ORIGINAL ARTICLE

The embodied grounding of focal parts in English wh-dialogues with negative answers

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Abstract: Negative answers are common types of responsive expressions to English wh-questions. From the theoretical perspective of Embodied-Cognitive Linguistics (Wang, 2014) and the dialogic view on meaning construction, this study takes English wh-dialogues with negative answers as the research object and regards such dialogues as a special group of dialogic constructions in conversation. This paper gives an account of the embodied properties of the semantic grounding process of dialogic focuses in such constructions, in terms of the types of the semantic grounding and the categories of semantic consistency of focal parts of wh-questions with those of negative answers, with the ultimate goal to decipher the cognitive mechanism by which wh-dialogues with negative answers are produced and construed in linguistic communication.

Keywords: wh-dialogue; construction grammar; negation; event; grounding

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1. Introduction

Dialogue analysis is one of the cutting-edge topics in current linguistic cognitive research (Brône et al., 2014; Fried, 2009; Nikiforidou et al., 2014; Sakita, 2006; Zeng, 2018; Gao, 2015; Hu and Meng, 2015; Wang, 2017). A pair of a wh-question and its answer is a form of dialogue in linguistic communication. The existing cognitive approaches to English wh-dialogues (Zeng, 2016; Wang and Zeng, 2016a, 2016b, 2016c) reveal that pairs of wh-questions with negative answers are configurations with unique structural features, as shown in dialogue (1).

Dialogue (1)

Question: What were you thinking about?

Answer: Oh, I was thinking, ‘I don’t want this to end.’

The focal part of the wh-question in dialogue (1) is the interrogative word “what”, which is

highlighted at the beginning of the question, and the answer contains the sequence of linguistic signs “I don’t want this to end”, where there is a contracted form of syntactic negation marker “*not*”. In this dialogue, the respondent directly elaborates the focus of the question with the structure involving a negated semantic content, and the questioner garners the specific information of “what” through the answer having a negative marker. Dialogue (1) exemplifies the structural pattern of a wh-question with its negative answer. In such type of dialogues, the question is typically constructed with the form of “wh-word + auxiliary + remainder?”, while the answer is the linguistic expression containing such negative lexicon(s) as *no*, *not*, *never*, *nothing*, *nobody*, *nowhere*, *none*, *unsuccessful*, or a syntactic marker of negation, for instance, the prefix “*dis-*”, the condensed form “*n’t*” when collocated with an auxiliary verb. The purpose of a speaker’s using this kind of dialogue is supposed to verify the known information about the objective world or to explore the unknown information concerning the reality by deconstructing and reconstructing events.

According to Croft and Cruse (2004: 257–258), construction is a symbolic unit, which subsumes syntactic, semantic, pragmatic and discourse-functional properties. A construction is a form-meaning pair (Goldberg, 1995: 4). Constructions are conventionalized pairings of form and function (Goldberg, 2006: 3). In this sense, the pair of form with function indicated by a wh-dialogue with the negative answer signifies the status of “*dialogic construction*” of such a dialogue.

Bakhtin (1981) and Voloshinov (1973) advocate a dialogic view on the meaning constructed in literary texts, and hold that the dialogue is the fundamental form of human’s existence. According to Kristeva (2013: 3), intertextuality is the relation of a text with its previous and latter texts, suggesting that the understanding of meaning should be based on the relationship between texts. Linell (2006) assumes that cognitive studies on language should examine the interactions between subjects and the interactions between subjects and contexts in linguistic communication. Linell (2006) also points out that the meaning of a particular discourse in communication is linked to its outer syntax that may include three parts, namely antecedent, subsequent, and co-occurring structures. What is worthy of our attention is that Du Bois (2014) introduces the theory of dialogic syntax to analyze the meaning of discourse, while Brône and Zima (2014) propose a dialogic construction grammar approach, the integration of dialogic syntax and cognitive construction grammar, to natural languages, advocating that the cognitive analysis of utterances should examine the dialogic resonances among structures at least at the syntactic, semantic and pragmatic levels.

