

## Article

# ‘Good’ Is ‘Possible’: A Case Study of the Modal Uses of ‘Good’ in Shaoxing

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**Abstract:** This paper sets out to investigate the modal uses of the lexeme *hv*<sup>3</sup> ‘good’ in the Jidong Shaoxing variety of Wu and to reconstruct its grammaticalization pathway. Modal meanings of *hv*<sup>3</sup> include circumstantial possibility, deontic possibility and necessity, and epistemic possibility. These meanings can be summarized as ‘can’, ‘may’, and ‘should’, respectively. The modal meanings of *hv*<sup>3</sup> are derived from its meaning of ‘fit to’ rather than ‘good’. We propose here that *hv*<sup>3</sup> first extended to express circumstantial possibility, and then further extended to denote deontic modality and participant-internal possibility in two separate directions: (i) circumstantial possibility > deontic modality, and (ii) circumstantial possibility > participant-internal possibility. The epistemic use of *hv*<sup>3</sup> is proposed as the final stage of the lexeme’s modal extension.

**Keywords:** good; circumstantial possibility; deontic; epistemic; Shaoxing Wu; grammaticalization; extension



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## 1. Introduction

Modality is a semantic domain concerning how languages code possibility and necessity. Languages may adopt different strategies to express modality, such as auxiliary verbs, morphological devices of mood, modal affixes, lexical means, modal adverbs and adjectives, modal tags, modal particles, and modal case (de Hann 2006). While Sinitic languages are well known for lacking morphological mood, modality is expressed by auxiliary verbs, adverbs, and potential constructions, as well as particles. Among these devices, auxiliary verbs are the most common means of expressing possibility and necessity in Sinitic languages (Chappell and Peyraube 2016).

Modal auxiliaries in Standard Mandarin can be divided into necessity and possibility modal verbs. Possibility modal verbs include *hui*<sup>4</sup> 会 ‘can < know, comprehend’, *ke*<sup>3</sup>*yi*<sup>3</sup> 可以 ‘can, may < fit so as to’, and *neng*<sup>2</sup> 能 ‘can < capable’, while necessity modal verbs include *dei*<sup>3</sup> 得 ‘must < obtain’, *gai*<sup>1</sup> 该 ‘should < owe’, and *yao*<sup>4</sup> 要 ‘need, must’. According to a survey by Fan (2014, pp. 15–187), these are common modal verbs in Sinitic languages. Different Sinitic languages or dialects have developed various lexical sources into modal auxiliaries, for example, *kuan*<sup>44</sup> 管 ‘can < manage, supply’ in Fangcheng Central Plains Mandarin (L. Wang 2013), *iəw*<sup>22</sup>*fe*<sup>75</sup> 有法 ‘can < have methods’ and *ua*<sup>51</sup> 话 ‘can < say’ in Liujiang Jinde Hakka (Y. Wang 2019), *tə*<sup>hie</sup><sup>75–33</sup>*te*<sup>75–33</sup>*lo*<sup>72–53</sup> 吃得落 ‘can < can eat’ in Shaoxing Wu (Sheng 2021, p. 416), and *hao* 好 ‘can < good’ in Jieyang Min (Xu 2007, pp. 234–37) and Hakka (Huang 1995, p. 116; Yeh 2012; Zhuang and Huang 2014, pp. 223–24). In fact, *hao* ‘good’ has been adapted as a modal auxiliary in a contiguous area around the Yangtze River Delta. This phenomenon might be considered as a micro-areal phenomenon.

This paper will offer a case study on the modal uses of *hv*<sup>3</sup> 好 ‘good’ in the Jidong variety of Shaoxing Wu. First, a detailed synchronic description of the modal uses of *hv*<sup>3</sup> ‘good’

in Jidong Shaoxing is given. This is followed by a diachronic reconstruction of the pathway of grammaticalization from ‘good’ to ‘can, may, should’ of *hv*<sup>3</sup>. Observation of *hv*<sup>3</sup>’s distribution indicates that its modal uses are derived from the auxiliary use of its meaning ‘fit to’ rather than directly from its meaning ‘good’. We find that in a grammatical sentence containing *hv*<sup>3</sup>, the situation expressed by the matrix VP is often enabled by an external or an internal condition. It is from this circumstantial possibility that the participant-internal possibility of *hv*<sup>3</sup> is derived. Our finding contributes some new evidence in support of Narrog’s (2012, pp. 187–90, 202–9) findings that circumstantial possibility may develop into participant-internal possibility and deontic possibility may extend to deontic necessity. The bidirectional developments ‘circumstantial ↔ participant-internal’ and ‘deontic possibility ↔ deontic necessity’ hold (Narrog 2012, pp. 185–221). We also propose that the epistemic use of *hv*<sup>3</sup> is derived from the uses of both circumstantial and participant-internal possibility. The semantic connection between the deontic and epistemic uses of *hv*<sup>3</sup> is not obvious in Jidong Shaoxing, unlike the well-known deontic–epistemic polysemy of English *must* (Traugott and Dasher 2001, pp. 120–21).

Section 2 discusses the modality types distinguished in this paper. Section 3 presents background information and basic linguistic features of the target language. Section 4 introduces the polysemy of the lexeme *hv*<sup>3</sup>. Section 5 sets out to illustrate the modal uses of *hv*<sup>3</sup>. Section 6 aims to reconstruct the grammaticalization pathway of *hv*<sup>3</sup> and offers a comparison with the diachrony of *hao*<sup>3</sup> ‘good’ in the history of Chinese. Section 7 is a general conclusion.

## 2. Modality Types and Terminology

The domain of modality can be organized in several ways. Deontic, dynamic, and epistemic are the most broadly accepted concepts. Coates (1983, p. 10) contrasts root modality, which comprises both dynamic and deontic, and epistemic modality. van der Auwera and Plungian (1998) oppose epistemic and non-epistemic (later revised as situational (van der Auwera and Ammann 2013a)), with the latter subdivided into participant-internal and participant-external. Palmer (2001) proposes an opposition of event modality (deontic and dynamic) and propositional modality (epistemic and evidential). Narrog (2012, p. 46) suggests volitive modal categories opposed to non-volitive modal categories. Given that a reorganization of our understandings of modality is not an aim of the current paper, here we adopt subcategories of modality solely on the basis of their relevance in describing the polysemy of *hv*<sup>3</sup>. Relevant modal concepts include:

### Circumstantial possibility

Circumstantial possibility refers to a proposition enabled by certain external circumstances (Narrog 2012, p. 10). It can also be interpreted as a possibility allowed by external conditions, as in (1).

- (1) *You can get to University City by taking subway line 9.*

### Permission and weak obligation

Both permission and obligation belong to deontic modality, also known as deontic possibility and necessity. Deontic modality refers to possibility or necessity determined by certain social norms, expectations, or a speaker’s desire or command (see Palmer 2001, p. 10; van der Auwera and Plungian 1998, p. 81). Permission denotes that a participant is allowed to complete an action (Bybee et al. 1994, p. 320), as in (2), while weak obligation means that a participant was advised to complete an action (Bybee et al. 1994, p. 320). In English, weak obligation is usually expressed by *should* and *ought*, as in (3).

- (2) *You may leave now.*  
 (3) *You should leave now.*

### Participant-internal possibility

Participant-internal possibility refers to “a kind of possibility [ . . . ] internal to a participant engaged in the state of affairs” and it covers dynamic possibility, ability, and capacity (van der Auwera and Plungian 1998, pp. 80, 82), as in (4).

(4) *She can lift that heavy stone.*

Epistemic possibility

Epistemic possibility refers to a speaker's degree of certainty about a proposition (van der Auwera and Ammann 2013b); see (5). Epistemic modality is generally relevant to knowledge, belief, and related notions.

(5) *The bus may be late (due to the snow).*

### 3. Jidong Shaoxing and Some Basic Features

#### 3.1. Variety under Investigation

Shaoxing 绍兴话 is a Northern Wu dialect of Sinitic belonging to the Linshao subdivision 临绍小片 of the Taihu division 太湖片 (Wang and Cao 2012, p. 104). The variety under investigation, Jidong 稽东, is spoken in Jidong Town in the southern suburb of Shaoxing Prefecture and is classified as belonging to the Southern Suburb variety of Shaoxing (Tao et al. 2014).

