific beliefs of what “she” refers to and what “the bar” non-ambiguously means. In what follows, I will specify what beliefs about rules are relevant in the process of saturation and disambiguation. First and foremost, the beliefs that are supposed to penetrate understanding experiences do not need to be explicit. When one fills out “she” with its referent and represents it in one’s experience immediately, one just does it automatically so that it is more likely that one is not aware of what belief resulted in the saturation. In other words, the subject herself is not aware of whether one’s perceptual experience is influenced by the belief that “she” refers to Michelle Obama, or another belief. One simply doesn’t have conscious access to the belief which is responsible for the content of the understanding.

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36 See Recanati (2002)
The contextual belief that “she” refers to Michelle Obama is no doubt an explicit one found at least at a later stage of the pragmatic process. During the secondary pragmatic process, one is well aware of the fact that “she” refers to Michelle Obama in the speaker and hearer’s conversational context. So, the subject can neatly make an inferential link between the fact and her semantic belief that “She passed the bar” means that Michelle Obama passed the bar exam. However, this inferential link is not found introspectively during the primary pragmatic process. So, it is either the case that the same belief, that “she” refers to Michelle Obama in the context, works in an implicit form during the process or it is the case that another implicit belief has an impact on the content of the understanding experience. What I argue is that it is mechanical rules which fix the referent of indexicals and the meaning of ambiguous terms. In chapter 1, I argued that the subject points to so-called quasi-context in order to fix the meaning of ambiguous terms. Such quasi-contexts consist of either the utterances precedent to the very utterance, or subject’s linguistic habit that what topics she talks frequently. Considering the case in which the second kind of quasi-context is relevant to the issue gets clearer. Suppose that there is no context of conversation but the utterance that she passed the bar is made abruptly. A hearer can question by herself what the subject means by ‘she’ in the situation because she has no contextual resources to fill in the indexical term. However, with respect to the ambiguous term “the bar”, the subject is likely to represent one fixed meaning in her experience, either the place where alcohol is served or the legal bar exam, based on which term she is more familiar with in her everyday usage. In this way, even when there is no explicit conversational context, the subject is ready to disambiguate at some point. So, it is simply not true that the subject must hold the belief that “the bar” means the bar exam in the
context in question in order to disambiguate the concept the bar required for her to have an understanding experience. Although the case of saturation is a bit different, the fact that contextual belief is not applied in the process of disambiguation can be applied as well. In other words, some other beliefs than contextual beliefs have an impact on the content of understanding experience. As I said that it is the beliefs about mechanical rules of saturation and disambiguation. More in detail, the rule that fixes the referent of “she” during the primary pragmatic process can be specified in the following way:

PP(she): “she” in an utterance refers to what is meant by a female name or a female pronoun which occurs (i) within the utterance precedently or in another preceding utterance, and (ii) in the closest proximity to the very occurrence of “she”.

It seems true that if “she” is non-ambiguously refers to Michelle Obama, there might not be any female name occurs between “Michelle” and “she”. Considering the following passage:

(i) Since Michelle Obama decided to become a lawyer, she prepared the bar exam very hard. Her mother supported all the processes devotedly.* And, she passed the bar finally.

Noticeably, a hearer feels a bit odd when she hears the whole passage. She may think that the last utterance means that Michelle Obama passed the bar exam, considering the full context of the passage. However, she would feel odd because she tends to fill in the indexical ‘she’ in the last utterance with what’s referred by the female term located in the closest proximity. In this case, the female term is “her mother”. It is not difficult to imagine that she experiences a sort of conscious and quick switch in understanding the meaning of the last utterance. It is likely that she understands it to mean that Michelle’s
mother passed the bar at first but quickly fixes her understanding, say, “it is not her mother. It is Michelle who passed the bar” Such a temporary misunderstanding is so quick that some may not recognize but it is well captured by the odd feeling of the hearer and her rational judgment that the passage is *ill-organized*. All the situations show an inherent gap between the content of immediate understanding and the content of a higher-level cognitive understanding. The content of immediate understanding is fixed not by the full context of the conversation but by mechanical rules of saturation, and disambiguation as well. The following might be a rule of disambiguation.

