A Colexficational Analysis of *Chū* in Modern Chinese

KUANG Lincai
College of International Studies, Southwest University, Chongqing, China
kuanglincai@163.com

Abstract

Directional verbs in modern Chinese, notably *chū*, are crucial. Previous studies on *chū* pay little attention to colexification and its mechanisms; they primarily focus on polysemy, syntactic restriction, and diachronic evolution in Mandarin Chinese. Research on Chinese topolects has also been neglected. Development of the Database of Cross-linguistic Colexifications (CLICS^3) facilitates its cross-linguistic and topolectal exploration. This paper first discusses colexified pairs of *chū* in Modern Chinese, and constructs its colexificational network based on the CLICS^3. It also argues for colexificational mechanisms of colexified extensions. Conceptual metaphor and metonymy are considered two core mechanisms accounting for the colexified extensions of *chū*. Metaphoric colexified extensions map onto the space, time, and state domain, following the order of "space > time > state". As for the metonymic colexified extensions, the extended concepts result from different substructures of the image schema profiled in the motion event of *chū*.

Keywords: *chū*, directional verb, colexified pair, metaphor, metonymy

Povzetek

Smerni glagoli, še posebej *chū* v sodobni kitajščini, so ključnega pomena. Dosedanje študije o *chū* namenjajo premalo pozornosti koleksifikaciji in njenim mehanizmom; raje se osredotočajo na polisemijo, sintaktične omejitve in diahroni razvoj v standardni kitajščini. Še posebej neraziskani so dialekti. Nedavno oblikovana baza podatkov o medjezikovnih koleksifikacijah (CLICS^3) omogoča vpogled v glagol *chū* z medjezikovnega in narečnega vidika. Članek prvo obravnava njegove koleksificirane pare v sodobni kitajščini, nato pa na podlagi CLICS^3 razvije koleksifikacijsko mrežo. Obenem predlaga mehanizme koleksifikacijske razširitve koleksificiranega. Osnovna mehanizma koleksifikacije sta konceptualna metafora in metonimija, ki pojasnjujeta koleksificirane razširitve glagola *chū*. Njegove metaforične koleksificirane razširitve je moč preslikati v prostorsko in časovno domeno ter stanje, pri čemer si le-te sledijo vrstnemu redu "prostor > čas > stanje". V primeru metonimične koleksificirane razširitve pa se razširjeni koncepti pojavijo iz različnih podstruktur slikovne sheme, profilirane v gibalnem dogodku glagola *chū*.

Ključne besede: *chū*, smerni glagoli, koleksificiran par, metafora, metonimija

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1 Introduction

François (2008) defines colexification as "a given language is said to colexify two functionally distinct senses if, and only if, it can associate them with the same lexical form" (2008, p. 163). He claims that whether a sense can be included in a semantic list depends on whether two senses are strictly colexified in at least one language. Interestingly, the development of the Database of Cross-linguistic Colexifications (CLICS[3]) (2019) makes it possible to conduct a colexficational analysis of a lexical form. Directional verbs are specific and widely used in modern Chinese, among which *chū* 出 "go out" is an important one. Previous studies of *chū* pay little attention to colexification but focus on polysemy (Liu, 1998; Shi, 2001; Wang, 2005; Hu et al., 2019), syntactic restriction (Chu et al., 1999; Hu et al., 2019), and diachronic evolution (Wu, 1997; Chu et al., 1999; Liu, 2015; Zhou, 2018) in Mandarin Chinese, while topolects only play an inconspicuous role in verifying the results. Whereas topolects are indispensable parts of modern Chinese (Chu et al., 1999; Liu, 2015) due to some characteristics different from those in modern Chinese. In this sense, topolects should be attached as much importance as Mandarin Chinese in the study of *chū*. Based on Mandarin Chinese and topolects in Chinese, this present paper intends to explore the complete colexified pairs of *chū*, and then construct its colexificational network, as well as uncover its colexficational mechanisms.

