Competing Markers: Acquisitive and Core Modals in Modern Mandarin Chinese

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Abstract

This paper addresses the topic of acquisitive modals grammaticalized from the etyma meaning "come to have" (Enfield 2001), in Mandarin děi/dé/de 得, Cantonese dak 得, Lao dai^4 and Vietnamese dwoc. The goal of the investigation is twofold. It is argued that (i) the polyfunctionality covered by the MSEA acquisitive modals, in Mandarin, tends to be displayed by the core modal *néng*, which functions as a sort of umbrella accommodating different modal meanings, whereas the acquisitive morphemes are highly specialized in conveying a unique modal meaning. Moreover, evidence is provided showing that, (ii) when cooccurring with potential contributions, néng contributes to conferring an agentive reading. To this end, a comparison is provided between the expression of possibility via the core modal néng versus the acquisitive modals, also with reference to their stacked occurrences. Examples are provided showing that néng is a modal "reinforcement" of the potential construction (Cheng and Sybesma 2004), wherein the latter is characterized by reduced agentivity. Different types of double occurrences are singled out, also with reference to the degree of grammatical acceptability by different informants. The contexts in which the 'néng de-construction' is fully accepted are mainly interrogatives and rhetorical questions. This modal stacking is considered very natural in epistemic multimodal constructions, and is perceived as mandatory in the relative clauses wherein the nominal head is the object of the potential construction. In these cases, for the head to be interpreted as the object, there must be either the subject or a full-fledged modal, like *néng*, (or both). Finally, it is also highlighted that méi néng can occur as a suppletive form of the negative potential. The former expresses actuality entailment, therefore displaying the implicative feature which is common to many acquisitive modals, such as get.

Keywords: acquisitive modality, potential constructions, semantic orientation

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1. Introduction

1.1 The acquisitive modals

When compared to Europe, a striking peculiarity of the Asian region is that it "is populated by a number of largely unrelated and typologically very diverse language families". This very same feature is also confirmed if we limit our analysis to South-East Asia, which can hardly be considered a homogeneous linguistic area.² Despite this difficulty, more and more typological studies are bringing to the fore a consistent number of phenomena which point to the existence of specific areal features.³ This is the case of the 'acquisitive modals', as coined by van der Auwera et al. (2009) to indicate the "expression of modality that goes back to a predicate meaning 'acquire, get'". Since the modal implication underlying the notion of "getting" – or better expressed as "coming to have", as Enfield puts it⁵ – has been investigated by Matisoff (1991), with reference to Lahu, it became more and more clear that a distinct set of constructions contribute to express a range of meanings, that is also expressed by full-fledged modals as Mandarin néng, which here will often be referred to as "core modals". The first part of the paper (Sections 1 and 2) provides a brief introduction to the notion of acquisitive modals and the related issues of Areal linguistics. Section 2 illustrates the terminology, the taxonomy and the notion of semantic orientation (Hsieh 2005), mainly based on the English 'get'. Sections 3 and 4 focus on the acquisitive modals in Modern Standard Chinese, presenting, respectively, their most salient instantiations in the positive and negative forms, and the cluster of meanings that they express. Finally, Section 5 provides a comparison between the expression of possibility via the core modal néng and the acquisitive modals, also with reference to multimodal modal expression.

1.2 Areal linguistics and directionality

The hotbeds of acquisitive modality are found in Northern Europe and Mainland South-East Asia (MSEA).⁷ Across the latter area, as underlined by Enfield, the widespread pattern is signified by "some ten different etymons", 8 which developed similar polysemy, often including an aspectual value and occurring in different word orders, when compared with core modals. The topic of acquisitive modals also brings to the forefront the issue of the

¹ Hansen Björn and Umberto Ansaldo, "Areality in Modality and Mood", in *The Oxford handbooks of mood* and modality, edited by Jan Nuyts and Johan van der Auwera (Oxford: Oxford University Press, 2016), 618.

² On the notion of linguistic area, cf. Bernd Heine, "Areas of grammaticalization and geographical typology", in Geographical typology and linguistic areas, with special reference to Africa, edited by Osamu Hieda, Christa König, and Hirosi Nakagawa (Amsterdam: Benjamins, 2011), 41.

³ As underlined by Heine, since 1990 typology linguistics "has focused more on geographically defined units, searching for linguistic correlates to geographical or geo-political discontinuities", Ibid, 42.

Johan van der Auwera, Petar Kehayov, and Alice Vittrant, "Acquisitive modals", in Cross-linguistic semantics of tense, aspect, and modality, edited by Lotte Hogeweg, Helen de Hoop, and Andrej Malchukov (Amsterdam & Philadelphia: John Benjamins, 2009), 271.

⁵ Nick J. Enfield "On genetic and areal linguistics in Mainland Southeast Asia: parallel polyfunctionality of 'acquire'", in Areal diffusion and genetic inheritance, edited by Alexandra Y. Aikhenvald and Robert M.W. Dixon (Oxford: Oxford University Press 2001), 271.

James Matisoff, "Areal and universal dimensions of grammaticalization", in Approaches to Grammaticalization. Volume 2: Focus on Types of Grammatical Markers, edited by Elizabeth C. Traugott and Bernd Heine (Amsterdam: Benjamins, 1991), 383-453

⁷ The MSEA area includes: "Vietnam, Cambodia, Laos, Thailand, Peninsular Malaysia, Burma, parts of northeast India, and extensive areas of southern and south-western China", Enfield "On genetic and areal linguistics",

⁸ Ibid, 320.

possible impact of language contact on the grammaticalization of modals. In the context of modality investigation, the regional approach effectively allowed for identification of different paradigms of grammaticalization. The universalist hypothesis by Bybee et al. (1994)⁹ has in fact been challenged. The stipulation was that grammaticalization proceeds unidirectionally, from participant-internal to participant-external domains, and not vice versa. The data collected for acquisitive modals in MSEA show a significant counterexample.¹⁰

The similarities visible in the acquisitive patterns can be attributed to various reasons, which we will not discuss here. Yet, it might be of some help to recall the four main reasons for language similarity outlined by Aikhenvald: linguistic universals, coincidence in the distribution of typological features, common linguistic origin or genetic inheritance, linguistic contact. 11 According to van der Auwera et al., in both hotbeds of acquisitive modality, "language contact must have played a significant role" and it is also possible that its impact was such as to "deviate" the directionality of grammaticalization, in a way that cannot be fully captured by the semantic map prediction. 12 It is also possible that the semantic link between the lexical meaning of 'acquire' and the possibility meaning of 'attainment' might be deemed as a universal. Also, the grammaticalization path visible in a specific linguistic area is also influenced by "a 'system internal factor' in innovation and change – typological poise". 13

In the specific case of MSEA acquisitive modals, the tendency towards verb concatenation, typical of analytic languages, has certainly played a major role. For instance, concerning three main Sinitic languages, Chappell and Peyraube observe that the potential verb compounds "led to the emergence of certain types of modal verbs", evolved from get verbs in series in V₂ position and that the modal meaning of these forms varies in parallel with their specific negative markers.¹⁴ Before discussing the properties and the behaviour of the polyfunctional morphemes linked with the acquisitive etymons, and the constructions in which they surface, a brief outline of the modal classification is therefore necessary.

13 Nick J. Enfield, Linguistic epidemiology: Semantics and grammar of language contact in mainland Southeast Asia (London: Routledge Curzon, 2003), 5.

⁹ Joan Bybee, Revere Perkins, and William Pagliuca, The Evolution of Grammar: Tense, Aspect and Modality in the Languages of the World (Chicago: University of Chicago Press), 1994.

