

Two Types of Negatives: In Light of Langacker's Models

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Abstract

With the same negative structure *you don't know that* +PROPOSITION, the two distinctively different interpretations are possible: type A with the complement proposition being presupposed as true; type B with the complement proposition not being presupposed as true (Nakashima 2015a/b). The difference seems to be closely related to the cognitive interaction of the speaker and the hearer, who engage in “assessing what the other knows, intends, and is currently attending to (Langacker 2008: p. 465).” The present paper proposes the hypotheses, which are based on Langacker’s models of the control cycle (2002, 2009) and the current discourse space (2008). The examples for each type are examined in light of the hypotheses: it is shown that the hypotheses are applicable and relevant in both cases.

Keywords: Negatives, Verb *know*, Sentence subject *you*, Ronald W. Langacker, Control cycle, Current discourse space

Introduction

This paper examines the sentence structure *you don't know that* + PROPOSITION with two different meanings. With the verb *know*, which is one of the factive predicates, truth of complements is generally presupposed (Kiparsky and Kiparsky 1970). Thus, in case of factive predicates, even when the main clauses are negated the subordinate-clause proposition are not (Langacker 2003, 2008, 2009). The phenomenon is shown as in examples in (1) below.

- (1)
- a. Joe *knows* that Alice is unhappy.
 - b. Joe *doesn't know* that Alice is unhappy.

In both (1a) and (1b), the complement proposition *Alice is unhappy* is presupposed to be true.¹ It does not matter whether or not Joe knows the situation

described in the complement proposition. In either case the speaker could say, “Alice is unhappy.” When the sentence subject is *you*, however, there are cases where the subordinate-clause propositions do not stay as valid if the main clauses are negated (Nakashima 2015a,b,c). Thus, we propose two types of *you don’t know that* +PROPOSITION: type A, in which the factivity is kept intact even when the main clause is negated; type B, in which the feature of factivity is lost when the main clause is negated.² Type A is exemplified in (2); type B in (3) as below.

(2)

TEICHNER: (Voiceover) When the Revolutionary War ended, General George Washington came home to Mt. Vernon uncomfortable with anything having to do with slavery. So he hid his new slave quarters in plain sight, next to his greenhouse.

Mr. WIENCEK: That’s the great genius of Washington the architect. *You don’t know that* those are the slave quarters. There are no doors, there are very small windows. He made it invisible. I mean, this is kind of a symbol of his struggle with slavery, architecturally, right here in front of us.

(CBS Morning, 2004/02/15)

In example (2) Mr. Wienczek, the speaker of the utterance “you don’t know that those are the slave quarters,” is saying that George Washington designed the rooms so that people couldn’t recognize the fact that the rooms were made for slaves. That is, the subordinate-clause proposition *those are the slave quarters* is presupposed to be true. Thus, we regard example (2) as a case of type A, in which the truth of the complement proposition is presupposed in spite of the main clause being negated.

On the other hand, (3) is an example of type B, in which the feature of factivity is lost when the main clause is negated.

(3)

“Look, *you don’t know that* he took it. You don’t know anybody took it. Maybe it did fall off. Why don’t you drive back down toward the shop and look for it along the way?”

(Massachusetts Review, Summer 1996)

¹ Langacker argues that the feature of factivity will be accounted for by presupposing two layers of conceptualization: one layer is subjectively construed and the other is objectively construed (2002, 2009).

² In Nakashima (2015a/b/c), the two types are analyzed based on the intersubjective view of Verhagen and his construal configuration (2005, 2007).

In (3), the speaker of the utterance “you don’t know that he took it” does not believe the proposition *he took it*. This is quite obvious because the speaker later suggests the possibility that the thing might have fallen off accidentally instead of being stolen. Therefore, in example (3) the complement proposition is not presupposed as true. This is a case of type B, where factivity is lost when the main clause is negated.

As seen in (2) and (3), with the same negative structure *you don’t know that* +PROPOSITION, the two distinctively different interpretations are possible: type A with the complement proposition being presupposed as true; type B with the complement proposition not being presupposed as true. The objective of this paper is to elucidate such semantic difference in the interpretation between type A and type B. The difference seems to be closely related to the cognitive interaction of the ground, the speaker and the hearer, who read each other’s knowledge, viewpoints and intention. Thus it is both relevant and essential to analyze the examples in relation to the context of the discourse between the speaker and the hearer. The discussion of the present paper is made based on the models proposed by Ronald W. Langacker: the control cycle (2009) and the current discourse space (2008).

