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Unpacking the English *Because*-Constructions as Used in Three Cognitive Domains: A New Approach to Analyzing Its Semantic-Syntactic Features

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Abstract

This article analyzes the semantic-syntactic features of English *because* from a constructionist perspective. It is claimed that *because* is used to indicate causality in three basic syntactic constructions, namely, the Causality-Stating Construction committed to an objective description of a causal relation in reality, the Causality-Inferring Construction used to make inference on an assumed causal relation between two entities, and the Causality-Explaining Construction aimed at offering an explanation for a prior speech act. Such usages represent three cognitive domains in which language users cognize and interact with the physical and mental worlds, i.e., the physical-social domain, the epistemic domain and the speech act domain. All the usages in such three domains share the same formal expression, namely, "*q*, *because p*". Such basic constructions are interrelated to each other through metaphorical mappings, displaying respectively syntactic-semantic features and constructional polysemy. It is suggested that *because* is not polysemous but has pragmatic ambiguity. Additionally, the Causality-Stating Construction has two functional varieties, both of which are employed to convey causal relation between the two propositions contained in the main clause and the subordinate clause, as based on presupposition.

Keywords

Construction Grammar, *Because*, Cognitive Domains, Pragmatic Ambiguity

1. Introduction

One of the ultimate purposes, and the core content, of doing scientific research is

to discern the relation between causes and effects. Studies on the linguistic expressions of causality show that the most evident and frequently used forms are those lexical causal links (Cf. Altenberg, 1984; Solstad & Bott, 2017) such as *so* and *because* (*of*), and those clausal links, such as *that's why*. As Quirk et al. (1985: p. 1104, 1106) and Mittwoch et al. (2002: p. 731) point out, *because* is the multifunctional core word most frequently used to express causality. However, its syntactic-semantic features seem to have long been inadequately analyzed and insufficiently explained, especially in EFL/ESL contexts (Cf. Hirose, 1991; Sweetser, 1990; Kanetani, 2007). In China, for example, the topic is long ignored and no serious research article on *because* has ever been published, probably because Chinese speakers, including EFL learners, tend to equate it with its Chinese equivalent, "*yīnwèi*" (因为), which is incorrect. So, it is believed that a more careful analysis of such features can shed lights on human understanding of both similarities and dissimilarities of the ways different language users express causality. The present article, by applying cognitive Construction Grammar theory and methodology (CxG, Goldberg, 1995, 2006; Fried & Östman, 2004; Fried & Nikiforidou, 2025), aims to offer for EFL learners a careful analysis of its syntactic-semantic features, the way its form and meaning matches and the major pragmatic conditions on its use, along with the laws English native speakers cognize and use *because*, because recent CxG studies on *because*-related constructions have shown their edges in revealing the features and regularities of its usages (Cf. Hilpert, 2005a, 2005b, 2007). A construction is a learned or conventional pairing of form with meaning or (semantic or discoursal) function with sufficient frequency in use, a certain grammatical pattern with identifiable and definable rules, allowing for compositional constructions (Goldberg, 1995: p. 4, 2006: p. 5; Goldberg & Casenhiser, 2006; Boas, 2013). Constructions can present themselves in varying sizes and complexities, ranging from sentential levels through phrasal levels to morphological levels, and in the light of principle of No Synonymy of Grammatical Forms, any change in form will entail, to a greater or lesser extent, a change in meaning (Bolinger, 1968; Givón, 1985). The term "meaning" is understood to include all of the conventionalized aspects associated with a construction's function.

CxG is usage-/exemplar-based in that it allows both instances and generalizations to be captured in terms of fully articulated schematic networks, including schemas on various levels. In this model, linguistic or constructional knowledge is considered as a high-dimensional space with formal and functional dimensions, in which exemplars are stored in positions representing their values on these dimensions, and clouds of exemplars with high densities (compared to the space surrounding them) are what corresponds to categories. All linguistic instances including the exemplars are constructs that instantiate certain constructions that exist independently of the particular lexical items they allow (cf. Michaelis, 2019; Kim & Michaelis, 2020: pp. 14-15, 60-61; Boas, 2025). Based on the features of a large number of instances observed from related literature, BNC and the Internet uses, the author proposes the following five distinctive syntactic constructions or patterns

that entertain *because* (Cf. Sweetser, 1990: p. 77, with slight modifications):

1) Tom came back because he loved Jill. (Pattern I as a discourse-functional variant of Pattern II)

2) Tom came back, because he loved Jill. (Pattern II, or Causality-Stating Construction)

3) Because he loved Jill, Tom came back. (Pattern III as a discourse-functional variant of Pattern II)

4) Tom loved Jill, because he came back. (Pattern IV, or Causality-Inferring Construction)

5) *Because he came back, Tom loved Jill.

6) What's the answer to this problem, because you're so clever. (Pattern V, or Causality-Explaining Construction)

Regarding the BNC-based sampling, a total of 99,476 sentences involving use of *because* were randomly retrieved, with fifteen words at both sides of it kept in the retrieving. The multiple sources harbored different portions, including "Spoken", "Fiction", "Magazine" "Newspaper", "Non-ACAE", "academic" and "MISC". For convenience of operation, the sampled data were randomly sampled for three times manually, until finally 250 qualified instances were left. As the statistics showed, the proportions of the instances as used in the five patterns varied markedly: Pattern I (39.2%), Pattern II (13.6%), Pattern III (4.8%), Pattern IV (16.8%) and Pattern V (4%). Importantly, 54 instances (21.6%) were ruled out of the statistical analysis as they mainly involved structures of either the "This / That is because ..." type or the "... because of ..." type. Those instances, however, do not contradict the present scheme of description and explanation.

In next sections, a fine-grained analysis of the relation and differences between those patterns will be made mainly by making syntactic tests, with an aim to demonstrate the constructional status and conceptual mappings involved and find out if *because* is polysemic. It is argued that the Patterns II, IV and V are the basic syntactic constructions whereas the other two are functional varieties. The three basic constructions are herein termed as Causality-Stating Construction, Causality-Inferring Construction and Causality-Explaining Construction respectively. The analysis is hoped to offer a neat but highly descriptive and explanative scheme of the features of *because*.

2. Some Philosophical Considerations on Causality Expressions with *Because*

Making some philosophical considerations on causality expressions with *because* helps clarify the nature of the related usages. As is well known, a primary concern of philosophy is the relation between thinking and being, and reasoning and making judgment based on concepts is the core of logical thinking. Since logical relation reflects cognitive processes and outcomes, causality as a type of meta-logical relationship is the basis of all logical relationships and serves as the starting point of reasoning. It is, therefore, one of the core contents of thinking and the condi-

tion of, and foundation for, human rational behaviors. Consequently, one's cognition of it may affect his life[1]. For that reason, causality and the linguistic expressions of it have always been a research topic of philosophers and researchers in other fields (Cf. Meyer, 2000). Since Aristotle, both idealist and materialist philosophers have paid close attention to the problem of distinguishing, identifying and expressing causality and their debates last till now (Cf. Wang et al., 1972: pp. 20, 49, 59, 75, 86, 111, 124-125, 210). In particular, both Hume and Kant emphasize the role of human sensibility, intellectuality and rationality in understanding causality. It is found out that human beings' causal reasoning functions as a basic principle in their construction of activities and experiencing and perception of reality; it is also a core category of human cognition. It therefore maintains the survival of human beings, being vitally important to representation of their knowledge and cognitive processes such as predicting, explaining and understanding (Cf. Meyer, 2000; Noordman & Blijzer, 2000). Therefore, Hume likens cognition of causality to "the adhesive of the universe", Hitchcock (1998) holds that knowledge of causality is guide of human life, and Keil (1989) stresses that causality is the most useful relationship in conceptual structure and theoretical construction (cited in Khoo et al., 2002).