¹⁰ The synchronic observation is that the participant-internal uses is available only for languages that have a participant-external use too, and that, comparing the two hotbeds, "it indeed seems to be the case that the path from participant-internal to participant-external possibility has been useful in languages from all corners of the world, whereas the opposite, the change from participant-external to participant-internal seems to have happened in fewer areas", Van der Auwera et al., "Acquisitive modals", 294.

¹¹ Alexandra Aikhenvald, "Areal features and linguistic areas: contact-induced change and geographical typology", in Geographical typology and linguistic areas, with special reference to Africa, edited by Osamu Hieda, Christa König, and Hirosi Nakagawa (Amsterdam: Benjamins, 2011), 13.

¹² Van der Auwera et al., "Acquisitive modals", 292.

¹⁴ Hilary Chappell and Alain Peyraube, "Modality and mood in Sinitic languages", in *The Oxford handbooks* of mood and modality, edited by Jan Nuyts and Johan van der Auwera (Oxford: Oxford University Press, 2016), 481-482.

2. Theoretical framework and terminology

2.1. General taxonomy

The modal taxonomy adopted here is the framework by van der Auwera and Plungian (1998),¹⁵ with some integration from van der Auwera et al. (2009).¹⁶ In this model, a main distinction is made between *epistemic* and *non-epistemic* modalities. Moreover, the *non-Epistemic* area is split between *participant-internal* (PI) and *participant-external* (PE) modalities. The latter is crosscut into two different divisions: the *deontic* and the *non-deontic* (here labelled as *circumstantial*).¹⁷ The following are the relevant examples proposed by van der Auwera et al.:¹⁸

Possibility

(1)	a. John can speak Japanese.	[PI]					
	b. To get to the station, you can take bus 66.	[PE circumstantial]					
	c. I can watch TV tonight – I have mom's permission.	[PE deontic]					
	d. He may be home, or he may not – I don't know.	[Epistemic]					
Necessity							
(2)	a. I have to have a cup of coffee, otherwise I can't function.	[PI]					
	b. In order to get to the station, you have to take bus 66.	[PE circumstantial]					
	c. You must stay home now, and this is an order.	[PE deontic]					

[Epistemic]

d. He **must** be home now; he left the office a long time ago.

Concerning the categorization of acquisitive modals such as the participant-external English 'get' or Danish fa, and the participant-internal 'manage', Van der Auwera and Plungian also briefly sketched the category of *actuality*, expressing that a given state of affairs has been actualized. Concerning the English 'get', there are three attested readings in the possibility domain. Two of them pertain to 'actuality', while the third one conveys permission. In the participant-internal area, the sentence has an agentive reading, as in (3a). In the participant-external area – where the actualization is related to situational feasibility – the participant "receives" the state of affairs from the circumstances; therefore, the modalized expression has a 'receptive reading', as (3b). The relevant examples from van der Auwera et al. (2009) are visible below:

(3) a. John **got** [managed] to learn Japanese. [PI circ., Actuality, agentive reading]²⁰ b. John **got** to know the whole truth. [PE circ., Actuality, receptive reading]²¹

¹⁵ Johan van der Auwera and Vladimir A. Plungian, "Modality's semantic map", *Linguistic Typology* 2 (1998), 79-124.

¹⁶ Van der Auwera et al., "Acquisitive modals".

¹⁷ On the notion of situational or circumstantial modalities, cf. Frank Robert Palmer, *Modality and the English Modals* (London/New York: Longman, 1990); Michael Perkins, *Modal Expressions in English* (Norwood, New Jersey: ABLEX Publishing Co. 1983); Jan Nuyts and Pieter Byloo, Janneke Diepeveen, "On deontic modality, directivity, and mood/A case study of Dutch *mogen* and *moeten*", *Antwerp Papers in Linguistic* (2005), 110.

¹⁸ Van der Auwera et al., "Acquisitive modals", 274, slightly modified.

¹⁹ The idea of 'actuality' was already sketched in Van der Auwera and Plungian, "Modality's semantic map", 103-104, wherein it is defined as follows: "Some state of affairs is actualized because of participant-external circumstances, in particular, because the participant in some way "received" the state of affairs." The prototypical example of participant-internal actuality (5a) was: 'He managed to learn Japanese in four weeks' (Ibid, 104), including the implicative predicate *manage*.

²⁰ Van der Auwera et al., "Acquisitive modals", 284.

²¹ Ibid, 283.

[PE deontic, Permission]²² c. I **get** to watch TV tonight. [Context: I have mom's permission]

In the necessity domain, 'get' shows a PE non-deontic reading, developed from the notion of possession, which can be glossed as 'completed acquisition', 23 as in (4a). Finally, 'get' also occurs with causative force, related to the PI area, as in (4b):

(4) a. I have got/gotta to go now. [Necessity, PE non-deontic]²⁴ [PI, causative force]²⁵ b. John **got** me to clean his car.

Finally, a striking feature of the acquisitive modal 'get' is its implicative feature. The lexical material at the source of the acquisitive modals is related to a class of predicates that Karttunen (1971)²⁶ has labelled as *implicative verbs*, such as 'manage', 'happen', as visible in (5).

- a. Yesterday, John didn't manage remember to kiss Mary. (5)
 - b. Yesterday, John didn't kiss Mary.²⁷

With this type of verbs, the negation of the implicative predicate is equal to the negation of the actualization of the state of affairs described by the following verb. In other words, sentences like (5a) imply (5b). As underlined by Hacquard (2006), ²⁸ an implicative inference also arises when ability modals occur with perfective aspect. Starting from Bhatt (1999),²⁹ this phenomenon has been described as actuality entailment. In such a scenario, a modalized expression (e.g. 'John can solve the problem') shifts in the domain of realis and describes the actualization of a past possibility. As a result, (6a) is contradictory, because 'John solved the problem' (6b).³⁰

a. 'John managed/got/happened to solve the problem, #but he didn't solve it.'31 (6) b. = 'John solved the problem.'

Ability modals can therefore be analysed as implicative modals, like 'manage'. This might be even more so for acquisitive modals, like the English 'get', that are already included in the Karttunen inventory of implicative predicates. For instance, the implicative feature is

²² Ibid, 271.

²³ Ibid.

²⁴ Ibid.

²⁶ Lauri Karttunen, "Implicative verbs", *Language*, 1971, 47, 340–358.

²⁸ Valentine Hacquard, Aspects of Modality (PhD thesis, Boston: Massachusetts Institute of Technology, 2006).

²⁹ Rajesh Bhatt, Covert Modality in Non-Finite Contexts (PhD thesis, Philadelphia: University of Pennsylvania,

³⁰ Another implicature is that the tense of the two verbs must agree as in 'John managed/got/ happened to solve the problem #next week', slightly modified, Karttunen, "Implicative verbs", 346.

