

A Philosophical Investigation of the Context Sensitivity of *Know*: *Contextualism versus Semantic Minimalism*

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Abstract

A common and important question about context sensitivity is its extent in ordinary language. While words such as “I,” “this,” and “now” are known to be contextually sensitive, whether words such as *know* are context sensitive is debated. Contextualists believe that *know* is a context-sensitive word, while semantic minimalists insist it is not. The two groups have been engaged in a persistent debate on this issue and have not yet reached a consensus. Centering on this debate, this paper first briefly reviews contextualism and semantic minimalism’s debate over *know*, and then test whether it is context sensitive. This paper finds that the content of *know* displays some hierarchy, and to answer the question of whether it is context sensitive, logical inference must be distinguished from pragmatic inference. When expressing logical inference, *know* describes some state of affairs and factually certifies that the content of *know* is a fact; therefore, it involves no context sensitivity. While expressing pragmatic inference, however, *know* causes different pragmatic effects and indicates different levels of context sensitivity.

Keywords: *know*, context sensitivity, contextualism, semantic minimalism, pragmatic inference

1. Introduction

In *Metaphysics*, Aristotle (2009) begins, “All men by nature desire to know,” placing the problem of “knowledge” as the most prominent. Knowledge is not only the content but also the result of *know*. Therefore, the word *know* is crucial to understand the world and gain the knowledge. In daily life, *know* seems to be a common and simple word, without causing difficulties during communication, while its understanding in philosophy creates difficulties. Wittgenstein (1969, p.13), for example, said in *On Certainty*, “We just do not see how very specialized the use of ‘I know’ is.” He emphasized Moore’s incorrect use of “I know,” arguing that Moore treated the expression “I know” as an expression like “I hurt,” which is difficult to doubt (Wittgenstein, 1969, p. 178; Chen, 2010, p. 169). Wittgenstein believed that Moore mixed the concept of *know* with that of “believe,” “convince,” and other similar concepts. Wittgenstein’s careful study of the word *know* reflects its complexity.

The problem related to *know* is complicated, including not only its content but also the context in which it can be used. Whether the context affects the understanding of *know* has been a controversial issue between contextualism and semantic minimalism. Contextualists believe that context affects communicators’ understanding of *know*, and the meaning of a sentence involving it will change with context (DeRose, 1992; Cohen, 1998; Ludlow, 2005; Ichikawa, 2017). However, semantic minimalists argue that only a limited number of words’ meaning will be affected by context, and *know* is not one of them (Borg, 2004; Cappelen & Lepore, 2005; Stanley, 2007; Borg, 2012). The essence of their debate lies in whether *know* has context sensitivity and, if so, in what aspects. Focusing on the above debate, this paper analyzes the meaning of *know* and attempts to determine its context sensitivity.

2. Literature Review

2.1 The Debate between Contextualism and Semantic Minimalism

In contemporary times, the debate between semantics and pragmatics is manifested as the debate between semantic minimalism and contextualism, which mainly concerns the interrelationships between propositional content and context. Propositional content and context, semantic content, and pragmatic value have always been the focus of the study of semantics and pragmatics. The relationship between the four involves not only the boundary between semantics and pragmatics but also the debate between semantic minimalism and contextualism. A sentence commonly has both “semantic content” and “pragmatic value,” and it is generally believed that the pragmatic value will be affected by the semantic content. The two perspectives argue whether semantic content will be affected by the pragmatic value. In other words, will semantic content change when used in different contexts?

Contextualists argue that context does change sentences’ semantic and propositional content (Stanley, 2000; Carston, 2002; Recanati, 2010; King, 2013). Cappelen (2007, p. 3) said, “If you vary the context of utterance enough, i.e. vary the audience, the conversational context, the background knowledge, etc., you can get any sentence to communicate different propositions.” Thus, context will influence

the semantic and propositional content of sentences. For example, the sentence “I like this game” will express various propositions in different contexts. If NBA player O’Neal says this sentence, it expresses a proposition that the Black basketball star likes basketball games. If a resident of Sichuan says this sentence, however, it likely expresses the proposition that he or she likes playing Mahjong. Thus, different contexts apply different propositional content to the same sentence. Additionally, semantic and propositional content change synchronously, and context will affect both of them at the same time.