**PP(the bar)**: During the primary pragmatic process, an occurrence of the ambiguous term “the bar” is disambiguated and recognized as to mean either the place where alcoholic beverages are served or the bar exam, in accordance with the meaning of the same term that occurs precedently in its closest proximity during the same passage or conversation, or in accordance with another expression which is conceptually relevant to the term when the same expression is absent from the passage precedently.

Consider the following passages.

(ii) Since Michelle Obama wanted to become a lawyer, she prepared the bar very hard. And, she passed the bar finally.
(ii)’ Michelle planned to hang out with her friend at a bar in downtown but she was unable to find the location. She passed the bar finally. And, she became a lawyer.

Considering the whole passage (ii), the term “the bar” in the second utterance means what “the bar” in the first utterance means, according to PP(the bar). Once the meaning of “the bar” in the first utterance is fixed, the subject represents the meaning automatically in her understanding when she faces the second instance of “the bar”.
The fixed meaning of the first occurrence of “the bar” is likely to be a consequence of secondary pragmatic process. For the primary and the secondary pragmatic process occurs almost simultaneously. The point is this: when we represent the meaning of the second occurrence of “the bar” during primary pragmatic process, it is just an automatic representation of pre-fixed meaning of “the bar” in the first utterance. So, the representation itself is not what is given through the secondary pragmatic process.

The fact that we make such an automatic representation at the first level of understanding is clearer with the passage (ii)’. While reading the full passage in order, one naturally understands the second occurrence of “the bar” as a place where alcohol is served. However, when we read up to the end of the passage, it gets confusing. Considering the context of conversation or passage, it is not fixed whether “the bar” in the second utterance means the place alcohol served or the bar exam. When we add a further decisive context in order to fix its meaning as the bar exam, the gap between the primary understanding and the secondary understanding gets clearer. Any competent speakers will judge that the passage is ill-organized in a way that it brings about a gap between understandings at different levels of pragmatic process. The case shows that one has a primary system of understanding through which one represents the meaning of an utterance following long-term beliefs of rules according to which one fixes the meaning automatically, without depending on the specific context of conversation.

However, some would still be skeptical, pointing out that the rule of automatic representation that I addressed does not cover all cases. Specifically, when a subject is just regarded as representing what a previous occurrence of the same term means, how can we represent the meaning of the first occurrence of the term? Consider the part of (ii).
(iii) Since Michelle Obama wanted to become a lawyer, she prepared the bar very hard.

With the given passage (iii), the subject neatly disambiguates the meaning of “the bar” during the primary pragmatic process. Again, the point is what enables her to disambiguate at the level of primary understanding. At least it need not be the belief that “the bar” means the bar exam in the conversational context. The disambiguation can be done based on long-term beliefs that determine a conceptual link between ‘the bar’ and any term that has a significant conceptual link with ‘the bar’ and that occurs precedently in the closest proximity. In this case, the meaning of “the bar” is fixed as the bar exam due to the conceptual link between the bar exam and the term ‘a lawyer’.

To summarize, at least two kinds of beliefs are relevant to the disambiguation of an ambiguous term during the primary pragmatic process. The first belief is about a practical rule of disambiguation according to which an ambiguous term means just what the same term of another occurrence means in the closest proximity means. The rule is entirely isolated from any occasional beliefs of the context of conversation. The second belief is also about practical rule of disambiguation according to which the meaning of an ambiguous term is fixed depending on which one is conceptually linked to another term that occurs precedently within the passage. Both beliefs that guide the practice of disambiguation is in no way explicit, so that they neatly fit into the view according to which (primary) understanding and disambiguation is done through cognitive penetration, not an explicit inference.