³¹ Slightly modified, Ibid, 342, 346.

confirmed for the Lithuanian and Latvian acquisitive modals, namely, tekti and dabūt.³² It has also been shown that acquisitive verbs have an aspectual use in some MSEA languages, as visible in the preverbal occurrences of Lahu ga, 33 and the postverbal occurrences of the Vietnamese được.³⁴ However, there are also languages, such as Lao, Cantonese, and Modern Standard Chinese,³⁵ wherein the postverbal occurrence of the acquisitive forms signal the potential for actualization, and does not display an implicative feature. 36 According to Enfield, due to the typological pervasiveness of serial verb constructions and resultative compounds, in MSEA the acquisitive morpheme in postverbal resultative constructions developed in two main directions (7a), and did so along a grammaticalization cline which culminates in the possibility meaning, as illustrated in (7b).³⁷

Finite, on a given occasion:
$$V_1 \text{ and as a result } V_2$$

$$V_1 \text{ cause/condition} + V_2 \text{ result}$$
Non-finite, whenever,
$$Can/would \ V_1 \text{ with the result that } V_2$$

$$b \quad (i) \ 'V-\text{and-acquire'} > (ii) \ 'V-\text{and-succeed'} > (iii) \ 'can \ V-\text{and-succeed'} > (iv) \ 'can \ V'$$

In sum, the notion of potential actualization seems a characterising feature of highly grammaticalized MSEA acquisitive modals. This is the case of the postverbal modal acquisitive morpheme in Modern Standard Chinese, which "focuses on whether or not the end point denoted in the predicate can be reached". 38 We will discuss these constructions in Sections 3, 4 and 5, but for now, a tentative readjustment of the taxonomy is in order.

2.2. Learned ability, success and feasibility

To better accommodate the acquisitive modals for the participant-internal area, we need a more fine-grained taxonomy including a further subclass where actuality is viewed as a potential actualization of the state of affairs. To this end, the PI area is split into two classes. The first is an equivalent to Enfield (2003)'s 'procedural ability', here labelled as 'learned ability³⁹ (8), which in some MSEA languages is signalled by dedicated markers, as Modern Standard Chinese huì and Hmong txawj.

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(8)a. 我不会说越南话。
                                                                 [PI Learned Ability]
      Wŏ bú huì
                         shu\bar{o}
                                Yuènánhuà.
      1sg neg be.able speak Vietnamese
      'I cannot speak Vietnamese (I am not able).'
                                                         (Hmong)<sup>40</sup>
   b. Kuv tsis txawj hais
                               lub
                                    njab-laj.
      1sg neg know speak CL
                                     Vietnamese
      'I don't know how to speak Vietnamese.'
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³² Anna Daugavet, "Latvian dabūt 'get': An acquisitive modal?", Baltic Linguistic 6 (2015), 9-44.

³³ Matisoff, "Areal and universal dimensions of grammaticalization", 418.

³⁴ Enfield, Linguistic epidemiology, 202.

³⁵ Enfield "On genetic and areal linguistics", 269.

³⁶ For this construction there is no evidence of actuality entailment, cf. Xie Zhiguo, "On the semantics of modal particle de in Mandarin Chinese", in Proceedings of the 16th Amsterdam colloquium, edited by Maria Aloni, Paul Dekker and Floris Roelofsen (Amsterdam: ILLC, 2007), 241–246.

³⁷ Enfield "On genetic and areal linguistics", 285.

³⁸ Lisa Cheng, Rint Sybesma, "Forked modality", in *Linguistics in the Netherlands 2003*, edited by Paula Fikkert and Leonie Cornips (Amsterdam: AVT/John Benjamins, 2003), 13.

³⁹ Each modality is linked to a functional meaning, which is capitalized as Ability, permission etc.

⁴⁰ Ibid, 193.

Following Enfield (2003), the second subclass is labelled as 'success', defined as: "the idea of realising a result which a previous and separate action or event was intended to produce". ⁴¹ This notion typically involves two components, "a result-directed action/event, and a subsequent result". If the result is attained, it coincides with van der Auwera and Plungian's idea of participant-internal actuality. 42 The modality labelled as success expresses the contingent ability to handle a situation often, despite difficulty, (9a) and also apply to any ability assessment uttered in a specific situation, in view of a specific challenge, as in (9b).

(9) a. 'Boris can get by with sleeping five hours a night.'43 [PI circumstantial, success] 鲍里斯每晚睡五个小时就能对付过去。44 duìfu Bàolisī měi wăn shuì wǔ ge xiǎoshí jiù néng guòqu.

sleep five CL hour every night then can handle go.by Equivalent of: "Manage to sleep only."

b. 张三一个人搬得起来那箱书。45

Zhāngsān yígerén bān-de-qĭlái nà xiāng shū lift-POT-rise that box book Zhangsan alone 'Zhangsan can lift up the box of books all by himself.'

Equivalent of: 'Can manage to lift up the box.'

The distinction between Ability and success is similar to that between dynamic vs. neutral dynamic modalities. The resulting final taxonomy, including the semantic meaning of each modality, is visible in Table 1.

Table 1. Modal Taxonomy

Classic	NON-EPISTEMIC				
terminology	DYNAMIC		DEONTIC		EPISTEMIC
Van der Auwera and Plungian (1998)	Participant Internal		Participant External		
	Learned Ability	Circum	nstantial Deontic		
Semantic function	Ability	Success	Feasibility	Permission	Probability
Semantic function	Inability	Failure	<i>Impossibility</i>	Permission denial	<i>Improbability</i>
Mandarin markers	Huì,	Néng ,	Néng,	Кĕуĭ,	Huì, Kĕnéng,
Manuariii iliarkers	-de Descriptive	-de Potential	-de Potential	Néng	
Semantic source orientation	Subject	Subject/ Situation	Situation	Speaker	Speaker/ Situation
		Agentive	Recipient		
		Actuality			

⁴¹ Enfield, *Linguistic epidemiology*, 59.

⁴² The same author also illustrates the difference between success and Attainment, the latter being the "actualization in reality of some predication", Ibid.

⁴³ Van der Auwera and Plungian, "Modality's semantic map", 283-284.

⁴⁴ Li Renzhi, Modality in English and Chinese: A Typological Perspective (Boca Raton: Florida, DisCom,

⁴⁵ Xie Zhiguo, "The modal uses of *de* and temporal shifting", *Journal of East Asian Linguist*, 2012, 21, 388.

2.3. The semantic orientation

The contrast between learned ability and success is found in a number of languages, for instance in Italian it is marked via sapere 'know how' vs. riuscire 'manage'. In Modern Standard Chinese, the prototypical markers are huì vs néng/potential complement. In fact, if we analyse these modalities from the perspective of the semantic delineation of the source, conceived by Hsieh (2005), 46 then in each of them, the capability of performing a given action is referred to different domains. For learned ability, it mainly stems from the participant. However, for the success subclass, the source of enablement is partly related to a given situation (and the challenge posited to the participant by the environment). This type of meaning is typically conveyed by predicates such as 'manage' or 'get', as in "John got to learn Japanese", which not by chance, can also be understood as 'John had the opportunity to learn Japanese'.

A full-fledged situation oriented modality is found in the participant-external situational modality, where the enabling conditions are provided by the environment, as in "John got to know the whole truth". 47 In Table 1, the modal categories are organized based on the semantic map of the grammaticalization path; wherein the cline is illustrated in (10):

(10)Participant-internal Participant-external **Epistemic** Learned Ability>Success>Feasibility>Permission>Probability Subject > Situation> Speaker.

The situational orientation⁴⁸ "sits across" different modalities, suggesting that the ordering source must be conceived as a continuum rather than a discrete category. 49 Among acquisitive modals, the situational feature is nonetheless quite striking. To better highlight this trait, we need to present the most common instantiation of the acquisitive pattern in Modern Standard Chinese.