The data presented in this paper were collected with four native speakers from 2022 to 2023. Our consultants represented three generations within the same family. They were Mr. HUANG Tangfu 黄汤富 (born in 1955), Mrs. HUANG Xingqin 黄杏琴 (born in 1957), Mr. HUANG Yongjiang 黄永江 (born in 1977), and the second author Mr. HUANG Xiao 黄晓 (born in 2002). Mr. HUANG Yongjiang speaks an innovative variety of Jidong Shaoxing, while the other three speak a conservative variety.

Our corpus included both spontaneous and elicited data. Spontaneous data illustrated in this paper were either extracted from a corpus of six hours of audio material or taken from unrecorded daily conversations which were not part of the corpus. Elicited data comprised about 130 sentences. Elicited data presented in this paper will be indicated as 'elicitation', while the data with unmarked sources were either from our corpus or the unrecorded daily conversations. It is worth mentioning that when performing elicitation we did not simply ask for translations from Standard Mandarin to Jidong Shaoxing. Instead, taking semantic nuances of modals into consideration, we provided different contexts as stimuli for our consultants.

#### 3.2. Basic Features

Shaoxing possesses eight tones: Tone 1/33/, Tone 2/13/, Tone 3/435/, Tone 4/213/, Tone 5/52/, Tone 6/231/, Tone 7/4/, and Tone 8/23/. Tones 7 and 8 are two checked tones. Any syllable bearing Tone 7 or 8 ends with a glottal stop/ʔ/. We will hereafter refer to the tones with a superscript of the number by which the tone is named. Note that tone sandhi is not represented in our transcription. Shaoxing is basically a VO language, especially in dependent clauses and when an object appears with a complex modifier, as shown in (6). Wu languages are characterized by topic prominence (Liu 2001) and constructions with topicalized objects are commonly observed in Shaoxing, as in (7). A topicalized object can occupy either a sentence initial position (7) or can follow the subject and precede the verb. As an analytic language, Shaoxing grammatical relations are realized by prepositions or word order. See example (6) for an example of a dative argument marked by the dative preposition *pəʔ* 'to'.

(6) 我拨依讲讲□前头做生活种事体。

ŋo<sup>4</sup>      pə<sup>7</sup>      noŋ<sup>4</sup>      kɔŋ<sup>3</sup>kɔŋ<sup>3</sup>      ŋa<sup>4</sup>      zjɛ<sup>2</sup>də<sup>2</sup>      tso<sup>5</sup>      saŋ<sup>1</sup>fɪwo<sup>8</sup>      tsoŋ<sup>3</sup>      zɪ<sup>6</sup>tʰi<sup>3</sup>.  
1SG      DAT      2SG      tell.DLM      1PL      beforetime      do      life      CLF      thing

'I'll tell you something about how (I) made a living before.'

(7) 榧子摘落来要园得好。

fɪ<sup>3</sup>tsɪ<sup>3</sup>      tsa<sup>7</sup>-lə<sup>8</sup>lɛ<sup>2</sup>      ʔp<sup>5</sup>      kʰɔŋ<sup>5</sup>-tə<sup>7</sup>-hɔ<sup>3</sup>.

Torreya      pick-fall.come      need      store-VCOMP-GOOD

'After picking the Torreya nuts, (they) must be well stored.'

Sheng (2021) provides a detailed description of the Shaoxing grammatical system, though it focuses on the Keqiao 柯桥 variety, i.e., the Western Suburb variety, which is slightly different from the variety under investigation here.

### 3.3. Modal Auxiliaries and Potential Constructions

We summarize the distributional features of auxiliary verbs in Jidong Shaoxing following Heine (1993, pp. 20–24) and Zhu (1982, p. 122). In Jidong Shaoxing, auxiliary verbs form a closed class of words. They are free elements taking verbal or clausal complements in the form of [AUX VP] which feature reduced verbal behaviors. Auxiliary verbs in Jidong Shaoxing cannot take any aspectual marking as verbs do.

In an auxiliary construction, the strategy V (NEG) V is applied to the auxiliary verb to form a polar question. An auxiliary verb can stand alone to answer a polar question. See the example below for a polar question formed with the auxiliary *fwē<sup>6</sup>* 会 ‘can’ and a positive response.

(8) 侬游水会会游{个□}? 会{个□}。  
 noŋ<sup>4</sup>      lɿŋ<sup>2</sup>sɿ<sup>3</sup>      fwē<sup>6</sup>      fwē<sup>6</sup>      lɿŋ<sup>2</sup>      ɣɔ?<sup>2</sup>      fwē<sup>6</sup>      ɣo<sup>8</sup>.  
 2sg      swim      can      can      swim      AFF.PRT      can      AFF.PRT  
 ‘Can you swim? (Yes, I) can.’ (Elicitation)

Some common Sinitic auxiliary verbs are used in Jidong Shaoxing. *fwē<sup>6</sup>* ‘can < know’ is used to express possibility, as in (8); *ɿp<sup>5</sup>* 要 ‘must, should < need’ is used to code necessity; and *ɕjaŋ<sup>3</sup>* 想 ‘want’ and *k<sup>h</sup>iŋ<sup>3</sup>* 肯 ‘be willing’ are used to express willingness. While *neng<sup>2</sup>* and *ke<sup>3</sup>yi<sup>3</sup>* are used to denote possibility and permission in Standard Mandarin, these meanings are expressed by potential constructions and *hw<sup>3</sup>* ‘can < good’ in Jidong Shaoxing.<sup>1</sup> For this, see Table 1 and also Sheng (2021, pp. 413–31).

**Table 1.** Modal auxiliary verbs in Jidong Shaoxing.

Possibility	Necessity	Willingness
hw <sup>3</sup> 好 ‘can < good’ fwē <sup>6</sup> 会 ‘can < know’	hw <sup>3</sup> 好 ‘should < good’ ɿp <sup>5</sup> 要 ‘must, should < need’ (ɿŋ <sup>1</sup> )ke <sup>1</sup> (应) 该 ‘should < owe’	ɕjaŋ <sup>3</sup> 想 ‘want’ k <sup>h</sup> iŋ <sup>3</sup> 肯 ‘be willing’

Sinitic languages often adopt potential constructions to express possibility in the form of [V-POT-COMP], with [V-NEG-COMP] as the negated form (Chappell and Peyraube 2016, pp. 312–15). In the negated form, the potential marker and the negator are considered as infixes (Chao 1968, pp. 437–38; Sun 2006, p. 60). In Jidong Shaoxing, potential constructions, *V-tə<sup>7</sup>-COMP*, are also commonly used to express possibility and are relevant to the modal uses of *hw<sup>3</sup>* in Jidong Shaoxing. When denoting ‘cannot’, it is a negated potential construction that is used rather than the negated *hw<sup>3</sup>* ‘can’, *fə<sup>8</sup> hw<sup>3</sup>* ‘not good’. The most generalized potential construction is *V-tə<sup>7</sup>-le<sup>2</sup>* ‘V-POT-come’, with *V-və<sup>8</sup>-le<sup>2</sup>* ‘V-NEG-come’ as the negated form. Both (9a) and (9b) can denote ‘cannot run’, with *dv<sup>2</sup>-və<sup>8</sup>-le<sup>2</sup>* ‘run-NEG-come’ having an additional meaning of prohibition.

- (9) a. 逃不动  
 dv<sup>2</sup>-və<sup>8</sup>-don<sup>4</sup>  
 run-NEG-move  
 ‘cannot run’ (Elicitation)
- b. 逃不来  
 dv<sup>2</sup>-və<sup>8</sup>-le<sup>2</sup>  
 run-NEG-come  
 ‘cannot run’ (Elicitation)

See Section 5 for more details.

## 4. Polysemy of *hw<sup>3</sup>* in Jidong Shaoxing

In Jidong Shaoxing, the lexeme *hw<sup>3</sup>* 好 is a polysemous and multi-functional word. *hw<sup>3</sup>* can serve as an adjective/adjectival verb ‘good, fitting, ready, done, ok’, as an auxiliary verb ‘fit to, easy to, can, may, should’, as a resultative verb complement denoting a completed action, as an adverb ‘quite’, and as a complementizer introducing a purposive clause.