So far, I’ve shown that understanding experience as a high-level perceptual experience is established through a long-term cognitive penetration since no explicit beliefs
are needed when the subject represents the meaning of indexical terms and ambiguous terms in her understanding experiences. In the next section, I will show what kind of epistemic roles the cognitively penetrated experiences play, when the belief about what the given utterance means is made.

4.3. Dogmatic Justification of Perceptual Belief

As I showed in chapter 3, an understanding experience as a kind of higher-level perceptual experiences, has conceptual content. It is a consequence of long-term cognitive penetration by stored concepts and implicit beliefs about the conceptual links among them, also by a mechanical rule according to which the subject assigns the referent of an indexical term without considering the conversational context. The way such beliefs influence experience is a kind of long-term cognitive penetration, not a mere top-down influence under which a belief changes the way we experience things more or less instantaneously but it does not itself constitute the content of the experience we have. In what follows, I will argue that the high-level perceptual experiences, as they are conceptualized, serve as justifiers for perceptual beliefs. Also, the same justifying relationship applies to an understanding experience and a belief about what is said.

There are several different ways a belief is justified. Some beliefs are justified by other beliefs and some other beliefs are justified by themselves. In both cases, the beliefs are justified by the truth of their contents. When the belief that p is justified only by the belief that q, p follows from q, necessarily. In the same way, when the belief that r is justified by itself, r is necessarily true. Since one can trace back to the source of justification
in accordance with the logical chain of derivation, those who wants to argue for dogmatism tends to rely on the bearer of non-derivative truth to cut the possible infinite regress. That’s why beliefs about necessary truth are designated as foundational belief.

So, considering a perceptual belief, we have to ask what justifies the belief. Is it justified by another belief or by a perceptual experience? It is easy to say that a perceptual belief derives from a relevant perceptual experience. For example, my belief that I see a red ball in the middle of this room seems to be derived from my experience of seeing a red ball. However, although it makes sense that the experience caused me to have the belief, it is still not clear whether the experience justifies my belief since the justificatory relationship holds between beliefs in most cases.

Suppose for argument’s sake that all the beliefs are either justified by other beliefs or justified in and of themselves. Then, how can we spell out what justifies the belief that I see a red ball? Since the perceptual belief is not justified by itself, there would be a set of beliefs through which the perceptual belief is justified. In this case, we can construct an argument in which the content of the perceptual belief logically follows from the content of other beliefs. Let me specify the argument in the following:

P1. The spherical objects kicked, hit or thrown in the games are balls.

P2. The color which looks such and such phenomenally is red.

P3. I see a spherical object kicked in a game and the object looks such and such phenomenally.

C. Therefore, I see a red ball.
In the argument, C follows from P1, P2 and P3. Therefore, when it comes to the perceptual belief that C, the belief is justified conjointly by the belief that P1, the belief that P2 and the belief that P3. P1 is necessarily true because when a spherical object is kicked, hit or thrown, it is nothing other than balls. P2 is necessarily true as well. For it is just a characterization of the color red which has a distinctive phenomenological character. One may think that P3 is another form of perceptual belief. Indeed, without the belief that P1 and the belief that P2, one might derive P3 from any visual experience that one gets from the environment. So, it will be question begging again whether a visual belief can be justified by a visual experience alone. To answer this question, let me just suppose for now that P3 is not derived by any other beliefs. The point is that one must have the belief that P1 and the belief that P2 in order to have the belief that C. In other words, one must have the concept of red and ball which are illustrated in the belief that P1 and the belief that P2. In this model of justification, the belief that C is partly derived by P1 and P2 which can provide infallible grounds for C at the very bottom of justification pyramid.