3. Instantiation of the acquisitive morpheme in Mandarin

In line with the behaviour visible among MSEA acquisitive modals, in Modern Standard Chinese the lexical verb $d\acute{e}$, 'acquire, obtain', grammaticalized into markers that surface in preverbal and postverbal constructions. Preverbally, the phonetic realization of the acquisitive morpheme includes the suprasegmental features, surfacing as the possibility marker dé and the necessity modal dèi. Depending on the presence of negation, it shifts from the possibility to the necessity domain, thus displaying polarization. The morpheme $d\acute{e}$ occurs only in the negative form, as a deontic possibility modal (11a) or – in double negation (bù dé bù 'cannot but') - as a suppletive form of circumstantial necessity. In turn, the necessity morpheme děi 'have to' is not compatible with negation, is a PE non-deontic marker (11b). Sporadically it also has an epistemic reading, which is incompatible with its double negation suppletive form, bùdébù (11c).

⁴⁸ In this context, the term 'orientation' refers to the delineation of semantic sources involved in the use of modal expressions. She proposed a threefold classification into 'speaker-oriented', 'situation-oriented', and 'subject-oriented' modals, cf. Ibid, 53.

⁴⁶ Hsieh Chia-Ling, "Modal Verbs and Modal Adverbs in Chinese: An Investigation into the Semantic Source", USTWPL, 2005, 1, 31-58.

⁴⁷ Van der Auwera et al., "Acquisitive modals".

⁴⁹ In the case of the modals expressing success, it could be said that they are in a grey zone between subject and situation-orientation.

教室里不得吸烟。 (11) a. (Deontic Possibility, Permission Denial, Positive polarity) Jiàoshì lĭ bùdé $x\bar{\imath}$ vān. not.possible inhale smoke classroom in 'Smoking is not allowed in the classroom.'

- 现在我得/不得不走了。 (Circumstantial Necessity, Inevitability, Negative polarity) Xiànzài wŏ dĕi/ bùdébù zŏu le. 1sg have.to/ cannot.but leave SFP now 'I have to/cannot but leave now.'
- c. 快要下雨了。要不快走,得/*不得不挨浇了。 Kuài yào xià yǔ le. Yàobú kuài zŏu, **děi**/ *bùdébù le.jiāo soon FUT fall rain SFP if.not fast leave, have.to/ cannot.but endure SFP. wet 'It's going to rain. If we don't hurry to leave, we will certainly get wet.'

(Epistemic Necessity, Negative polarity)

In postverbal constructions, the phonological realization of the acquisitive morpheme includes only the segmental features, de, denoting a form of bleaching. The modal reading typically associated with these constructions, at least in some of their instantiations, is circumstantial possibility.

In the postverbal environment, three different structures are generally identified, often referred to as descriptive complements, namely: the manner (12a), extent (12b-c) and potential (12d) complements.⁵¹ In the first two, "a clause or VP following de describes either the extent or manner of the verbal event". 52 In the potential complement, the morpheme de signals that an event *can* produce the result described by the resultative predicate. The three complements can surface as 'V₁ de V₂', but their linear structure can also vary significantly. In the potential form, nothing can be interposed between V_1 de and V_2 ; in the manner, V_2 is restricted to adjectival predicates, often modified by an intensifier, as in (12a), and in the extent complement the two predicates admit different subjects, 'NP V₁ de NP V₂'.

(Manner)53 (12) a. 走得很慢 zŏu de hĕn màn.

> walk MANN slow. very

'walk very slowly.'

笑得站不起来 (Extent)54

xiào **de** zhàn bи qĭlái. laugh EXT stand negPOT rise 'laugh so much that cannot stand up.'

吵得人家睡不着 (Extent)55 zháo chǎo de rénjia shuì bù make.noise EXT others sleep negPOT achieve 'make so much noise that others cannot sleep.'

⁵⁰ Ding Shengshu (丁声树) et al. Xiandai hanyu yufa jianghua (现代汉语语法讲话) [Lectures on Modern Chinese Grammar] (Beijing: Shangwu yinshuguan [背景商务印书馆], 1999-rip.1953), 92.

⁵¹ Christine Lamarre, "Verb Complement Constructions in Chinese Dialects: Types and Markers", in Sinitic Grammar: Synchronic and Diachronic Perspectives, edited by Hilary Chappell (Oxford: Oxford University Press, 2001), 85-119.

⁵² Alexander Williams, "Causal VVs in Mandarin", in *The Handbook of Chinese Linguistics*, edited by James C.-T. Huang, Audrey Y.-H. Li, and Andrew Simpson (Hoboken: Wiley-Blackwell, 2016), 320. Moreover, it must be noted that the extent complement carries a causative force, similarly to the causative 'get' illustrated

⁵³ Charles Li and Sandra Thompson, Mandarin Chinese: A Functional Reference Grammar (Berkeley/Los Angeles: University of California Press, 1981), 624, slightly modified.

⁵⁵ Lamarre, "Verb Complement Constructions", 86.

跳得过去 tiào-**de**-guòqu jump-POT-go.across 'can jump across.'

(Potential complement)

Each of the three de-constructions has its distinctive negative form, wherein the semantic scope is transparent. In the manner complement, the scope is on the adjectival predicate (expressing the manner). In the extent complement, the negation takes scope on the predicate inside de-XP; finally, the negative potential excludes the very possibility for the event to produce the given results, thus the de morpheme drops and is replaced, by the unstressed bu which is an equivalent of 'cannot' (13).

(13) a. 因为他的膝盖有伤跑不快。56 Yīnwèi tā de xīgài yŏu shāng pǎo-**bu**-kuài. 3sg SUB knee have injury run-negPot-fast 'Because of his injured knee, he cannot run fast.' (Potential complement, PI Circumstantial Possibility, ≠ 'doesn't run fast')

All these features fit nicely in the acquisitive landscape outlined by van der Awuera et al. (2009), ⁵⁷ confirming a pattern where the negative polarization, as for preverbal $d\acute{e}$, is paralleled by the opacity in the positive form. Also, in a highly grammaticalized form, as Modern Standard Chinese de-constructions, 58 the relative opacity of the positive form is paralleled by the transparency in the negative forms of modal, as shown below:

(14)	Preverbal:	Necessity domain: incompatibility with negation	[dĕi]	Inevitability
		only double negation	bùdébù	
		Possibility domain: mandatory negation	bù dé	Permission denial
	Postverbal:	Stressed negation without de ellipsis	'V1 de bù V2'	Inability
		Unstressed negation with de ellipsis	'V1 bu V2'	Impossibility

4. The possibility cluster of meanings

Now that we have presented the different modal usage of the acquisitive morpheme, we can briefly turn our attention again to a certain cross-linguistic phenomenon. The polysemy illustrated in example (3) and the polyfunctionality displayed by the acquisitive modals in MSEA, as in (11), are consistent with the tendency - in languages which have grammaticalized forms of non-epistemic modalities - to develop specific "cluster of meanings". ⁵⁹ One of the main patterns include the participant-internal and the circumstantial possibility, additionally extended to participant-external deontic possibility. In sum, it encompasses the expression of ability, success, feasibility and permission. This behaviour is attested for the English 'can', the so called "can-cluster", and to a different extent, it is borne out also for the MSEA acquisitives. Notably, in the negative forms, the vagueness between permission and ability reading is a widespread pattern, as shown in the following Lao expression:

⁵⁷ Van der Auwera et al., "Acquisitive modals", 296.

⁵⁸ Enfield, "On genetic and areal linguistics", 255-290.

⁵⁹ Heiko Narrog, "The Expression of Non-Epistemic Categories", in *The Oxford handbooks of mood and* modality, edited by Jan Nuyts and Johan van der Auwera (Oxford: Oxford University Press, 2016), 159-160.

daj⁴ (Lao)60 (15)phen¹ phaa²saa³ vaw4 laaw speak language Lao Acq neg 'S/he can't speak Lao.'