According to cognitive linguistics, human beings, in using language to understand and express the reality, base their efforts on the interaction between their body-minds and the world, aided and conditioned by their experience and cognitive strategies. For that reason, the form and meaning of language are iconic to the cognitive modes and reflect how humans cognize the world. Such a belief reflects the basic principle of "Reality⇄Cognition⇄Language" of cognitive linguistics (Cf. Wang, 2007: pp. 68-70). One can make a two-way interpretation of it: reality determines (human's embodied) cognition, which in turn determines language (form and meaning); language influences cognition, which in turn influences reality. After all, human beings are born with the ability to induce and deduce causality from recurrent events, as well as the ability to predict or deduce relevant causal events from a single event. Additionally, they develop related behavioral habits or show relevant tendencies. However, they may make errors in determining the necessary and sufficient conditions in causality, and some predictions or inferences they make may be incorrect. These characteristics are reflected in their language use. On the basis of such considerations, this article aims to reveal the main features of language users in their understanding and expressions of causality by examining the features of *because* as a logical connector.

3. The Basic Types of Reasoning That *Because* Expresses: Stating Fact vs. Making Inference

A cornerstone of CxG is the notion that basic human experiences correspond to

[1]Normally, logical relations have causality as their presuppositional conditions, such as adversative, concessional and conditional relations. For example, "John didn't pass his exam, though he worked hard." (Cf. Sweetser, 1990).

central senses in construction argument structures, which are attributed to syntactic constructions in which they occur. This is the Scene Encoding Hypothesis that Goldberg (1995: p. 11, 39) defines and explains as the fact that languages are thought to draw on a finite set of certain event types. Alternatively, constructions represent human experiences through structures which correspond to basic general events, as it is assumed that the development and emergence of syntactic constructions evolved from a need to linguistically encode these event types (Behrend, 1998). Next in the article, it is suggested that the *because*-constructions indicate events of reporting causality. It is generally held that *because* is typically used to express the causal relation between a causing entity and a caused entity, both of which are facts and propositional. Meanwhile, it can be used for making a judgment about causality, which is usually subjective. Thus, the connector can be used in two syntactic-semantic structures, i.e., (objective) causal and (subjective) inferential[2]. See the following examples (based on Rutherford, 1970: p. 95, 97; Cf. Jespersen, 1949: p. 399):

(7) a. ^{q}[Sam is not coming] because ^{p}[he's asked for sick leave]. (Pattern I)

b. ^{q}[Sam is not coming], because ^{p}[he just called from Rome]. (Pattern IV)

As indicated, (7) a&b fall in different patterns. Rutherford (1970) and Hooper & Thompson (1973) term them respectively as restrictive and non-restrictive adverbial clause. Since (BE) CAUSE as a two-scale operator is used to link two related propositions, i.e., *q*(,) *because p*, its interpretation is thus determined by the semantic relation between *q* and *p*. For Pattern I, it means that *q* and *p* are associated with two events or states of causality in reality (Cf. Lyons, 1977: p. 483), with a one-to-one correspondence between cause and effect (note that for that reason in (7) a *just* can be inserted immediately before *because*), in which case the cause is the sufficient condition for the effect, and one can make deduction from the cause to the effect. In fact, what the speaker does is just give a straight objective description of such a relationship, which is taken as whole, and, consequently, he can use expressions like "The fact is ..." or "It's true that ..." to mark that feature or paraphrase the sentence; or, he may even use an overt declarative sentence, such as "*At first* I could not speak because I hated him so much." It is noteworthy that, since no judgement is involved in the case, a comma can be inserted and that forms Pattern II.

In contrast, in the two propositions in Pattern IV, *q* is an assertion, as a judge-

[2]Quirk et al. (1985: pp. 484, 1103-1104, 1086) distinguish between four types of reason clauses, with a criterion of objectivity and subjectivity. Accordingly, innate objective connection in reality falls into the category of "cause-effect", while the causes identified subjectively include reason, motivation and circumstances. Solstad (2009) calls them "plain causes" and "reasons" respectively. In many dictionaries, the items *cause* and *reason* are generally not differentiated, and they are used to explain each other. In this article, they are differentiated as that *cause* means causality implied between facts, while *reason* indicates causality identified, put forward or judged for human behavior, attitude or stance. It is evident that *cause* implies objectivity and *reason* relates to subjectivity. And *reason* can be seen as a special case of *cause*, i.e., a cause proposed for certain explanation or clarification. For example, "I picked out the painting because it matches my wall." Therefore, the *cause* associated with the patterns I, II and III is factual, while in pattern IV it is assumed.

ment made or a conclusion drawn, which in turn makes itself a focus of the expression. As a result, some modality markers can be used to paraphrase it, such as "probably" or "I think", while *p* has assertive flavor as it indicates the basis or prerequisite for inferring causality, in the sense that the speaker thinks there is a deductive relationship between a factual prerequisite and an inferred result. Therefore, Nakau (1994) calls Pattern I "a propositional interpretation" and Pattern IV "a modal interpretation". Evidently, this backtracking inference from result to cause is subjective, as there is unnecessarily a sufficient deductive relationship between the premise and the inferred result[3]. After all, a proposition of objective causality is true, but it CAN be denied or questioned, while a deduced causality MAY be wrong and is likely to be denied or questioned. Consider (8):

(8) a. The fact is that Sam isn't coming and the reason is that he's asked for sick leave.

b. I guess Sam isn't coming, because he just called from Rome.

b'. My *knowledge* that Sam just called from Rome *causes* my *conclusion* that he isn't coming.

c. Just because Sam just called from Rome doesn't mean he isn't coming.

Here, however, lies the logical basis for the common syntactic form that Patterns I, II and IV share, i.e., the main clause and the subordinate clause express effect and cause respectively, be them objective or assumed beings. Sweetser (1990: p. 20) and Hirose (1991), among others, point out that Pattern IV is unified with Pattern II through metaphorical mapping; that is, one's knowing some information leads him to a conclusion, such as (8) b', and that information itself is also a fact. In actual speech, modal expressions or analytical expressions like the underlined parts in (8) b' are usually absent or implicit, which makes the actual speech indicated by the main clause sound or read like a fact. Additionally, the subjective-objective distinction is a relative notion[4], as one's subjective behavior can also be viewed as an objective fact, and his encyclopedic knowledge about the relationship between the propositions represented by the clauses and contextual factors play a key role in his interpretation. Without necessary contextual clues, especially when a hearer is unsure of the objectivity of what his speaking partner describes, the opposition between subjectivity and objectivity is unobvious to the hearer, and then it is possible that there is a factual or inferential causal relationship between the two clauses. Therefore, ambiguity may arise. Consider (9) (Cf.