In contrast to contextualists’ views, semantic minimalists do not reject the role of context but hope to limit the influence of context on meaning to a minimal degree, maintaining that part of a sentence’s semantic content is independent of context and intention (Borg, 2004; Shen, 2011; Huang & Du, 2018; Rahman & Xu, 2023). These semantic contents are the conventional meanings generated by their constituent lexical items according to syntactic rules, and they are the same for all utterances of a sentence in different contexts (Soames, 2002; Borg 2012). Regardless of whether the context changes or the speaker’s intentions, the sentence has the same minimum semantic content (Cappelen & Lepore, 2005, p. 152). This minimum content ensures the possibility of communication, because in order to communicate, communicators must at least understand the meaning of the sentence itself (Huang & Liu, 2021). Otherwise, communication cannot proceed.

Expressions have minimal semantic content that remains the same regardless of context because, to determine the reference of a sentence in a different context, the minimum requirement is understanding the meaning of the sentence itself, which logically guarantees a priority for the semantic content of the sentence (Preyer, 2015). The sentence “There is a cat on the table” has the same propositional meaning, “a cat is on the table,” regardless of context. Therefore, this proposition is context invariant. That is, whether the cat is orange, black, yellow, or white; whether it is a Persian, a Ragdoll, a Maine Coon, or a Garfield; or whether the table is made of wood, iron, stone, or rubber, the listener can decipher the reference of the cat and table. The minimal semantic content of the sentence is understood. Thus, regardless of the specific context, the meaning of the sentence is context independent.

The debate between contextualism and semantic minimalism on whether the meaning of any expression remains the same when used in any context has not yet reached consensus. Since this debate is associated with many other problems in the philosophy of language, it is a valuable topic to study.

2.2 Previous Contextualists and Semantic Minimalists’ Studies on Know

Know has a wide meaning and is mainly used to express possessing information, having direct cognition of something, being certain about something, being familiar with or having experience or understanding of something, or being able to do something. In China, the use of the term *know* did not become similar to modern usage until the Tang Dynasty (Yang, 2021). In linguistics, *know* is a common transitive verb that expresses that the subject has some knowledge about something. With the rising interest in meaning theory, this word presents some problems and has attracted some philosophers’ attention since its study can provide insights into certain philosophical problems, such as the relationship between body and mind, the distinction between semantics and pragmatics, and the debate between contextualism and semantic minimalism.

Contextualists believe that most words are sensitive to context, and both contextual information and the speaker’s communicative intention will affect the formation of word meaning (Wu & Du, 2021). This includes words like *know*. Contextualists argue that this word is context-sensitive because the knowledge attribution of statements containing *know* depends on the context. More precisely, the truth value of the sentence “S knows P” is determined by the context in which it is used (DeRose, 2009, p. 1; Wei, 2013). Suppose there are two different contexts of “knowledge”: ordinary, low-standard knowledge (KL) and special, high-standard knowledge (HL). Compared to KL, HL is a cognitive standard for which more cognitive factors must be considered. For example, to know whether it is raining outside, people can determine whether it is raining with their eyes and ears, examining whether the road is wet or listening to the rain and thunder. However, to know whether it is raining for HL, more is required, such as proving that the individual’s ears or eyes are trustworthy or obtaining special evidence to ensure that no one is tricking that person into thinking it is raining. Because when the sentence “I know it is raining outside” is applied in different knowledge contexts (sometimes KL, sometimes HL), it can possess different truth values depending on the conversational context. This perspective helps explain why people can honestly say both “I know the banks will open on weekends” and “I do not know the banks will open on weekends.” Since the value of sentences containing the word *know* will change according to different contexts, it is reasonable to say that *know* is a context-sensitive word.