A different phenomenon, more similar to Modern Standard Chinese, is visible in the postverbal construction of the Vietnamese acquisitive morpheme được (here glossed as Acq). As underlined by Thepkanjana and Ruangmanee, ⁶¹ the constructions denoting ability and circumstantial possibility have the same linear construction, but, when negated they surface with a distinctive pattern, namely, 'V (NP) Neg Acq' for ability (16a), and 'Neg V (NP) Acq' (16b). The preverbal construction, 'Neg Acq V (NP)' instead signals deontic possibility (16c), similarly to Modern Standard Chinese bùdé, but without displaying negative polarity.

(16) a. Anhấy nói tiếng Viêt không được. (Vietnamese) speak language Vietnamese Acq (Learned Ability)⁶² 'He cannot (is not able to) speak Vietnamese.' xe, nên tôi **không** đi không có đón nó go pick him Acq. because neg. have car so I neg (Circumstantial possibility)⁶³ 'Because I do not have a car, I cannot go to pick him up.' c. cái ghể này anhấy **không được** ngồi nhưng chị ấy được ngồi ACQ CL chair this he neg Acq sit but sit 'He cannot sit on this chair, but she can.' (Deontic possibility)

Moreover, as highlighted by Enfield, 64 even though in many MSEA languages the acquisitive markers can express learned ability, such meaning can be considered as a marginal instantiation of the acquisitive pattern. Also, independently from the languagespecific use of the acquisitive morphemes, other predicates are available, as Lao $p\hat{e}n^3$, Modern Standard Chinese *huì* 会, Vietnamese *biê't*, and Hmong *txawi*, all expressing 'know how'.

(17) a. *Phen*¹ phaa²saa³ $laaw^2 b \hat{o}^0$ $p\hat{e}n^3$. $(Lao)^{65}$ vaw⁴ speak language Lao neg know.how.to 'He is incapable of speaking Lao.' c. *Tôi* **không** biết (hát) bài (Vietnamese) hát này. song this 1sg neg know sing CL 'I don't know (how to sing) this song. b. Kuv tsis txawi hais lub njab-laj. (Hmong) 1sg neg know speak CL Vietnamese. 'I don't know how to speak Vietnamese.'

The polifunctionality of the acquisitive modals, is related to a specific feature of the possibility domain, that is, its semantic inclusion, wherein ability, and, more importantly, success and permission can be considered as hyponyms of a general possibility stemming from the situation, that we call 'feasibility' (see Table 1). On the other hand, permission denial (deontic prohibition) is a special case of obstructed ability to perform an action due

⁶⁴ Enfield, Language epidemiology, 180.

⁶⁰ Enfield, Language epidemiology, 101.

⁶¹ Kingkarn Thepkanjana and Soraj Ruangmanee, "Grammaticalization of the Verb 'To Acquire' into Modality: A Case Study in Vietnamese", Taiwan Journal of Linguistics, 2015, 13-2, 117-150.

⁶² Ibid 142.

⁶³ Ibid 143.

⁶⁵ Examples (17a-b-c), ex Ibid, 102, 180, 193.

to circumstances. These semantic relations can explain the use of ambiguity between inability and permission denial of acquisitive morphemes in other MSEA languages, such as Lao. On the other end, in Modern Standard Chinese and in Vietnamese, the acquisitive negative forms appear to be highly specialized in conveying a unique modal meaning.

In sum, the landscape is by no means uniform. Yet, the same hyponymic semantic relations are visible in the polyfunctionality of the MSEA acquisitive pattern, in the polysemy of English 'cannot',66 and, also in the suppletion mechanism of Chinese core modal bù néng.⁶⁷ In this regard, in an areal perspective, it is important to underline that Modern Standard Chinese behaves differently from the other MSEA languages analysed in the relevant literature. In fact, the can-cluster of meaning tends to be covered by the core modal néng, rather than by the forms stemmed from the acquisitive morpheme dé. Let's discuss and then analyse the different expressions conveyed by these two competing markers.

5. Analysis of competing markers

As anticipated, the prototypical marker of learned ability is huì. The de morpheme can express ability only in a "scalar" form, in the descriptive/manner complement, that is, a postverbal de-construction followed by an adjectival phrase (AP). As underlined by Paul, ⁶⁸ it is generally accounted for as an adverbial construction, where the adjunct (exceptionally) surfaces postverbally, describing the manner of actualization of the preverbal predicate.⁶⁹ The 'V-neg-V' questions, and the negative forms take place in the adjectival phrase, rather than in the preverbal predicate. Syntactically, this behaviour suggests that the former might have a predicative status. ⁷⁰ Pragmatically, it may also suggest that the adjectival phrase is the salient content of the utterance. In fact, the manner complement per se is not sufficient to modalize a proposition; yet, by highlighting a degree of competence, such as 'not too well' in (18a), it expresses inability in a more nuanced way than the negated ability modal (18b).

```
(18) a. 中文我讲得不太好。
       Zhōngwén wŏ
                     jiăng de
                                  bú tài
                                           hăo.
       Chinese 1sg speak MANN neg too
                                           well
       'I don't speak Chinese very well.'
    b. 我不会讲中文。
       Wŏ
                                  Zhōngwén.
             bú
                    huì
                           jiăng
                    be.able speak
                                  Chinese
       'I cannot speak Chinese.'
```

The modal *néng* instead is compatible with a learned ability reading only if no circumstantial marker is present (19a). Otherwise, the modalized expression acquires a deontic

⁶⁶ Enfield, Language epidemiology, 39.

⁶⁷ The semantic inclusion displayed by 'cannot' and *bùnéng* can be explained from a pragmatic perspective. Also, it can be analysed in view of the semantic delineation of the modal ordering source, where situation oriented modalities are superordinate to the speaker or subject-oriented modalities; on the topic cf. Carlotta Sparvoli, "Modals and negation: A semantic explanation of the modal suppletion strategy in Chinese", Chinese as a Second Language Research, 2015, 4-2, 163-193.

⁶⁸ Waltraud Paul, New Perspectives in Chinese Syntax (Berlin: De Gruyter Mouton 2015), 21.

⁶⁹ This is the only instance in which, apparently, an adjunct surfaces in postverbal position. Paul also points out the syntactic structure of this form would deserve more investigation, and proposes an alternative account in which de is a functional head selecting the adjectival phrase (AP) and where the resulting de-phrase is in turn selected by the verb.

⁷⁰ Ibid, 309.

interpretation, as observed by Alleton.⁷¹ In this context, the deontic nuance is more plausible. However, it must be noted that (19b) could also have a circumstantial reading, in which the inability is related to the environment. For instance, the speaker might be claiming that the noise in the room prevents him from concentrating and speaking in Chinese.

(19) a. 我不能说中文。

Wŏ bù néng shuō Zhōngwén.

neg can speak Chinese

'I cannot speak Chinese' [PI Learned Ability, Inability]

b. 我在这儿不能说中文。

Wŏ zài zhèr bù néng/kěyĭ shuō Zhōngwén.

1sg here neg can/may speak Chinese

'I cannot [=may not] speak Chinese here.' [PE Deontic Possibility, Permission Denial]

'I cannot [=do not manage] speak Chinese here.' [PE Circumstantial Possibility, Failure]

Bùdé is a marker of participant-external deontic possibility (permission), and bù néng can be used with the same meaning.

(20)此处不得/不能吸烟。

> Cĭchù bùdé /bùnéng xī not.allow not.can inhale smoke this.place 'Smoking is not allowed here.'