This paper, in agreement with the view of embodied construal and the kernel principle “Reality (*ti*)---Cognition (*ren*)---Language” proclaimed by Embodied-Cognitive Linguistics (ECL), discusses the categories of semantic grounding of focal parts of questions in wh-dialogues with negative answers, and investigates the types of focal adjustments in such dialogues, with an aim to expound the correlation between language, cognition and interpersonal interaction in these types of dialogic constructions. All the examples of dialogues are selected from the Corpus of Contemporary American English (COCA).

2. Existing research findings on negation

Negation is a key research topic in the fields of philosophy, logic, psychology, and linguistics. Grounded in single language data or comparative studies in different languages, the existing research on negation has dealt with the conceptual structure, logical form, syntactic features,

discourse function of negation through theoretical speculation or data-driven analysis.

From the philosophic perspective, negation serves as the way of speculation, through which human beings deepen their understanding of the objective world. Negativity is described by Herbert Marcuse as the central concern of modern philosophy and even studies on thought (Xu, 2011: 42). Traditionally, philosophical studies on negation are conducted with the combination of views on dialectics (Tan, 2015: 19), observation perspectives (Zhao, 2013: 208), experience accumulation (Whitehead, 1978), subjectivity (Felgenhauer, 2016) or phenomenology (Saury, 2009: 245).

In logical reasoning, negation is one of the factors to determine the truth value of a proposition. According to Frege, all negations are characteristic of being propositional and can be interpreted or replaced by the structure “it is not true that...” (cf. Speranza, 2010: 298). Wittgenstein introduced the operator of negation to discuss the functions for truth values (Stock, 1985: 465). Mints (2006) uses mathematical logic to analyze propositional semantics of negative sentences. Besides, Onishi (2016) discusses negative modalities under the theoretical framework of relevance logic R.

The studies on negation in psychology mainly examine the relationship between meaning and the conception of negation through various experiments. Language is the function of human mind, so psychoanalysis can reveal the construction, use and cognitive processing of negation in language (Michael, 2006: 6). Horn (1989: 154–203) explains the semantic marking and the acquisition of negation as well as the negating process of conception from the psychological angle. Relevant psychological researches suggest that negative statements and positive statements are not at the same level (Blanco, 2011).

Negation is a universal component of language (Loder, 2006: 13). More often than not, negative statements may contain more information than positive statements (Liu and Cui, 2006: 100). Barwise (1991) observes that all human languages contain one or more operating mechanisms for negation. In the view of Speranza (2010: 299), it is negation that makes us fully human, providing us with the capacity to deny, to contradict, to misrepresent, to lie, and to convey *irony*.

The linguistic researches on negation are mainly carried on at syntactic, semantic, and pragmatic levels. Negation is a process of converting a sentence with affirmative tone into that with negative one, usually by inserting into the sentence negative word(s) such as *no*, *not* or their variants (Gleason, 2001). Haegman (1995) focuses on the syntactic features of negation based on the binding theory and minimalist program in the framework of Transformational - Generative Grammar. Zeijlstra (2007) analyzes the form and syntactic position of negation in different languages, and specifically investigates the quantifiers and the polar item indicating negation, and the consistency of grammatical relations in structures containing negation. On the pragmatic level, Leech (1983) claims that for speakers, negative sentences are processed with more time and efforts than positive ones. Nieuwland (2008) detects the relationship between negation, pragmatic context and world knowledge through ERP experiments.

In linguistic studies, most of the findings on negation are rooted in formalist approaches (cf. Sandu, 1994; Kim, 1995; Ladusaw, 1996) and the cognitive-functional analyses (cf. Halliday, 1994: 22; Langacker, 1991: 241–243). In particular, from the perspective of cognitive linguistic research, Verhagen (2005: 28–77) holds that the main function of negation in the natural language is revealed in the cognitive coordination between conceptualizers; the purpose of speaker/author's using a

sentence containing negation is to guide the hearer/reader to construct two different mental spaces, one of which is accepted by the hearer/reader at the end of the reasoning process for meaning, while the other of which is rejected.