In the following section, we will look at Langacker’s model of the control cycle, in which the semantic structure of the cognitive verb *know* will be designated. Next, we will see Langacker’s scheme of the current discourse space. Then, the hypotheses of this paper will be introduced and the hypotheses will be examined.

Control Cycle and the Verb *Know*

This section introduces Langacker’s model of the control cycle, in which the semantic structure of the cognitive verb *know* is designated. Langacker proposes a general cognitive model, the control cycle, which he applies to various aspects of human experience (2002, 2009). One aspect, the epistemic level, which pertains to the acquisition of propositional knowledge, is the main concern of the present paper. Before we look at the epistemic level, however, first, let us look at the general model which was proposed by Langacker. The model is sketched as in Fig. 1 below.

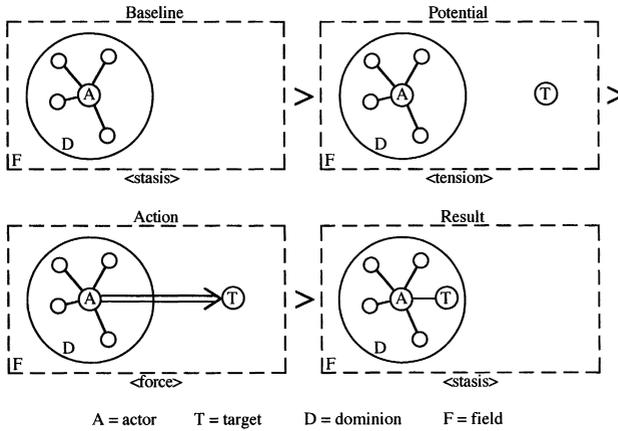


Fig. 1

(Langacker 2009: p. 130)

First, in the static baseline, an actor (A) controls the entities, which are illustrated as small circles, and they constitute its dominion (D). Next in the potential phase, some target (T) enters into the field (F) and the actor needs to deal with the target, which causes tension there. In the phase of action, the actor exercises some sort of force, indicated with double arrows, bringing the target (T) into the actor's own dominion. As a result the target is under the control of the actor, the stasis being brought again.

Langacker maintains that the control cycle can be applied to events at different levels, such as the physical, perceptual, mental and social. For example, at the physical level, the control cycle can indicate how a cat encounters a mouse, catching and putting it under its control. In case of the epistemic level, it will be shown how propositional knowledge is acquired by the conceptualizer. Such a process is illustrated in Fig. 2 below.

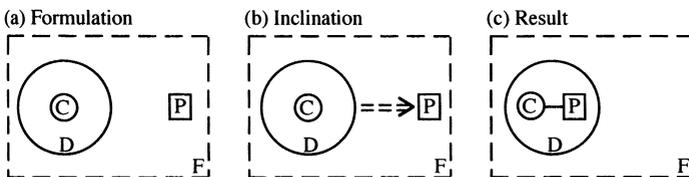


Fig. 2

(Langacker 2009: p. 133)

As shown in Fig. 2, the actor is a conceptualizer (C); the target is a proposition (P); and the dominion is the conceptualizer’s view of reality (epistemic dominion), that is, the set of propositions that the conceptualizer currently assumes to be valid. First, in the formulation phase, P exists in C’s field of awareness. At this phase C is only aware of the propositional knowledge but has not yet assessed its validity. Next, in the inclination phase, through assessment, C arrives at some sort of inclination regarding to P, which is represented by the dashed arrow. Langacker points out that depending on degrees of force, P could be either accepted as “part of C’s view of reality” or rejected as in the case of the verb *doubt*, for example (2009: p. 133). Finally, in the result phase, P is possessed as C’s view of reality in its dominion.

Based on their semantic values, predicates can be characterized in terms of how the profiled relationship maps onto the control cycle. Langacker proposes five types in cognitive verbs, depending on the phase each cognitive verb maps onto. The five types, that is, result, action, formulation, assessment and inclination, are illustrated in Fig. 3. Verbs corresponding to each type are listed accordingly in (4).