Both the core modal *néng* and the *de*-construction are prototypical markers of circumstantial modalities, where the latter occurs as a potential complement, which, in the positive form are mainly fixed expressions, dictated by idiomatic rules. ⁷² A viable, and sometimes better, alternative to these constructions is the core modal of circumstantial possibility. For instance, (21a) is fully acceptable only in an appropriate context, whereas its negative form (21b), and (21c) are perfectly grammatical even as isolated sentences.

(21) a. 他一分钟写得完一百个字。

[PI Success]

Tā yì fēnzhōng xiě-**de**-wán

3sg one minute write-POT-finish one hundred CL character

'He can finish writing one hundred characters in one minute.'

b. 他一分钟写不完一百个字。

Tā yì fēnzhōng xiě-**bu**-wán γì băi gè zì.

write-negPOT-finish one hundred CL character 3sg one minute

'He cannot write one hundred characters in one minute.'

c. 他一分钟能写一百个字。

 $T\bar{a}$ $v\hat{i}$ fēnzhōng néng xiě gè zì. vì băi

3sg one minute can write one hundred CL character

'He can write one hundred characters in one minute.'

These two markers can signal participant-internal circumstantial possibility, which for brevity is here called success:

(22) a. 他一分钟吃得完三碗饭。

Tā yì fēnzhōng chī-**de**-wán sān wăn fàn. eat-POT-finish three bowl rice 3sg one minute

⁷¹ Viviane Alleton, Les auxiliaires de mode en chinois contemporain (Paris: Maison des sciences de l'homme,

⁷² Cheng and Sybesma, "Forked modality", 15.

b. 他一分钟能吃完三碗饭

Tā yì fēnzhōng **néng** chī wán sān wăn fàn. 3sg one minute can eat finish three bowl rice 'He can eat three bowls of rice in one minute.'

And they also can express participant-external circumstantial modality, feasibility:

(23) b. 这张桌子坐得下六个人。

Zhè zhāng zhuōzi zuò-**de**-xià liù-ge rén this CL table sit-POT-down six-CL person 'This table can sit six people.'

This type of situational possibility can also be signalled by the modal $k \not e y i$, a prototypical marker of participant-external deontic modality, expressing permission. However, it is important to underline that, in this context, the only admitted negative forms are those of the prototypical circumstantial markers, i.e. $n \not e n g$ and the potential complement.

(24) 这张桌子(*不)可以坐六个人

Zhè-zhāng zhuōzi (*bù) kĕyĭ zuò liù ge rén. this-CL table neg may sit six CL person 'This table can(not) sit six people.'

It must be noted that, in the participant-external area, the potential complement often occurs in marked sentences with an apparent subject inversion,⁷³ as in (25). These constructions typically include an 'accommodation verb', that is, a predicate expressing "the provision of space or time needed for a certain activity, for example sleeping, sitting, standing, or dancing".⁷⁴ One-Soon Her highlights the incompatibility of a subject oriented adverb and, hence, the "drastic reduction in volitionality, and thus agentivity" of this type of sentence. ⁷⁵

(25) 一张桌子(*故意*高高兴兴地)坐四个人。

Yì zhāng zhuōzi (*gùyì*gāogāoxìngxìng-de) zuò sì ge rén one CL table intentionally/happily sit four CL person 'This table (*intentionally/*happily) sits four people.'

The non-agentive feature is fully consistent with the semantics of the participant-external modality, where "the participant in some way "received" the state of affairs". ⁷⁶ And it is also in line with the semantics of the MSEA equivalents of *get*, which are all *non-agentive*. ⁷⁷ Some kinds of reduced agentivity can also be identified for the participant-internal sentences. In fact, as suggested by the Result Small Clause analysis proposed by Cheng and Sybesma (2004), ⁷⁸ in the potential complement, the subject refers only to the matrix verb. The predicate under the scope of the acquisitive morpheme de – that is, the resultative – takes as

⁷³ Apparent because the "this subject-object inversion is only apparent, as technically the agent role is not syntactically realized at all", One-Soon Her, "Apparent subject-object inversion in Chinese", *Linguistics*, 2009, 47-5, 1175.

⁷⁴ Ibid, 1154.

⁷⁵ Ibid, 1167.

⁷⁶ Van der Auwera and Plungian, "Modality's semantic map", 103.

⁷⁷ Enfield, "On genetic and areal linguistics", 38. In other words, the MSEA etyma of the acquisitive modals are more like English *receive* and *acquire* than like English *get*, cf. Van der Auwera et al., "Acquisitive modals", 292.

⁷⁸ Cheng and Sybesma, "Forked modality".

its subject the nominal phrase that surfaces as an object. The structural representation, slightly modified, is visible below:⁷⁹

(26) 搬得起来这箱书。

```
this-box book rise.up
'manage to lift this box of books.'
```

As visible in (26), the potential marker occupies the modal position in the resultative small clause in the VP. Quantificationally, it is linked to an element in the matrix modal position, and this may account for the fact that in Mandarin, this construction is often doubled by preverbal néng. 80 More specifically, the hypothesis is that the de-potential has lost its full modal force, and therefore often requires a full-fledged modal, in the matrix position, like néng. 81 Some typical occurrences of this type of stacked construction will be described in the next section.

5.1 Modal stacking

Despite the high frequency of the 'néng de-construction', its occurrence is not always observed. 82 Let's start underlying that in a small sample of eight informants, one of them finds the 'néng de-construction' as ungrammatical, and "tolerates" it only in rhetorical questions. If we solely rely on the judgements by the other seven informants, then two scenarios can be singled out: contexts in which néng occurrence is frequent (arguably, for pragmatic reasons), and contexts in which it is mandatory. As visible in (27a), the latter situation takes place in some relative clauses (we will discuss it in next section).

(27) a. 不过得把它放在一个*(能)找得到的安全地方。83

bă tā fàng zài yí ge **néng** zhǎo-**de**-dào Búguò dĕi de ānguán dìfāng have to BA 3sg put in one CL can seek-POT-reach SUB safe place 'But you have to put it in a safe place where one can manage to find it.'

b. 永远站在一个你找得到的位置。

Yŏngvuăn zhàn zài νí пĭ néng zhăo-**de**-dào de wèizhì. forever stand in one CL 2sg can seek-POT-reach SUB place '[I] will forever be in a place that you will be able to find.'

The co-occurrence with the core modal *néng* is also observed in embedded clauses such as the one below, but in this case *néng* can be omitted:

(28) a. 我希望你在新地方(能)找得到工作。84

Wŏ xīwàng nǐ zài dìfāng néng zhǎo-de-dào $x\bar{\imath}n$ gōngzuò. 1sg hope 2sg new place can seek-POT-reach work

⁷⁹ Rint Sybesma, "Zhuang: A Tai language with some Sinitic characteristics. Postverbal 'can' in Zhuang, Cantonese, Vietnamese", in From Linguistic Areas to Areal Linguistics, edited by Pieter Muysken. Amsterdam/Philadelphia: John Benjamins Publishing Company, 2008, 259. 80 Ibid, 268.

⁸¹ Cheng and Sybesma, "Forked modality".

⁸² Even by a brief interrogation of a corpus, it can be seen that out 364 occurrences of zhǎo-de-dào, only 62 were in co-occurrence with néng.

⁸³ Beijing Daxue Zhongguo Yuyanxue Yanjiu Zhongxin (北京大学中国语言学研究中心) [Center for Chinese Linguistics, Peking University] Hanyu (Xiandai/Gudai) yuliaoku (汉语(现代/古代) 语料库) [Corpus of (Modern/Ancient) Chinese] http://ccl.pku.edu.cn:8080/ccl_corpus/index.jsp?dir=xiandai. 84 Ibid.