With regard to the research contents pertinent to negation, ambiguity caused by negation (Horn, 1989: Chapter 6; Liu, 2005), scope and focus of negation (Quirk et al., 1985: 787–789; Zuo, 2014: 1), classification of negation (Miestamo, 2000), and acquisition of negation (Klima and Bellugi, 1966; Choi, 1988; Batet, 1995; Cuccio, 2012) are concerns highlighted in linguistic studies.

To sum up, the existing research findings on negation cover the discussions of the ambiguity caused by negation, the scope and the focus of negation, the position of negation, the function of negation, the relationship between negation, affirmation, and the interrogation. Undoubtedly, these achievements enable us to understand more about negation in language. Nevertheless, there is an obvious deficiency in the existing studies on negation, which is that most of the discussions are done on the basis of single utterances. Additionally, the existing analyses on wh-dialogues (Zeng, 2015) indicate that findings on wh-dialogues with negative answers at the level of paired utterances are rarely seen. This paper is supposed to bridge these gaps left by the existing research on negation as well as wh-dialogues.

3. Event domain-based grounding of focal parts in English wh-dialogues with negative answers

3.1. Event-domain in a wh-dialogue¹

Event domains are the basic units for people to understand the world (Wang, 2005: 18). Event-domain Cognitive Model (ECM) is essentially the representation of the internal structure of an event, as shown in **Figure 1** (ibid).

Figure 1. Event-domain cognitive model (ECM) (Wang, 2005: 18).

Figure 1 shows that a basic event domain mainly includes two core elements, viz. **Action** and **Being**, both of which display hierarchical features. Specifically, an **Action** might consist of several sub-actions as marked by A1, A2, or An, while an event could be structured with the joint efforts from multiple participants that are in the category of **Being** and labeled as B1, B2, or Bn. In the

1. Wh-dialogues in this study refer to English wh-dialogues.

view of ECM, the **Being** in an event domain might refer to concrete entities such as persons, objects, or abstract ones (e.g. concepts, imaginative worlds, objects). Additionally, the **Action** or **Being** in an event domain could be specified further in terms of its typical properties such as D1, or Dn for **Action**, and C1, or Cn for **Being**.

According to the assumption of the ECM, in English wh-dialogues, questions and answers are essentially the results of linguistic encoding for the same event domain or different event domains. An interrogative word such as *when*, *where*, *why*, or *how* placed at the beginning of a wh-question is the encoding of the information about time, space, reason, or the mode of the element **Action** in a specific event domain, while the question word such as *what*, *who*, or *which* highlights the features concerning participants (**Being**) in a given event.

3.2. Cognitive grounding

In the sense of Cognitive Grammar, the term *ground* in cognitive grounding theory is distinct from the use of that in figure-ground alignment. The former is employed to indicate the speech event, its participants (speaker and hearer), their interaction, and the immediate circumstances (notably, the time and place of speaking) (Langacker, 2008: 259). Taylor (2002: 341–412) assumes that abstract entities are grounded in situated dialogic context on the basis of schema-instance cognitive principle. “Grounding” is applied to describe the process that an instance is taken out of the instantiation domain of a type concept to talk about a specific entity (or persons and things) (Wan, 2009: 30). Niu (2013: 35) holds that the grounding theory in Cognitive Grammar is to explain a conceptualizer’s mental operation, when things or objects denoted by nouns, or events designated by verbs are contextually situated within the knowledge scopes of both a speaker and a hearer, with the help of certain grammatical strategies. Wang (2011: 471–472) interprets “*grounding*” as the process that abstract language concepts are elaborated by concrete instances, namely the process to exemplify schematic entities in a particular situation.