This paper is unfolded as follows. Section 2 explains the data and methodology for this study. Section 3 discusses the colexified pairs of *chū* in Mandarin Chinese and 43 topolects from pertinent data. To justify the colexifications for *chū* in different topolects, Section 3 employs the CLICS[3] to complement cross-linguistic colexifications for the concept GO OUT, and further establishes the colexificational network of *chū* in modern Chinese. Section 4 discusses the mechanisms for the colexified extensions of *chū*. And the last section 5 summarizes the whole study and concludes.

2 Data and methodology

This present paper makes use of Mandarin Chinese data from the online version of the BCC Chinese Corpus created and managed by Beijing Language and Culture University, and the Modern Chinese Dictionary (7th edition). The corpus and the dictionary consist of rich Mandarin Chinese instances, which can be utilized to testify to the common lexical semantics or concepts of *chū* in Mandarin Chinese. The data for the quantitative analysis of lexical semantics or concepts of *chū* in Chinese topolects in section 3 comprise the large dictionary of modern Chinese topolects (43 volumes) and

the Database of Cross-Linguistic Colexifications (CLICS^3). The large dictionary is selected because it is widely considered to be a standard representative of modern Chinese topolects, including all Chinese topolectal families identified by Language Atlas of China (2nd edition) (Xi & Zhang, 1990) as well as tremendous instances of different topolects. CLICS^3 covers more than 3100 language varieties of the world, showing the concepts that share the same lexical form with the target concept, having been proven to be scientific in psychological and cognitive research (Joshua et al., 2019). The database provides us with some cross-language evidence to some degree, demonstrating the commonality between *chū* in Mandarin Chinese and other languages. In addition, this paper also collects previous studies of *chū* in Mandarin Chinese (Liu, 1998; Chu et al., 1999; Hu, 2012) to conduct a fine-grained analysis.

From the preceding description, it is clear that data have been drawn from a great variety of sources. This is inevitable because the colexificational changes are slow and proceed in small steps, whereas this study requires refined data covering detailed colexified pairs. Fortunately, the large dictionary of topolects and CLICS^3 make it possible to conduct a close-grained analysis of *chū* in Modern Chinese.

3 The colexified pairs and colexificational network of *chū*

Lehrer (1992) suggests that the typological study focuses on the specific way of how to package linguistic materials into lexemes or phrases with the purpose of uncovering the internal universality and systematicity of languages within lexical levels. Since lexicons are traditionally counted as "unique" and "idiosyncratic" without a common ground for cross-linguistic comparison, François (2008) further argues that breaking up lexemes into semantic atoms or senses can make the cross-linguistic comparison between lexical items possible. It is precisely for this reason that he incorporates the notion of colexification into cross-linguistic lexical studies to resolve the thorny issue of comparability for lexical items. The following part discusses the colexified pairs of *chū* and constructs its colexificational network in modern Chinese.

3.1 The colexified pairs of chū in Modern Chinese

As is argued by François (2008), whether a sense can be incorporated in a semantic list hinges upon the strict colexification of two senses in at least one language. Specifically, if a linguistic form in a sort of Language has <sense1>

and <sense2>, at the very least it can be seen as evidence of the view that the form strictly colexifies <sense1> and <sense2>, manifested by the colexified pairs <sense1, sense2>. Gast and Koptjevskaja-Tamm (2022) expand the view and further distinguish independent colexification from dependent one, that is, the colexification resulting from an intermediate concept. Additionally, they also add negative evidence to exclude some pairs from the colexificational database. Based on these views, this part argues the colexified pairs of *chū* in modern Chinese. Since "GO OUT" is the basic sense of *chū*, such as *chūmén* 出门 "go out of the door", and it can be found in every topolect in Chinese, this present paper selected it as the pivot node in the colexificational network, in sync with the pivot concept (François, 2008). Finally, 9 colexified pairs of *chū* in modern Chinese have been identified, including <GO OUT, HAPPEN>, <GO OUT, ARRIVE>, <GO OUT, EXCEED>, <GO OUT, TAKE OUT>, <GO OUT, PRODUCE>, <GO OUT, PAY>, <GO OUT, COME TO AN END>, <GO OUT, GO>, <GO OUT, OUTSIDE>. In what follows, each colexified pair will be elaborated further and supported with examples.

