

A Constructionalization Approach to Chinese Shang (上) and Xia (下) Spatial Metaphor

Yang Xu

School of International Studies, Southwest University, Chongqing, China
Email: byyangxu@sina.com

Received 11 June 2015; accepted 1 August 2015; published 5 August 2015

Copyright © 2015 by author and Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

Language is subject to change over time. Diachronic construction grammar can provide adequate accounts for phenomena of language change. Constructionalization, as a kind of new approach, compasses and goes beyond both lexicalization and grammaticalization (Traugott, 2014). This paper reviews the main ideas of constructionalization and constructional changes, explores the expressions of Chinese spatial metaphor shang (上) and xia (下), and proposes that the sequence and schema of spatial metaphor is the main motivation of constructionalization of Chinese shang (上) and xia (下).

Keywords

Constructionalization, Spatial Metaphor, Shang (上) and Xia (下)

1. Introduction

Constructions have been widely paid attention from linguists and philosophers. Constructional theories surpass Saussure's semiotic theory and focus on the form and meaning of constructions. Language use impacts constructional changes. This idea agrees with one of the major hypotheses of cognitive linguistics, namely, language knowledge is derived from language use. The constructional approach to language changes takes a holistic consideration of both form and meaning and proposes that constructional changes are interconnected in the whole network. Previous studies on the Chinese spatial metaphor were mainly carried out from the synchronic perspective. This research will investigate the expressions of Chinese spatial metaphor from shang (上) and xia (下) from the constructionalization perspective.

2. Theoretical Framework

The constructional framework for language change abides by the main ideas of Construction Grammar and some

fundamental principles of the usage-based model. Five tenets are identified by Goldberg (2013: p.3): 1) the basic units of grammar are constructions, and constructions are conventional form-meaning pairings; 2) a non-modular perspective assumes that semantic structure can be mapped on syntactic form; 3) linguistic knowledge can be grasped through taxonomic and hierarchic networks; 4) the underlying factors for cross-linguistic variation can be better explained from domain-general cognitive process and variety-specific constructions; 5) language use influences language constructions. This constructional framework conceives of language as an interconnected network and assumes that linguistic knowledge is acquired in the constructional network (Goldberg, 2003).

A usage-based model to language change stresses on the model of entrenchment and sanctioning. A network of constructions interacts with the relational links and inheritance links. Language change involves not only construct-specific changes but also changes across the constructional network accordingly. It is typically gradual for constructional changes and constructionalization. This constructional approach claims that there exists a unity between form and meaning, a continuum between grammar and lexicon, a gradient from grammaticalization to lexicalization, and a generalization from substantive to schematic constructions.

Factors influencing constructionalization involve schematicity, productivity, and compositionality. Traugott and Trousdale (2013: p. 22) define constructionalization as “the creation of form_{new}-meaning_{new} (combination of) signs. It forms new type nodes, which have new syntax or morphology and new coded meaning, in the linguistic network of a population of speakers”. They distinguish the changes of gradual and instantaneous constructionalizations. Gradual constructionalizations tend to be procedural while instantaneous constructionalizations are exclusively lexical. Constructional changes refer to specific change, which only affects one internal dimension of a construction and does not create a new node. Constructional changes that precede and enable constructionalization involve expansion of pragmatics, mismatches between form and meaning, and even small distributional changes. Constructionalization also may lead to further constructional changes, which typically involve expansion of collocations as well as morphological and phonological reduction. These micro-steps are called post-constructionalization constructional changes (Traugott and Trousdale, 2013: p. 27).

2.1. Two Models of Constructionalization

Grammatical constructionalization refers to the constructional development through a series of small-step changes and brings about a form_{new}-meaning_{new} sign. It incorporates some of achievements achieved in grammaticalization and unifies the grammatical direction of change. Two models of grammaticalization can be proposed: grammaticalization as reduction and grammaticalization as expansion. The former emphasizes the process of semantic attrition, paradigmaticization, obligatorification, condensation, coalescence and fixation. The latter argues that such expansions as host-class expansion, syntactic expansion and semantic-pragmatic expansion are obvious in the change process. The constructional approach maintains that the two models are not in conflict but complementary to one another. Grammatical constructionalization is characterized by an increase in schematicity and productivity and a decrease in compositionality. It focuses on the outcome of changes, not the process of changes. Such changes are motivated by means of analogization and neoanalysis. Construction network builds a framework for rethinking what analogical thinking plays a role in the constructional changes.