[3]An inference made can be correct. Importantly, the interpretation of the whole sentence hinges on whether the speaker is certain about the factual nature of the cause and the effect. For example, the utterance "The ground is wet, because it has rained" can be inferential (i.e., Pattern IV), and also a factual description (i.e., Pattern II). But, in "It has rained, because the ground is wet", where the deduction is made from effect to cause, it can only be inferential (Cf. Hirose, 1991).

[4]According to Partridge (1966: p. 446) and Ayto (2005: p. 55), *because* is a contracted form of "because that ...", which in turn derives from an earlier expression of "by cause that...", and its initial meaning is "due to the fact that ...". It can be seen, therefore, that *because*-expressions prototypically are used to report factual causality, and also in human cognition and expression of causality pure objective or factual description and assumed factual being are closely related and intertwined. Semantic interpretation of utterances varies among language users since it is normally a subjective process, though in which contextual information available to them plays a key role.

Quirk et al., 1985: p. 442):

(9) a. He is unhappy, because he doesn't eat enough.

b. John smokes, because he has cigarettes in his house.

One can make two interpretations of the two sentences in (9) based on their knowledge about the Patterns I, II and IV as follows: when a pause indicated by the comma and certain intonation information are available, the sentences are preferably interpreted as inferential, but when they are understood as statements on factual causality, such a pause and intonation information have virtually no effect on his interpretation (Cf. Sweetser, 1990: pp. 82-86). Just as Jespersen (1949: p. 399) points out, objective causality can only be deduced from cause to effect, but for inferential causality the inference can be made from cause to effect and vice versa. This feature is a full reflection of a characteristic of human cognition, in the sense that their language use reflects their experience and perception of reality, and it shows their initiative in their cognition of the world. Importantly, this kind of subjective and objective reflections may be mixed up or integrated, which finds its expression in the same linguistic form.

4. The Association between Pattern I and Pattern II: Their Formal-Semantic Features

In the previous text, the basic types of reasoning expressed by *because* have been identified as stating fact and making inference which find their expressions in Pattern I, II and IV. The only difference between Pattern I and Pattern II lies in the use of a comma between the two clauses. Regarding the function of describing factual causality, the comma only indicates a pause in speaking and thus does not affect the two propositions and their relationship. Consequently, the two patterns are practically interchangeable in neutral contexts (cf. Chafe, 1984)[5]. From the constructionist perspective, however, if the two constructions stand in opposition to each other, they must bear some semantic difference. There is, in fact, quite a lot discussion on such differences. For example, Chafe (1984) discusses the structural relevance between the adverbial clause and the main clause and the positional flexibility of the adverbial clause. It is held in this article that the two patterns can stand in opposition to each other in certain contexts. Specifically, the subordinate clause in Pattern I can be taken as functioning as a temporal adverbial-like modifier as it is closer to the main clause in both meaning and structure, and the proposition it accommodates is simply a component of a larger complex proposition expressed by the main clause. Therefore, the two clauses are of the same and one intonational-semantic unit. In contrast, the propositions expressed

[5]Quirk et al. (1985: p. 789) also point out that Pattern I, when read as two independent intonation units because of a comma in it, is different from a single and one intonation unit without such a comma, which in turn leads to changes in the scope of subordinate clause and meaning of the whole sentence. Additionally, they (1070-1074, 1103-1107) hold that using such a comma will affect the syntactic property of the subordinate clause, and it is a rule that a comma should be used or there should be a pause after any type of adverbial clause that appear initially in a sentence. That is well consistent with the proposition and distinction made in this article.

by the two clauses in Pattern II are relatively independent, with the meaning of the subordinate clause being more peripheral in the sense that the proposition it expresses functions as a supplementary comment on, and explanation to, the proposition expressed by the main clause. Therefore, the two clauses are of two different intonational-semantic units. In Chafe's terms, the former is an adhesive clause and the latter a free clause. In addition, according to Nuyts (2009) "one-commitment-per-clause" principle, each intonational unit (syntactically, i.e., a clause) expresses a complete meaning in conveying certain new information. Thus, *because* as used in Pattern I is functionally subordinate while in Pattern II, coordinate. This embodies the principle of distance iconicity (Wang, 2007: pp. 510-535). Likewise, just as Quirk et al. (1985: p. 613, 1070, 1104, 1106) point out, the *because*-clause in the former case is an adjunct while in the latter a disjunct, as it is integrated with the main clause to different degrees, i.e., only an adjunct is highly similar to subject and object and shows parallel syntactic behavior[6]. The opposition between the two patterns regarding their syntactic properties can be tested and demonstrated syntactically, which is self-evident from the following contrasts (cited from Quirk et al., 1985: pp. 504-505, 1070-1071; Nakau, 1994: p. 162; Kroeger, 2017: p. 336):

(10) a. He likes them(,) because they are always helpful.

b. Because they are always helpful, he likes them.

c. The fact is that he likes them(,) and the reason is that they are always helpful.

d. That's untrue! He likes them because they never complain.

(11) a. It is (*not*) *because they are always helpful* that he likes them.

b. The reason he likes them is (*not*) *because they are always helpful*.

c. Does he like them *because they are always helpful* (or *because they never complain*)*?*

d. He doesn't like them *because they are always helpful* (but *because they never complain*).

d'. He doesn't like them, *because they are always helpful*.

e. He likes them not *because they are always helpful* but *because they never complain*.

f. He likes them only because they are always helpful./Only because ... does he like them.

g. —Why does he like them?

—He likes them *because they are always helpful*.

—*Because they are always helpful, he likes them.

h. Tom *returned because he missed his family*, and so did Mac/but Mac didn't.

i. If *she scolded him because he forgot their date*, they will be back on speaking terms soon.

[6]Quirk et al. (1985: p. 440, 501, 922) roughly distinguish four types of adverbials, i.e., adjuncts, subjuncts, disjuncts and conjuncts, and the degrees of their integration with the sentences they are a part of decrease in turn. Though *because* as a connector links a subordinate clause, the degree of the integration of such a clause with the whole sentence in different patterns differ considerably. Consequently, as it can be seen, *because* demonstrates some properties of coordinating conjunctions.