<GO OUT, HAPPEN>: *Chū* can express the concept of HAPPEN, which can be found in Mandarin Chinese, Chengdu topolect, Taiyuan topolect, Xi'an topolect, etc. Examples are as follows:

(1) 病人出血太多，需要立刻包扎。(Mandarin Chinese)
Bìngrén chū xiě tài duō, xūyào lìkè bāozhā.
patient – happen blood – too much, need a bandage immediately
'The patient was bleeding too much and needed to be bandaged immediately.'

(2) 手上出咧个疙瘩。 (Xi'an topolect)
Shǒushàng chū liě gè gēdá.
on the hand – happen – a blister
'There is a blister on the hand.'

<GO OUT, ARRIVE>: *Chū* can denote the concept ARRIVE, which can be found in Mandarin Chinese, Meixian topolect, Chengdu topolect, Xi'an topolect, etc. Illustrative examples are given as follows:

(3) 全体代表出席了今天的大会。 (Mandarin Chinese)
Quántǐ dàibiǎo chūxí le jīntiān de dàhuì.
all representatives– arrive –today's conference
'All representatives attended today's conference.'

(4) 这阵应该出场么? (Chengdu topolect)
Zhè zhèn yīnggāi chūchǎng me.
the time should– arrive
'I don't think this is the time to play.'

<GO OUT, EXCEED>: *Chū* can imply the concept of EXCEED, which can be found in Mandarin Chinese, Shanghai topolect, Xi'an topolect, Jixi topolect, etc. Examples are as follows:

(5) 他在公司的地位已经大大超出了他老板。(Mandarin Chinese)
Tā zài gōngsī de dìwèi yǐjīng dàdà chāochū le tā lǎobǎn.
his status in the compapany greatly– exceed –his boss
'His status in the company has greatly exceeded that of his boss.'

(6) 不出三年，渠肯定就是个好木匠了。 (Jixi topolect)
Bù chū sān nián，qú kěndìng jiùshì gè hǎo mùjiàng le.
not– exceed –three years, you must a good carpenter
'In three years, you will be a good carpenter.'

<GO OUT, TAKE OUT>: *Chū* can indicate the concept of TAKE OUT, which can be found in Mandarin Chinese, Guangzhou topolect, Taiyuan topolect, Meixian topolect, etc. Examples are as follows:

(7) 你看你出的什么主意，一点用都没有。 (Mandarin Chinese)
Nǐ kàn nǐ chū de shénme zhǔyì, yīdiǎn yòng dōu méiyǒu.
you look your– take out – ideas, no use
'Look, whatever ideas you came up with are of no use at all.'

(8) 出支估仔给你估。 (Guangzhou topolect)
Chū zhī gūzǎi gěi nǐ gū.
I– take out –a riddle you guess
'Take out a riddle and try to guess it.'

<GO OUT, PRODUCE>: *Chū* can signify the concept of PRODUCE, which can be found in Mandarin Chinese, Taiyuan topolect, Shanghai topolect, Jixi topolect, etc. Examples are as follows:

(9) 我们县城里今年出了个文科状元。 (Mandarin Chinese)
Wǒmen xiànchéng lǐ jīnnián chū le gè wénkē zhuàngyuán.
our county this year– produce –a liberal arts champion
'Our county has a liberal arts champion this year.'

(10) 爾徽州真出人才。 (Jixi topolect)
Ěr huīzhōu zhēn chū réncái.
your Huizhou indeed– produce –talents
'Huizhou is a place full of talents.'

<GO OUT, PAY>: *Chū* can typify the concept of PAY, which can be found in Mandarin Chinese, Chongming topolect, Danyang topolect, and Xiamen topolect. Examples are as follows:

(11) 大家尽情吃喝，今天这顿饭饭钱我出。 (Mandarin Chinese)
Dàjiā jìnqíng chī hē, jīntiān zhè dùn fàn fànqián wǒ chū.
everyone eat and drink today the bill I– pay
'Everyone, eat and drink to your heart's content. I'll pay for today's meal.'