Semantic minimalists believe that a sentence has its minimal semantic content, which is unacted on in context. They also argue that only a minimal part of words is context-sensitive, comprising Kaplan’s (1989) and Cappelen and Lepore’s (2005) “the basic set,” which includes personal pronouns like “I,” “you,” and “he”; demonstrative pronouns like “that” and “this”; adverbs like “now,” “there,” “before,” “today”; and so on. Only words in the basic set of context-sensitive expressions are context-sensitive, while words such as “know,” “black,” and “high” are not (Pagin & Pelletier, 2007). Although contextualists believe that the contextual sensitivity of *know* is represented by ellipsis, ambiguity, hierarchy, and contrast (Cao, 2009), these properties have been questioned by semantic minimalists. Regarding the hierarchy of *know*, Stanley (2004) argued that comparing it with gradable adjectives is incorrect and that the expression of *know* is different from that of gradable adjectives. It is not hierarchical, incapable of accepting the modification of degree adverbs like “very,” the comparative “more,” or the superlative “most.”

As seen above, contextualists and semantic minimalists have varying opinions about which words are contextually sensitive, particularly the word *know*. Although some discussions have addressed this question, this issue is still debated, and determining whether a hierarchical

verb such as *know* is context sensitive needs more evidence.

3. Semantic Minimalists' Tests for *Know*

Contextual sensitivity refers to the determination of the meaning of a word depending on the context in which the expression is used (without which the meaning of the expression cannot be determined) (Cappelen & Lepore, 2003). That is, if expression E has the same meaning when used in different contexts, then the expression is not context sensitive. Conversely, if expression E has a definite meaning only in context C, and if the meaning of the expression changes with context, then expression E is context sensitive (Cappelen & Lepore, 2003). Thus, how the context sensitivity of words is detected must be examined. Semantic minimalists Cappelen and Lepore (2005) illustrated the difficulty of finding an appropriate solution by considering a test of intuitive trustworthiness. They presented three context-sensitivity tests, including the Inter-contextual Disquotational Indirect Reports Test, the Collective Description Test, and the Inter-contextual Disquotable Test. The following sections will discuss these tests.

3.1 The Inter-contextual Disquotational Indirect Reports Test

The first test is the Inter-Contextual Disquotational Indirect Reports Test, which Cappelen and Lepore defined as follows: "Take an utterance *u* of a sentence *S* by speaker *A* in context *C*. An inter-contextual disquotational indirect report of *U* is an utterance *U'* in a context *C'* ($C' \neq C$)" (2005, p. 88). Because the intuitive meaning of "context sensitivity" is that the semantic value of a word "e" varies with different contexts, the test indicates that if the report of *U* in context *C'* (i.e., *U'*) is true, then *S* (especially "e" in *S*) cannot pass the test. Similarly, if the report of *U* in context *C'* (i.e. *U'*) is false and the word "e" in *S* prevents cross-context references to indirect reports, then *S* passes this test, and the word "e" is context-sensitive (Cappelen & Lepore, 2003). Test 1 indicates whether the word *know* can pass this test:

Test 1 Inter-Contextual Disquotational Indirect Reports Test

Ct1: I am writing an article.

Ct2: Frege says I am writing an article.

Ct1': I know water is H₂O.

Ct2': Frege says I know water is H₂O.

In Test 1, the words "I" and *know* are tested in terms of the inter-contextual disquotational indirect report. The result shows that in Ct2, the reference to "I" is changed compared with Ct1. In Ct1, "I" can refer to the author who is writing this article, while in Ct2, "I" can both refer to the author and Frege. Therefore, "I" passes this test; it is context sensitive. However, the word *know* does not pass the test. In Ct1', it expresses the certainty of the truth that water consists of H₂O. In Ct2', it again expresses the certainty that water consists of H₂O. The meaning of *know* remains the same in these two different contexts, so it fails to pass this test. Thus, *know* is context invariant.