The mentioned uses of *hv*<sup>3</sup> in Jidong Shaoxing are also attested in Standard Mandarin (Lü [1980] 1999, pp. 256–58), except that *hv*<sup>3</sup> in Jidong Shaoxing possesses more modal uses than *hao*<sup>3</sup> does in Standard Mandarin.

As an **adjective**, the basic meaning of *hv*<sup>3</sup> is ‘good’. Adjectives in Jidong Shaoxing function like intransitive verbs in a way, a common feature for East and Southeast Asian languages. No copula is needed when forming an adjectival predicate, and some adjectives can bear aspectual marking as intransitives do. The two features that distinguish adjectives from intransitive verbs are that (i) adjectives can modify nouns directly and (ii) adverbs can be derived from them. Examples (10) and (11) illustrate the attributive and the predicative uses of *hv*<sup>3</sup> ‘good’, respectively. Example (12) shows its derivational use as an adverb, achieved via reduplication and the use of the adverbializer *tɕjɒ*<sup>5</sup>.

- (10) 破剪刀用哉，用个把**好**剪刀。

p <sup>h</sup> a <sup>5</sup>	tɕjɛ <sup>3</sup> to <sup>1</sup>	fjɒ <sup>3</sup>	fjɒŋ <sup>6</sup>	dze,	fjɒŋ <sup>6</sup>	gə <sup>8</sup>	po <sup>3</sup>	<b>hv</b> <sup>3</sup>	tɕjɛ <sup>3</sup> to <sup>1</sup> .
broken	scissor	NEG.IMP	use	CRS	use	S_PROXCLF	GOOD	SCISSOR	

‘Don’t use the broken scissors. Use this **good** pair.’ (Elicitation)

- (11) □个香榧是**好**{个□}。

ŋa <sup>4</sup>	gə <sup>8</sup>	ɕiaŋ <sup>1</sup> fi <sup>3</sup>	ze <sup>4</sup>	<b>hv</b> <sup>3</sup>	go <sup>8</sup> .
1PL	POSS	Torreyana	indeed	GOOD	AFF.PRT

‘Our Torreyana nuts are indeed **good**.’

- (12) 米**好好**□来□，依弄渠作啥？

mi <sup>4</sup>	<b>hv</b> <sup>3</sup> <b>hv</b> <sup>3</sup>	tɕjɒ <sup>5</sup>	le <sup>2</sup> doŋ,	noŋ <sup>4</sup>	loŋ <sup>6</sup>	fi <sup>4</sup>	tsə <sup>5</sup>	so <sup>5</sup> ?
rice	well	ADV	be.at	2SG	do	3SG	do	what

‘The rice was **fine** there. How come you messed it up?’

The meaning ‘good’ can imply the meaning ‘suitable’. In (13), *hv*<sup>3</sup> denotes ‘suitable’ or ‘better’.

- (13) 渠脸盘大，还是留长头发**好**。

fi <sup>4</sup>	ljɛ <sup>4</sup> bə <sup>2</sup>	do <sup>6</sup> ,	fiwæ <sup>2</sup> zə <sup>8</sup>	ljə <sup>2</sup>	dzaŋ <sup>2</sup>	də <sup>2</sup> fa <sup>7</sup>	<b>hv</b> <sup>3</sup> .
3SG	face	big	still	keep	long	hair	GOOD

‘She has a big face and long hair **suits** her.’

In (14), marked by the currently relevant state marker *dze*, *hv*<sup>3</sup> denotes ‘ready, done’. *hv*<sup>3</sup> in (15) serves as a resultative complement turning the verb *tɕ<sup>h</sup>iə<sup>7</sup>* ‘eat’ into a telic verb phrase expressing a completed action.

- (14) 饭**好**哉。

væ <sup>6</sup>	<b>hv</b> <sup>3</sup>	dze.
meal	GOOD	CRS

‘The meal is **ready**.’

- (15) 饭吃**好**哉。

væ <sup>6</sup>	tɕ <sup>h</sup> iə <sup>7</sup> - <b>hv</b> <sup>3</sup>	dze.
meal	eat-GOOD	CRS

‘(I) finished (my) meal.’

As an **auxiliary**, *hv*<sup>3</sup> takes verbal or clausal complements and can denote ‘fit to, be easy to, can, may, should’. *hv*<sup>3</sup> in (16) denotes ‘be easy to’, while (17) is ambiguous and can be interpreted as either ‘fit to’ or as ‘can’. See Section 5 for more examples of the modal uses of *hv*<sup>3</sup>.

- (16) 个道题□坐**好**做□。  
 gə<sup>8</sup>      dɒ<sup>4</sup>                      di<sup>2</sup>      mə<sup>8</sup>      zo<sup>4</sup>                      hɒ<sup>3</sup>                      tso<sup>5</sup>      jə<sup>8</sup>.  
 S\_PROX   CLF                      question TOP                      sit/extremely                      GOOD                      do      PRT  
 ‘This problem is extremely **easy** to solve.’
- (17) 雄花粉撸过个半个月**好**打药水□。  
 fjoŋ<sup>2</sup>hwo<sup>1</sup>fəŋ<sup>1</sup>      boŋ<sup>4</sup>-loŋ<sup>4</sup>                      ku<sup>5</sup>      gə<sup>8</sup>      pə<sup>5</sup>      gə<sup>8</sup>      fjo<sup>8</sup>      hɒ<sup>3</sup>  
 male.flower.pollen      shake-gather                      pass      CLF      half      CLF      month      GOOD  
 taŋ<sup>3</sup>                      fja<sup>8</sup>sɿ<sup>3</sup>                      fia.  
 beat                      pesticide                      PRT  
 ‘A half month after (female *Torreya* trees) are pollinated manually (with) male pollen,  
 i. it’s the **right time** for spraying pesticide.’  
 ii. one **can** spray pesticide.’

In terms of syntactic position, the auxiliary *hɒ<sup>3</sup>* might sometimes be considered as an adverb. This is especially true in an example like (16) where the meaning ‘be easy to’ could be interpreted as ‘easily’ modifying the verb *tso<sup>5</sup>* ‘do’. However, auxiliaries and adverbs are characterized by different syntactic behaviors. As mentioned in Section 3.3, when transforming a declarative sentence with an auxiliary into a polar question, the strategy V (NEG) V is applied to the auxiliary instead of to the main verb, as in (18).

- (18) 个道题**好**(不)**好**做□?  
 gə<sup>8</sup>      dɒ<sup>4</sup>      di<sup>2</sup>      hɒ<sup>3</sup>      (və<sup>8</sup>)      hɒ<sup>3</sup>      tso<sup>5</sup>      fia?  
 S\_PROX   CLF      question      GOOD      NEG      GOOD      do      PRT  
 ‘Is this problem **easy** to solve?’ (Elicitation)

Compare (19) with (16) and (18). The adverb *ŋE<sup>2</sup>* ‘very’ in (19a) occupies the same preverbal position as *hɒ<sup>3</sup>* does in (16). To transform (19a) into a polar question, one must apply the strategy V (NEG) V to the predicative adjective *næ<sup>2</sup>* ‘difficult’, as in (19b). Yet, this strategy can never be used with an adverb. The form *ŋE<sup>2</sup>* (*və<sup>8</sup>*) *ŋE<sup>2</sup>* ‘LIT: very not very’ in (19c) is ungrammatical.