(12) 我出五块钱和你交换。 (Danyang topolect)
Wǒ chū wǔ kuài qián hé nǐ jiāohuàn.
I– pay –five yuan for your exchange
'I'll give you five bucks in exchange.'

<GO OUT, COME TO AN END>: *Chū* can designate the concept of COME TO AN END, which can be found in Loudi topolect, Meixian topolect, Danyang topolect, etc. Examples are as follows:

(13) 我早就讲了，这个人是要出豁的。 (Loudi Chinese)
Wǒ zǎo jiù jiǎng le，zhè ge rén shì yào chūhuō de.
I early told, the guy must– come to an end
'I have told you, you and that guy must come to an end.'

(14) 明交出伏咧。 (Danyang topolect)
Míng jiāo chūfú liē.
tomorrow heat– come to an end
'The heat will come to an end tomorrow.'

<GO OUT, GO>: *Chū* can express the concept of GO, which can be found in Mandarin Chinese and Guangzhou topolect. Examples are as follows:

(15) 逢年过节都要出城一趟。 (Mandarin Chinese)
Féng nián guòjié dōu yào chūchéng yī tàng.
go through the year– go –to the town
'I have to go out of the town once a year.'

(16) 你出街做咩? (Guangzhou topolect)
Nǐ chūjiē zuò miē?
you– go –street do what
'Why are you going to the street?'

<GO OUT, OUTSIDE>: *Chū* can denote the concept of OUTSIDE, which can be found in Guangzhou topolect, Xi'an topolect, and Urumqi topolect. Examples are as follows:

(17) 行出啲。 (Guangzhou Chinese)
Xíng chū dī.
go– outside
'I will go outside.'

(18) 把你底好酒往出拿。 (Urumqi topolect)
Bǎ nǐ dǐ hǎo jiǔ wǎng chū ná.
take you wine– outside
'Take your wine outside.'

This present paper exhaustively explored the above 9 colexified pairs of *chū* in Mandarin Chinese and Chinese topolects from pertinent data. Following the Chinese topolectal families delineated in the Language Atlas of China (2nd edition) (Xi & Zhang, 1990), a compilation of 21 exemplary topolects has been chosen to illustrate the outcomes, as depicted in Table 1.

Table 1: The colexfied pairs of *chū* in Mandarin Chinese and topolects

	Mandarin	Chongming	Chengdu	Pingxiang	Meixian	Yangzhou	Xining	Xi'an	Nanchang	Taiyuan	Fuzhou	Guangzhou	Haikou	Jinan	Shanghai	Loudi	Jixi	Danyang	Xiamen	Harerbin	Urumqi
GO OUT	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
HAPPEN	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+					+
ARRIVE	+		+		+		+	+		+		+			+						+
EXCEED	+				+			+		+				+	+		+				+
TAKE OUT	+				+			+		+		+		+	+	+					+
PRODUCE	+	+			+			+		+	+	+			+		+				+
PAY	+	+																+	+		
COME TO AN END			+	+	+	+			+		+	+	+	+		+		+			
GO	+											+									
OUTSIDE								+				+									+

3.2 The colexificational network of *chū*

This part resorts to CLICS[3] to justify the colexified pairs of *chū* in Modern Chinese. As illustrated earlier, given its fundamental meaning and top frequency, "GO OUT" is deemed to be the pivot node in the colexificational network. When "GO OUT" is selected as the target concept in CLICS[3], the result can be exhibited in Figure 1.

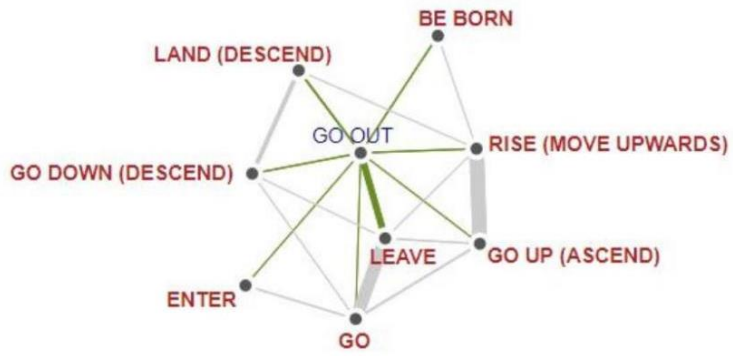

Figure 1: The Colexificational Network of "GO OUT" in CLICS[3]