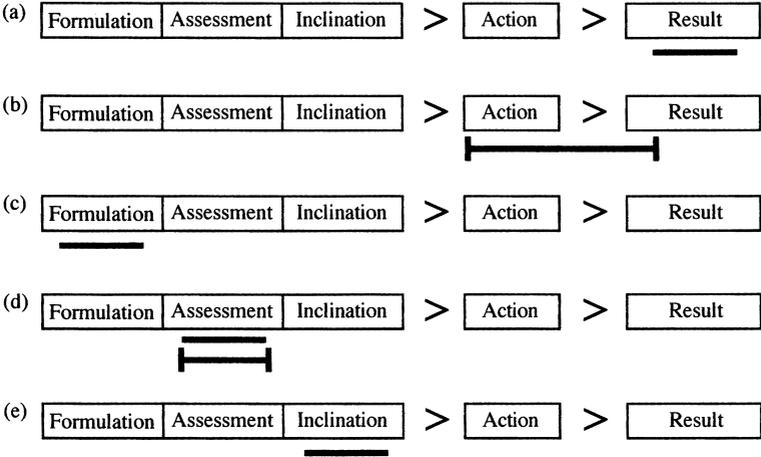


Fig. 3

(Langacker 2009: p. 132)

- (4)
 a. **Result:** *He {knows / believes / thinks / realizes / accepts / is sure / is certain / is convinced} that Bush is a pacifist.*

- b. **Action:** *She {learned / discovered / decided / concluded / realized / determined / found out / figured out} that his whole story was a pack of lies.*
- c. **Formulation:** *It is {possible / conceivable / plausible / feasible / imaginable} that they could be of some use to us.*
- d. **Assessment:** *He {wondered / considered / asked / was unsure / was undecided / was unclear} whether the effort was worth the bother.*
- e. **Inclination:** *I {suspect / believe / suppose / think / figure / reckon} they will never agree to my offer.* (Langacker 2009: p. 132)

As shown above, in the case of the verb *know*, the profiled relationship maps onto the result phase, where the proposition is possessed as the conceptualizer's view of reality in his/her dominion. This paper takes this theory of Langacker's as its standpoint, applying the definition of the verb *know* to the discussion.

In this section, Langacker's model of the control cycle is introduced and it is shown how the semantic value of the verb *know* is designated. That is, the verb *know* refers to the result phase: the proposition is possessed as the conceptualizer's view of reality in its dominion. This definition of the verb *know* will be the basis of the following discussion.

Current Discourse Space

The previous section introduced the control cycle, in which the semantic value of the verb *know* is designated. That is, the verb *know* refers to the result phase: the proposition is possessed as the conceptualizer's view of reality in its dominion. In this section, Langacker's model, the current discourse space (CDS), is presented. In the introduction, it is pointed out that the two types of negative structure, type A and type B, differ from each other in relation to how the speaker and hearer read each other's knowledge, viewpoint and the intention of their utterances. Put differently, such cognitive interaction between the speaker and the hearer of the ground plays an essential part in understanding the difference between the two types. Thus the present paper applies Langacker's model, the current discourse space, which gives full explanation of "how interlocutors arrive at roughly similar conceptions of the objective content (Langacker 2008: p. 466).

In discourse, the speaker and hearer engage in assessing each other's knowledge and intentions, which is the key factor of the linguistic meaning of an expression. In other words, interpretation of an expression is impossible without the common ground provided by the overall context, which is shared by the interlocutors (Langacker 2008, p. 465). Langacker calls this common basis for interpretation the current discourse space (CDS).

As discourse unfolds, at each step the current expression is constructed and interpreted against the background of those that have gone before. The prior discourse is a major determinant (along with context, background knowledge, etc.) of what I call current discourse space (CDS). The CDS is a mental space comprising everything presumed to be shared by the speaker and hearer as the basis for discourse at a given moment. Starting from that basis, each successive utterance updates the CDS in some fashion. (Langacker 2008: p. 59)

The scheme of CDS is illustrated in Fig. 4 as below.