3.2 The Collective Description Test

The second test proposed by Cappelen and Lepore is the Collective Description Test. Its working principle is as follows: "If a word *E* is context sensitive, we cannot grasp its semantic value in the new context without the original context" (Zhang, 2015). If the verb *V* in a verbal phrase is context sensitive (i.e., it can change its semantic truth value when used in different contexts), then it cannot be inferred that there is a context based on which the verb *V* could describe what both *A* and *B* have done if it is known that there are two discourse contexts in which *A* and *B* are each true (Cappelen & Lepore, 2003; Cappelen & Lepore, 2005, p. 99). In other words, although there is a context in which *A* and *B* are both true, this does not guarantee that there is a context in which both *A* and *B* are true. This is because the semantic truth value of the verb *V* has already been determined in the previous context. Therefore, whether the semantic truth value of the verb *V* will remain the same when it is used alone in another context cannot be guaranteed. However, if the verb *V* is used for a series of statements in which *A* and *B* are true and what they have in common can be described, then this would provide evidence that *V* has the same semantic content in different statements. Therefore, the verb *V* is not context sensitive. Take the noun *e*, for example: "e is *F*" is true in context *C*₁, and "e is *G*" is true in context *C*₂. If it cannot be inferred that "e is *F* and *G*" is true in another context *C*, then *e* passes the test and is context sensitive. Test 2 shows whether the word *know* passes this test:

Test 2 Collective Description Test

Ct3: At that time, I was 18 years old.

Ct4: At that time, I was 25 years old.

Ct5: At that time, I was 18 and 25 years old.

Ct3': I know water consists of H₂O.

Ct4': Frege knows water consists of H₂O.

Ct5': Frege and I know water consists of H₂O.

Test 2 presents a collective description test for the words "At that time" and *know*. "I" can be true in both Ct3 and Ct4, but it cannot be true in Ct5, for one person cannot be 18 and 25 years old at one time. Therefore, "At that time" is false in Ct5, and it is a context-sensitive expression. The word *know* in Ct3', Ct4', and Ct5' can be properly understood, and all three sentences can be true statements, expressing

the knowledge and conviction of the fact that water consists of H₂O. Additionally, the combination of Ct3' and Ct4' can ensure the truth of Ct5'. Therefore, the word *know* fails to pass the collective descriptive test, and it is not context sensitive.

3.3 The Inter-contextual Disquotable Test

The third test presented by Cappelen and Lepore is the Inter-contextual Disquotable (ICD) Test. The logic behind this test is that if a word is context sensitive, its denotive or semantic value will vary with context (Cappelen & Lepore, 2005). More specifically, to test whether a word *e* is context sensitive, the word must be placed in sentence *S*, and then the sentence should be used. If there is a possibility that the utterance of *S* (*e* is the word in *S*) is false, even though sentence *S* is a true sentence (where *e* remains the same) (Cappelen & Lepore, 2005), the word passes the test, and it is context sensitive. The ICD test is also referred to as the context-shifting argument. Cappelen and Lepore (2005) argued that the context-shifting argument means that if the sentence *S* contains the word *e*, *S* expresses a true proposition in the storytelling context, and a target context in which *S* expresses a false proposition can be described, then *e* passed the test. Test 3 shows whether *know* passes this test:

Test 3 Inter-contextual Disquotable Test

Ct6: (background: attending an academic conference at a hotel where the conference fee is 200 dollars)

(As I pay for the fee, the receptionist said to me) "200 dollars are enough."

Ct6': Although "200 dollars are enough" is true, there is the possibility that "200 dollars are enough" is false.

Ct7: I know he is a male.

Ct7': "I know he is a male" is true, and there exists no possibility in which "I know he is a male" is false.

Test 3 gives an inter-contextual disquotable test for the words "enough" and *know*. In communication, "200 dollars are enough" can be true and also false when the context shifts. For example, if the conference fee is 200 dollars and the attendee pays this amount, after which the receptionist says, "200 dollars are enough," the statement is true and appropriate. After a while, the attendee books a room for three days, and at this time, "200 dollars are enough" is false. Therefore, "enough" passes the inter-contextual disquotable test, and it is context sensitive. However, in Ct6, the sentence "I know he is a male" is analytically true, and there is no possibility that the sentence is false. So, *know* does not pass the test, and it is not context sensitive.

As seen in the above examples, Cappelen and Lepore's three tests of contextual sensitivity can be applied to pronouns (Test 1), adverbs (Test 2), and gradable adjectives (Test 3). Verbs such as *know* fail these tests; all of the tests revealed that the meaning of *know* cannot change with the context in which it is used. Thus, whether *know* is a context-sensitive word can be analyzed. There are two perspectives regarding this question: one is to agree with Cappelen and Lepore and argue that *know* is context invariant; the other is to question their tests and find more evidence to show that *know* is context sensitive. This paper argues that *know* is context sensitive and attempts to present more evidence.