However, we still need to inquire about the nature of the belief that P3 and what kind of roles the perceptual experiences play in justifying perceptual beliefs. Recall that a higher-level perceptual experience which represents a kind property K is penetrated by implicit beliefs about K. Then, we can spell out the relationship between higher-level perceptual experiences and the perceptual beliefs derived from it in the following way:

Experience1: Seeing an object as a red ball
Belief1: I see a red ball.
Since experience 1 is a higher-level perceptual experience for it to represent the kind properties of being red and being a ball, it is already penetrated by a set of beliefs. Both the belief that P1 and the belief that P2 penetrate experience 1. Therefore, P1 and P2 are already embodied in experience 1. Having experience 1, one is already believing that P1 and P2. So, the belief 1 is well-grounded in the belief system. The experience 1 is a piece of evidence that one is justified to have the belief 1, by the belief that P1 and the belief that P2. At this point, some may ask whether experience 1 is also penetrated by the belief that P3. I think it is not because the belief that P3 is an occasional belief that does not penetrate and alter a perceptual experience. What I want to argue is that C is not actually acquired through either implicit or explicit inferential process described in the argumentative form above. So, the premise P3 does not have an active role in deriving the belief 1. The belief 1 is derived from the experience 1 only but in the experience 1 the belief that P1 and the belief that P2 are embodied through the process of cognitive penetration. The experience 1 justifies the belief 1 because it is conceptualized by the belief that P1 and the belief that P2.

This idea of justification must be generalized to the perceptual belief in general since it is not only about perceptual beliefs derived from higher-level perceptual experiences. Although not all the perceptual experiences are higher-level perceptual experiences in a technical sense, all perceptual experiences are conceptualized more or less. My idea is that there is no such a thing as an intact perceptual experience. Indeed, there is a long historical debate as to this issue.37 I will not answer all the worries presented by the supporters of pure non-conceptualized perceptual experiences. I just want to give a decisive

answer to a central worry according to which one will not make a conceptual update followed by new evidence if one’s evidence is already conceptualized. It is something like this. If an experience is given in the form like the experience 1, one can in no way have another belief than the belief 1 even if the belief 1 is false. For example, what one sees is actually an unknown spherical object possibly but one cannot form a true belief properly based on the visual experience since one sees it as a ball. It seems that one and others do not have any chance to develop a new concept which refers to that unknown spherical object since one and others just see it as a ball. However, this just understands the level of conceptualization in a too simplified way. One will see the object as a ball insofar as one sees it as a ball. This does not mean that one has no possibility to see it any other way. While one sees an object as a ball, one still recognizes its specific characteristics. One sees it as a red ball or as a rubber-made ball, for example. When some properties that the unknown spherical object have are not shared by other balls, one will recognize the difference between the unknown spherical object and other balls after repetitive exposures to the spherical object. For example, one can recognize that the unknown spherical object is in fact a living alien which looks exactly like a ball. Once one recognizes the object as an alien-looking-like-ball, one is ready to see it as an alien-looking-like-ball. It could sound a bit odd that one makes such a quick and immediate phenomenal change while one’s experience is not subject to short-term cognitive penetration. However, it does not mean that one just begins to see a ball differently. It just means that one starts to see an object as what’s different than a ball while she had been illusioned to see it as a ball. There is an old Chinese tale in which a person mistakenly sees a rock as a tiger and tries to kill it. When the person gets aware that it is a rock not a tiger, his experience just gets back to normal
because he might have seen it as a rock under the condition one can see all the distinctive properties of the rock. The same goes for the alien-looking-like-ball case. If the subject had been in a condition in which she sees all the unique properties not shared by the balls, she would have seen something other than balls though she would not know what to call it. This means that the subject already has an ability to see it differently. So, there is no real quick and immediate phenomenal change followed by a conceptual development.

Also, when one develops a new concept like this, one does not need to have a pure non-conceptualized experience. Once the difference is recognized, the experience is already conceptualized another way. The experience would be such a thing as seeing something similar to but different from a ball. Once an experience is conceptualized, it can play the role of justifying evidence for a perceptual belief as I showed earlier. We have a perceptual belief since we already have beliefs of concepts which constitute the content of the belief, in our cognitive system.