- (19) a. 个道题呆难□。  
 gə<sup>8</sup>      dɒ<sup>4</sup>      di<sup>2</sup>      ŋE<sup>2</sup>      næ<sup>2</sup>      da.  
 S\_PROX   CLF      question      very      difficult      PRT  
 ‘This problem is very difficult.’ (Elicitation)
- b. 个道题难(不)难□?  
 gə<sup>8</sup>      dɒ<sup>4</sup>      di<sup>2</sup>      næ<sup>2</sup>      (və<sup>8</sup>)      næ<sup>2</sup>      fia?  
 S\_PROX   CLF      question      difficult      NEG      difficult      PRT  
 ‘Is this problem difficult?’ (Elicitation)
- c. \*个道题呆(不)呆难□?  
 \*gə<sup>8</sup>      dɒ<sup>4</sup>      di<sup>2</sup>      ŋE<sup>2</sup>      (və<sup>8</sup>)      ŋE<sup>2</sup>      næ<sup>2</sup>      fia?  
 S\_PROX   CLF      question      very      NEG      very      difficult      PRT  
 Attempted: ‘Is this problem very difficult?’ (Elicitation)

Beyond its uses as an auxiliary, *hɒ<sup>3</sup>* also has more grammaticalized uses. Namely, *hɒ<sup>3</sup>* is used as a complementizer to introduce a purposive clause equivalent to the English counterpart ‘so as to’. This function may be closely related to the auxiliary use of *hɒ<sup>3</sup>*. In the example below, the first clause ‘take away the quilt’ is uttered in a context in which this action will allow the speaker to put a sheet on the bed. The two clauses are linked by *hɒ<sup>3</sup>*.

- (20) 棉被驮还, **好**让我铺床单方便些。  
 mjɛ<sup>2</sup>bi<sup>4</sup>      do<sup>2</sup>-fwæ<sup>2</sup>,      hɒ<sup>3</sup>      njaŋ<sup>6</sup>      ŋo<sup>4</sup>      p<sup>h</sup>u<sup>1</sup>      dzɒŋ<sup>2</sup>tæ<sup>1</sup>      fɒŋ<sup>1</sup>bjɛ<sup>6</sup>      sə<sup>7</sup>.  
 quilt      take-away                      GOOD      let      1sg      lay      sheet      convenient      a.bit  
 ‘Take away the quilt **so as to** let me easily put the sheet on.’ (Elicitation)

Finally, like Standard Mandarin, *hɒ<sup>3</sup>* in Jidong Shaoxing can serve as an **adverb** meaning ‘quite’, i.e., a degree intensifier. This use of *hɒ<sup>3</sup>* is quite limited. The most common case is that *hɒ<sup>3</sup>* modifies the adjective *ljaŋ<sup>4</sup>* ‘several’, as in the following example.



(21) 头歇儿车路里有**好**两个人轧死哉□。

də <sup>4</sup> ɕjē	tɕ <sup>h</sup> jo <sup>1</sup> lu <sup>6</sup>	li <sup>4</sup>	fjə <sup>4</sup>	hɒ <sup>3</sup>	ljan <sup>4</sup>	gə <sup>8</sup>	nɿŋ <sup>2</sup>	za <sup>8</sup> -sa <sup>7</sup>
just.now	road	inside	there.be	GOOD	several	CLF	person	crush-die
dze	mə <sup>8</sup> .							
CRS	PRT							

‘There were easily several people that were crushed to death on the road.’

As can be observed from the examples given above, the modal uses of *hɒ<sup>3</sup>* ‘good’ account for a number of its auxiliary uses. The nuances of its modal meanings will be elaborated in the next section.

## 5. Modal Uses of *hɒ<sup>3</sup>*

Like English *can* and *may* or Standard Mandarin *neng<sup>2</sup>* ‘can’ and *ke<sup>3</sup>yi<sup>3</sup>* ‘may’, the modal meaning of *hɒ<sup>3</sup>* in Jidong Shaoxing is largely dependent on context. This section presents the different types of modality that *hɒ<sup>3</sup>* can express. In a nutshell, *hɒ<sup>3</sup>* can denote circumstantial and physical possibility, permission, weak obligation, and epistemic possibility, but cannot denote mental ability or learned skills.

### 5.1. Circumstantial Possibility

Circumstantial possibility is the most common modal use of *hɒ<sup>3</sup>* in Jidong Shaoxing and denotes that an action is enabled under certain conditions external to the participant. This use can be easily observed in narratives involving production or treatment processes. Example (22) is one such case. This example concerns how to process *Torreya* nuts. The procedure of cleaning, expressed with the modal *hɒ<sup>3</sup>* in (22i), can only be carried out after the peels of the *Torreya* nuts completely rot off, i.e., the peel’s rotting off is the enabling condition for cleaning. Cleaning is, in turn, the enabling condition for the drying process (22ii), which is also realized with the modal *hɒ<sup>3</sup>*. Both *hɒ<sup>3</sup>* in (22) denote circumstantial possibility and can be interpreted as ‘can’. Note that *fiwɛ<sup>6</sup>* in (22), used along with *hɒ<sup>3</sup>*, is an adverbial use denoting ‘only then’ and corresponding to the adverb *cai<sup>2</sup>* 才 ‘only then’ in Standard Mandarin. This adverbial use of *fiwɛ<sup>6</sup>* differs from its auxiliary use in (24). See also (29) for another instance of the adverbial use.

(22) 烂□过十日会好庠，庠过会**好**晒。

(i)	læ <sup>6</sup>	doŋ	ku <sup>5</sup>	zə <sup>8</sup>	njə <sup>8</sup>	fiwɛ <sup>6</sup>	hɒ <sup>3</sup>	ɬu <sup>5</sup> ,
	rot	DUR	pass	ten	day	only.then	GOOD	wash
(ii)	ɬu <sup>5</sup> -ku <sup>5</sup>	fiwɛ <sup>6</sup>	hɒ <sup>3</sup>	sa <sup>5</sup> .				
	wash-pass	only.then	GOOD	dry.in.the.sun				

‘(Let the peels of the *Torreya* nuts) rot for ten days and only then (you) **can** wash (the *Torreya* nuts). Only after washing (them), **can** (you) dry them in the sun.’

We have mentioned above that *hɒ<sup>3</sup>* cannot be used to express mental or learned ability. Thus, the clause (23ii) ‘I can speak French’ does not express the ability of speaking French but denotes that it is possible to speak French under circumstances in which speaking English is unnecessary. To express mental ability or learned skills, one must use the modal verb *fiwɛ<sup>6</sup>* ‘can’, as in Standard Mandarin. See examples (24) and (8).

(23) □听不懂英语有啥要紧□，我**好**话法语个□。

(i)	fja <sup>4</sup>	t <sup>h</sup> ɿŋ <sup>5</sup> -və <sup>8</sup> -toŋ <sup>3</sup>	ʔɿŋ <sup>1</sup> ny <sup>4</sup>	fjə <sup>4</sup>	so <sup>5</sup>	ʔjɒ <sup>5</sup> tcɿŋ <sup>3</sup>	nə <sup>8</sup> ,
	3PL	listen-NEG-understand	English	have	what	importance	PRT
(ii)	ŋo <sup>4</sup>	hɒ <sup>3</sup>	fiwo <sup>6</sup>	fa <sup>7</sup> ny <sup>4</sup>	gə <sup>8</sup>	jæ.	
	1SG	GOOD	speak	French	AFF	PRT	

‘It doesn’t matter if they can’t understand English. I **can** speak French.’

(24) 我**会**话法语个□。

ŋo <sup>4</sup>	fiwɛ <sup>6</sup>	fiwo <sup>6</sup>	fa <sup>7</sup> ny <sup>4</sup>	gə <sup>8</sup>	jæ.
1SG	can	speak	French	AFF	PRT

‘I **can** speak French.’ (Elicitation)

In (25), a circumstantial condition is not overtly mentioned, but the sentence implies that there are several ways to get to University City. Taking Line 9 is one possible option.

- (25) 依□大学城好坐9号线(个□)。  
 non<sup>4</sup> ta<sup>5</sup> da<sup>6</sup>hjo<sup>8</sup>dzəŋ<sup>2</sup> hɒ<sup>3</sup> zo<sup>4</sup> tɕjə<sup>3</sup>hɒ<sup>6</sup>ɕjɛ<sup>5</sup> go.  
 2sG ALL university.city GOOD sit number.nine.line AFF.PRT  
 ‘You **can** take Line 9 to go to University City.’

Example (26) is a topic–comment construction. The sentence-initial noun *ka<sup>7</sup>ŋ<sup>2</sup> pɛ<sup>5</sup>* ‘turtle shell’ is not the agent of the VP *hɒ<sup>3</sup> tso<sup>5</sup> hja<sup>8</sup>* ‘can make medicine’ but the material. Therefore, even though the possibility expressed in (26) is related to the intrinsic property of turtle shells, we still consider this case to be one of circumstantial possibility, as it is the medicinal value of turtle shells that allows them to be made into medicine.