4. The Context Sensitivity of *Know*

The word *know* in the syntactic form is a binary predicate, which is typically used to express understanding something or possessing some knowledge of something. *Know* is the process and act of "knowledge," while "knowledge" is the content of *know*. Since possessed knowledge has a structure, its hierarchical structure reflects the hierarchy of *know*. Moreover, as a hierarchical verb, the context sensitivity of *know* concerns two kinds of inference: logical inference and pragmatic inference.

4.1 The Hierarchy of the Content of *Know*

Knowledge has its structure and is not homogeneous, as Deng once said "In daily life, the common use of the term 'knowledge' tends to obscure the important fact that knowledge is not in fact homogeneous" (2009, p. 82). As the content of *know*, knowledge has its own hierarchy; different types of knowledge arise from different types of human practice. In *Book VI of Nicomachean Ethics*, Aristotle (2003) mentioned that through *theoria*, *poiesis*, and *praxis*, mankind has obtained *nous*, *sophia*, *phronesis*, *episteme*, and *technique*. *Nous* is not some independent knowledge but is contained in the above activities and corresponding knowledge. People obtain *technique* from *praxis*, and then from *technique* move to *episteme*. The origin of *episteme* is *nous*, while the combination of *episteme* and *nous* is *sophia*. The entire process is a gradual process, accumulated progressively layer by layer. Thus, knowledge is hierarchical.

The hierarchy of the content of the word *know* is also reflected in daily activities. In January 2020, the full-scale outbreak of COVID-19 severely impacted daily life. The following test explores whether all people know the same thing about COVID-19, from illiterate people and English majors to COVID-19 experts, COVID-19 infector A (who knows he is infected with COVID-19), and COVID-19 infector B (who does not know she is infected with COVID-19):

- (1) (Illiterate people say) I know COVID-19.
- (2) (English majors say) I know COVID-19.
- (3) (COVID-19 experts say) I know COVID-19.
- (4) (COVID-19 infector A who knows he was infected with COVID-19 says) I know COVID-19.
- (5) (COVID-19 infector B who was infected but does not know it is COVID-19 says) I know COVID-19.

All these five sentences have different content of *know*, even though they have the same expressive form. Regarding illiterate people’s *knowledge*, they may only know a string of symbols; they may have heard about the disease, but they cannot connect it to COVID-19. For English majors, COVID-19 is not just a string of symbols; they may also know it is the coronavirus disease and possess some fragmented common knowledge (e.g., COVID-19 is a coronavirus that causes fever, dry cough, fatigue, and other symptoms after infection). Compared with English majors, COVID-19 experts’ knowledge is not fragmented or common but professional and systematic. They know COVID-19 is a coronavirus of the genus β , a single-stranded plus-stranded RNA virus with a capsule and round or oval particles that have a diameter of about 60–140 nm. It has five essential genes, which encode four structural proteins—namely, nuclear protein (N), viral envelope (E), matrix protein (M), and spike protein (S)—as well as RNA-dependent RNA polymerase (RdRp). Compared with COVID-19 experts, infected patients know more about COVID-19 through their own experiences; their knowledge of COVID-19 is more intuitive and vivid. In addition, Patient A, who knows that he is infected, has more consciousness and solutions to fight against COVID-19 than patient B, who does not know that she is infected. Patient A may have a deeper feeling about COVID-19 and will be better equipped to deal with it based on his knowledge of COVID-19. All these *know* display some hierarchy of the content of *know*, as shown in Table 1.

Table 1. The hierarchy of the content of *know*

Subjects of <i>Know</i>	Content of <i>Know</i>	Objects of <i>Know</i>
I (Unlettered people)	Know (symbols)	COVID-19
I (English majors)	Know (symbols + common knowledge)	COVID-19
I (COVID-19 experts)	Know (symbols + professional knowledge)	COVID-19
I (Patient B who does not know he was infected with COVID-19)	Know (symbols + common knowledge + personal experience+ psychological feelings)	COVID-19
I (Patient A who knows he was infected with COVID-19)	Know (symbols + common knowledge + personal experience+ psychological feelings + consciousness of consequences)	COVID-19

As seen in Table 1, the same COVID-19 reflects the hierarchy of different content *types*. From illiterate people to the COVID-19 patients, their *knowledge* of COVID-19 has increased progressively, with more information being revealed. Thus, the same COVID-19 reflects different *know*. However, further exploration is needed to determine whether these different levels of *knowledge* are merely different senses of *know* or can reflect the context sensitivity of *know*.