'I hope that you can manage to find a job in the new place.'

The néng de-construction is found both in the antecedent and in the consequent, often introduced by the adverb $c\acute{a}i$, as visible in the following example from the Peking University Corpus. Here, the occurrence of *néng* is not mandatory.

(29)a. 这样的保险柜,目前,只有在保险公司里才(能)找得到。85

Zhèyàng de băoxiănguì, mùqián, zhĭyŏu zài băoxiăn lĭ gōngsī This.way SUB strongbox currently only.exist in insurance company in néng zhǎo-de-dào

only can seek-POT-reach

'This kind of strongbox can currently only be found at insurance companies.'

b. 如果他(能)找得到我,自然也(能)找得到他自己那边的飞行员。⁸ yě **néng** zhǎo-**de**-dào wŏ. zìrán Rúguŏ tā néng zhăo-de-dào 1SG, naturally also can seek-POT-reach If 3sg can seek-POT-reach tā zìjǐ nà biān de fēixingyuán.

3sg own that side SUB pilot

'If he can manage to find me, of course he will also be able to manage to find the pilot at his side.'

There is full agreement among all the informants on the fact that in the potential construction bùnéng is banned (30b).

这么多菜,吃不完! (30) a.

> Zhème duō cài, chī-bù-wán. So.much a.lot food eat-NegPot-finish 'So much food, [one] cannot eat it all.'

b. *这么多菜,不能吃得完!

Zhème duō cài, bù néng chī-de-wán So.much a.lot food neg can eat-POT-finish Intended meaning: 'So much food, [one] cannot eat it all.'

The *néng de*-potential form is frequent in interrogatives and rhetorical questions.

主人微笑着连连点头,又问:"你能搬得动这个金球吗?"87 (31) a.

> Zhŭrén wéixiào-zhe liánlián diăntóu, yòu wèn: smile-ASP owner repeatedly nod, again ask

zhè ge jīn Nǐ **néng** bān-**de**-dòng qiú ma?

2sg can move-POT-displace this CL golden sphere SFP.

'The owner nodded while smiling, then asked again: "Can you manage to move this golden sphere?""

b. 这么多菜, 你怎么能吃得完呢?

Zhème duō cài, nǐ **zěnme** néng chī-**de**-wán So.much a.lot food 2sg how can eat-POT-finish SFP 'So much food, how can you manage to eat it all?'

⁸⁵ Ibid.

⁸⁶ Ibid.

⁸⁷ Ibid.

In such cases, the V-not-V questions are formed on the core modal, néng bù néng. Importantly, the latter can be used to express a positive answer, but, for some informants, it is not fully acceptable in the negative form.

(32)这么多菜,能不能吃得完?能/(能)吃得完。 Zhème duō cài, néng bù **néng** chī-de-wán? *Néng/ (Néng) chī-de-wán* so.much a.lot food can neg can eat-POT-finish? Can/ can eat-POT-finish 'So much food, can (we) manage to eat it all? Yes/ Yes (I can).'

In multiple modal constructions, the potential complement typically occurs in sequences such as *epistemic necessity*>futurity>circumstantial possibility.

(33)如果是开车去应该会来得及! Rúguŏ shì kāi chē qù yīnggāi huì lái-**de**-jí. If be drive car go should futurity come-POT-reach 'It should be possible to make it by car.'

Moreover, the sequence epistemic necessity>futurity can also be found with the degree complement.

明年1月份,保税区积压的日本汽车应该会卖得很好。88 (34)Míngnián yīyuèfèn, băoshuìqū jīyā de rìběn gìchē Next.year January, dutyfree.area backlog SUB Japan car yīnggāi huì mài de hěn hǎo should fut sell MANN very well 'Next January, the backlog orders of Japanese cars in the duty-free area should sell very well.'

The *néng de* potential occurs with epistemic necessity modals, according to the sequence: Epistemic necessity>PE circumstantial possibility>PI circumstantial possibility.

(35) a. 礼品店里有很多手工制作的八音盒,这几支曲子应该都能找得到。89 Lǐpǐn diàn li yǒu hěn duō shǒugōng zhìzuò bāvīnhé, Gift shop in exist very many manual SUB musical.box, make zhè iĭ qŭzi **yīnggāi** dōu **néng** zhǎo-**de**-dào $zh\bar{\imath}$ tune should this few CL can seek-POT-reach all 'In gift shops there are many handmade musical boxes, it should be possible to manage to find these few tunes.'

b. 应该能来得及!

Yīnggāi néng lái-de-jí. should can come-POT-reach 'It should be possible to make it.'

This "double modality" can be found both with participant-external and participant-internal areas, but is not accepted as fully grammatical by all the informants. On this matter it must be underlined that the informants who accept sentence (36a) would accept also (36b).

In English, with this type of modality introduced by epistemic necessity markers, in order to render all the modal constituents explicitly, we need to use a passive form and introduce an impersonal agent, such as 'for him, it should be possible to manage'. As an

⁸⁸ In addition to néng, the potential construction can be also introduced by kěiyǐ 'may, can' and by the futurity marker huì /bù huì 会/不会 and by the evidential and subject oriented adverbs such as xiàng, dāngrán 像, 当

⁸⁹ Peking University, Corpus of (Modern/Ancient) Chinese.

alternative, néng can be translated as an adverb of general possibility, though it must be noted that 'should possibly' is not a felicitous combination.

(36) a. 木筏顺着水流应该能滑得下来。90

shùnzhe shuĭliú yīnggāi néng huá-de-xiàlai Мù fá current should can slip-POT-come.down along 'It should be possible for the wood raft to be able to slip down along the currents.' ('The raft should ?possibly manage to')

b. 他一分钟应该能写得完一百个字。

Tā yì fēnzhōng yīnggāi **néng** xiě-**de**-wán νì băi ge zì. He one minute should can write-POT-finish one hundred CL character 'For him, it should be possible to manage to write one hundred characters in one minute.'

With epistemic markers, whether of necessity or possibility, kevi 'may', is an alternative to néng.

你一定/也许(可以)找得到他。91 (37)

Νĭ vídìng/ vĕxŭ kĕivĭ zhăo-de-dào tā 2sg certainly perhaps may seek-POT-reach he 'You can certainly manage to find him'.

In such sequences, the potential complement is compatible with sentential negation, such as the epistemic *bú yídìng* and *wèibì* (recall that *bù néng* is instead banned).

(38)不一定/未必(能)找得到。

> Bùyídìng / wèibì zhǎo-**de**-dào néng not.necessarily/ not.certainly can seek-POT-reach 'Not necessarily/certainly it can be possible to manage to find...'. 'Not necessarily can it be possible to find...'

Interestingly, this multimodal construction can be introduced by the negative aspectual marker méi.

但由于缺乏资料,又因茅盾先生是一位大作家,因此他和别人都一直没能写得出来。92 (39)Dàn yóuyú quēfá zīliào, yòu yīn Máo Dùn xiānshēng shì yí wèi dà zuòjiā, but due.tolack.of resource, and because Mao Dun mister be one CL great writer, tā hé biérén dōu yìzhí méi néng xiě-de-chūlái therefore he and others all all.along neg can write-POT-come.out 'However, due to the lack of resources, and due to the fact that Mao Dun was a very important writer, he and the others never managed to write (it).'

It must be noted that (39) is judged grammatical also with a negative potential, xiĕ-de-chūlái, replacing the negative modal *méi néng*.

^{&#}x27;Perhaps you can manage to find him'.

⁹⁰ Modified ex Xie, "The modal uses of de and temporal shifting", 391.

⁹¹ Ibid.