- (26) 甲鱼背好做药个□。  
 ka<sup>7</sup>ŋ<sup>2</sup> pɛ<sup>5</sup> hɒ<sup>3</sup> tso<sup>5</sup> hja<sup>8</sup> gə<sup>8</sup> jæ.  
 soft.shell.turtle back GOOD do medicine AFF PRT  
 ‘Turtle shells **can** be made into (Chinese traditional) medicine.’

Interestingly, the HAVE-construction, [*hja<sup>4</sup>*<sub>HAVE</sub> + NP<sub>i</sub> + *hɒ<sup>3</sup>*<sub>GOOD</sub> + VP + Ø<sub>i</sub>], is often used to express possibility.<sup>2</sup> In this construction, the VP should be a transitive verb with an absent object. The absent object is co-referential with the NP following the verb *hja<sup>4</sup>* ‘have’. See also (30A-ii) and (38) for the same construction denoting permission and dynamic possibility, respectively. The example below is semantically analogous to example (26). The quantity of raw rice determines how much steamed rice one can have.

- (27) 三升米有五碗好烧。  
 sə<sup>1</sup> səŋ<sup>1</sup> mi<sup>4</sup> hja<sup>4</sup> ŋ<sup>4</sup> ?wə<sup>3</sup> hɒ<sup>3</sup> sɒ<sup>1</sup>.  
 three cup rice have five bowl GOOD cook  
 ‘Three cups of raw rice **can** be made into five bowls of steamed rice.’

It should be noted that *hɒ<sup>3</sup>* demonstrates asymmetrical semantic extension in Jidong Shaoxing. The negated *hɒ<sup>3</sup>* does not denote impossibility or prohibition but denotes ‘not suitable’ (see (31)–(33) and further discussion in Section 6). Rather, the opposite of a modal proposition formed by *hɒ<sup>3</sup>* has to be expressed by a negated potential construction [V-NEG-COMP] in which *le<sup>2</sup>* ‘come’ is the most frequent lexeme occupying the complement position, as mentioned in Section 3.3. Compare the two clauses in (28). Both (28a) and (28b) can be produced after the clause ‘the shop is contaminated with the coronavirus’, with (28a) as a clause of contrast and (28b) as a clause of consequence. The impossibility of using the shared bicycles in (28b) cannot be realized by simply negating the modal *hɒ<sup>3</sup>*, but must be expressed by the negated potential construction *dzi<sup>2</sup>-və<sup>8</sup>-le<sup>2</sup>* ‘cannot ride’.

- (28) 后头月店个个毛病惹牢□,  
 hɛ<sup>4</sup>də<sup>2</sup> bæ<sup>6</sup> tɕjɛ<sup>5</sup> gə<sup>8</sup> gə<sup>8</sup> mɒ<sup>2</sup>biŋ<sup>6</sup> nja<sup>4</sup>-lɒ<sup>2</sup> lə<sup>8</sup>,  
 back CLF shop s\_PROX CLF illness attract-tight PRT  
 a. 前头个共享单车话道照样好用□。  
 zjɛ<sup>2</sup>də<sup>2</sup> gə<sup>8</sup> goŋ<sup>6</sup>ɕjaŋ<sup>3</sup> tæ<sup>1</sup>tɕ<sup>h</sup>jo<sup>1</sup> hwo<sup>6</sup>dɒ<sup>4</sup> tso<sup>5</sup>hjaŋ<sup>6</sup> hɒ<sup>3</sup> hjoŋ<sup>6</sup> la.  
 front MOD shared bicycle unexpectedly as.usual GOOD use PRT  
 ‘Even though the shop is contaminated with the coronavirus, the shared bicycles in front of it are still **available** for use.’  
 b. 前头个共享单车也骑不来哉。  
 zjɛ<sup>2</sup>də<sup>2</sup> gə<sup>8</sup> goŋ<sup>6</sup>ɕjaŋ<sup>3</sup> tæ<sup>1</sup>tɕ<sup>h</sup>jo<sup>1</sup> ha<sup>4</sup> dzi<sup>2</sup>-və<sup>8</sup>-le<sup>2</sup> dze.  
 front MOD shared bicycle also ride-NEG-COME CRS  
 ‘The shop is contaminated with the coronavirus, (so) the shared bicycles in front of (the shop) aren’t **available** for use any more.’ (Elicitation)

## 5.2. Permission and Weak Obligation

In Jidong Shaoxing, *hɒ<sup>3</sup>* can express both permission and weak obligation, both of which belong to deontic modality. Semantically, these modal types correspond to ‘may’ and ‘should, ought to’, respectively. Like circumstantial possibility (van der Auwera and Plungian 1998), the enabling conditions of these two modality types are also participant-



external except that permission and weak obligation are determined by speakers or social or ethical norms.

### 5.2.1. Permission

Example (29) demonstrates *hv*<sup>3</sup> used to express legal marriage ages in China. (30Q) is a polar question asking for one's permission in which the reduplicated form *hv*<sup>3</sup> *hv*<sup>3</sup> is the contracted form of V (NEG) V when forming a polar question (see also (8) and (19)). A positive answer to (30Q) is given in (30A-i). In (30A-ii), the possessive construction is used to denote permission. *tɕja*<sup>5</sup> is the contraction of the adverb *tsə*<sup>7</sup> 'only' and the possessive verb *hja*<sup>4</sup> 'have'.<sup>3</sup>

(29) 男个要廿二岁，女个廿岁会好结婚□。

nə <sup>2</sup>	gə <sup>8</sup>	ʔjə <sup>5</sup>	njæ <sup>6</sup> ni <sup>6</sup>	se <sup>5</sup> , ny <sup>4</sup>	gə <sup>8</sup>	njæ <sup>6</sup>	se <sup>5</sup>
male	NMLZ	need	twenty-two	year	female	NMLZ	twenty year
fiwə <sup>6</sup>	hə <sup>3</sup>	tɕjə <sup>7</sup> hwəŋ <sup>1</sup>	le.				
only.then	GOOD	marry	PRT				

'Men **can** only get married when they attain 22 years of age and the legal age of marriage for women is 20.' (Elicitation)

(30) Q- 个颗糖我好好吃?

gə <sup>8</sup>	k <sup>h</sup> o <sup>1</sup>	dwəŋ <sup>2</sup>	ŋo <sup>4</sup>	hə <sup>3</sup>	hə <sup>3</sup>	tɕ <sup>h</sup> jə <sup>7</sup> ?
s_PROX	CLF	candy	1sg	GOOD	GOOD	eat

'May I eat this candy?'

A- 吃是好吃，介{只有}一颗好吃。

(i) tɕ <sup>h</sup> jə <sup>7</sup>	zə <sup>8</sup>	hə <sup>3</sup>	tɕ <sup>h</sup> jə <sup>7</sup> ,	(ii) ka <sup>7</sup>	tɕjə <sup>5</sup>	ʔjə <sup>7</sup>	k <sup>h</sup> o <sup>1</sup>	hə <sup>3</sup>	tɕ <sup>h</sup> jə <sup>7</sup> .
eat	COP	GOOD	eat	but	only.have	one	CLF	GOOD	eat

'Yes, definitely you **may**, but you **can** only eat one.'

As mentioned in Sections 3.3 and 5.1, the negated *hv*<sup>3</sup> may not be used to denote 'cannot, may not, should not'. To express prohibition, one must adopt the negated potential construction [V-NEG-*le*<sup>2</sup>] 'cannot, may not'. Compare (31) with (29).

(31) 男个年龄不到廿二岁，婚结不来□。

nə <sup>2</sup>	gə <sup>8</sup>	njɛ <sup>2</sup> liŋ <sup>2</sup>	fə <sup>7</sup>	tə <sup>5</sup>	njæ <sup>6</sup> ni <sup>6</sup>	se <sup>5</sup> ,	hwəŋ <sup>1</sup>
male	NMLZ	age	NEG	attain	twenty-two	year	marriage
tɕjə <sup>7</sup> -və <sup>8</sup> -le <sup>2</sup>	le.						
marry-NEG-come	PRT						

'Men **cannot** get married (legally), if they haven't attained 22 years of age.'