4.2 The Logical and Pragmatic Inference of *Know*

Know is a hierarchical verb whose content can present different levels of knowledge, but this does not prove that it can cause different pragmatic meanings in different contexts. To test whether *know* is context sensitive, two different situations must be considered and distinguished: logical inference and pragmatic inference. Generally speaking, logical inference concerns the literal meaning of lexical items and is not speaker or context related, while pragmatic inference involves these factors. In other words, when words, phrases, or sentences are understood apart from the literal meaning, what is behind the content must be explored (Jiang, 2002). Pragmatic inference is the process by which the listener deduces the speaker’s implied conversational meaning based on the context and other factors.

The word *know* can possess context sensitivity only when it describes the inference of pragmatic meaning. Logical *know* does not express any context sensitivity, as seen in the following “I know”:

- (6) I know $2 + 2 = 4$.
- (7) I know what it is to have a bad cold.
- (8) I know Annie Ernaux won the Nobel Prize in Literature.
- (9) I know there are extraterrestrial creatures outside the earth.
- (10) I know Chongqing hotpot is the best.
- (11) I know he is a male.

From the perspective of syntax, these six sentences have the same grammatical structure, which can be shown as the form “V (know) + S (proposition).” With this form, these sentences express the subject’s knowledge about something. If all these sentences are seen as logical propositions, the word *know* does not cause any effect because all of them express that the subject possesses some knowledge about something. “I know” describes a state of affairs, which ensures the content of what I know is a fact. The first sentence expresses knowledge of a mathematical equation, which is an a priori truth. The second sentence expresses some experiential knowledge since only after experiencing the cold can the individual say he or she knows how that feels. The third phrase is a fact because the event in which

Annie Ernaux won the 2022 Nobel Prize in Literature has occurred, as announced on October 6, 2022. The fourth sentence expresses some information about the subject's belief that other creatures exist in the universe. The fifth sentence shows the subject's opinion about Chongqing hotpot, and the final sentence expresses knowledge about an analytic truth.

When combined with logical propositions, *know* does not make any sense or have any effect, but only describes a state of affairs that guarantees the content of what "I" know is a fact, whether it is an a priori truth, experiential knowledge, a fact, some belief, personal opinion, or analytic truth. Expressions like "I think I know" are not typically used to describe such conditions. However, if these sentences are used in different contexts, they can cause different communication effects. In other words, "I know" in all six sentences has a definite meaning and can cause pragmatic meaning in a specific context. Below, "I know he is a male" is used as an example to test whether *know* is context sensitive:

Test 4: Contextual Negation Test

Ct8: (All employees of a unit go to a hospital for an annual physical examination and are outside the gynecological examination door.)

Woman B: A breast examination, OK . . . Oh! We need to strip off the top to check. Well, the doctor, he's a male.

Woman A: So . . . I'm not going to check this one.

Ct9: (All employees of a unit go to a hospital for an annual physical examination and are outside the gynecological examination door.)

Woman A: I've had a lot of pain in this area (pointing to the breast). I should see a doctor anyway.

Woman B: (Pointing inside the door) He is a male.

Woman A: I know he is a male.

Woman B: Well, go ahead. I wish you all the best.

Ct9': (All employees of a unit go to a hospital for an annual physical examination and are outside the gynecological examination door.)

Woman A: I've had a lot of pain in this area (pointing to the breast). I should see a doctor anyway.

Woman B: (Pointing inside the door) He is a male.

Woman A: I did not know he is a male.

Woman B: . . .