As seen from (10) b & c, the subordinate clauses in Pattern I and Pattern II can be fronted to the initial position of sentence, and one can use metalinguistic paraphrase to explain the relationship between *q* and *p*, though the paraphrase of Pattern II sounds more idiomatic. And the challengeability test (Cf. Kroeger, 2017: p. 339) demonstrated in (10) d shows that Pattern I and Pattern II share the same propositional content, and what is challenged is the causality between the propositions involved. As in (11), it is shown that Pattern I indicates *q*-*p* propositional unity in that the two clauses are integrated into one and single information unit, and one speech act as well, and what is asserted is only causality between them (Cf. Rutherford, 1970; Hooper & Thompson, 1973; Chafe, 1984). Specifically, (11) a&b show that the subordinate clause can function as the focus of the related cleft and pseudo-cleft varieties; (11) c indicates with the (choice-making) question test that the subordinate clause can function as the focus of a question, and the causality relationship between propositions as a whole can be questioned; the negation test in (11) d tells that the subordinate clause can also be placed within the scope of negation and function as its focus (note that the scope of (11) d' covers the main clause only and thus effects disambiguation, and (11) d can serve as an answer to (11) c and the negation of (10) a); the pattern of "not X but Y" as used in (11) e and the use and salience of *only* in (11) f as an exclusive focus intensifier (Cf. Quirk et al., 1985: p. 604) prove the focal nature of the subordinate clause, showing that (11) f, just as (11) d, also negates the causality between propositions; (11) g shows that only the subordinating element can be used to answer *wh*-questions based on the main clause; (11) h is a test of ellipsis and pro-form scope; (11) i shows the sentence of Pattern I as a whole can be inserted into a conditional sentence.

Most of those syntactic tests and the semantic properties thus revealed are relevant to Pattern I but not to the Patterns of II, IV or V[7]. As to the status of information, all the instances in (11) (except d') show the presupposition of the information entailed by the main clause of (10) a, as in Pattern I what *q* expresses is given information, which comes earlier, while what *p* expresses is assertive new information, which comes later but is more salient. Such a way of information organization accords with the law of cognition in general, namely, "given before new".

Resultantly, such salient new information can be focalized. In contrast, the information conveyed by both *q* and *p* in Pattern II is new and assertive, so even an exchange of their syntactic positions in Pattern II (i.e., Pattern III) will not cause drastic change in meaning or semantic relationship (Cf. (7) a, and note that certain adverbials such as *just* and *only* can be inserted right before the subordinate clause). In that case, however, *p* is presuppositional and normally serves as continuation or restatement of prior information expressed in context, though the semantics of the subordinate clause is still orientated towards the main clause and

[7]Note that the 'not X but Y' structure of (11)e is also applicable to Pattern II (Cf. Quirk et al., 1985: p. 1071).

q stays as an assertion and the semantic focus[8].

According to Noordman & Blijzer (2000), as far as the shared knowledge of the related fact is concerned, the "cause-effect" order of the two clauses is easier to understand than the reverse order, which is more iconic both to the way one cognizes causality and to his knowledge structure, because one usually finds it easier to know effect from cause than the other way around. Since it is uneasy for a hearer to predict a non-presuppositional assertive cause, the subordinate clauses in Pattern IV and Pattern V cannot be fronted sentence-initially (as given information). In fact, just as Haspelmath (1995) shows, subordinate clauses usually can be placed sentence-initially, such as those introduced by *when*, *if* or *since*, but coordinate clauses normally cannot, such as those introduced by *for*, *and* or *but*. Therefore, the fronting of the subordinate clause in (10) b shows that Pattern III is more similar to Pattern I, and its association with Pattern II lies mainly in the fact that the latter expresses factual causality, which is a common semantic feature of Pattern I, Pattern II and Pattern III, standing in opposition to Pattern IV and Pattern V. A subordinate clause becomes presuppositional when placed sentence-initially, and it must be separated by a comma from the assertive main clause that follows it because a presupposition and an assertion, as different in nature, normally cannot appear within the same clause. As is shown above, the subordinate clauses in Pattern IV and Pattern V have strong coordinating flavor, as also evidenced from the use of comma and pause, the signs of coordinate structures (Cf. (11) d&d' and (13) b).

However, not all types of adverbial clause can behave and function in the same way as *because*-clauses do, which as a minor proposition becomes a part of a single (but broader) major proposition expressed by a complex sentence. For example, using temporal clauses can trigger a presupposition which has truth value, but the proposition expressed by "*q because p*" does not presuppose that *p* is true; instead it entails that *q* AND *p* are true. Consider (12) and (13) (cited from Kroeger, 2017: p. 332):

(12) a. Prince Harry wore his medals *when he visited the Pope*.

b. Prince Harry didn't wear his medals *when he visited the Pope*[9].

c. Did Prince Harry wear his medals *when he visited the Pope*?

(13) a. Arthur married Susan *because she is rich*.

b. Arthur didn't marry Susan *because she is rich*.

[8]Just compare the incorrect answer in (11)g and read the following test sentence of questioning, "Because ... helpful, does he like them?" Though what appears initially in a sentence is generally presuppositional information, such information can also appear at the rear or end of sentence. For example, temporal adverbial clauses introduced by *when* or *since* normally convey presuppositional information. So, *because*-clauses display such a feature. In accordance with Quirk et al. (1985: p. 565), the subordinate clause in Pattern III is no longer the predicative adjunct in Pattern I, but rather it is sentential adjunct in nature. Only when an adverbial clause expresses an assertion that has information salience can the negation operator (along with such adverbs of frequency as *always*) become associated with it, though the operator generally is not associated with presuppositional information (Cf. Johnston, 1994; Kanetani, 2007).

[9]Changes in the scope of *when*-clauses can be complicated, which can be similar to those of *because*-clauses (Cf. Quirk et al., 1985: p. 790).

b'. ^{NEG}[Arthur married Susan *because she is rich*.]

b''. ^{NEG}[Arthur married Susan] [*because she is rich*.]

c. Did Arthur marry Susan *because she is rich*?

The sentences in (12) all presuppose the truth value of the propositions expressed by the adverbial *when*-clauses. In contrast, (13) a entails the truth value of the propositions expressed by both clauses, but the negation in (13) b and the questioning in (13) c are oriented towards the propositions expressed by the subordinate clauses. In addition, (13) b is ambiguous (with two possible interpretations of (13) b'&b'', Cf. (11) d), but (12) b is unambiguous. It is shown that those *when*-clauses as modifiers function as making the propositions expressed by the main clauses more concrete, but *because*, with the operator of CAUSE it has, helps integrate the propositions expressed by the main and subordinate clauses by asserting causality (Cf. Kroeger, 2017: p. 333)[10]. The establishment of such causality is one part of the constructional meaning of Pattern I, which is just what is negated or questioned. Alternatively, what is negated or questioned is such a relationship, not the truth value of the propositions involved. This analysis, together with considerations of scopal features related, is helpful in explaining ambiguity as shown in (13) b[11], as one can easily disambiguate it by inserting a comma so as to change the form of the construction (i.e., Pattern II).

5. Pattern IV: Indicating Inference Making

As shown above, using a comma or pause (or intonation) in Pattern I and Pattern II is practically optional, but it is compulsory in Pattern IV and Pattern V (so, related interpretations of sentences can be associated with different syntactic constructions, which may result in semantic absurdity with or without such signs). Using a comma indicates a pause in speaking, also signaling identification of the information status of the related clause without a tonal fall in the phrase at the end of the initial main clause. Specifically, it tells whether an assertion or a presupposition is involved (Cf. Rutherford, 1970; Sweetser, 1990: p. 83; Nakau, 1994). For instance, like (10) c, (7) b can be paraphrased as (14) (Cf. (8) b'):

(14) (I guess) Sam is not coming, (and my reason is that) he just called from Rome.

