# The Cognitive Metonymic Motivation of the English "There be" Existential Construction

## **Hanyue Wang**

School of Foreign Language, Minzu University of China, Beijing, China Cynthiayue1120@outlook.com

Abstract. The "There be" existential construction is an iconic English sentence pattern, which establishes a spatial cognitive framework for various nouns through the expletive subject "there" and a focus-final structure. So how is such a construction generated? Based on Grammatical Metonymy Theory, this paper proposes that the cognitive motivation of the English existential construction is the core metonymic operation of PLACE-FOR-EXISTENCE, while abstract nouns additionally require the secondary metonymy ENTITY-FOR-STATE to achieve reification. To validate this model, this study employs a corpusbased approach combined with diachronic analysis and contrastive study to analyze 4,000+ instances of the construction extracted from the COCA, COHA, and OED corpora, which indicates that: (1) Concrete nouns, by virtue of their inherent spatial entity status, predominantly enter the construction directly in non-definite forms; (2) Abstract nouns rely on multiple reification means to achieve "boundedness"; (3) The grammaticalization of "there" is essentially spatial metonymy; (4) A Chinese-English contrast reveals that English adjusts cognitive salience through highly grammaticalized means, whereas Chinese relies more on lexical means and word order to directly present a scene. This study, combining previous research evidence and empirical studies, has firstly proposed a two-tier metonymy model to explain the cognitive motivation of English existential construction.

**Keywords:** Existential Construction, Grammatical Metonymy, Cognitive Motivation

#### 1. Introduction

The existential construction (There be + NP + Locative) is a core sentence pattern in the English grammatical system. Through its unique structure of "expletive subject 'there' + predicate verb + post-verbal noun phrase," it breaks the conventional English "Subject-Verb" word order, constructing a specific spatial cognitive framework for introducing focal information (the NP).

Research on the "There be" construction has long been relatively scarce, with previous studies mostly focusing on its syntactic generation mechanisms or functional exploration, examining its constructional features [1], referentiality changes [2], or analyzing its information structure function from a functional linguistics perspective [3]. However, these studies have largely overlooked a fundamental question: what is the conceptual essence behind this special syntactic form? Existing syntactic or functional explanations fail to fully reveal its underlying cognitive motivation.

To address this research gap, this study, grounded in Grammatical Metonymy Theory [4], proposes that the generation of the English existential construction is rooted in a two-tiered metonymic operation: the core metonymy PLACE-FOR-EXISTENCE maps an existential event onto a spatial frame "there", forming the basis for the entry of all NPs; whereas abstract nouns, lacking inherent spatial attributes, require the secondary metonymy ENTITY-FOR-STATE, achieved through quantification, containerization, and other means to realize "reification." To validate this model, this paper employs corpus analysis to examine the definiteness features of NPs and the reification strategies for abstract nouns, combines diachronic evidence to trace the grammaticalization path of "there," and reveals differences in cognitive strategies across languages through a Chinese-English contrast. The research aims to provide an in-depth cognitive explanation for the English existential construction.

#### 2. Theoretical framework

# 2.1. Core conceptual definitions

To clarify the nature of the "There be" construction, we need to define three core theoretical concepts supporting this study. First, Grammatical Metonymy refers to the metonymic mapping from a "source" concept to a "target" concept within the conceptual structure [4], realized through adjustments in grammatical form. This mapping provides the conceptual motivation for unconventional yet acceptable syntactic collocations. Second, the core of Cognitive Grammar is that syntax is the symbolic representation of fundamental human cognitive experiences and modes of conceptualization [5]. Humans are cognitively predisposed to construe abstract, intangible concepts as concrete, quantifiable entities. This cognitive capacity for "reification" provides the fundamental possibility for abstract nouns to enter the existential construction like concrete objects. Finally, Figure-Ground Organization [6] reveals how language regulates cognitive salience through grammatical means. In a perceptual scene, the "Figure" is typically the moving, smaller, conceptually more accessible entity occupying the cognitive focus, while the "Ground" is the relatively stationary, larger entity providing spatial or temporal reference for the "Figure". This theory is crucial for explaining why the "There be" construction adopts the special word order of "expletive subject + post-verbal noun."