As sketched in Figure 1, 8 colexified pairs of "GO OUT" can be identified, including <GO OUT, LAND (DESCEND)>, <GO OUT, GO DOWN (DESCEND)>, <GO OUT, ENTER>, <GO OUT, GO>, <GO OUT, LEAVE>, <GO OUT, GO UP (ASCEND)>, <GO OUT, RISE (MOVE UPWARDS)>, <GO OUT, BE BORN>.

Moreover, the colexfication network of *chū* in modern Chinese and "GO OUT" in different languages are combined to showcase their overlap and complementarity. It is important to mention here that both the threshold of the nodes and lines in CLICS[3] are three, indicating that more than three kinds of language have such a concept and more than three sorts of forms hold such colexified pairs respectively. This present paper identifies the colexified pair of *chū* in Modern Chinese in tandem with the same threshold of nodes and lines to make the two colexification networks well-matched.

The conjoined colexification network of *chū* "GO OUT" is demonstrated in Figure 2, and only one overlapping colexified pair is existent, that is <GO OUT, GO> (see the shadow part).

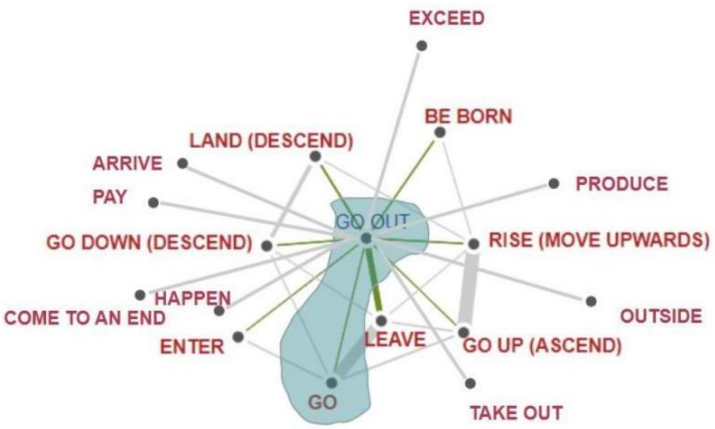

Figure 2: The colexification network of *chū* ("GO OUT")

4 The colexification mechanisms of *chū*

The colexified extension of *chū* is not arbitrary but follows certain rules. As is explained by Gibbs and Matlock (1997, p.215), "the lexical organization of polysemous words is not a repository of random, idiosyncratic information, but is structured by general cognitive principles that are systematic and recurrent throughout the lexicon". Conceptual metaphor and metonymy are long advertised as two fundamental cognitive mechanisms we live by. Specifically, they are viewed as the internal force of semantic expansion of the lexicon (Lakoff & Johnson, 2003) as well as the underlying reason for colexification (Gast & Koptjevskaja-Tamm, 2022). This present paper contends that conceptual metaphor and metonymy are the core mechanisms during the colexified extended process of *chū*, among which image schema, particularly for container schema, comes into play.

Additionally, Lakoff and Johnson (1980) pointed out that the space domain is the most fundamental one in human cognition, which can be further projected into some abstract domains, such as the time domain. And for Heine et al. (1991), abstract concepts, derived from other space concepts, are conventionally counted as the most fundamental concepts in human language as such. As *chū* is patently relative to space in modern Chinese, its colexification has to do with mapping onto three domains, including the space domain, the time domain, and the state domain. In what follows, the core mechanisms of *chū* will be elaborated in terms of diversified domains.

4.1 Metaphoric mapping in the space domain

The first colexified chain of *chū* extended from metaphoric mappings in the space domain can be illustrated as follows: GO OUT > TAKE OUT. It is significant to mention here that the meaning or concept of TAKE OUT is extended on the basis of the fundamental concept of GO OUT, including not only the real move but also some mental ones.