(Elicitation)

Similarly, to deny the request in (30Q), the negated potential construction *tɕ<sup>h</sup>jə<sup>7</sup>-və<sup>8</sup>-le<sup>2</sup>* 'may not eat' is used, as shown in (32).

(32) A- 吃不来{个□}, 看牙齿烂光。

tɕ <sup>h</sup> jə <sup>7</sup> -və <sup>8</sup> -le <sup>2</sup>	go <sup>8</sup> ,	k <sup>h</sup> ə <sup>5</sup>	ŋo <sup>2</sup> ts <sup>h</sup> ɿ <sup>3</sup>	læ <sup>6</sup> -kwəŋ <sup>1</sup> .
eat-NEG-come	AFF.PRT	look	tooth	rot-finish

'No, you **may not**. Beware of rotten teeth.'

The semantic asymmetry between *hv*<sup>3</sup> 'can' and *fə*<sup>8</sup> *hv*<sup>3</sup> 'not good, not suitable' makes Jidong Shaoxing stand out among other Wu dialects in which NOT GOOD is observed to denote 'may not, cannot', such as Shanghainese (B. Huang 1996, p. 295; Qian 1997, p. 132) and Xianju Wu 仙居话.<sup>4</sup> Compare the two sentences from Jidong Shaoxing and Xianju given in (33). To express 'one may not smoke indoors', the negated potential construction *tɕ<sup>h</sup>jə<sup>7</sup>-və<sup>8</sup>-le<sup>2</sup>* 'cannot eat' is used in Jidong Shaoxing, while *fə*<sup>42</sup> 'cannot', which is the fusion of the negator *fə*<sup>2</sup> and *hao*<sup>324</sup> 'can < good', is used in Xianju.

- (33) Jidong Shaoxing
- a. 里头香烟吃不来{个□}。  
 li<sup>4</sup>də<sup>2</sup>                      ɕjaŋ<sup>1</sup>ʔjɛ<sup>1</sup>                      tɕ<sup>h</sup>ja<sup>7</sup>-və<sup>8</sup>-le<sup>2</sup>                      go.  
 inside                      cigarette                      eat-NEG-come                      AFF.PRT  
 ‘(One) **may not** smoke indoors.’ (Elicitation)
- Xianju Wu 仙居吴语
- b. 间里{不好}吃香烟。  
 ka<sup>33</sup>li<sup>32</sup>                      fao<sup>42</sup>                      tɕ<sup>h</sup>o<sup>75</sup>                      ɕia<sup>55</sup>ie<sup>42</sup>.  
 room.inside                      NEG.GOOD                      eat                      cigarette  
 ‘(One) **may not** smoke indoors.’ (Elicitation)  
 (Pan Xueyuqing pers. comm.)

### 5.2.2. Weak Obligation

We have seen permission granted (either by a social norm or a speaker) with the modal *hv*<sup>3</sup> ‘good’ in previous examples. When expressing weak obligation with *hv*<sup>3</sup>, it is often the case that a speaker offers his or her advice or imposes his or her desire in a delicate way on the participant. Example (34) is a case of giving advice or a command. In this sentence, the topicalized object ‘clutch’ precedes the verb and follows the subject.

- (34) 依只离合器好抬起来哉，再闹落去部车都要拨依闹破哉。  
 noŋ<sup>4</sup>    tsə<sup>7</sup>    li<sup>2</sup>fiə<sup>8</sup>tɕ<sup>h</sup>i<sup>5</sup>    hv<sup>3</sup>    dɛ<sup>2</sup>-tɕ<sup>h</sup>i<sup>3</sup>le<sup>2</sup>    dze,    tsɛ<sup>5</sup>    nɔ<sup>6</sup>-lə<sup>8</sup>tɕ<sup>h</sup>i<sup>5</sup>    bu<sup>6</sup>    tɕ<sup>h</sup>jo<sup>1</sup>  
 2SG    CLF    clutch    GOOD    lift-rise.come    CRS    still    do-fall.down    CLF    car  
 tu<sup>1</sup>    ʔjɔ<sup>5</sup>    pə<sup>7</sup>    noŋ<sup>4</sup>    nɔ<sup>6</sup>-p<sup>h</sup>a<sup>5</sup>    dze.  
 all    PROSP    PASS    2SG    do-break    CRS  
 ‘You **should** let go of the clutch. Otherwise, you’ll wreck the car.’

By way of contrast, the following two examples are more optative. However, if example (35) is a combination of the speaker’s advice and wish, the case of (36) certainly only involves the speaker’s wish, for a meteorological phenomenon is not an intervenable event.

- (35) 依头发好剪剪哉。  
 noŋ<sup>4</sup>                      də<sup>2</sup>fa<sup>7</sup>                      hv<sup>3</sup>                      tɕjɛ<sup>3</sup>tɕjɛ<sup>3</sup>                      dze.  
 2SG                      hair                      GOOD                      cut.DLM                      CRS  
 ‘You **should** get a haircut.’
- (36) 雨落□介许多日数哉，好停停哉□。  
 fiy<sup>4</sup>    lo<sup>8</sup>    lə<sup>8</sup>    ka<sup>5</sup>    ɕy<sup>3</sup>to<sup>1</sup>    nɔ<sup>6</sup>su<sup>5</sup>    dze,    hv<sup>3</sup>    diŋ<sup>2</sup>diŋ<sup>2</sup>    dze    jə<sup>8</sup>.  
 rain    fall    PRF    so    many    day    CRS    GOOD    stop.DLM    CRS    PRT  
 ‘It has been raining for so many days. It **should** stop.’

### 5.3. Participant-Internal Possibility

Participant-internal possibilities expressed by *hv*<sup>3</sup> are basically restricted to dynamic abilities or possibilities. We reiterate that the domain of mental ability or learned skills excludes the use of *hv*<sup>3</sup>. Unlike the uses of *hv*<sup>3</sup> illustrated in Sections 5.1 and 5.2, the possibilities expressed by *hv*<sup>3</sup> in (37) and (38) are not enabled by external or circumstantial factors but are determined by participants’ inherent physical strength.

- (37) 我一只肩胛两百斤担**好**挑。  
 ɲo<sup>4</sup> ʔjə<sup>7</sup> tsə<sup>7</sup> tɕjɛ<sup>1</sup>ka<sup>7</sup> ljaŋ<sup>4</sup>pa<sup>7</sup> tɕiŋ<sup>1</sup> tæ<sup>5</sup> **hɒ<sup>3</sup>** tʰjɒ<sup>1</sup>.  
 1SG one CLF shoulder two.hundred a.half.kilo load GOOD carry  
 ‘I **can** carry a load of one hundred kilos on one shoulder.’
- (38) 依小辰光脚筋骨好□, 我跟□爷爷柴山里走一埭, 依**好**走两三埭□。  
 noŋ<sup>4</sup> ɕjɒ<sup>3</sup> zəŋ<sup>2</sup>kwɒŋ<sup>1</sup> tɕja<sup>7</sup>tɕiŋ<sup>1</sup>kwə<sup>7</sup> hɒ<sup>3</sup> lɛ, ɲo<sup>4</sup> kiŋ<sup>1</sup> na<sup>4</sup>  
 2SG small moment leg.muscles.bones GOOD PRT 1SG and 2SG.POSS.KIN  
 fja<sup>2</sup>fja<sup>2</sup> za<sup>2</sup> sə<sup>1</sup> li<sup>4</sup> tsə<sup>3</sup> ʔjə<sup>7</sup> da<sup>6</sup> noŋ<sup>4</sup>  
 grandfather firewood hill inside walk one VCLF 2SG  
**hɒ<sup>3</sup>** tsə<sup>3</sup> ljaŋ<sup>4</sup> sə<sup>1</sup> da<sup>6</sup> lɛ.  
 GOOD walk two three VCLF PRT  
 ‘You were of good leg strength when you were little. Within the time me and your grandfather managed to arrive at the hill (to fetch some firewood), you **could** make several trips.’

Example (39) shows the HAVE-construction used to express physical ability.