### 2.2. Metonymic operation model

### 2.2.1. Core metonymy: PLACE-FOR-EXISTENCE

The most fundamental cognitive basis of the "There be" construction is using the concept of "spatial location" as the source domain to refer to the target domain of an "existence event." This core metonymic operation is a prerequisite for any noun to enter this construction. Its specific connotation is shown in Table 1:

Table 1. Core metonymic operation mechanism

Dimensio n	Content	Theoretical Support
Cognitive Essence	Using a spatial container (there) to refer to an existence event, forming the "SPACE IS EXISTENCE."	Langacker' views on spatial conceptualization [5].
Syntactic Manifesta tion	•Mandatory presence of expletive subject "there"• NP is mostly non- definite	(Delete the first sentence of the original text) Wang Yin explains this that definite subject presuppose existence and violate the construction's function to introduce new subjects [7].
Universal ity	Applica	ble to all existents (concrete/abstract)

# 2.2.2. Secondary metonymy: ENTITY-FOR-STATE

For abstract nouns lacking physical form, they require an auxiliary metonymic mechanism, namely the secondary metonymy ENTITY-FOR-STATE. This process is key to achieving the "reification" of the NP. The specific connotation is shown in Table 2:

Table 2. Secondary metonymic operation mechanism

Dimens ion	Content	Theoretical Support
Cogniti ve Essence	Construing an abstract state (e.g., hope) as a spatially bounded entity (e.g., a ray of hope) through ontological metaphor.	Langacker on "reification of abstract concepts" [5]; Wei Zaijiang proposes that the process of reification for emotional categories involves making the unbounded bounded. This process relies on the cognitive mechanism of grammatical metonymy [8].
Syntacti c Manifes tation	Mostly requires mandatory quantificational modification, metaphorical containers, or dynamic verbs.	BNC corpus statistics shows admission rate of unquantified abstract nouns $< 0.02\%$ [7].
Univers ality	Or	aly abstract nouns require this metonymy.

Synthesizing the above analysis, we construct the following metonymic operation model for the "There be" existential construction (Figure 1):

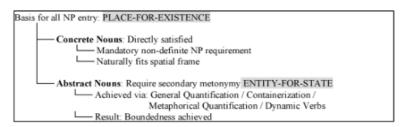


Figure 1. Metonymic operation model of the english existential construction

### 3. Empirical analysis: corpus evidence for the metonymic operation model

This section provides empirical validation for the proposed metonymic operation model through corpus analysis and diachronic investigation, specifically exploring noun entry conditions, the

grammaticalized nature of there, and cognitive differences in English and Chinese realization.

## 3.1. All nouns: non-definite entry condition

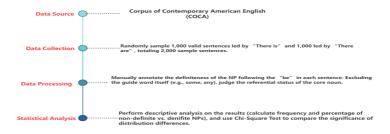


Figure 2. Research scheme for noun definiteness feature

The function of the existential construction is to assert the appearance of a new entity. Definite nouns presuppose the entity's existence, leading to "existential redundancy" [7]. Therefore, concrete nouns tend to enter the construction in non-definite forms. To verify this view, this study designed the following scheme, as shown in Figure 2:

The results showed that non-definite NPs (e.g., a book, three cats, some students) accounted for 1,942 instances, or 97.1% of the total. Definite NPs (e.g., the problem, his car) accounted for only 58 instances, or 2.9%. The few instances of definite NPs all occurred in special pragmatic contexts, such as indicating "reminder, discovery" ("There is the tax, of course.") or used in enumeration ("First, there's the issue of cost. Second, there's the problem of time..."). Their function deviates from the core function of "introducing a brand-new entity" of the construction, instead signaling a known entity that becomes relevant or visible in the immediate context. Chi-square test analysis indicated an extremely significant difference in the distribution between non-specific and specific NPs ( $\chi^2 = 1772.728$ , df = 1, p < 0.001), confirming the mandatory requirement of the existential construction for non-specific noun phrases.

### 3.2. Abstract nouns: mandatory nature of reification

Abstract nouns lack inherent spatial entity status and cannot directly integrate into the PLACE-FOR-EXISTENCE cognitive frame. Their entry into the construction requires various quantification or reification means to reshape them into a "bounded", countable virtual entity [9]. Existing corpus evidence shows that the admission rate of unquantified abstract nouns in the BNC is <0.02%, and the admission rate of abstract nouns is positively correlated with reification means [7]. To verify this view, this paper designed the following research scheme, as shown in Figure 3:

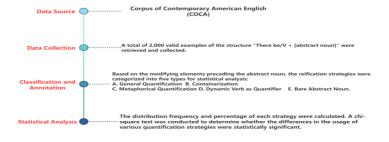


Figure 3. Research scheme for abstract noun reification means

A statistical analysis of 2,000 valid examples of "There be/V + abstract noun" from the COCA corpus, classified by reification means, yielded the distribution proportions shown in Table 3:

Table 3. Statistical results of abstract noun reification means classification

Reification Means Category	Judgment Criteria		Perce ntage
General Quantification	Whether the NP is preceded by determiners or phrases indicating indefinite quantity, such as some, any, no, little.	1,1 42	57.1 %
B. Containerization	Whether the NP is an "a/an $+$ N1 $+$ of $+$ (Det) $+$ N2 (abstract)" structure, where N1 is a noun denoting container, scope, or perception (e.g., sense, feeling, air).	378	18.9 %
C. Metaphorical Quantification	Whether the NP is an "a/an $+$ N1 $+$ of $+$ (Det) $+$ N2 (abstract)" structure, where N1 is a metaphorical noun denoting concrete things like light, sound, trace (e.g., ray, glimmer, trace).	248	12.4 %
D. Dynamic Verb (as Quantifier)	Whether the verb in the sentence is an intransitive verb other than be that denotes "appearing, happening, persisting, existing" (e.g., arise, emerge, develop).	212	10.6 %
E. Bare Abstract Noun	Whether the NP is a "bare" abstract noun.	20	1.0%

Chi-square test results showed that the distribution differences between categories were statistically significant ( $\chi^2 = 1874.3$ , df = 4, p < 0.001). Among them, bare abstract nouns without any reification means (Category E) had an extremely low admission rate (only 1.0%), and in the very few examples, their acceptability was often strongly constrained by context or sounded unnatural. Over 99% of abstract nouns achieved ""boundedness" through one of the means in categories A-D, with "general Quantification" (Category A, 57.1%) being the most common means, followed by "Containerization" (Category B, 18.9%), "Metaphorical Quantification" (Category C, 12.4%), and "Dynamic Verbs" (Category D, 10.6%). These results strongly demonstrate that the secondary metonymy ENTITY-FOR-STATE is not only necessary but also syntactically mandatory for abstract nouns to enter the "There be" construction.

## 3.3. Diachronic evidence: metonymic desemanticization of expletive "there"

Traugott has identified the following diachronic evidence [10]:

- Middle English: There sat a knight ("there" denotes a real location);
- Modern English: There is a problem ("there" grammaticalized into an existential marker). This study, consulting the COHA and OED corpora, found the following examples:
- - Early Modern English: "There is a tide in the affairs of men" Shakespeare, Julius Caesar
- "There" begins to be used to introduce an unknown entity; its locative meaning starts to generalize and blur. Here, the function of "there" is closer to introducing an existing phenomenon or truth.
- Modern English: "There's no place I'd rather be right now than in your room." J.D. Salinger, The Catcher in the Rye

There is fully grammaticalized into a syntactic function word (expletive subject).

Etymological and diachronic corpus examination clearly shows the grammaticalization path of "there" from a contentful locative adverb to a functional existential marker. This process is the result of the gradual bleaching of its spatial meaning via PLACE-FOR-EXISTENCE).

## 3.4. Contrast of realization and cognitive strategies

By comparing classic existential sentences from the COCA (English) and BCC (Chinese) corpora, the following differences in the realization means and cognitive strategies of existential constructions between English and Chinese can be observed, as shown in Table 4:

Table 4: Cognitive strategy comparison of english and chinese existential constructions

Table 4. Cognitive strategy comparison of engine and enmose existential constructions					
Com paris on Dim ensio n	English Existential Construction	Chinese Existential Sentence	Analysis		
Struc	There + V + NP + Loc.	Loc. + V + NP	The English construction adjusts cognitive salience through focus finalization, making the NP the "Figure" (focus of attention) and the spatial frame built by "there" the "Ground" (reference), conforming to Figure-Ground Theory [6].  Chinese uses a concrete or generalized location word to directly serve as the syntactic subject. The construction unfolds in the natural order of "Ground-Action-Figure," representing a direct lexicalized presentation.		
Core Verb	Highly restricted, primarily "be" "exist" and a few presentation verbs like "appear" "emerge" "remain"	Extremely rich, can be subdivided by meaning:Existence: 桌上放着一本书。(A book is lying on the table.) Appearance: 远处来了一个人。(A person came from afar.)Disappearance: 村里死了一头牛。(A cow died in the village.)	The verb function in the English existential construction is highly grammaticalized; the singularity of the verb form aims not to distract attention from the focal NP.  The verbs in Chinese existential sentences carry significant lexical and semantic load, containing more information.		
Conc rete Nou n Exa mple	There is a book on the table.	桌上有一本书。(On table has one book.)	English: "there" as formal subject constructs the "Ground"; "a book" as logical subject is postposed and focalized. The prepositional phrase on the table is supplementary Ground information. Chinese: "桌上" (on the table) is the syntactic subject and cognitive "Ground"; "一本书" (one book) is the object and cognitive "Figure". Word order naturally realizes the cognitive flow from "Ground" to "Figure".		
Abst ract Nou n Exa mple	There is some hope.	(他)心中有一线希望。(He) in- heart has one-thread hope.)	English: there creates an abstract "mental space" frame; some reifies the abstract concept "hope," making it a "Figure" that can be focused on. Chinese: Expressing abstract existence requires lexicalizing an abstract container, like "心中" (in the heart), "世上" (in the world), to serve as the subject (Ground), then using a measure word like "一线" (a thread of) to reify the abstract noun into a "Figure".		
Meto nym y Mec hanis m	Grammaticalize d Metonymy	Lexicalized Metonymy	English adjusts cognitive salience through grammaticalized means, while Chinese relies more on lexical means to directly present the scene.		