When referring to the spatial concept, container schemata lend themselves to modeling in terms of pertinent conceptual metaphors. Specifically, container schemata divide the space into three parts, including the interior, the exterior, and the boundary, which can be further projected onto one entity with a boundary. To take one example, a room has a boundary (i.e. wall), separating the space into interior and exterior, so it is precisely for this reason that some physical motions can be described as "moving from one room to another", which can be schematized as A ROOM IS A CONTAINER. More illustrative examples are as follows:

(19) 地震了，赶快跑出这栋楼。 (Mandarin Chinese)
Dìzhèn le, gǎnkuài pǎo chū zhè dòng lóu.
an earthquake happen go– out –this building
'There's an earthquake. Run out of the building quickly.'

(20) 她把书拿出了教室。 (Mandarin Chinese)
Tā bǎ shū ná chū le jiàoshì.
she take book– out –of classroom
'She took the book out of the classroom.'

As for physical activity, the correspondences exist likewise. Many aspects in the domain of CONTAINER, such as the interior, exterior, and boundary,

can be selectively highlighted in the BUILDING domain, as demonstrated in Table 2.

Table 2: The container mapping of *chū* in the space domain

Source: CONTAINER domain	Target: BUILDING domain
whole container	whole building
boundary	wall/ceiling/door/floor
interior of container	interior of building
exterior of container	exterior of building
departure of container	go out of the building

When the mapping of *chū* is projected onto abstract spatial concepts without clear boundaries, such as hospitals and governments, the meaning of *chū* can be extended to "going out of institution" or "removing affiliation of a space", exemplified in (21) and (22). Such physical motion from the interior to the exterior can be sketched as a process including the source point, the target point, the moving direction, and the figure, corresponding to the CONTAINER metaphoric elements. Specifically, the source point corresponds to the interior, the target point to the exterior, the moving direction to the motion direction, and the figure to the entity. Additionally, the mapping of *chū* can be further projected onto the more abstract mental spatial concept, such as emotions, which can be schematized as EMOTION IS CONTAINER, exemplified in (23).

(21) 要遵守秩序，不然会被赶出医院。 (Mandarin Chinese)
Yào zūnshǒu zhìxù, bùrán huì bèi gǎn chū yīyuàn.
should obey order or will be expelled– out –the hospital
'You must obey the order, otherwise you will be expelled from the hospital.'

(22) 那个犯人被驱逐出了这个国家。 (Mandarin Chinese)
Nàgè fànrén bèi qūzhú chū le zhège guójiā.
the prisoner be expelled– out –this country
'The prisoner was deported from the country.'

(23) 不要难过，你要尽快走出悲伤才行。 (Mandarin Chinese)
Bùyào nánguò, nǐ yào jǐnkuài zǒuchū bēishāng cái xíng.
do not sad, you need to take yourself– out –of it as soon as possible
'Don't be sad, you have to get over the sadness as soon as possible.'

There is no denying that the motion of *chū* is not limited to the real physical move, but also the virtual move in the mind based on spatial experience. Metaphorically speaking, the figure of *chū* can be conceptualized as an event, idea, activity, etc., which are the objects of TAKE OUT.

4.2 Metaphoric mapping in the time domain

The second colexified chain of *chū* extended from metaphoric mappings in the time domain can be illustrated as follows: GO OUT > COME TO AN END.

Space and time are two core elements of human cognition (Langacker, 1987; Evans, 2004; Croft & Cruse, 2004), and time is in the long run more complex since it could be understood in terms of another concrete concept. For some reason, time can be compared to an entity, within which time frame is compared to a container. So when the entity moves from the container inside (within an episode of time) to the container outside (outside an episode of time), the basic concept of GO OUT can be extended to the concept of COME TO AN END. Pertinent mappings are shown in Table 3.

Table 3: The container mapping of *chū* in the time domain

Source: CONTAINER domain	Target: TIME domain
whole container	full episode of time
boundary	time point
interior of container	within an episode of time
exterior of container	outside an episode of time
departure of container	come to an end

Illustrative examples are given as follows:

(24) 上海刚刚出梅，即连日大热。 (Fuzhou topolect)
Shànghǎi gānggāng chūméi, jí liánrì dà rè.
Shanghai just– out –mould rain season begin hot
'Mould rain season just came to an end, it is starting to be very hot.'