As seen in test 4, *know* expresses various pragmatic meanings. The sentence "I know he is a male" expresses an analytical truth, and this true fact has its own sense in contexts, which expresses the subject's certainty of the content of *know*. When used in various contexts, "'I know' + a true fact" will have some extra pragmatic meaning. In Ct8, when woman B presents for the breast examination, she discovers that the doctor is a male, and she tells this to woman A. Woman A cares about this and avoids this examination. Thus, the sentence "he is a male" caused some verbal action, which can be referred to as P1. In Ct9, because of the breast pain, woman A decides to have an examination. When woman B tells her that the doctor is a male, woman A replies, "I know he is a male." This sentence produces another verbal action—that is, woman A does not care the doctor is a male, and she accepts the male doctor to check her breast. This communication effect can be referred to as P2. In Ct9', when woman B tells woman A that the doctor is a male, woman A replies, "I did not know he is a male." Here, "I did not know" cannot cause the effect P2; woman B will not say "Well, go ahead. I wish you all the best." When woman A replies to the sentence "He is a male," she implies that she is considering a male doctor examining her breast. From her reply, woman B can infer this situation, so she will not say, "Well, go ahead. I wish you all the best." Instead, woman B may advise woman A to change to a female doctor.

When negating *know*, the sentence can have different illocutionary effects. In Ct9 and Ct9', both *know* express the subjects' attitude toward the fact that the doctor is a male; however, they have different pragmatic meanings. In Ct9, woman B can pragmatically infer that woman A does not mind whether the examination doctor is male or female, so she does not stop woman A and gives her best wishes to A. In Ct9', *know* is negated, and it causes a different effect. From A's reply, B can infer that A cannot accept a male doctor, so B will advise her to change to a female doctor. Thus, test 4 shows that *know* in certain contexts has sensitivity. The logical *know* does not have to be equal to the pragmatic *know*.

5. Conclusion

The word *know* as a common binary predicate does not cause any difficulty in daily communication, but because of the complexity of its content and contexts, it has presented many philosophical challenges. Beginning with the dispute between contextualism and semantic minimalism on whether *know* is a context-sensitive word, this paper analyzes the content of *know* and tests whether *know* is context sensitive. The paper finds that Cappelen and Lepore's tests for context sensitivity are not suitable to test knowledge because it is a verb whose content has hierarchy. Therefore, different situations must be considered when determining whether *know* has contextual sensitivity. If sentences involving *know* are seen as logical propositions, *know* lacks contextual sensitivity, while if they are pragmatically seen, *know* possesses contextual sensitivity.

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References

- Aristotle. (2003). *Ethika nikomachea*. Beijing, China: The Commercial Press.
- Aristotle. (2009). *Metaphysics*. Devon, England: NuVision Publication.
- Borg, E. (2004). *Minimal semantics*. New York, NY: Oxford University Press. <https://doi.org/10.1093/0199270252.001.0001>
- Borg, E. (2012). *Pursuing meaning*. New York, NY: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199588374.001.0001>
- Cao, J. L. (2009). Arguments against and for the context sensitivity of “knowing”. *Journal of Xiamen University (Arts & Social Science)*, 4, 13-20.
- Cappelen, H. (2007). Semantics and pragmatics: Some central issues. In G. Preyer, & G. Peter (Eds.), *Context-sensitivity and semantic minimalism: New essays on semantics and pragmatics* (pp. 3-24). New York, NY: Oxford University Press.
- Cappelen, H., & Lepore, E. (2003). Context shifting arguments. *Philosophical Perspectives*, 17(1), 25-50. <https://doi.org/10.1111/j.1520-8583.2003.00002.x>
- Cappelen, H., & Lepore, E. (2005). *Insensitive semantics: A defense of speech act pluralism and semantic minimalism*. Oxford, England: Blackwell. <https://doi.org/10.1002/9780470755792>
- Carston, R. (2002). *Thoughts and utterances: The pragmatics of explicit communication*. Oxford, England: Blackwell. <https://doi.org/10.1002/9780470754603>
- Chen, J. Y. (2010). *Ludwig Wittgenstein*. Beijing, China: New World Press.
- Cohen, S. (1998). Contextualist solutions to epistemological problems: Skepticism, Gettier and lottery. *Australasian Journal of Philosophy*, 76(2), 289-306. <https://doi.org/10.1080/00048409812348411>
- Deng, Z. L. (2009). *Hayek's social theory*. Shanghai, China: Fudan University Press.
- DeRose, K. (1992). Contextualism and knowledge attributions. *Philosophy and Phenomenological Research*, 52(4), 913-929.