This fact echoes the analysis made earlier, i.e., the construction without a

[10]Such an operator can be defined as follows: *CAUSE(p, q)* is true iff *p* is true, *q* is true, and *p*'s being true causes *q* to be true.

[11]Only Pattern I which has no comma may have ambiguity that results from the difference in range of scope of negation. Besides, utterances whose main clauses involve the use of such expressions as *few* and *I believe* which are related to the scope-expressing pattern '*p because q*' may also have ambiguity (Cf. Kroeger, 2017: p. 333). However, (13)b is different because *not* stays in the same syntactic position however wide the scope is, and what is negated cannot be fronted directly to the initial position of a declarative sentence, e.g., *"Arthur married Susan [not *because she is rich*]." In contrast, using a symmetrical structure of "not ... but ..." as in (11)e is grammatically correct. As is well known, the scope of a negation operator usually is oriented rightward and cannot cross a punctuation mark, so when a subordinate clause is placed initially in a sentence, it goes beyond the scope of the negation operator which is placed to its right, which causes change in form, which in turn leads to change in meaning. In that way, the patterns of I, II and III are distinguished (Cf. Chafe, 1984).

comma is likely to be viewed as a single information unit and proposition, while the one with a comma is usually treated as two independent but associated information units and propositions[12]. Evidently, Pattern IV reflects inferred causality while the speaker makes an assertion on his inferred judgement and the causality. Viewed against Pattern I and Pattern IV, the different intonation patterns and the (propositional content) challengeability tests in the questions in (15) reflect different syntactic-semantic properties of the *because*-clauses (Cf. Kanetani, 2007, and cf. (4), (6), (10) d):

(15) a. Did Tom come back because he loved Jill? ↗

b. Did Tom love Jill, because he came back? ↘

c. That's untrue! Tom doesn't love Jill; He loves Marry.

d. *That's untrue! You know Tom loves Jill because he told you that.

Of those sentences, (15) a is a simple question on the speech act (Cf. (10) a and (11) c), which is directed towards the causality itself, while (15) b concerns two independent speech acts, of which the former is asking for confirmation (which implies a statement of inference) and the latter is adding proof or evidence (which is factual). (15) c&d (as answers to (15) b) indicate that the main clause is the focus in the question. Accordingly, this contrast in the scope of interrogative force will affect the related syntactic behavior of Pattern I and Pattern IV. For example, the subordinate clause in Pattern I can be nominalized while in Pattern IV it cannot (Cf. Rutherford, 1970: p. 105; Quirk et al., 1985: pp. 484-485). Consider (16):

(16) a. He was (not) arrested because of (his) murdering of his boss.

b. *He's not coming, because of his having just called from Rome.

Such a difference arises from the fact that nominalized prepositional phrases cannot independently express speech acts, which therefore causes changes to the nature of speech act expressed by the original utterance, and what such phrases express becomes a part of a major or greater speech act. Evidently, such a property is congruent with Pattern I but inconsistent with Pattern IV. In addition, only the subordinate clause in Pattern I, instead of Pattern IV, can be modified by an exclusive adverb. See the contrast in (17) (cited from Schourup & Waida, 1988: p. 95; Cf. (11) f):

(17) a. He went to college *simply* because his parents asked him to.

b. *Tom loved Jill, *just/merely/simply/only* because he came back.

And that is mainly because Pattern I stresses the direct and objective cause-effect correspondence, whereas exclusive adverbs emphasize only one possibility while excluding other possibilities, which is consistent with the semantic feature of Pattern I. In Pattern IV, however, the cause that a speaker tries to figure out is,

[12]Interestingly, in sentence groups like "S_1, so S_2", the conjunction *and* can be (optionally) placed right before the adverbial connector *so*, rendering a grammatically correct pattern of "S_1, and so S_2". This shows that S_1 and S_2 are strongly independent of each other. Likewise, though the patterns of I, II and IV do not permit direct addition of *and* right before *because*, the latter two patterns permit such uses of *and* conditionally. This fact shows that the degree of integration of *because*-clause and main clause varies. And, when one expresses factual causality (using the patterns of I, II or III), he can use *because*-clause as parenthesis in certain syntactic contexts, e.g., "It's widely known, because the unions have publicized it, that the Department is looking at bailing out ...".

logically speaking, only one possibility, so the assertion made in the main clause CAN be challenged or overturned. In (17) b, for instance, the fact that "he came back" unnecessarily causes the result that "Tom loved Jill". Even if the result itself is true, it may be caused by other reasons, and thus semantic conflict or contradiction arises when a modifying exclusive adverb is used. Another feature that merits one's attention is that some paraphrasing markers, such as "I think", can be added only to Pattern IV because its main clause is assertive in nature[13], and only the subordinate clause in Pattern IV can be topicalized. For example (cited from Hooper & Thompson, 1973: p. 494; Kanetani, 2007):

(18) a. He's not going out for dinner because his wife is cooking Japanese food.

b. *He's not going out for dinner because Japanese food, his wife is cooking.

c. I think we have more or less solved the problem for donkeys here, because those we haven't got, we know about.

Without the comma, the scope of *not* in (18) a can or cannot cover the subordinate clause, resulting in ambiguity (Cf. (11) d, d'). The contrast between (18) b&c shows that the object in the subordinate clause of Pattern I cannot be topicalized while in Pattern IV it can, which is because the topicalization in (18) b "damages" the one and single information unit and speech act expressed by Pattern I, but Pattern IV, as represented by (18) c, is free from such "damage" because the two clauses represent two independent information units and speech acts. Even with such topicalization, the speech acts expressed by the two clauses are independent of and different from each other. In other words, such topicalization is grammatical. Likewise, as in contrast with Pattern I (Cf. (11) a), the subordinate clause in Pattern IV cannot be used in a cleft sentence as what is emphasized (Cf. Nakau, 1994: p. 162). Consider (19):

(19) a. He's not coming to class because he's sick. (Pattern I)

b. He's not coming to class, because his wife told me. (Pattern IV)

c. *It's because his wife told me that he's not coming to class.

Branchini (2014: pp. 239-241) makes a point that clefting aims to allow an element that holds an unmarked syntactic position earlier to take up a salient position and acquire a stress as focus such that the cleft clause that comes later expresses given and presuppositional information, which requires that the focalized element and other elements within the same sentence be parts of the same single information unit and speech act and the associated proposition be factual or objective. That is to say, a cleft sentence is one and single information unit, but different information units must be expressed separately and form their own clefts. Therefore, Pattern I satisfies such a semantic requirement while Pattern IV does not, as the focalized element crosses over the range of the information unit it is part of, and the two propositions expressed by the two clauses suggest an act of inference making.