⁹² Ibid.

6. Discussion

Both in the success and in the feasibility reading, the potential complement displays a behaviour that singles it out from the other MSEA postverbal acquisitive markers; that is, the frequent occurrence in combination with the core modal *néng*. In general, this sequence of markers is fully accepted (and sometimes even preferred) in interrogative contexts, typically rhetorical questions, and in combination with epistemic markers, assessing the probability that the actor is capable or not of achieving a given state of affairs. This phenomenon can be accounted for with reference to the modal strength of the acquisitive marker de. Rhetorical questions and conditionals (not to mention epistemic contexts) are typically linked to the expression of modality, both in the propositional and in the pragmatic sense. Therefore, given that the potential complement does not have a full-fledged modal force, the core modal contributes with some type of modal "reinforcement". On the other end, most of the informants agree in that néng is mandatory in relative clauses. More specifically, it happens when the nominal head is the object of the potential construction (object relative clause). In these cases, some kind of reference to an agent is required. Evidence of this claim can be found in the fact that if the subject of the relative clause is expressed (40a), then, néng can be omitted. If the subject is omitted, then néng is required, as visible in (40b).

(40) a. 不过得把它放在一个*(你)找得到的安全地方。 (=(27.a))Búguò dĕi bă tā fàng zài yí ge nĭ zhǎo-de-dào de ānguán dìfāng have.to BA it put in one CL 2sg seek-POT-reach SUB safe place 'But you have to put it in a safe place that you can manage to find.'

b. 不过得把它放在一个*(能)找得到的安全地方。

Búguò dĕi bă tā fàng zài yí ge néng zhǎo-de-dào de ānauán dìfāng have to BA it put in one CL can seek-POT-reach SUB safe place 'But you have to put it in a safe place that one can manage to find.'

For the nominal head to be interpreted as the object of zhào-de-dào, there must be either the subject or a full-fledged modal, like néng (or both). If the subject is omitted, néng is sufficient because it requires an agent and, therefore, contributes to making it clear that the nominal head is the object, not the subject. In other words, the core modal néng is essential for parsing the object relative clause correctly. 93 This function is not required in (41), where the head of the relative clause $(r\acute{e}n)$ can be interpreted in two ways, as the object (41a) or as the subject (41b) of the relative sentence. Therefore, in this case, the presence of *néng* is not mandatory.

(41) a. 不过得把它发给一个你能靠得住的人。

Búguò dĕi bă tā fā gěi yí ge nǐ néng kào-de-zhù de rén. have to BA 3sg put in one CL 2sg can stand-POT-reside SUB person 'But you have to send it to someone that you can trust.'

b. 不过得把它发给一个靠得住的人。

Búguò dĕi bă tā fā gěi yí ge kào-**de**-zhù de rén.

⁹³ As underscored by Arosio et al., object relative clauses are typically more challenging to comprehend than subject relative clauses; cf. Fabrizio Arosio, Flavia Adani, and Maria Teresa Guasti, "Grammatical features in the comprehension of Italian Relative Clauses by children", in Merging Features: Computation, Interpretation and Acquisition, edited by José M. Brucart, Anna Gavarró, and Jaume Solà (Oxford: Oxford University Press, 2009), 138-155.

have to BA 3sg put in one CL stand-POT-reside SUB person 'But you have to send it to someone that can be trusted (trustworthy).'

The following is another example in which we need either *néng* or the subject:

```
(42) a. 请你给我一本*(我)/*(能)看得懂的书。
       Qĭng nǐ
                   gěi
                        wŏ
                             yì běn
                                     *(wŏ)/*(néng) kàn-de-dŏng
                                                                       de
                                                                             sh\bar{u}.
      Please 2sg
                  give me
                              one CL 1sg
                                                   read-POT-understand SUB book.
       'Please give me a book that I/one can understand.'
```

However, in object relative clauses, if for pragmatic reasons the context requires an overt reference to the addressee, then the subject must be present anyway. This is the case of (27b), a sentence expressing something like "If you want, you will always know where to find me". Given the context, the sentence would sound odd without the subject of the embedded clause.

```
永远站在*(你)能找得到的位置。
(43)
                                                                      (=(27.a))
       Yŏngyuăn zhàn zài
                           nǐ néng zhǎo-de-dào
                                                    de
                                                          wèizhì.
       forever
                stand in
                           2sg can seek-POT-reach SUB place
       '[I] will forever be in a place that you will be able to find.'
```

Concerning the restriction to the *néng de*-construction in negative sentences, *bùnéng* is banned from occurring with the potential complement. Yet, *méi néng* works as a suppletive negative marker in a perfective context. Differently from the potential complement, méi néng can only have an implicative meaning, as 'did not manage', as we saw in (39). This topic though would deserve a more detailed investigation, but this observation might still add some insight, especially if combined with the "general incompatibility with past denoting temporal phrases", and the temporal shifting of the modal uses of de, underscored by Xie (2012).⁹⁴

7. Conclusions

In the first part of the paper, we have highlighted that the modalities in the can-cluster are characterized by hyponym relations, emerging in the negative forms, where permission denials, failure and inability can be considered a subtype of the general idea of impossibility. Such phenomena are visible in other MSEA acquisitive modals. Concerning Modern Standard Chinese, the relevant point is that the negative form of the core marker bù néng functions as a sort of umbrella accommodating different modal meanings. The opposite is visible for each instantiation of the acquisitive morpheme, hosting a different negative construction for each modal meaning. The only area of ambiguity has to do with the reading of the necessity marker děi, which sporadically also gets an epistemic reading. Notably, this ambiguity drops in the double negation of the acquisitive modal, bùdébù, which can only have a circumstantial necessity reading. From these observations, two main claims can be advanced. Epistemic modality does not have a "dedicated" negative acquisitive form. Based on the semantic map hypothesis, the epistemic class is a target modality of grammaticalization, which has not been fully codified in Modern Standard Chinese. This might point to a correlation between degree of grammaticalization and unique negative form, a topic which would deserve further investigation.

In the second part of the paper, it has been shown that the polyfunctionality covered by the MSEA acquisitive modals, in Mandarin tends to be displayed by the core modal neng.

⁹⁴ Xie, "The modal uses of *de* and temporal shifting", 387.

This marker functions as a "reinforcement" of the potential modality (Cheng and Sybesma 2004). The grammaticality judgement of the 'néng de-potential construction' is a matter of controversy, since there are also informants (in our case, 1 out of 8), who accept it only in interrogatives and rhetorical questions. However, based on the judgement of most of the informants, it can be said that there are contexts in which the néng de-construction is very natural (epistemic multimodal constructions). The contribution of néng might be that of conferring an agentive reading to the potential complement. In fact, the only context in which néng is close to mandatory is in object-extracted relative clauses, where the potential complement alone is not sufficient for interpreting the nominal head as the object. Finally, the negative form of the core modal, méi néng, occurs as a suppletive form expressing actuality entailment, therefore displaying the implicative feature which is common to many acquisitive modals, such as get. All these traits might contribute to show that, not only are acquisitive modals a highly grammaticalized form, but they also seem to have a reduced agentive feature. And, in their postverbal occurrences, when compared with other MSEA acquisitive morphemes, they have a more reduced modal strength.

8. Abbreviations

ACQ acquisitive morpheme; ASP Aspect; BA preposition introducing the ba-sentences; CL classifier; EXT extent; MANN manner; MSEA Mainland South-East Asia; Neg negation; PFV perfective aspect; PE participant-external; PI participant-internal, POT potential; SFP Sentence Final Particle; SUB Subordinator.

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