Prototypically, in an English wh-dialogue, the schematic wh-word heading the question is specified in the answer, which indicates the grounding process of the dialogic focus, the wh-word initiating a wh-question, from a type concept to a concrete example.

3.3. Schema-instance relation between a wh-question and its (negative) answer

In a wh-dialogue, the semantic grounding of the dialogic focus that is encoded by the wh-word at the head of the question implies the categorization of the relation between a schema that is a type concept indicated by the question and its instance suggested by the (negative) answer, as seen in **Figure 2**.

Figure 2 illustrates that in a wh-dialogue, the question is the conceptualization of type event by virtue of the semantic attribute of a *schema* and thus the semantic uncertainty denoted by the wh-word heading the question. Following this line of thinking, the question in dialogue (1) encodes a schema that is an unspecified TYPE concept of event: you are talking about X, in which X might be instantiated by unlimited examples, for the reason that the semantic grounding elements for the wh-word², such as time, space and speakers, might vary widely.

2. Wh-words in this study are interrogative words at the heads of English wh-questions, such as *what*, *when*, *where*, *how*, or *which*.

Figure 2. The semantic relation of type concept and its instance in a wh-dialogue.

Essentially, the TYPE concept thus encoded by the wh-question in Figure 2 suggests that Speaker 1 (S1, the questioner) delimits a domain of instances, from which Speaker 2 (S2, the answerer) might select a member to serve as the answer to the wh-word or the wh-question. In the case that the answer is consistent in the semantic category with the wh-word in the question, the answer is in fact the instance of the schema that is the wh-word or wh-question. Otherwise, the so-called answer is not an instance of this schema.

Specifically, in a situated wh-dialogue, the question (Q) by S1 defines a domain of instantiation (DI) of the wh-word³ that is at the beginning of Q. With reference to the textual and other types of contexts working as the background information for the semantic grounding of the wh-word, the DI could accommodate countless specific members of the schematic wh-word. During the interaction between S1 and S2, S2 identifies the semantic features of the wh-word, which could be in the category of the element *Action* or *Being* of the ECM encoded by the wh-question. On account of the roles of the fundamental grounding elements, namely ECM, S1, S2, speakers' interaction, time and space, etc. to specify the dialogic focus, the members of instances in the DI that are possible answers to the schematic wh-word will then be narrowed down to some extent. To successfully select the most proper instance(s) from the DI, S2 needs to probe more contextual information, for instance, the communication intentions of S1 and S2, and the embodied interactive experience between S2 and the objective world. The qualified instance identified eventually by S2 in the DI is then the situated answer to the wh-question. In consequence, the schematic wh-word or wh-question is elaborated by a specific example.

4. Types of grounding of focal parts in questions of wh-dialogues with negative answers

3. Cases of multiple interrogative wh-words heading a wh-question do not fall into the scope of this research.

In wh-dialogues concerned in this study, negative answers typically represent the results of the instantiation of wh-words in questions, indicating the types of grounding of focal parts in these categories of dialogic constructions. In the process of semantic grounding of wh-words from type concept to an instance, the objects to be grounded are wh-words, the elaborations of which are subjected to grounding elements in the dialogic situations. In prototypical negative answers, marker(s) for negation, such as *not*, are the basic grounding elements to semantically anchor wh-words. Viewed from the data in COCA, there are three major types of semantic grounding of dialogic focuses in wh-dialogues with negative answers, which are exemplified as follows.

4.1. Direct grounding

Typically questioners in wh-dialogues expect the respondents to directly provide detailed information about wh-words, the focal parts in wh-questions. For these cases, a dialogue mode of questioning with ideal answering is shared, with the answer directly elaborating the focus in the question. Dialogue (1) is a case in point, insomuch as the negative statement “I don’t want this to end” specifies the “what” at the head of the question in a straightforward way. Another example is dialogue (2).