Lexical constructionalization addresses how new contentful constructions come into being and develop. It includes gradual constructionalization of schema and instantaneous creation of new micro-nodes. This model regards language as an inventory consisting of constructions of various sizes ranging from affixes to clauses. Lexical and grammatical morphology can be better explained in line with the continuum between lexical and grammatical constructions. The word-formation schemas involve bound morphemes while grammatical schemas are connected with free morphemes. In addition, word-formation schemas focus on the contentful meaning and grammatical schemas on the procedural meanings. A constructional approach unifies the studies in grammaticalization and lexicalization, establishing the theoretical framework of constructionalization. The lexical construction change involves both gradual constructionalization of schemas or micro-constructions and instantaneous constructionalization. Changes in productivity, schematicity, and compositionality collectively reflect these phenomena of the rise, persistence and loss of word-formation patterns. Lexical constructionalization involves a both reduction and decrease in compositionality and expansion or increase in schematicity and productivity.

2.2. Mechanisms of Constructionalization

Historical cognitive linguistics is addressed to language users how to perform selective mental representations of certain construction. The mechanisms of changes focus on how language changes while the motivations of

changes pertain to why language changes. Traugott and Trousdale (2013) adopt the new term *neoanalysis* to replace *reanalysis* and *analogization* to analogy. Bybee (2003) suggests that frequency is one kind of change mechanisms, but Traugott and Trousdale propose that it is only an epiphenomenon of routinization and schematization.

2.2.1. Neoanalysis

The reanalysis refers to changes in the structure of an expression or class of expressions that does not include so-called immediate or intrinsic modification of its surface manifestation in construction changes (Langacker, 1977: p. 58). Harris and Campbell (1995: p. 50) describe this structure in Langacker's characterization as a kind of underlying structure and consider this structure to be constituent, hierarchical and grammatical. However, there remain some problems to be solved. Language users can not internalize the construction in question and they cannot construe a construction from the speaker. Therefore, reanalysis does not happen. Language users just employ different analysis. In other words, one cannot reanalyze a structure one does not have. In addition, reanalysis cannot provide evidences except when new distributions are mapped on the new covert analysis. Reanalysis involves macro-steps changes and does not correlate with constructionalization. Neoanalysis is operated as a micro-step in a constructional change. Micro-step changes, whether of form or of meaning, can be captured in framework of construction grammar.

2.2.2. Analogization

The function of analogy in grammaticalization has long existed. Fischer (2007) proposes that analogy is of great importance in language change. Analogy can function at both paradigmatic and syntagmatic levels. In her opinion, the structural properties of language use is of little amount compared with on-line processing. Therefore, analogy is regarded as the main mechanism in grammaticalization (De Smet, 2009). Traugott and Trousdale (2013) think that it is vital to tell the process of analogical thinking from the mechanism of analogy. Analogization is used to clarify the relations between a motivation and a mechanism. Analogical thinking can better account for aspects of changes in meaning and form. It is of equal importance to tell the process of parsing because it motivates different analyses and results in different structures. A constructional perspective on language change admits the position that pattern matching is an important factor in change and membership of sets cannot be neglected. Adopting a diachronic construction grammar perspective, we can explore how constructions came into being, developed and declined. Analogical thinking and analogization can better account for constructional changes.

3. Spatial Constructionalization of Chinese Shang (上) and Xia (下)

The constructions of Chinese shang (上) and xia (下) date back to the Shang dynasty. Shang (上) and xia (下) purely express the spatial concepts. These expressions can be found in the earliest pictographic characters. Shang (上) refers to something being above something else and xia (下) denotes to something being below something else in the earliest pictographic. Shang (上) and xia (下) mainly express the conceptualization of a certain stage or a process in modern Chinese. They can be expressed to be the quantity of something, social hierarchy of people or organizations, state of people, objects or events and time.

3.1. Quantity Constructionalization of Chinese Shang (上) and Xia (下)

Chinese shang (上) and xia (下) contain general metaphorical extensions. A larger quantity is shang (上) and a smaller quantity is xia (下), as is shown in (1) and (2):

- (1) 物价上涨 Price of commodities go up.
- (2) 成绩下降 Scores at school go down.

The example (1) and (2) show that the image schematic structures of shang (上) and xia (下) can map onto the domain of quantity, indicating a vertical numerical scale. A large number of objects in our daily life are expressed by means of metaphor. The increasing and decreasing of temperature in thermometers reflect directly the level of mercury column. The rising and falling in stock prices show obviously the relevant stock curve going up and down respectively. The thermometers and stock market graphs are built through a larger quantity metaphor shang (上) and a smaller quantity metaphor xia (下). The new expressions of shang (上) and xia (下) can be considered as a kind of pre-constructionalization because they appear new meaning.

- (3) 工资在上涨 Salary is going up.
 (4) 工资在下降 Salary is going down.