Regarding the grammatical function of *because*-clauses, Hirose (1991) suggests

[13]Some main clauses may include explicit expressions of inference making within themselves, or other alternative expressions may be used for the same purpose, such as *may, maybe, might, must, can't* and tag questions. For example, "Maybe your marriage didn't work ... because you had too much fun at the bachelor party."

that it can function as subject (Cf. (8) c) and predictive, but the latter function is only seen in Pattern I and Pattern II. For illustration, take (20) as an example which is associated with (9) b:

(20) a. The reason why John smokes is because he has cigarettes in his house.

b. John's having cigarettes in his house causes him to smoke.

c. John must be a smoker, in view of the fact that he has cigarettes in his house.

In (20) a, "John smokes" is presupposed to be true, so it can be paraphrased by (20) b only but not by (20) c; conversely, "It has rained, because the ground is wet" as a sentence of Pattern IV cannot be paraphrased by using a predicative *because*-clause. Consider (21):

(21) *The reason why it has rained is because the ground is wet.

That is because the main clause has in it a presupposition "it has rained", which requires that it not be assertive in nature or asserted to be true, but that turns out contradictory against the semantic requirement of Pattern IV in that its main clause conveys an assertion. As analyzed earlier, a sentence-initial *because*-clause generally is presuppositional and given information which forms a cause-effect correspondence with the focus that comes after it, namely the main clause. Hence, one can easily understand or anticipate the message the main clause expresses from the information given in the subordinate clause, well aware of the feature that he can use "*mean*" as a link to rephrase the sentence and demonstrate the propositional equivalence within it because an "effect-cause" style of inference as made in Pattern IV is well likely incorrect. In fact, if the subordinate clause is placed initially, the propositional equivalence thus formed is usually semantically absurd and very likely to be questioned or challenged. See (22):

(22) a. Because he fell into the pond, Tom $_{\text{(naturally/necessarily)}}$ got wet through.

b. The fact that Tom fell into the pond causes the same fact to mean that he got wet through.

c. John is a good teacher, because he is liked by all the students.

d. *Because John is liked by all the students, he is a good teacher.

e. *Because John is liked by all the students means that he is a good teacher.

f. *The fact that John is liked by all the students causes the same fact to mean that he is a good teacher.

(22) a instantiates Pattern III and can be paraphrased by (22) b so that the factual causality in (22) a is shown; (22) c is a construct of Pattern IV, but it is incorrect to rephrase it as (22) d or (5)[14], nor can one use (22) e to express the propositional equivalence involved or (22) f to explain its implied meaning because that is illogical. Evidently, therefore, interpretation of utterances is greatly determined by the syntactic constructions they are of: a sentence-initial *because*-clause must

[14](22) d is ungrammatical mainly because its form is probably derived from Pattern III, which is closely associated with Pattern II and Pattern I, of which the constructional meanings are related to direct expression of, or assumed, factual causality. In the light of such constructional meanings, therefore, one's interpretation as shown in (22) d is contrary to encyclopedic knowledge and logic. But, adding some modal expressions before the main clause will improve its grammaticality. Though such an addition "damages" the original sentence form and thus is not within the scope of the present discussion on the related constructions, it lends strong support to the present analysis.

be interpreted as indicating factual causality so that the whole utterance makes sense; it can be treated as expressing factual causality or making inference if it is placed at the end of sentence; if a sentence involves inferred causality, its subordinate clause must be placed at its end, but if it is placed initially, it presupposes the truth value of the proposition it expresses so that the whole sentence must be placed in a negated context so as to make sense, i.e., the inferred causality itself is negated, which is illustrated in (8) c, because one cannot make presupposition of and assertion on the same ideational content simultaneously. In fact, "Just because X doesn't mean Y" makes another syntactic construction, but it is not within the space of this article.

To analyze the syntactic-semantic differences between *since* and *because* helps clarify the characteristics identified of *because*. According to Quirk et al. (1985: p. 565, 613, 1071), Nakau (1994), Wickboldt (1998) and Kanetani (2007), non-temporal *since* expresses inference-making, i.e., about the causality that is obvious (or virtually presuppositional) and easily inferable on the basis of one's common knowledge of facts. However, *since*-clause as a disjunct holds a relatively free position and is normally separated from the main clause with a comma so that they form two independent propositions, whereas *because* is employed to prototypically express unknown causality between two events that are factual and directly associated, and the meaning of inference making it can express is often extended and implied. By contrast, *since* is monosemic with evident polarity, as it only indicates strongly assertive affirmative inference (as a premise) and is usually used for expressing subjective modality. As a result, the subordinate clause is syntactically independent and cannot be negated while *because* can be modified by such gradable and modal adverbs as *mainly*, *probably*, etc. or the clause it introduces can be questioned, or two scopes of negation are possible in its interpretation (Cf. (13) b), or *because* can be modified by exclusives such as *just*, or the *because*-clause cannot be nominalized to function as subject or predicative (Cf. Ross, 1973: pp. 161-163; Schourup & Waida, 1988: pp. 95, 108-109).

6. Comparing the Three Basic Patterns: Stating, Inferring or Explaining Causality

In the present scheme, Pattern II is termed as "Causality-Stating Construction" and Pattern IV "Causality-Inferring Construction", and Pattern I and Pattern III are treated as discourse-functional variants of Pattern II (Cf. Chafe, 1984). Likewise, Pattern V is labeled as "Causality-Explaining Construction", which means its subordinate clause indicates the speaker's intention to explain why he conducts the speech act expressed by the main clause (Cf. Sweetser, 1990: p. 77). For illustration, take as an example (6) which is paraphrased as (23) a&b below, and consider (23) c&d, as the propositional content challengeability tests show that the focus of Pattern V lies in its main clause:

(23) a. I performed the act of asking a question, and the reason is I know you're very clever.

b. My knowledge of your cleverness caused me to perform the act of asking you the question.

c. That's untrue; you know the answer already.

d. *That's untrue; you ask me the question because you want to make me feel embarrassed.

Following the principle of "pragmatic supremacy" in communication, one uses contextually appropriate means to achieve his goals. In Speech Act theory, making speech is performing acts. In fact, both parties in a communicative event may well know each other's speech acts, based on which they can move on in the process. Due to the instinctive recognition and tacit pragmatic characteristics, the forms of characterizing speech acts may be so diverse that both clauses can surface as questions, imperatives and inverted sentences of all kinds, thus carrying different illocutionary forces. Though the respective linguistic markers are usually omitted, they usually can be recovered or reconstructed. Consider (24):

(24) a. [I hereby inform you that] Tom came back, because he loved Jill.

b. [I hereby conclude] Tom loved Jill, because he came back.

c. [I hereby perform the act] of asking a question, and what made me do so is that I know you're very clever.

d. Don't worry, because this intriguing thriller is still VERY watchable.

The sentences in (23) and (24) suffice to show that Pattern V is closely associated with Pattern II, but it displays subjectivity just as Pattern IV does, while the latter is a metaphorical extension of Pattern II. Overall, the three Patterns of II, IV and V come down in one continuous cline in form and meaning and are unified in the same implicit speech act, i.e., indicating a cause-effect relationship. Similar to the causality-inferring pattern, the causality-explaining pattern does not permit its subordinate clause to be fronted to the initial position.