Dialogue (2)

Question: What does “hit it and quit it” mean?

Answer: It means **there’s no emotional involvement**⁴.

Founded on the syntactic parallelism between the question and the answer (as displayed by the bold black parts between them), the negative statement in the answer, namely “**there’s no emotional involvement**” semantically elaborates the “what” and the ECM frame “‘*hit it and quit it*’ means *X*” in the question. Hence, the questioner obtains the missing information on “Being” in the ECM frame, demonstrating the relationship of TYPE concept and the instance between the question and the answer. For this reason, dialogue (2) signifies one of the cases of direct grounding of wh-words in this family of dialogues.

It is noteworthy of our attention that zero instances implied by negative answers are another type of examples of direct grounding of wh-words, as shown in dialogue (3).

Dialogue (3)

Question: Who are you talking about?

Answer: Nobody in specific.

The answer in dialogue (3) represents an abstract concept of an empty set, and “+ human” is the common semantic feature shared by the dialogic focus “who” in the question and “nobody” in the answer. Thus, it is evident that there is the semantic correspondence in this conversation. In this view, “who” in the question is directly grounded in the sense that the number of instances of “who” in the current dialogic situation is zero.

4. The bold black parts in the question and the answer suggest syntactic mappings and thus structural resonances between two utterances (the same hereafter).

4.2. Delayed grounding

By delayed grounding, it means cases where answers with negative syntactic structures simply function to pave the way for the presence of instances of wh-words initiating the questions. For these dialogues, more often than not the respondents provide qualified members for schematic wh-words by employing affirmative statements that are positioned after the negative structures. Dialogue (4) is a convincing example.

Dialogue (4)

Question: How do engineers go about tackling that mountain of data to try to find out what happened?

Answer: Well, it's obviously **not** a very easy task. **The engineers have accident scenarios that they've worked out over the years. They tend to focus on eliminating things called single point failures...**

The answer in dialogue (4) consists of the utterance with the negative marker “**not**” and those with affirmative statements. The expression with negation, however, is not to specify the dialogic focus⁵ “how”, but to explain the property of *being tough* of the task, viz. the EVENT encoded by the question, that is, “By X, engineers go about tackling that mountain of data to try to find out what happened”. As inferred from the syntactic symmetries between the ECM frame in the question and the bold black parts in the answer, there are semantic resonances between the utterance by the questioner and those by the answerer. To put it another way, utterances with affirmative tones function as a whole to be the instance of the “how”, hence the dialogic focus is grounded at length but with a delay by the presence of the negative statement at the beginning of the answer.

4.3. Invalid grounding

Invalid grounding commonly occurs in cases of wh-dialogues with negative answers, where there do exist syntactic and semantic correspondences between questions and negative answers, seemingly showing that wh-words leading the questions are instantiated, but the instances of schematic wh-words are positioned within the scope of the negation. On this condition, the emergent instances are virtually not qualified members to elaborate dialogic focuses in these dialogues. Therefore, the semantic grounding of wh-words turns out to be invalid, with the evidence from dialogue (5).

Dialogue (5)

Question: When have you last seen one billion, Ray?

Answer: Well, not **recently**.

In this dialogue, the bold black parts suggest the syntactic mapping between the question and the answer. Meanwhile, both “when” and “recently” display the semantic property of *time*, with the latter being more specific, implying that “recently” is the instantiation of the “when”, hence indicating the event schema-instance relation exhibited between the two utterances. In the answer, “recently”, however, falls into the scope of negation that makes the qualification of “recently” as the instance of the “when” invalid.

5. The initial dialogic focus of an English wh-dialogue by default is indicated by the wh-word heading the wh-question.

Additionally, the case of invalid grounding could be the result of respondent's incapability to answer the question or hearer's non-cooperation with questioner to specify the dialogic focus in the conversation, just as hinted at in dialogue (6) and dialogue (7) respectively.