Although I try to make a generalized claim that all perceptual experiences are cognitively penetrated and thus conceptualized, I can also go with a more qualified claim for the rest of this chapter. At least, a higher-level perceptual experience HPEa can serve as evidence for a perceptual belief PBa which is alleged to derive from the experience because the set of (implicit) beliefs which penetrate the higher-level perceptual experience can serve as justifying beliefs for the belief PBa. Also, any perceptual experiences that serve as evidence for perceptual beliefs are cognitively penetrated and thus conceptualized. Otherwise, the justifying relationship would not be spelled out. With the structure of cognitive penetrated perceptual experiences, perceptual beliefs are firmly grounded in a dogmatist theory of justification. This view has some theoretical advantages. First, by
taking the idea of cognitively or doxastically penetrated perceptual experiences as evidence, we do not need to assume a justificatory relationship between the states with quite different structures: perception and belief. A perceptual belief is, with respect to the matter of justification, grounded in other beliefs the way that they are embodied in perceptual evidence. This view provides a proper answer to whether a cognitively penetrated experience can justify a relevant belief without circulation. I will shortly address this possible circulation problem in the following:

When I have a pre-judgment that my friend John is angry now, the judgment or the belief is enough to make me see his face as angry. The perceptual experience as evidence is contaminated but it leads me to believe that John is angry based on the experience. Isn’t it a clear case in which the evidence is biased by pre-existing beliefs rather than one in which the evidence properly justifies those beliefs?38 I would answer that the beliefs that penetrate and alter perceptual experiences are not the same one that we get to have as perceptual beliefs. First and foremost, the immediate judgment that John is angry is not allowed to penetrate and alter the way one experiences John because no beliefs and judgments can do that in a short-term. If the way one experiences John is altered, it is due to another effect than cognitive penetration or due to a penetration by another long-term beliefs. If not due to cognitive penetration, it might be due to top-down influence. An experience can be altered under a top-down influence when a higher-state influences the way the subject experiences. For example, the sky can look gray because the subject feels depressed. Although the way the subject sees the sky has been altered because of another state, feeling depressed, it is not a consequence of cognitive penetration because the altered

38 The worry is given by Siegel (2006) and Siegel (2012a). Chudnoff (forthcoming) contends that such an alleged epistemic downgrading does not take place.
experience itself does not represent the depressed feeling. She can only infer the fact that she feels depressed through the way she experiences the color of the sky. This is a mere top-down influence distinguished from cognitive penetration. On the other hand, any cognitively penetrated experiences represent the beliefs responsible for the alteration of perceptual experiences. The case of angry-looking-John is different from the case above. The experience represents some cognitive items which are responsible for the way one experiences John. However, it does not directly follow that the cognitive item is the very belief that John is angry. Rather, I will argue that the beliefs through which one is able to represent cognitive items such as being angry are somewhat long-term implicit beliefs, not a just-given-belief about the emotional status of John.

When looking at John’s face, one will find that his facial expression is so ambiguous that it can be read another way. The structure of the problem is analogous to how to experience an ambiguous term and how the process of disambiguation takes place. I already argued that the belief of an automatic disambiguating rule determines the way we experience the term, not the contextual belief that the term means X does. In the same way, there might be an automatic rule to determine whether a particular pattern of facial look expresses fear or sadness. We can describe and analyze such an automatic disambiguation rule of facial expression through an example from a famous psychological experiment according to which the same face looks to express different emotions depending on which facial look is located next to the original face with ambiguity.\(^3\) For example, when the photo of the face was located next to an explicitly sad face, the original face looked to express the feeling of fear rather than that of sadness. In contrast, when it was located next

\(^3\) Butler, Oruc et al. (2008)
to a relatively fearful face, the face looked rather sad. Such a way the subject experiences an ambiguous figure as one fixed figure depending on what’s next to the figure is called adaptation. According to Block (2014), adaptation involves both an inference from low-level properties and immediate recognition from high-level properties. He agrees that when the face is upright, it is more likely that high-level attributives specific to faces involve adaptation. As a consequence, one recognizes a certain ambiguous face as expressing a non-ambiguous emotion, by representing the non-ambiguous emotion in one’s experience.