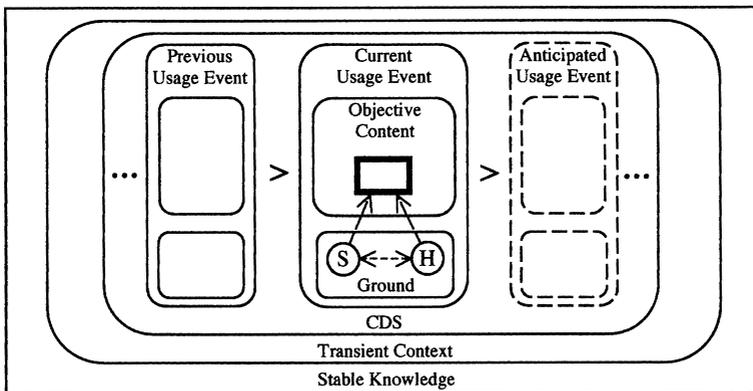


Fig. 4

(Langacker 2008: p. 466)

As shown above, first in Previous Usage Event, the speaker and the hearer (Ground) access each other's knowledge and intention, based on which they pursue utterance in Current Usage Event. The event that the speaker anticipates is illustrated in Anticipated Usage Event.³ Based on this scheme, the next section will

³ Furthermore, introducing the CDS, Langacker points out that in negation the positive conception of what is being negated will be brought into mind (p. 2008: p. 59). He illustrates this point through the following dialogue.

A: Will Victoria agree to be a candidate?

B: She may not.

C: But Stephanie will.

(Langacker 2008: p. 59)

Here, the speaker B's use of "not" is understood as corresponding to the positive notion, that is, Victoria's agreeing, which was brought in prior to B's utterance. In other words, the speaker B would have no reason to have a negative utterance using "not" unless the possibility of Victoria's agreeing to be a candidate had been mentioned for consideration.

propose the hypotheses of this paper.

Hypotheses

In this section, the hypotheses of this paper will be proposed based on Langacker's model of the control cycle and the current discourse space. The hypotheses are based on the following premises:

Premise 1. Type A is a case where the subordinate-clause proposition is kept presupposed even though the main clause is negated. Thus, with type A, S possesses P as his/her view of reality.

Premise 2. Type B is a case where the subordinate-clause proposition is not presupposed. Thus, with type B, S does not possess P as his/her view of reality.

Hypotheses

Type A

Previous Usage Event:

[A-1] S thinks that H does not possess P as his/her view of reality.

Anticipated Usage Event:

[A-2] H will realize that he/she does not possess P as his/her view of reality.

Type B

Previous Usage Event:

[B-1] S thinks that H possesses P as his/her view of reality.

Anticipated Usage Event:

[B-2] H will reassess the validity of P.

[S: Speaker, H: Hearer, P: Complement proposition]

This section presented the hypotheses of the paper. In the next section, the validity of the hypotheses will be analyzed. We will examine if the hypotheses for the two types can be applied to the examples of the corresponding types. If they are applicable, the hypotheses are regarded as valid and cogent.

Explanation Based on the Hypotheses

This section examines the validity of the hypotheses proposed in the previous section. We will analyze if the hypotheses are applicable to examples of both type A and type B.

1. Type A

First, let us look at examples (5), (6) and (7), which belong to type A.

(5)

“Sleepiness affects the part of the brain responsible for judgment and self-awareness,” says Dr. Balkin and as awareness drifts away, we do not, obviously, realize this is happening. “If you’re driving, you may know you feel tired, but *you do not know that you are falling asleep*,” he says. “It’s completely insidious”. You can also fall asleep very briefly and wake up without even being aware that you nodded off. These “microsleeps” may last for just a few seconds... enough time for something awful to happen if you’re behind the wheel of a fast-moving 2-ton vehicle.

(<http://www.prevention.com/health/health-concerns/danger-driving-tired>)

In (5) Dr. Balkin is talking about the possible danger that drivers might fall asleep “without knowing it.” Here, the speaker, Dr. Balkin, possesses the proposition *you are falling asleep while driving* as his view of reality, and therefore, this is a case of type A. Now let us see if the hypotheses of this paper are applicable to this example. According to the hypothesis A-1, *S thinks that H does not possess P as his/her view of reality*. This hypothesis is relevant to the case here, because here Dr. Balkin (= S) is warning the danger (=P) that drivers (= H) don’t realize the fact that they’re falling asleep. Also, the doctor describes the situation as *insidious*. Obviously, he thinks that the drivers (= H) do not possess P (=drivers are falling asleep) as their view of reality. Furthermore, as for Anticipated Usage Event, the hypothesis A-2 *H will realize that he does not possess P as his/her view of reality* is also applicable to this case. This is because Dr. Balkin’s (the speaker’s) intention of his utterance is to have drivers (=H) realize their ignorance and to warn them the danger of falling asleep. Thus the hypotheses are applicable here, and therefore they are regarded as valid.