Dialogue (6)

Question: Why do you think that Poland should have nuclear weapons?

Answer: I don't understand the question.

The initial dialogic focus for dialogue (6) is linguistically encoded by the "why" in the question. Nonetheless, in the answer there is no structure that is semantically correspondent to "why", and the focus of the respondent is his or her cognitive incapability to interpret the meaning of the question⁶. It is clear that the "why" as the focus in the question is not successfully instantiated, resulting in the invalid grounding of the wh-word.

Dialogue (7)

Question: How did you get your wedding dress?

Answer: I don't want to talk about it.

In regard to dialogue (7), the questioner's concern is the way the answerer got the wedding dress, and the answerer is supposed to provide detailed information centering on "how", whereas the truth is that there is no syntactic structure suggesting any instances of the "how". What the answer has demonstrated is the respondent's attitude of non-cooperation (for a certain reason) with the questioner to specify "how", with the consequence that the wh-word placed at the head of the question is not grounded validly in this situated conversation.

5. Structural mappings from focal parts in negative answers to those in corresponding wh-questions

Normally each utterance in daily language communication has its focus or theme. In the views of cognitive grounding theory and the event-based schema-instance principle, the quality of a wh-dialogue predominantly relies on the degree of semantic consistency between the wh-word heading the question and the focus in the answer. The three types of semantic grounding of wh-words in wh-dialogues with negative answers discussed in section 4 imply that there are two fundamental categories of semantic consistency between wh-questions and the negative answers, revealing the extents of being foregrounded of the wh-word in the local dialogues.

5.1. Explicit semantic consistency of focal parts in wh-questions and their negative answers

When the focus of a wh-question and that of its negative answer have the same semantic feature(s), and the negative statement is a qualified instance of the wh-word leading the questions, the respondent in this situation successfully positions the specific member(s) of schematic wh-word or the entire question frame, based on the "schema-instance" categorization of semantic mapping between utterances. With regard to these cases, an explicit semantic consistency of focal parts in

6. The respondent's incapability to answer the question might be because of the respondent's intention of being unwilling to answer the question, which can be explained further with the help of pragmatic theories and is not the key concern of this study.

wh-questions and their negative answers is displayed, and focuses of questions are foregrounded or highlighted in the communication. Example (8) is one of these types of dialogues.

Dialogue (8)

Question: What do you say to me on that score?

Answer: I say that **the US should not treat the Iraqi army as a political faction in Iraq**.

This dialogue is developed around the focus of the question “what”, which is supposed to be a set of utterances uttered by the answerer and associated with the ECM whose *Being* related to “that score”. Before the specific information on “what” is offered, the dialogic focus of the question, viz. “what”, is a schema signifying a type concept. As for the answer, there are structures that were employed in the question, producing syntactic parallelism (you say: I say) as underlined within this conversation. On the basis of the symmetrical feature, it can be inferred that the bold black parts (**the US should not treat the Iraqi army as a political faction in Iraq**) in the answer as a whole is the instantiation of the “what”, even though the negative marker “*not*” is embedded in the answer. The ECMs based schema-instance relation between the two utterances show that the dialogic focus in the question is foregrounded in the grounding process of the “what”.

5.2. Inconsistency of focal parts in wh-questions and their negative answers

In wh-dialogues, some negative answers and questions form pairs of utterances solely at the syntactic level, but the focuses of questions and those of answers are inconsistent in terms of the semantic properties, giving rise to cases where wh-words heading the questions are not grounded successfully or grounded but in a delayed manner, and thus the dialogic focus in such a wh-dialogue is shifted to a new one (dialogue (9)), or the dialogic focus is suspended (dialogue (10)), or even the dialogic focus is removed (dialogue (11)). For these examples, the dialogic focuses are not foregrounded in the communication.

Dialogue (9)

Question: How do you see this race breaking?

Answer: Well, it’s not how I see it; it’s how the polls see it.