When it comes to the cases of adaptation in which high-level attributives are involved, the recognizing experiences are consequences of cognitive penetration since the subject represents the kind of emotions and one must have the concepts of the emotional kind to represent them.

What I argue is that we don’t recognize facial expressions as a result of short-term cognitive penetration because short-term cognitive penetration is not possible. In this sense, my prejudgment that John is angry must not affect my experience of his facial expression at all. If any belief influenced how I experience John’s facial expression, it would need to be stored in my memory for a sufficiently long period of time.

The connection between the prejudgment on John’s emotional status and the experience that I have is not properly made. Although the way I see John is influenced by certain beliefs it is not by an occasionally given belief such that John is angry now. Rather, the way I see John is a consequence of formal disambiguation. Let us look at the case of the prejudgment again. This is a bit different from the case in the experiment because the subject judges that John is angry even when there’s no other happy faces within his look. The disambiguation rule works a bit complicated here. Considering the conditions to which
the rule is applied, first, the given facial expression the subject is supposed to disambiguate must be ambiguous enough, for example 60% sadness and 40% happiness, to express contrasting facial expressions depending on the context. If John’s face looked obviously happy, the subject would not have seen him as angry. If it did, the subject must have been confused since what she was told about John’s feelings and what she sees in fact do not match. Such a possible confusion shows again that a short-term belief does not penetrate a perceptual experience. The role of a short-term belief in this case is just a trigger for a disambiguation. In the context, one is supposed to determine how John is feeling and one is likely to choose a particular type of emotion depending on the rich context which one is surrounded. In this case, since one is already representing the property of being angry in one’s knowledge that John is angry, one is more likely to represent the property of being angry when one is required to determine whether a given face is expressing anger or another rival emotion. That is the reason why a neutral face looks angry to some degree in this context. If one is justified to believe that John is angry, the source of justification traces back to what she heard from another, not to perceptual experience. And, it is not a problem for one to believe that John is angry based on testimony. The belief that John is angry is well justified by the testimony from another. When the facial look is obviously different from what she heard, she may react in one of two ways. She would react either that John is angry but hiding it under a happy face, or that John is happy, and thus what the subject heard from another is false. Which one between the testimony and the facial look the subject would take as evidence is determined by which one is evidentially more reliable. For example, if the source of the testimony is reliable but the subject frequently fails to recognize the feeling of another, the belief will be based more on what one was testified.
To summarize, there is no genuine circulation when a cognitively penetrated experience serves as evidence for a perceptual belief. To show this, I replied to a central worry according to which the way the subject experiences the facial expressions of other people is constitutively influenced by prejudgments, and thus taking the experiences as evidence for the belief whose content is the same as that of the prejudgment is circular. When a higher-level perceptual experience justifies a perceptual belief, the ultimate justification is attributed to a set of long-term beliefs which define what the concepts, a constitutive part of the content of the perceptual experience, mean.

In what follows, I will look at how the structure of justification is applied to the case of understanding and the nature of beliefs about what a given utterance means.

4.4. Belief of What an Utterance Means

Before I start, I want to make one thing clear. The belief of what’s understood is different from the belief of what’s said. Although the two beliefs routinely share their contents, they do not always match. I have seen several cases in which the subject misunderstands what an utterance means but ends up having a true belief about what it means. For example, when an utterer organizes a passage not in accordance with the rules through which passage is properly organized, the hearer misunderstands, failing to disambiguate and fill in indexicals properly. Thus, the belief involuntarily derived from the automatic understanding is conceptually distinct from the belief about what is actually said by the same utterance. Comparing the two beliefs, although the first belief is based solely on the understanding experience, the second belief is based on a conscious inference from
a contextual belief about what the ambiguous or indexical terms refer to in the given conversational context. So, there are indeed dualistic systems through which a hearer forms a belief of what the given utterance means. Let me spell out this point with examples.