<https://doi.org/10.2307/2107917>

- DeRose, K. (2009). *The case for contextualism: Knowledge, skepticism and context* (Vol.1). New York, NY: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199564460.001.0001>
- Huang, L. H., & Du, S. H. (2018). Semantic minimalism: Issues and reflection. *Contemporary Linguistics*, 20(3), 386-400.
- Huang, Q., & Liu, L. M. (2021). The debate between semantic minimalism and contextualism revisited: A view from context. *Contemporary Linguistics*, 23(04), 574-590.
- Ichikawa, J. J. (2017). Introduction: What is epistemic contextualism. In J. J. Ichikawa (Ed.), *The Routledge handbook of epistemic contextualism* (pp. 1-10). New York, NY: Routledge. <https://doi.org/10.4324/9781315745275-1>
- Jiang, T. (2002). On the logical nature of pragmatic inference: Towards a formal theory of pragmatics. *Journal of Foreign Language*, 3, 18-29.
- Kaplan, D. (1989). Demonstratives. In J. Almog, J. Perry., & H. Wettstein (Eds.), *Themes from Kaplan* (pp. 481-563). New York, NY: Oxford University Press.
- King, J. C. (2013). On fineness of grain. *Philosophical Studies*, 163(3), 763-781. <https://doi.org/10.1007/s11098-011-9844-9>
- Ludlow, P. (2005). Contextualism and new linguistic turn in epistemology. In G. Preyer, & G. Peter (Eds.), *Contextualism in philosophy: Knowledge, meaning and truth* (pp. 11-41). New York, NY: Oxford University Press. <https://doi.org/10.1093/oso/9780199267408.003.0002>
- Pagin, P., & Pelletier, F. J. (2007). Content, context and composition. In G. Preyer, & G. Peter (Eds.), *Context-sensitivity and semantic minimalism* (pp. 25-62.) New York, NY: Oxford University Press. <https://doi.org/10.1093/oso/9780199213320.003.0002>
- Preyer, G. (2015). *The power of insensitive semantics: No way out of the schism*. Retrieved from <https://www.researchgate.net/publication/307108161>
- Rahman, A., & Xu, W. Z. (2023). Moderate semantic minimalism: An eclectic approach to trichotomy of meaning. *Humanities and social sciences communications*, 10(1), 1-22. <https://doi.org/10.1057/s41599-023-01701-2>
- Recanati, F. (2010). *Truth-conditional pragmatics*. Oxford, England: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199226993.001.0001>
- Shen, Y. (2011). Formal semantics under the challenge of contextual determinism: Problems and responses. *Modern Foreign Languages*, 34(4), 413-419.
- Soames, S. (2002). *Beyond rigidity: The unfinished semantic agenda of naming and necessity*. Oxford, England: Oxford University Press. <https://doi.org/10.1093/0195145283.001.0001>
- Stanley, J. (2000). Context and logical form. *Linguistics and Philosophy*, 23(4), 391-434. <https://doi.org/10.1023/A:1005599312747>
- Stanley, J. (2004). On the linguistic basis for contextualism. *Philosophical Studies*, 119(1-2), 119-146. <https://doi.org/10.1023/B:PHIL.0000029353.14987.34>
- Stanley, J. (2007). *Language in context: Selected essays*. New Yor, NY: Oxford University Press. <https://doi.org/10.1093/oso/9780199225927.001.0001>
- Wei, Y. D. (2013). The problem of knowledge justification and its resolving strategy of non-contextualism. *World Philosophy*, 3, 22-31.
- Wittgenstein, L. (1969). *On certainty*. Oxford, England: Blackwell.
- Wu, Y. J., & Du, S. H. (2021). Reflection upon lexical concept from the perspective of minimalism: Essence and critique. *Foreign Language Research*, 38(3), 34-38.
- Yang, X. B. (2021). “Zhi”, “dao”, “zhi dao” and “bu zhi dao”: A linguistic and philosophical analysis. *Modern Chinese*, 7, 33-38.
- Zhang, Y. (2015). Three tests of semantic minimalism. *Modern Philosophy*, 3, 58-62.