An important notion vital to the differentiation and understanding of the related constructions is event domain. According to Shen (2003), Evans (2007: pp. 61-62) and Houdé et al. (2004: p. 121), "domain" refers to different areas and categories of conceptualization and experience. As Sweetser (1990: pp. 11, 69, 76-78) holds, any utterance can be viewed as its speaker's description of a situation as well as his judgment (or content and result of his thinking), and the utterance itself represents his conduction of a speech act. Therefore, when relevant formal markers are absent, such an utterance is potentially associated with two event domains in objective and subjective worlds, and with certain speech acts accordingly. Such a meaning potential and pragmatic feature is universal across a lot of conjunctions and verbs. In fact, conceptual domains are represented as complex knowledge structures related to all aspects of human experience that are coordinated with each other. Indeed, one's cognition starts with the physical world he is in and interacts with, and based on the categories he has established he uses his prior knowledge to cognize and express the unknown world or new experience so that he can affect the extension of the expression to abstract entities and relations. Finally, he succeeds in establishing correspondences and associations between

multiple domains through cross-domain mappings, forming relationships between source domains and target domains. Consequently, he can make use of the same linguistic form to describe the (external and objective) physical-social domain, the (internal and subjective) inferring domain and the concomitant speech act domain[15], because he almost always thinks and believes his thoughts are right and to him these three domains are parallel, consistent and connected. Such a feature is typically seen in *because*, the uses of which in Pattern II, Pattern IV and Pattern V correspond to such three domains. Thus, the semantic interpretations of it are conditioned by the domains as well. Sweetser (1990) and Shen (2003) suggest that such language uses in the three domains are (at least) synchronically universal in English and Chinese[16], so it is suggested here that the major feature of *because* is a good demonstration or instantiation of such a universality.

7. The Multiple Interpretations of *Because*: Pragmatic Ambiguity vs. Semantic Ambiguity

Then, is *because* polysemous? It is a tricky issue to identify polysemy, as the distinguishing criteria are usually inconsistent in analyses. It is generally held that meaning as conceptualization is flexible and changeable, and the boundary between polysemy, homonymy and vagueness is unclear. According to Evans (2007: pp. 163-164) and Lewandowska-Tomaszczyk (2007), polysemy refers to that a linguistic item has multiple meanings, which are distinguished from each other but have diachronic correlation; it exists in all areas of languages and reveals the fundamental commonality of linguistic organization. Sweetser (1990: p. 1), among others, agrees that polysemy as a synchronic concept does not involve diachronic concerns, but Zhang (1982: pp. 47-49) points out that the multiple meanings of an item are usually related historically as they develop. Zhang suggests that a polysemous item must first have generality, in the sense that what it semantically generalizes is more than one simple feature of an entity. In the features that a concept embraces, relates to or activates, there are often several that are connected with some features of other concepts, which forms the conceptual basis of polysemy. For example, in Chinese "*tóu* (头)" can mean "head", "boss" or "lead or clue", because these three concepts share the common feature of "the highest or foremost part of things". Thus, to identify polysemy of a word, one has to make careful study of the synchronic and diachronic relations between all its sub-mean-

[15]Shen (2003) creates three terms for them, namely, "*xing-yu*" (lit. act-domain), "*zhi-yu*" (lit. cognition-domain) and "*yan-yu*" (lit. speech-domain), while Sweetser (1990: pp. 11, 13, 17-18, 20, 76-77, 80-83, 85) uses a variety of terms, including, for example, "external physical and social domain", "reasoning worlds/ processes" and "speech act world". However, they have common referential meanings. Her widely known terms are "content domain" (which relates to entities and situations in the real world and whose content have truth conditions, including speech and thoughts sometimes), "epistemic (modality) domain" and "speech act domain".

[16]In fact, such an extension of expression from the external-objective domain to the internal-subjective domain is universal in Archaic Chinese as well. For instance, the verb "*ding* (定)" originally means 'to stabilize, settle, or decide', or confirmation of objectivity, and later its epistemic use derives the meaning of making inference, synonymous with "surely, must", etc.

ings so as to establish its semantic structure. Additionally, polysemy displays linguistic ambiguity test and definition test (cf. Riemer, 2005: pp. 116-156; Lewandowska-Tomaszczyk, 2007). However, *because* underwent no obvious semantic evolution and there is no semantic oppositions within itself. Its part of speech determines its simple semantics, which fails it in such tests. Just as Horn (1972: pp. x-xi, 284-287) claims, the meanings of logical connectives are simple and stable, usually only related to proposition, presupposition, inference, entailment, implicature and so on. Consequently, the standard radial sets model or schematic network model (cf. Lewandowska-Tomaszczyk, 2007) are not applicable to describing its semantic structure, which is not complex enough. It is thus suggested that the usage and interpretations of *because* in the patterns analyzed so far do not prove its linguistic polysemy.

Since *because*, as used in different cognitive domains, shows systematic differences in meaning and syntactic behavior, it shows traces of polysemy in terms of some surface formal features. Sweetser (1990: p. 1, 7, 86) thus suggests that *because* shows pragmatic ambiguity, and the regular syntactic differences between its different usages should be attributed to different interpretations of the relevant domains, rather than polysemy of the entry itself. That is a stance the present construction-based analysis coincides with: such interpretations are caused, and licensed, by different constructions instead. According to Horn (1985), pragmatic ambiguity refers to the fact that the basic semantic function of a linguistic form extends and gives rise to other interpretations due to pragmatic factors, or, put differently, such a form is used in different ways in different contexts for pragmatic reasons. So, pragmatic ambiguity is not difference in semantic values. As analyzed earlier, *because* corresponds to one semantic value only, namely, (of an event of) indicating cause-effect relationship. However, in various contexts, it can display a variety of communicative functions, which indicates mappings from one form to multi-functions. A similar example is "How are you?", which can be used to ask about health, or to greet and strike up a conversation. Likewise, *not* as a negation operator displays pragmatic ambiguity (cf. Horn, 1985):

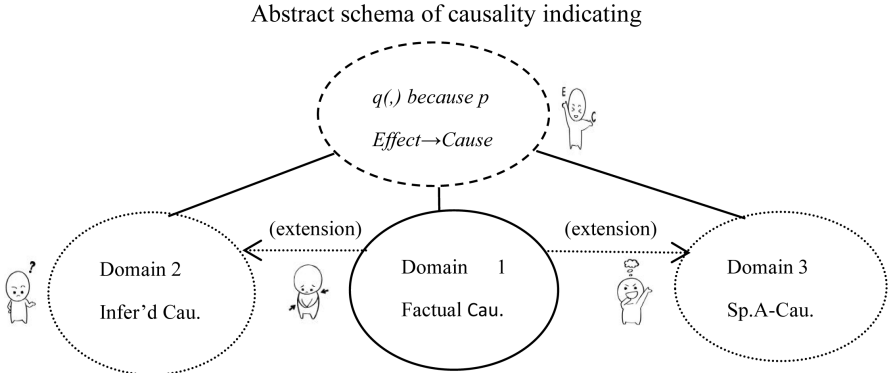
(25) a. She is *not* happy; she's sad.

b. She is *not* happy; she's ecstatic.

c. I would not *say* she is happy, but rather I would *say* she is ecstatic.