(6)

Miriam sat heavily on a sack of potatoes and scowled around her, acting for her potential audience. “You’re being a selfish girl. A vicious selfish girl to make us all search this way.” The fluted girl nodded. Yes, I am a selfish girl, she thought. I am a selfish girl, and you are a woman, and yet we are the same age, and I am smarter than you. You are clever but *you don’t know that* hidey-holes are best when they are in places no one looks. You look for me under and behind and between, but you don’t look up. I am above you, and I am watching you, just as Stephen

watched us all. Mirriam grimaced and got up. “No matter. Burson will find you.” She brushed the dust from her skirts. “You hear me? Burson will find you.” She left the pantry. (The Fluted Girl)

(6) above is another case of Type A, where the subordinate-clause proposition is presupposed to be true. The fluted girl is claiming how clever she is to find such a perfect place to hide herself safely. Now, let us see if the hypotheses for type A are applicable to this case, too. First, according to the hypothesis A-1, *S thinks that H does not possess P as his/her view of reality*. This hypothesis is applicable here because the fluted girl (=S) thinks that Mirriam (=H) does not imagine that she would be hiding in a safe place. In addition, according to the hypothesis A-2, *H will realize that he/she does not possess P as his/her view of reality*. By saying “you don’t know that hidey-holes are best when they are in places no one looks,” the fluted girl (=S) is trying to make Mirriam (=H) recognize her ignorance and to feel superior to Mirriam. Of course this is the heroine’s monolog, and Mirriam is not actually listening to her. Nevertheless, the intention of the girl’s utterance won’t change. Thus both hypotheses are regarded as relevant.

As the last example of type A, let us look at (7), which we saw in the introduction.

(7)

TEICHNER: (Voiceover) When the Revolutionary War ended, General George Washington came home to Mt. Vernon uncomfortable with anything having to do with slavery. So he hid his new slave quarters in plain sight, next to his greenhouse.

Mr. WIENCEK: That’s the great genius of Washington the architect. *You don’t know that* those are the slave quarters. There are no doors, there are very small windows. He made it invisible. I mean, this is kind of a symbol of his struggle with slavery, architecturally, right here in front of us. (= (2))

Here, in *You don’t know that those are the slave quarters*, the subject *you* is regarded as a generic reference.⁴ It refers to the potential audience in general, including Teichner, one of the other current interlocutors. Still, the hypotheses for type A are relevant to this case. First, according to the hypothesis A-1, *S thinks that H does not possess P as his/her view of reality*. The hypothesis is applicable here, because Mr. Wiencek (=S) says, “he made it invisible,” which means that

⁴ The example (5) can be also regarded as a case where a generic *you* is used.

people in general (=H) wouldn't notice the houses are for slaves. Moreover, the hypothesis A-2 is pertinent here. That is, the intention of Mr. Wienczek's utterance is to inform the potential audience that they wouldn't notice the fact, that is, the houses are built for slaves. In this way Mr. Wienczek is trying to show how skillful Washington was when he built the houses, as well as how uncomfortable Washington felt with slavery in those days. Thus, the hypotheses are relevant in the case of (7).

2. Type B

Next, let us look at the cases that belong to type B and examine if the hypotheses of this paper can be applied to them.

(8)

Dr. ROSENBERG: ...atropine, scopolamine, thorazine and Vitamin B. They work by providing an antagonist to the nicotine craving.

STOSSEL: And that gives you an 80... 90 percent success rate?

Dr. ROSENBERG: For two months. It's an 80, 90 percent success rate for two months. It's a 40....

STOSSEL: But what is it for... oh, 40?

Dr. ROSENBERG: Forty percent for 12 months.

STOSSEL: But aren't you conning people, desperate people, a little bit here? I mean, "80 percent success rate, pay \$500"? *You don't know that your patients are doing that well.*

Dr. ROSENBERG: Just in the time that I've been here, I've been very, very impressed with the length of stay that they have been off cigarettes.