Suppose that one hears,

(i) Michelle Obama prepared the bar exam very hard. And, she passed the bar finally.

Indeed, the utterance (i) is well organized and then no odd feeling is followed while one hears it. So, the hearer would get to believe that the utterance (i) means that Michelle Obama prepared the bar exam very hard, and then Michelle Obama passed the bar finally. The belief is supported by one’s understanding experience representing (i)’s meaning property which coheres to what (i) means. In the understanding experience of (i), one has ‘Michelle Obama’ filled in the location of the demonstrative ‘she’ in accordance with the automatic saturation rule. One gets to have a belief derived from that understanding experience. I call this belief, Belief-E. Also, in a further process of understanding, one may deliberately consider the knowledge on the context of conversation that the demonstrative ‘she’ in the utterance (i) refers to Michelle Obama. Based on the belief, one also gets to the belief of what (i) means. I call this belief, Belief-C. It is not difficult to recognize that the content of Belief-E and Belief-C is the same. It is mainly because the referent of ‘she’ is recognized as the same individual both in the automatic saturation process and in the inferential saturation process based on the context. However, the fact that their content is identical is not enough to assume that there is only one belief and only one belief formation process. It gets clearer when we look at a case in which the content of Belief-E and Belief-C does not match. Consider the following case.
(ii) Michelle Obama prepared the bar exam very hard. Her mother supported all the processes devotedly.* And, she passed the bar finally.

A competent English speaker would feel a bit odd for a quick moment when she hears the utterance (ii). The odd feeling comes out of a confusion that whether ‘she’ in the third part of this utterance refers to Michelle or her mother. Of course, the confusion would not last long because it is so obvious that ‘she’ means Michelle when she considers the whole meaning of the passage. However, one would complain that the whole passage is not well-organized because it is not organized in the way it does not make any confusion. Such a room for confusion or an odd feeling is well-explained through the mismatch between the content of Belief-E and Belief-C towards (ii). To specify it, it is likely that ‘she’ refers to Michelle’s mother in Belief-E whereas it refers to Michelle in Belief-C. Chronologically, Belief-C comes a bit later than Belief-E always because Belief-E derives from an inferential belief while Belief-E derives from an immediately given experience. When Belief-C is different from Belief-B in terms of its content, it is sufficient for the subject to feel odd or to complain. Such an explicit phenomenal transition in grasping the meaning of (ii) shows that there are two separate belief-forming systems—one based on understanding experience only and the other based on knowledge about the conversational context. When the beliefs from the two separate systems do not match, the belief based on the second system is more likely to be a true belief of what the utterance means. In other words, the result of the secondary system always takes priority over the primary system of the pragmatic belief. However, if it is true that the secondary system always has a priority, the primary system seems functionally null. Why do we have such a redundant system?
There is a clear answer to this curiosity. It might be for a quick processing of a patterned stimulus just as a higher-level perceptual representation is a consequence of a patterned stimulus, i.e., repetitive perceptual exposures to the same kind of objects. In general, human perceptual and cognitive system develops a patterned response to a patterned stimulus, in order to respond to future stimuli more quickly and efficiently. More specifically, given an utterance which is more or less patterned by semantic and pragmatic rules, one’s quick response system is activated and it yields an understanding as an output. By having this system, one can answer the utterance more quickly, and perform an action guided by the utterance more quickly. This is the way the subject interacts with the environment of conversation. However, since the system is not 100% reliable as far as it is solely mechanical, it is always supported by the secondary system. The secondary system works to confirm whether the output of the primary system is true. The duality of belief-forming system is also found in the case of a normal perception. There’s a standard case of illusion that one sees a straight stick bent in water. One sees the stick as bent and forms a belief of what one sees but one’s beliefs about the straightness of the stick and scientific fact about the way that water can generate an illusion immediately give rise to a different but true belief that the stick is straight. If anybody feels that such a non-standard case is more common in understanding than in normal perception, it is due to the artificiality of the utterance which is given as a perceptual stimulus to the subject. Although competent language users tend to follow the rule of conversation in making utterances, the attempt is not always perfect. The utterances are ill-organized many times and essential parts are missing frequently. This is why the deliberate belief forming system (the secondary system)
is more frequently utilized when forming the correct belief of what an utterance means than when forming the correct belief of what one sees and hears is.