(25) 出年我就要学识听粤语。 (Guangzhou topolect)
Chūnián wǒ jiù yào xuéshí tīng yuèyǔ.
out –this year I learn listsen Cantonese
'When this year comes to an end, I will learn to understand Cantonese.'

4.3 Metaphoric mapping in the state domain

The third colexified chain of *chū* extended from metaphoric mappings in the state domain can be illustrated as follows: GO OUT > HAPPEN.

When the form *chū* expresses the concept of HAPPEN, it can be viewed as a change from one state to another. Specifically, when an entity is inside the container, it is confidential and well-protected and often counted as non-existent. Meanwhile, it can apparently be perceived without protection when it leaves the container. So the concept of HAPPEN as in *Shēntǐ chū le máobìng* 身体出了毛病 "Something wrong happened to the body", can be interpreted as a change of the container (i.e., "body") from the healthy state to its ill state. Pertinent mappings are shown in Table 4.

Table 4: The container mapping of *chū* in the state domain

Source: CONTAINER domain	Target: STATE domain
whole container	body
boundary	the surface of the body
interior of container	inside the body
exterior of container	outside the body
departure of container	state change

It is important to mention that the image schema, particularly for container schema, is also extended in the course of the colexified extensions of *chū* from the spatial domain to the state domain. To put it in another way, it changes from a concretely spatial entity to an abstract state, which reconciles with human embodied experience (Lakoff, 1987). More illustrative examples are as follows:

(26) 停车，发动机出故障了，不能再往前开了。 (Mandarin Chinese)
Tíngchē, fādòngjī chū gùzhàngle, bùnéng zài wǎng qián kāile.
stop car and engine go– out
'Stop the car, something wrong happened with the engine.'

(27) 手上出咧个疙瘩。 (Xi'an topolect)
Shǒushàng chū liě gè gēdá.
on the hand – happen – a blister
'There is a blister on the hand.'

Chū extends its colexified chain through mapping onto the space domain, time domain, and state domain. Broadly speaking, the colexified extensions of *chū* are on a par with the metaphoric hierarchy put forward by Heine et al. (1991, p.48), that is, person > object > activity > space > time > quality. As is explained by Wu (2003), the essence of such hierarchy per anthropocentricity as well as the concept of EMBODIMENT that people understand things from their most familiar empirical category to the empirical category which is away from them.

4.4 Metonymic extensions of *chū*

The fourth colexified chain of *chū* extended from conceptual metonymy can be illustrated as follows: GO OUT > PAY, GO OUT > PRODUCE, GO OUT > GO, GO OUT > ARRIVE, GO OUT > OUTSIDE, GO OUT > EXCEED.

Traditionally, conceptual metonymy can be defined as an apparatus in which the understanding of one conceptual entity provides mental access to another. Meanwhile, Langacker (2013, p.69) uses the concept of "profile" in Cognitive Grammar, that is, the specific focus of attention within its immediate scope, to characterize metonymy as a "shift in profile". The colexified extensions of *chū* can be profiled into a diversified substructure based on its motion event.

Additionally, Talmy (2000) points out that two core elements should be taken into account when it comes to a basic translational motion, that is, figure and ground. The former refers to the moving entity against the reference point, and the latter is related to the physical environment of the moving event, including the source, goal, and position of the entity. Zeng (2009) incorporates the view and further points out that there are different degrees of salience in a translational motion, resulting in different semantic extensions. The motion even of *chū* can be depicted as the scene where an entity (figure) moves from a starting point in a space (ground) outside to an ending point. Its image schema can be sketched in Figure 3. The circle represents the figure, the rectangle represents the ground, and the arrow represents the moving direction and path. The ground builds a space in which the figure is located, and then the figure moves from the starting point A toward the ending point C in stages. It is important to mention that point B expresses the figure is moving to the boundary of the ground and away from it, forming the middle part or stage of the motion event.