The English existential construction is essentially a highly grammaticalized information structure construction. Its primary function is to use the syntactic means of "focus finalization" to make

spatial information (jointly borne by "there" and the locative phrase), which should serve as the "Ground", the syntactic starting point, while reserving the core focus position for the existent (NP). In contrast, the Chinese existential sentence (Loc. + V + NP) more directly reflects the human order of perceiving space: first locate (Ground), then observe the process (Action), and finally focus on the object (Figure). Cognitive salience is achieved through relatively natural word order and lexical choice. Therefore, Chinese verbs can retain their rich semantics, whereas English sacrifices verb diversity for the function of focus regulation.

#### 4. Discussion and conclusion

This study, by constructing a metonymic operation model and analyzing extensive corpus data, systematically argues for the cognitive metonymic motivation of the English "There be" existential construction. Its new findings can be summarized in following points:

Firstly, it has proposed and validated an original two-tier metonymic model (PLACE-FOR-EXISTENCE and ENTITY-FOR-STATE), offering a more integrated account of the construction's cognitive motivation. Secondly, it has provided substantial corpus-based evidence that strongly confirms the canonical requirement for non-definite NPs. Beyond validating prior theories [7], it has developed a more refined classification of reification mechanisms for abstract nouns and presented their empirical distribution. A unique theoretical insight emerging from this model is the novel conceptualization of the grammaticalization of "here" as a specific case of metonymic desemanticization, linking syntactic change directly to cognitive processes. Lastly, the cross-linguistic analysis has offered an updated perspective, characterizing the English-Chinese difference as a fundamental contrast between grammaticalized and lexicalized strategies for metonymy, moving beyond traditional syntactic comparison. Limitations of the study include the need for deeper examination of the context dependency of abstract noun reification means; future research could further expand the scope of cross-linguistic comparison or employ neurolinguistic methods to verify the cognitive reality of the metonymic operations.

In conclusion, this study ultimately demonstrates that grammar is not a set of cold formal rules but a symbolic system rooted in human embodied cognition. The essence of the English existential construction is the grammaticalized product of metonymic cognition.

#### References

- [1] Li, B., Yang, K., & Wen, X. (2023). A Constructionalization Analysis of the There-Existential Construction and the There-Deictic Construction. Foreign Language Research (Collection), (1), 72-88.
- [2] Li, X., & Liu, Z. G. (2023). A Study on Referentiality Change and the Subjective Meaning of the There-Construction. Foreign Language Teaching and Research, 55(2), 189-201, 319.
- [3] Xu, Y. H. (2019). A Study on the Function of the There-Existential Construction in Political Discourse from a Critical Cognitive Perspective (Master's thesis). Zhejiang University of Finance and Economics.
- [4] Panther, K.-U., & Thornburg, L. L. (2009). Metonymy and Metaphor in Grammar. John Benjamins.
- [5] Langacker, R. W. (2008). Cognitive Grammar: A Basic Introduction. Oxford University Press.
- [6] Talmy, L. (2000). Toward a Cognitive Semantics (Vol. 1). MIT Press.
- [7] Wang, Y. (2019). An Analysis of the There-Be Existential Construction Based on Russell's Theory of Descriptions: Can 'Existence' Be a Predicate? Foreign Language Research, (1), 1-6.
- [8] Wei, Z. J. (2021). The Cognitive Metonymic Motivation of Grammatical Constructions: A Case Study of the "Verb-Object + Object" Construction. Foreign Languages in China, 18(3), 24-30.
- [9] Wei, Z. J. (2022). An Embodied-Cognitive Perspective on the Boundedness of English Nouns. Foreign Languages in China, 19(6), 38-43, 51.
- [10] Traugott, E. C. (2004). Exaptation and Grammaticalization. Linguistic Society of America Annual Meeting.