STOSSEL: Can we go through your records and do our own survey and see if it's true?

Dr. ROSENBERG: Sure. Be my guest.

STOSSEL: Okay, let's go do that. (voice-over) We'll give you the results of that survey in a moment, but first, one more approach...

(ABC, 1990/05/25)

Here, Dr. Rosenberg is telling how effective his treatment has been for the patients who want to quit smoking. On the other hand, Stossel, a reporter, is skeptical about the alleged effectiveness of the treatment. Example (8) is a case of type B, where the complement proposition, *your patients are doing that well*, is not presupposed as a fact. As a matter of fact, the speaker, Stossel, is saying that Dr. Rosenberg's claim is not quite reliable. Now, let us see if the hypotheses for type

B are applicable to this example. First, according to the hypothesis B-1, *the speaker thinks that the hearer possesses the proposition as his/her view of reality*. Without doubt, in example (8), Stossel (=S) thinks that Dr. Rosenberg (=H) believes in the effectiveness of his/her therapy. Next, let's consider the Anticipated Usage Event. According to the hypothesis B-2, *H will reassess the validity of P*. In fact, here S (=Stossel) is anticipating that H (= Dr.Rosenberg) will reconsider the effect of the treatment. However, the doctor doesn't seem to care about Stossel's intention here. Seeing that, Stossel says that they want to examine Rosenberg's record and do their own survey to see if the treatment is truly effective. As seen above, both the hypothesis B-1 and B-2 are applicable to this case.

(9)

A: There's no ceiling on that violin. It could be worth a fortune. That's not including the stones. I wish there was some way to contact one of those collectors that have all the money in the world.

B: Too bad I don't know any. And, besides, *you don't know that* those diamonds are real. They could be glass.

He enjoyed saying that. He didn't care if they were real or not.

A: Maybe, but that violin is old; they bought it in Portugal on one of their visits. I phoned the woman. She doesn't know how much money her husband paid for it. (COCA)

In regard to the hypothesis B-1, the speaker (=B) assumes that the hearer (=A) regards the stones as real diamonds. However, the speaker him/herself is not sure if they are real, suggesting the possibility that they could be only glass. Moreover, regarding to the hypothesis B-2, the hearer (=A) is actually reassessing the validity of the proposition here. The hearer A says, "Maybe," which shows that he is reevaluating the proposition that *those diamonds are real*.

(10)

ARLENE: Reuben's real upset, honey. He got hurt. No matter what I said to him, he wouldn't take me back now. No way. You didn't see him this morning, honey. He's real upset. He ain't never gonna forgive me.

TREVOR: *You don't know that* he wouldn't.

ARLENE: I know.

TREVOR: You don't know until you ask him.

(Pay It Forward)

(10) is a conversation between Arlene, the mother, and Trevor, her son. The mother is worried that Reuben is so upset that he won't forgive her. First, according to the hypothesis B-1, *S thinks that H possesses P as his/her view of reality*. Here, S (=Trevor) thinks that H (=Arlene) believes that Reuben won't forgive her. Therefore, the hypothesis B-1 is relevant. The hypothesis B-2, *H will reassess the validity of P*, is also applicable here. In (10) Trevor (=S) is trying to change his mother's idea, saying "you don't know that." Nevertheless, Arlene (=H) sticks to her pessimistic idea and says, "I know." Hearing that, Trevor suggests that she should ask Reuben how he really feels.

In this section we examined if the hypotheses are applicable to the examples of the two types, and it was shown that the hypotheses for each type are applicable. Therefore we regard the hypotheses of the present paper as relevant and valid.

VI. Conclusion

This paper examined the negative sentence *you don't know that* + PROPOSITION with two different meanings: type A with factivity and type B without factivity. Based on Langacker's models, that is, the control cycle and the current discourse space, the present paper proposed the hypotheses. First, with type A, *S thinks that H does not possess P as his/her view of reality* (A-1); *H will realize that he/she does not possess P as his/her view of reality* (A-2). Second, with type B, *S thinks that H possesses P as his/her view of reality* (B-1); *H will reassess the validity of P* (B-2). The examples for each type were examined in the light of the hypotheses: it was shown that the hypotheses are relevant in all cases. Thus the paper concludes that the hypotheses are valid.

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