- (39) □卯做苦力, 介几十斤石头, 背牢**有**好二十里路**好**走□。  
 fæ<sup>2</sup>mɒ<sup>6</sup> tso<sup>5</sup> kʰu<sup>3</sup>ljə<sup>8</sup>, ka<sup>5</sup> tɕi<sup>3</sup> zə<sup>8</sup> tɕiŋ<sup>1</sup> za<sup>8</sup>da<sup>2</sup> pɛ<sup>5</sup>-lɒ<sup>2</sup>  
 before do labor so several ten a.half.kilo stone carry-tight  
**fjə<sup>4</sup>** hɒ<sup>3</sup> ljaŋ<sup>4</sup> zə<sup>8</sup> li<sup>4</sup> lu<sup>6</sup> **hɒ<sup>3</sup>** tsə<sup>3</sup> lɛ.  
 have GOOD several ten a.half.kilometer road GOOD walk PRT  
 ‘I **could** walk quite a dozen kilometers with a dozen kilos of stones carried on my back, when I was doing hard labor long before.’

Nevertheless, we do observe some marginal examples beyond the domain of physical ability. In (40), the participants ‘leaves’ are also the subject and are inanimate and cannot initiate an action, but ‘floating on the surface (of the water)’ is relevant to their inherent physical property of being light.

- (40) 树叶片轻飘飘{个□}, 水高顶**好**浮个□。  
 zɪ<sup>6</sup>fjə<sup>8</sup>bæ<sup>6</sup> tɕʰiŋ<sup>1</sup>-pʰjɒ<sup>1</sup>pʰjɒ<sup>1</sup> go<sup>8</sup>, si<sup>3</sup> kɒ<sup>1</sup>təŋ<sup>3</sup> **hɒ<sup>3</sup>** və<sup>2</sup> gə<sup>8</sup> la.  
 leaf light-viv AFF.PRT water surface GOOD float AFF PRT  
 ‘Leaves are very light and **can** float on the surface of the water.’ (Elicitation)

Note that Sheng (2021, p. 416) claims that *hɒ<sup>3</sup>* is only used in the modal HAVE-construction to express dynamic possibility in Keqiao Shaoxing.

#### 5.4. Epistemic Possibility

Finally, *hɒ<sup>3</sup>* can also be used to express presumption in Jidong Shaoxing. Presumption also falls under epistemic possibility since a speaker often makes a presumption based on previous knowledge. As shown in (41), a proposition is made with the knowledge that cherry blossoms usually bloom in late March and early April.

- (41) 辰山植物园个樱花**好**开□哉。  
 dzəŋ<sup>2</sup>sə<sup>1</sup> dzə<sup>8</sup>və<sup>8</sup>fjə<sup>2</sup> gə<sup>8</sup> ʔiŋ<sup>1</sup>hwo<sup>1</sup> **hɒ<sup>3</sup>** kʰɛ<sup>1</sup> doŋ dze.  
 Chenshan<sub>PLACENAME</sub> botanical.garden MOD cherry.blossom GOOD bloom PRF CRS  
 ‘The cherry blossoms in the Botanical Garden of Chenshan **may** have bloomed.’

The proposition below in (42) can be produced in several contexts, such as a context based on daily routine or one’s experiential estimation. Certainly, this sentence possesses a deontic interpretation in certain contexts, such as if the speaker were giving an instruction or order.

- (42) 车**好**来□哉。  
 tɕʰjo<sup>1</sup> **hɒ<sup>3</sup>** lɛ<sup>2</sup> doŋ dze.  
 car GOOD come PRF CRS  
 ‘The car/bus **should** be on the way.’

Example (43) is based on known information which is mentioned in the IF-clause. The NP *hja<sup>4</sup> (sa<sup>7</sup>) su<sup>5</sup>* ‘have (some) numbers’ in this sentence is metaphorically used to denote ‘be sure about something’ or ‘know something exactly’.

(43) 是话下卯再碰着介种事体, 下个对付依也好有些数哉{个□}。

ze <sup>4</sup> hwo <sup>6</sup>	ho <sup>4</sup> mo <sup>6</sup>	tsɛ <sup>5</sup>	baŋ <sup>6</sup> -dza <sup>8</sup>	ka <sup>5</sup>	tsoŋ <sup>3</sup>	zɿ <sup>6</sup> ti <sup>3</sup>	na <sup>8</sup> gə <sup>8</sup>	te <sup>5</sup> fu <sup>5</sup>
if	next.time	again	run.into-attach	so	kind	thing	how	deal
noŋ <sup>4</sup>	ɦa <sup>4</sup>	ɦv <sup>3</sup>	ɦja <sup>4</sup>	sa <sup>7</sup>	su <sup>5</sup>	dze	go <sup>8</sup> .	
2sg	also	GOOD	have	some	number	CRS	AFF.PRT	

‘Next time you encounter a similar situation, you **may** know how to handle it.’

In sum, the lexeme *ɦv<sup>3</sup>* in Jidong Shaoxing has lost its lexical meaning of ‘good’ when used as a modal auxiliary, as can be seen in all the examples illustrated in Section 5. It can denote circumstantial possibility, deontic modality (permission and weak obligation), dynamic physical ability, and epistemic possibility. Like many modal auxiliaries across languages of the world (see Kuteva et al. 2019 for the entries ‘C-POSSIBILITY’, ‘D-POSSIBILITY’, ‘D-NECESSITY’, Pi-POSSIBILITY, and ‘E-POSSIBILITY’), *ɦv<sup>3</sup>* can be interpreted as ‘can’, ‘may’, or ‘should’ in different contexts. Despite its polysemy as a modal auxiliary, we do observe cases where *ɦv<sup>3</sup>* cannot be used even within the modality types *ɦv<sup>3</sup>* denotes. The restrictions on *ɦv<sup>3</sup>* might be related to its source meaning ‘fit to’ and its circumstantial uses, which will be elaborated in the next section.

## 6. Reconstruction

We have shown in Section 4 the polysemy of the lexeme *ɦv<sup>3</sup>* in Jidong Shaoxing, but from which meaning is the modal *ɦv<sup>3</sup>* derived? We propose that the modal meaning of *ɦv<sup>3</sup>* is basically derived from the meaning ‘fit to’ but not from the primary meaning ‘good’. To be exact, the *ɦv<sup>3</sup>* of ‘fit to’ has extended to denote first circumstantial and then deontic possibility and necessity. It is from circumstantial possibility that *ɦv<sup>3</sup>* has extended to express participant-internal possibility. Finally, *ɦv<sup>3</sup>* has extended to denote epistemic possibility. For this, see Figure 1.

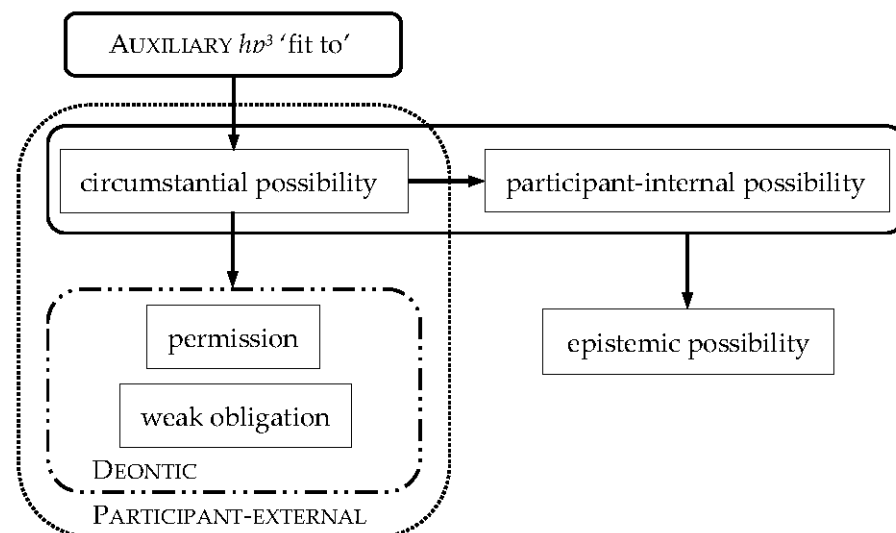


Figure 1. Extension pathways of *ɦv<sup>3</sup>* in Jidong Shaoxing.