As Horn indicates, the negation in (25) a&b shares the same syntactic-semantic property; specifically, the negation in (25) a is directed to the utterance itself (which is closely related to *happy*) while in (25) b it is of metalinguistic nature in that it negates the proposition in the assertion (i.e. "She is happy", which in turn can be paraphrased by (25) c). Consequently, the same utterance is followed by different declaratives in (25) a&b. The aforementioned difference in interpretation of the negation originates from the specific usage of the negator, which is determined by the relevant contexts the negator is used in and the semantic associations between the expressions. Such a difference of interpretation caused by pragmatic factors rather than semantic ones is not difference in semantic value,

as the function of negating stays unchanged. Likewise, *because* as a logic connector is consistently used in three pragmatic cognitive domains to describe factual or inferred causality, or explain a prior speech act[17]. Logic operators alike are the simplest linguistic items employed in objective logic analysis, but obviously the objectivist semantic theory developed by Frege cannot reasonably explain the characteristics and regularities of the usage of *because*, because it advocates that meaning is basically a certain relationship between words and the world, disregarding human interaction and cognition involved. To sum up, the following diagrammatic representation of the conceptual mappings is presented:



Note: Domain 1 = physical-social/content domain (the prototype = the Causality-Stating Construction); Domain 2= epistemic domain (extension from the prototype = the Causality-Inferring Construction); Domain 3 = speech act domain (extension from the prototype = the Causality-Explaining Construction).

Figure 1. Conceptual mappings between the three basic syntactic constructions based on *because*.

Figure 1 shows that the conceptual mappings take place from Domain 1 to Domain 2 and Domain 3 bidirectionally, on the condition that one believes in the reliability and irrefutability of his inferred causality ('Infer'd Cau.') the same way he does with factual causality ('Factual Cau.'), and also on the condition that he knows the need to explain to his speaking partner causality which relates to his prior speech act ('Sp.A-Cau.'). In all the cases, he means to report certain kind of cause-effect relationship. The major difference between them lies in whether the reported relationship is objective or subjective in nature. It is thus assumed that one has an abstract mental schema of causality indicating which is represented or realized by the three basic constructions. The present analysis shows that one's embodiment and linguistic expression of the three domains display commonalities, and he has to examine human cognitive structure in his description and interpretation of the semantics. Like verbs, the pragmatic meanings of the *because*-constructions can be described and analyzed with Frame Semantics (Fillmore, 1982), as Frame semantic information captures the richness of the various mean-

[17]Kroeger (2017: p. 336) distinguishes between two domains only, i.e., the truth-conditional domain and the use-conditional domain. The former corresponds to content domain and the latter accommodates both epistemic and speech acts domains.

ings associated with a lexical item, such as references through mental associations to world and cultural knowledge, experiences, and beliefs (Cf. Fillmore & Baker, 2010). Meanwhile, the present analysis proves the validity of a series of cognitive linguistic principles argued to have influenced constructions, such as iconicity, reasoning through metaphor and metonymy[18], categorization based on prototypes and basic experiential patterns, maximized economy, Maximized Motivation[19] and the ideas that interaction between speakers shapes grammar and formally similar constructions are also often semantically similar.

The analysis of the usages of *because* in the three domains apply to its use in monologues (Cf. Sweetser, 1990: p. 85), which lends further support to the present analysis. Against the relevant corpus data retrieved from BNC (Cf. Chen, 2017), it is found out that the present scheme has strong descriptive and explanative power to account for practically all the uses of *because* ever collected, including those peripheral or novel ones. In fact, its synonyms or equivalents in other languages can be analyzed likewise, though there might be differences of this or that kind related to the three domains. *Parce que* in French, for instance, is used to describe factual causality only, while *puisque* is employed to describe causality related to inference making and speech acts, which is similar to *since* (Cf. Zufferey, 2012). And in German, both the subordinate conjunction *weil* and the coordinate conjunction *den* can indicate factual causality, but *denn* only has usages related to causality inferring and speech acts (Cf. Kroeger, 2017: pp. 340-342). Regarding that feature, German forms a mirror image of English and has more choices in expressing situations related to both objective and subjective domains because *since* is used mainly to indicate causality in the domains related to inference making and speech acts.

8. Conclusion

This article discusses the major syntactic-semantic characteristics of English *because* as a connective and argues that it is used in three basic syntactic constructions, namely, the Causality-Stating Construction committed to an objective description of factual causality, the Causality-Inferring Construction used to make inference about assumed causality, and the Causality-Explaining Construction aimed at offering an explanation for a prior speech act. The underlying mechanism of such usages hings on, and substantiates, the three cognitive domains suggested by Sweetser (1990), i.e., the physical-social domain, the epistemic domain and the speech act domain. All the usages in such three domains share the same

[18]Some non-canonical or emergent varieties of the *because*-constructions are found on the Internet, of which the "*because*-X" (where X is a single word) construction is most noteworthy. For example: "I verb all sorts of things that aren't verbs, use words as incorrect parts of speech because funny." (retrieved from COCA) Such a construction is viewed as a metonymic use and it shows the three-way pragmatic distinction identified here.

[19]This principle is perhaps the most influential when it comes to modeling how constructions are organized: "If construction A is related to construction B syntactically, then the system of construction A is motivated to the degree that it is related to construction B semantically…Such motivation is maximized" (Goldberg, 1995: p. 67).

formal expression, namely, "*q, because p*", of which the interpretation is mainly determined by relevant pragmatic conditions. It is suggested that an abstract mental scheme of reporting cause-effect relationship functions as a superordinate construction that dominates, and is realized by, the three constructions in contexts.

Additionally, the Causality-Stating Construction has other two discourse-functional varieties, both of which are employed to convey causal relationship between the two propositions entertained by the main clause and the subordinate clause, as based on presupposition.

Importantly, the use of a comma in between the clauses is found to be vital to the identification of the constructions related to *because*. Specifically, the usages related to the physical-social domain have the same semantic content, but whether a comma is absent or not will affect the syntactic categorization and status of the information expressed by the two clauses and of *because*; the *because*-clause becomes presuppositional if it is placed sentence-initially, and in that case, using a comma as a marker is necessary to separate it from the main clause. The subordinate clause in both the Causality-Inferring Construction and the Causality-Explaining Construction must not be placed initially, because the information it indicates is not presuppositional or given, or easily accessible. And, a comma must be inserted in between the two clauses of those two constructions because both of them are assertive in nature. The three basic constructions are interrelated to each other through metaphorical mappings, displaying respectively their own syntactic-semantic features.

Lastly, it is revealed that *because* has pragmatic ambiguity.

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The author declares no conflicts of interest regarding the publication of this article.

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