So far, I argued that a higher-level perceptual experience of understanding an utterance serves as evidence for the belief of what the utterance means; but ultimate justification depends on beliefs presupposed in the conversational context of conversation. The two systems of belief-formation guide the way we understand an utterance and the world in general.

There is an additional point I want to make with respect to the belief of what an utterance means. This is mainly from Grice’s distinction between what is said and what is implicated. (Grice 1975) Grice focuses on cases in which the speaker, uttering U, wants to mean something other than what U normally means. Grasping the implicature of an utterance is done by an inferential process in which the hearer recognizes the fact that the speaker wants to convey a non-conventional meaning through her utterance. (Usually, the hearer recognizes such a non-conventional intention of the speaker due to speaker’s explicit violation of conversational maxims.) Let me spell out what exactly happens in each step of understanding an utterance u which is given by the speaker to convey a non-standard meaning.

Suppose that Jerry brought Cindy a restaurant. He liked it a lot but Cindy hated it. Cindy wanted to convey what she thinks about the quality of the food served in the restaurant without agitating him. So, Cindy said, “I hope the main chef would be off when we come back to the restaurant on the other day.”

When Jerry hears what Cindy said, he almost immediately gets what she wants to say that *the food is very bad and she will never come back to this restaurant again*, unless
he has some difficulty in understanding a conversation. However, to the proper grasp of what’s implicated by her utterance, Jerry experiences several steps of understanding. First, he grasps what’s literally meant by the utterance form through two separate processes I spelled out above. An immediate understanding experience pops in his head when he hears it and forms Belief-E. Shortly later, he forms Belief-C, considering some minimal facts about the context such as what ‘we’ means in this context of conversation. At the levels, Jerry just grasps what the utterance form literally means. Namely, he believes that Cindy hopes that the main chef would be off when Cindy and Jerry come back to the restaurant on the other day. A third process of understanding takes place since Jerry property recognizes that what she utters does not point to what they want to talk directly—the quality of food. Being motivated by such an intentional violation of conversational maxim, Jerry makes another inference that Cindy implicated that the food is very bad and she won’t revisit the restaurant. To the full grasp of the implicature, Jerry makes two inferences. One is an inference of literal meaning based on the knowledge of minimal contextual information which is used for saturation and disambiguation. The other is an inference of implicated meaning based on the knowledge of a wider contextual information through which Jerry can deliberate what Cindy wants to convey non-standardly. What’s interesting is that all the inferences are made involuntarily. The subject cannot choose whether he grasps what’s implicated or not. Insofar as he understands the way to communicate, he just immediately gets what the speaker wants to say non-standardly. The fact that he can make a joke, pretending not to understand what Cindy wants to convey, saying, “he’ll not be here if we revisit this restaurant in two months” shows that the transition from literal understanding to the grasp of what’s implicated takes place in the realm of consciousness.
In this way, there are several different ways a belief of what an utterance means can be justified. An understanding experience solely justifies what the given utterance means as evidence when there is no room for the ill-organization of the utterance form or for the intentional violation of conversational maxims.
References