It can be concluded in the example (3) and (4) that shang (上) and xia (下) show close corresponding relations between the metaphorical extensions. Meanwhile, they present a kind of tendency towards an overall coherence among different specific metaphorical extensions. If the overall coherence loses, a kind of constructionalization will occur.

3.2. States Constructionalization of Chinese Shang (上) and Xia (下)

The metaphorical extensions for target domain show that a more desirable state is shang (上) and a less desirable state xia (下), as is shown in (5) and (6) :

- (5) 下岗工人 Laid-off employees.
 (6) 抓住机遇是上策 The best way is to seize the opportunity .

The image schematic structures of Chinese shang (上) and xia (下) are mapped onto that of the target domain states. Chinese people consider a more desirable state as being at a higher position, while regard a less desirable state as being at a lower position. Therefore, people build this kind of mental states: a more desirable state are upwards and a less desirable state are downwards. The reason why brings about realization of this metaphor is people's religious beliefs from both Buddhism and Taoism. In their mind, a desirable world is much better than the physical world. The drooping posture is used to imply people's sadness and depression while the erect posture mainly expresses a kind of positive and cheerful state. Therefore, this kind of upward orientation can also refer to the positive evaluation while the downward orientation tends to be a negative expression. People adopt the analogical thinking to set up the state framework of Chinese shang (上) and xia (下).

Some expressions, like quality, publicity, intensity, and fulfillment of an action, are the specific metaphorical extensions within the target domain of states. Better quality is shang (上) and worse quality is xia (下), as is show in (7) and (8):

- (7) 上等货 first-class goods.
 (8) 下等货 low-grade goods.

A state of greater intensity refers to shang (上) and a state of less intensity refers to xia (下), as is shown in (9) and (10):

- (9) 上班 be on work
 (10) 下班 be off work

These examples demonstrate that there exists certain correspondence between those states which are considered as shang (上) and xia (下). For example, higher morality is (上) while lower morality is (下). Better quality is (上) while worse quality is (下). It can be concluded that the domain of states is metaphorically structured by the image-schematic structures of shang (上) and xia (下) in a coherent and systematic way rather than in an arbitrary and discrete manner. These cases show that the construction of shang (上) and xia (下) are motivated by the neanalysis of the spatial metaphor.

3.3. Social Hierarchy Constructionalization of Chinese Shang (上) and Xia (下)

The metaphorical extensions for his target domain are embodied, namely a more important status refers to shang (上) and a less important status refers to xia (下), as is shown in (11) and (12):

- (11) 上流社会 the upper classes
 (12) 下属机构 subordinate body

With the metaphorical extensions, the image-schematic structures of shang (上) and xia (下) are mapped onto the structures of the target domain of social hierarchy. China was ever under the feudal society with strict hierarchical system for more than thousands of years. The hierarchical system is so important in many aspects such as society, politics, and daily life. The emperor in ancient society was on the top of the social status and had the absolute power. The officials were divided into various hierarchies and all of them must obey the emperor's will and order. At the same time, the structure in a family also followed the hierarchical system in ancient China. That is to say, parents were on the top, and then were sons and grandsons. What's more, children should not go against parents' will and decision.

In ancient society, people were divided into many different hierarchies according to their physical size and strength. One would have better chance to win a fight than a shorter and smaller man. Therefore, the winners in

a fight always stand on the top of the losers. In modern society, social status and power are closely related. The more the power is, the higher the social status will be. Hence, higher social status is shang (上) and lower social status is xia (下). If the ancient officials in China want to go to the halls, he needs to climb a lot of stairs. These halls represent the higher social status and absolute power of the emperor. Hence, the halls are built far above the ground level. In the prize-awarding ceremonies of sports meeting, the champion always stands on the highest stage, the runner-up is on the higher stage while the third place winner on the lowest stage. And the national flags are arranged in turn as well. Moreover, in the name lists, the names of the VIPs always keep at the top of the page. In ancient China, people who believe in Buddhism and Taoism hope that there is a higher world where life is much better than the physical world. In ancient China, the throne of the emperor was always situated at a place several steps higher than the seats for his inferior officials. In addition, the seat for the patriarch was also placed in a higher place in common family. Common people practice kowtow to show their humbleness in front of officials. And the rebel was forced to kneel down to repent of their sin. Constructional changes of Chinese shang (上) and xia (下) are closely connected with the culture, politics and people's beliefs. These factors can prompt for the new construction and result in constructionalization.