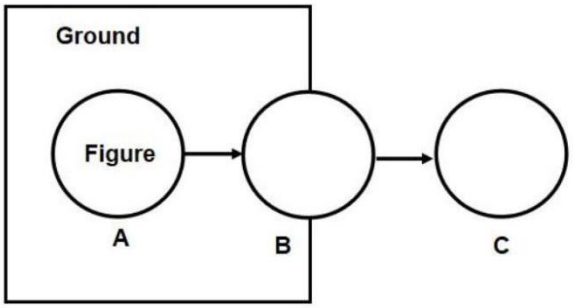

Figure 3: The Image Schema of *Chū* ("GO OUT")

According to human experience, their sight can follow a moving object when it moves towards an ending point along a certain path. When it stops, their focus may fall on the ending point. In the motion event of *chū*, when human follows the moving figure and situate their focus on the ending point, *chū* extends to the concept of ARRIVE and OUTSIDE, as in the expressions of *chūchǎng* 出场 "arrive and come on the stage" and *wǎng chū ná* 往出拿 "take something outside". When human locates their focus on the middle part B, that is, the figure overlaps the boundary of the ground and away from it, *chū* extends to the concept of PAY and PRODUCE, as in the expressions of *chū qián* 出钱 "pay the bill" and *chū réncái* 出人才 "produce talents". When human ignores the starting point and end point of the moving event, and only focus on the path of the moving event, *chū* extends to the concept of EXCEED, as in the expression of *bù chū bàn gè yuè* 不出半个月 "in a half month". And when human locates their focus both on the path and the ending point of the motion event, *chū* extends to the concept of GO, as in the expression of *chū jiē* 出街 "go to the street".

The concepts of GO OUT, ARRIVE, OUTSIDE, PAY, PRODUCE, EXCEED, and GO can evoke the same motion event of *chū*, but they profile different facets of it. GO OUT profiles the whole motion event, ARRIVE profiles the ending point of the event. PAY and PRODUCE profile the middle part of the motion event. EXCEED profiles the path of the event and GO profiles both the path and ending point of the event. As these extended concepts of *chū* profile different elements within the same moving event and shift their profiles in the same conceptual base, the concepts of ARRIVE, OUTSIDE, PAY, PRODUCE, EXCEED, and GO are metonymically associated with GO OUT. Different profiling of *chū* can be represented in Table 5.

Table 5: Different profiling of *chū*

Focus	Extended Concept
ending point	ARRIVE
middle part	PAY
middle part	PRODUCE
path	EXCEED
path and ending point	GO

5 Conclusion

Previous studies of *chū* mainly focus on its polysemy, syntactic restriction, and diachronic evolution in Mandarin Chinese. Less attention has been paid to its colexification and colexificational mechanism. Meanwhile, even similar exploration of *chū* in Chinese topolects has received no attention. Based on the Mandarin Chinese data from BCC Chinese Corpus and the Modern Chinese Dictionary (7th edition) (Institute of Linguistics, 2016), and Chinese topolectal data from a large dictionary of modern Chinese topolects (43 volumes) (Li, 2012). Designating the basic concept of GO OUT as the pivot concept, this present paper has identified 9 colexified pairs in Modern Chinese. Using the apparatus of CLICS[3], this present paper also acquires some cross-linguistic evidence to some degree, to justify the colexifications for *chū* (GO OUT) across topolects. According to the cross-topolectal evidence, the colexificational network of *chū* (GO OUT) in Modern Chinese is constructed.

This present paper has also explored the mechanisms for the colexified extensions of *chū*, that is, conceptual metaphor and metonymy. The metaphoric colexified extensions of *chū* can map onto the space domain, time domain, and state domain. Specifically, the extended concept of TAKE OUT maps onto the space domain, the extended concept of COME TO AN END maps from the space domain to the time domain, and the extended concept of HAPPEN maps from the space domain to the state domain. All the above metaphoric colexified extensions follow the order of "space > time > state". As for the metonymic colexified extensions, the extended concepts of ARRIVE, PAY, PRODUCE, EXCEED, and GO can profile different substructures (i.e. ending point, middle part, path) of the image schema in the motion event of chū. This paper elaborates upon the types of metaphoric and metonymic colexified extensions in this manner that will give important implications for studies of other directional verbs.

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