As we can see from the answer, the structure “how I see it” is in the scope of negation defined by the negative marker “*not*”, which informs us in this dialogic situation, the respondent denies the possibility that the focus “how” in the question will be specified, while the structure “*it’s how the polls see it*” with affirmative tone means a new dialogic focus “how” related to a new ECM “the polls see it” is introduced, with the original dialogic focus being shifted and not foregrounded but just as a part of the background for the two speakers to construe the new dialogic focus “how”.

Dialogue (10)

Question: What is it?

Answer: It’s not a drug.

For this short conversation, the focused attention of the questioner is a set of entity indicated by “what”. In the meantime, both the question and the answer share the event frame: it is X, which

lays the foundation of the schema-instance relation between “what” in the question and “a drug” in the answer. Nevertheless, the status of “a drug” as the instance of “what” is negated by “not” in the answer, bringing forth the example in which the dialogic focus is not grounded but suspended and waiting for being instantiated in the possible coming talk turns.

Dialogue (11)

Question: Who has a policy?

Answer: There’s no policy.

The talk turns in dialogue (11) show that “policy” in the question is re-produced in the answer, suggesting the ECM frame of the question is partially employed by the answerer. In addition, the negative marker “no” functions to negate the possibility that “policy” will be in the category of *Being* to construct the question ECM, indirectly denying the appropriateness of “who” as the central concern of the questioner. Accordingly, the dialogic focus is not elaborated but removed by virtue of the role of “no” in the answer.

Moreover, for examples of delayed grounding, negative answers function to lay the foundation for the presence of instances of wh-words, where the dialogic focus in such a conversation is detained but foregrounded ultimately, with the evidence from dialogue (4), repeated below as dialogue (12).

Dialogue (12)

Question: How do engineers go about tackling that mountain of data to try to find out what happened?

Answer: Well, it’s obviously not a very easy task. **The engineers have accident scenarios that they’ve worked out over the years. They tend to focus on eliminating things called single point failures...**

In the answer of dialogue (12), the first utterance with negative structure does not elaborate the semantic focus of the question, but the respondent still provides specific examples of the focus “what” heading the question before the end of the talk turn. For this dialogue, the focus of the question is not highlighted in the respondent’s mental space until the end of this short conversation.

6. Concluding remarks

From the theoretical perspectives of Event-domain Cognitive Model and cognitive grounding theory, this paper discusses the embodied properties of semantic grounding of focal parts in English wh-dialogues with negative answers, a special group of dialogic constructions, with the dialogue examples retrieved from the Corpus of Contemporary American English (COCA). Specifically, in line with the cognitive view on event and the schema-instance principle, this study proposes that pairs of English wh-questions with their negative answers typically display the relation between type concepts and the instances, indicating that there are three groups of semantic grounding of wh-words positioned at the heads of wh-questions, namely the direct grounding, the delayed grounding, and the invalid grounding. Meanwhile, the types of semantic grounding of wh-words in questions

imply two fundamental categories of semantic consistency between the focal parts of wh-questions and those of negative answers. The first category is the cases of explicit semantic consistency where the original dialogic focuses are foregrounded in conversation, while in the second one that is for the examples of semantic inconsistency, the dialogic focus designed by a questioner is prototypically not salient in the hearer's mental space but works as a part of the background for interlocutors to construe the new dialogic focus, and, if possible, to construct new talk turns. On account of the classifications of such types of dialogic constructions based on the semantic grounding of wh-words and semantic consistency between two utterances(Q and A), this paper thus makes a claim that negative statements having negative markers in the answers to English wh-questions chiefly serve to negate the appropriateness of the original dialogic focuses by denying the validity of the ECM frames of questions, or to negate the schema-instance relation between wh-words or wh-questions and their answers, essentially indicating the strategies speakers in conversation employ to structure English wh-dialogues with negative answers.

Conflict of interest

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