3.4. Time Constructionalization of Chinese Shang (上) and Xia (下)

The metaphorical extensions for this target domain are reflected that an earlier time is shang (上) and a later time is xia (下), as is shown in (13) and (14):

- (13) 上届运动会 The last sports meeting
 (14) 接下来的几个月 The next few months

It can be easily seen that the two metaphors and some examples above fit into the large system of time-as-space metaphor. With the two metaphors, the image schematic structures of shang (上) and xia (下) are mapped onto the domain of time, giving the two metaphors a vertical axis. In the history of human thought, the definition of space and time was figured mainly among the most fundamental notions of philosophy. People had noticed the interconnections between the two concepts long before Einstein's relativism was put forward. However, space and time do not seem to have a completely equal start point from a conceptual perspective. The definitions of space and time are as follows: space is regarded as something that is around us and above us, and time as something that flows on forever. In this definition, space is defined in its own terms involving around and above, while time is defined by resorting to a spatial metaphor. The two metaphors are analyzed as follows: time passing is motion along vertical axis. Times are fixed locations which are arranged along a vertical line. An earlier time is above a later time, as is shown in (15) and (16):

- (15) 上一代 the older generation
 (16) 下一代 the younger generation

Human beings are moving downwards along the vertical line towards future. Future is down and past is up, as is shown in (17) and (18):

- (17) 沿着历史的长河逆流而上 To go up stream against the river of history
 (18) 一代代传下来 To pass down generation to generation

The two special cases are consistent with each other because both entails that an earlier time is shang (上) and a later time is xia (下).

Firstly, time is expressed as motion or location in space metaphor, corresponding with our physiological structure (Xu, 2010). Human beings build the concept of time through motion and locations in their optical systems. Therefore, time should be perceived in terms of motion and location of objects. Secondly, the perception of spatial relations appears much earlier than that of temporal relations. Temporal relations do not begin to arrange events in the human mind until 13th century. At that time, time was understood to a great degree according to spatial expression. Thirdly, the perception of spatial relation is acquired earlier than those of temporal relations. The calendar is a vivid embodiment of the time as space metaphor in our life. An earlier time is always put on or above a later time. Life experiences about the death are one of prominent feature in ancient Chinese culture. Until now, many families keep a memorial tablet for worship ancestors. Analogization and neoanalysis are two main mechanisms of the expressive integration of spatial relations and temporal relations.

4. Conclusion

This research reviews the main ideas of constructionalization and constructional changes, explores the spatial expressions of Chinese shang (上) and xia (下) and investigates the constructionalization of Chinese shang (上)

and xia (下) from constructionalization perspective. This paper proposes that the expressions of metaphor are main motivations of constructionalization of Chinese shang (上) and xia (下).

Funding

This paper is financed by the Project of Doctoral Candidates' Scientific Research Innovation from Chongqing Education Commission. NO. CYB14063.

References

- Bybee, J. (2003). Mechanisms of Change in Grammaticization: The Role of Frequency. In B. Joseph, & R. Janda, (Eds.), *The Handbook of Historical Linguistics* (pp. 602–623). Oxford: Blackwell. <http://dx.doi.org/10.1002/9780470756393.ch19>
- De Smet, H. (2009). Analysing Reanalysis. *Lingua*, 119, 1728-1755. <http://dx.doi.org/10.1016/j.lingua.2009.03.001>
- Fischer, O. (2007). *Morphosyntactic Change: Functional and Formal Perspectives*. Oxford: Oxford University Press.
- Goldberg, A. (2003). Constructions: A New Theoretical Approach to Language. *Trends in Cognitive Sciences*, 7, 219-224. [http://dx.doi.org/10.1016/S1364-6613\(03\)00080-9](http://dx.doi.org/10.1016/S1364-6613(03)00080-9)
- Goldberg, A. (2013). Constructionist Approaches. In T. Hoffmann, & G. Trousdale (Eds.), *The Oxford Handbook of Construction Grammar* (pp. 15-31), Oxford: Oxford University Press. <http://dx.doi.org/10.1093/oxfordhb/9780195396683.013.0002>
- Harris, A. C., & Campbell, L. (1995). *Historical Syntax in Cross-Linguistic Perspective*. Cambridge: Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511620553>
- Langacker, R. (1977). Syntactic Reanalysis. In C. N. Li (Ed.), *Mechanisms of Syntactic Change*. Austin: University of Texas Press.
- Traugott, E. C., & Trousdale, G. (2013). *Constructionalization and Constructional Changes*. Oxford: Oxford University Press. <http://dx.doi.org/10.1093/acprof:oso/9780199679898.001.0001>
- Traugott, E. C. (2014). Toward a Constructional Framework for Research on Language. *Cognitive Linguistic Studies*, 1, 3-21. <http://dx.doi.org/10.1075/cogls.1.1.01tra>
- Xu, X. D. (2010). A Cognitive Study on Spatial Metaphors in English and Chinese: The Cases of English Up/Down and Chinese Shang/Xia. Chongqing Normal University, Chongqing.