We propose that the extension of *ɦv<sup>3</sup>* from a non-modal auxiliary to a modal auxiliary is motivated by contextual reanalysis and is a result of grammaticalization. Even though the ‘fit’ *ɦv<sup>3</sup>* and the modal *ɦv<sup>3</sup>* are both auxiliaries, the modal *ɦv<sup>3</sup>* is more desemanticized than the ‘fit’ *ɦv<sup>3</sup>*, with desemanticization being one of the four parameters for identifying grammaticalization (Heine and Narrog 2010, p. 405).

The following subsections will explain the semantic extension of *ɦv<sup>3</sup>* stage by stage.

### 6.1. 'Fit to' > Circumstantial Possibility > Deontic Modality

We identify the auxiliary use of *hv*<sup>3</sup> 'fit to' as the source meaning of its modal uses, since the auxiliary uses of *hv*<sup>3</sup> provide the primary syntactic context for its further extension, or grammaticalization, to modal auxiliaries, that is, [AUX VP]. Note that the meaning 'fit to' derives from the meaning 'good', as 'good' can imply the meaning 'suitable, fit to'. See example (13).

Ambiguity between the meaning 'fit to' and the modal meaning 'can, may, should' can be easily observed in Jidong Shaoxing. This kind of ambiguous context is labelled "bridging context"<sup>5</sup> by Heine (2002) and "critical context" by Diewald (2002). We adopt Heine's (2002) context-induced grammaticalization model to illustrate the process from 'fit to' to 'can, may, should' for *hv*<sup>3</sup> in Jidong Shaoxing. Ambiguous contexts play an important role in the process of semantic change and grammaticalization "giving rise to an inference in favor of a new meaning" (Heine 2002, p. 86). They are the environments where the mechanism of reanalysis takes effect. That is to say, a bridging context of 'fit to'-'can' provides a breeding environment where the modal meaning of *hv*<sup>3</sup> can be inferred. A complete process for the emergence of a new meaning is proposed to comprise four stages: (i) initial stage, (ii) bridging context, (iii) switch context, and (iv) conventionalization (Heine 2002).

In the initial stage, 'fit to' is the only reading of *hv*<sup>3</sup>. Although in most cases *hv*<sup>3</sup> 'fit to' can also be interpreted as 'can, may, should', especially in positive sentences, the exclusive meaning of 'fit to' is well preserved in the negated form of *hv*<sup>3</sup>, i.e., [NEG *hv*<sup>3</sup> VP]. As illustrated in (44), the VP *fəʔ da hv<sup>3</sup> ts<sup>h</sup>əʔ* can only be interpreted as 'not suitable to wear'. While a Mandarin native speaker or a speaker of other Wu dialects would probably not be convinced by our claim that the negated *hv*<sup>3</sup> cannot be interpreted as 'cannot, may not', as we have mentioned above, the negated *hv*<sup>3</sup> has not yet developed any modal meaning in Jidong Shaoxing. See (31)–(33) above. The meaning of 'cannot, may not, should not' can only be expressed by a negated potential construction.

#### Initial Stage

- (44) 是话下卯十二月里哉，依个双鞋介薄横不大好穿哉。  
 zE<sup>4</sup>fwo<sup>6</sup> fio<sup>4</sup>mɔ<sup>6</sup> zə<sup>8</sup>ni<sup>6</sup>fjo<sup>8</sup> li<sup>4</sup> dze, non<sup>4</sup> gə<sup>8</sup> ɕjɔŋ<sup>1</sup>  
 if later December inside CRS 2SG POSS CLF  
 fia<sup>2</sup> ka<sup>5</sup> bo<sup>8</sup> ʔwan<sup>3</sup> fəʔ da hv<sup>3</sup> ts<sup>h</sup>əʔ dze.  
 shoe so thin after.all NEG very GOOD wear CRS  
 'Your shoes are so thin and by December they won't be suitable to wear after all.'

The asymmetrical semantic extension of *hv*<sup>3</sup> 'can' and *fəʔ hv*<sup>3</sup> 'not suitable' in Jidong Shaoxing helps us to locate the lexical source of the modal *hv*<sup>3</sup>. The asymmetry can be explained by the principle of persistence (Hopper 1991), which refers to lexical traces being retained in a grammaticalized form in the process of grammaticalization.

In a bridging context, *hv*<sup>3</sup> is ambiguous and can be interpreted either as 'fit to' or as 'can'. It is in such contexts that the lexeme *hv*<sup>3</sup> 'fit to' is reanalyzed as 'can'. This reanalysis can be seen in example (45), where the clause 'he's not here' provides a suitable condition for the speaker to say something, and for *hv*<sup>3</sup> to be reanalyzed as 'can'.

#### Bridging Context

- (45) 渠人(无有)口，我有两句话好话哉。  
 fi<sup>4</sup> nin<sup>2</sup> ʔnjə<sup>3</sup> mə<sup>8</sup>, ɲo<sup>4</sup> hja<sup>4</sup> lian<sup>4</sup> tɕy<sup>5</sup>  
 3SG person NEG.have PRT 1SG have several CLF  
 ɕjoʔfwo<sup>6</sup> hv<sup>3</sup> fiwo<sup>6</sup> dze<sup>6</sup>.  
 speech GOOD say CRS  
 'Since he's not here, I have something that is suitable to say.'  
 'Since he's not here, I have something that can be uttered.'

In a switch context, the new modal meaning of *hv*<sup>3</sup> is the only interpretation. However, as pointed out by Heine (2002, p. 85), in this stage the target meaning still needs to be supported by a context. In (46), in the context that ʔjp<sup>5</sup> tso<sup>5</sup> gə<sup>8</sup> tu<sup>1</sup> tso<sup>5</sup>-hv<sup>3</sup> dze<sup>6</sup> '(I) finish all that should be done', the *hv*<sup>3</sup> in the following clause *lin<sup>6</sup>ɲa<sup>6</sup> zɿ<sup>6</sup>t<sup>h</sup>i<sup>3</sup> ʔnjə<sup>3</sup> so<sup>5</sup> hv<sup>3</sup> tso<sup>5</sup> go<sup>8</sup>*

can only be interpreted as a modal verb and the clause denotes ‘there’s nothing else that (I) can do’. Without this context, the clause *liŋ<sup>6</sup>ŋa<sup>6</sup> zɿ<sup>6</sup>t<sup>h</sup>i<sup>3</sup> ʔŋjə<sup>3</sup> so<sup>5</sup> hv<sup>3</sup> tso<sup>5</sup> go<sup>8</sup>* can also be interpreted as ‘there’s nothing else that fits (me) to do’. Undoubtedly, it is the specific context that helps to rule out the source meaning ‘fit to’.

#### Switch Context

- (46) 要做个都做好哉, 另外事体{无有}啥好做{个□}。  
 ʔp<sup>5</sup> tso<sup>5</sup> gə<sup>8</sup> tu<sup>1</sup> tso<sup>5</sup>-hv<sup>3</sup> dze<sup>6</sup>, liŋ<sup>6</sup>ŋa<sup>6</sup> zɿ<sup>6</sup>t<sup>h</sup>i<sup>3</sup>  
 need do NMLZ all do-GOOD CRS other thing  
 ʔŋjə<sup>3</sup> so<sup>5</sup> hv<sup>3</sup> tso<sup>5</sup> go<sup>8</sup>.  
 NEG.have what GOOD do NMLZ.PRT  
 ‘(I) finish all that should be done, there’s nothing else that (I) **can** do.’

At the stage of conventionalization, the modal meaning of *hv<sup>3</sup>* becomes independent of the source meaning ‘fit to’ which means that its modal meaning does not need to be supported by a specific context. In (47), the ‘can’ meaning of *hv<sup>3</sup>* is the only interpretation.

#### Conventionalization

- (47) □头卯好走另外路个□。  
 ŋa<sup>4</sup> də<sup>4</sup>mɔ<sup>6</sup> hv<sup>3</sup> tsə<sup>3</sup> liŋ<sup>6</sup>ŋa<sup>6</sup> da<sup>6</sup> lu<sup>6</sup> gə<sup>8</sup> jə.  
 1PL just.now GOOD walk other CLF road AFF PRT  
 ‘We **could** take the other road just now.’

We must admit that, as a modal verb, *hv<sup>3</sup>* has attained a certain degree of conventionalization, as demonstrated in (47). However, there are still constraints and restrictions closely related to the source uses of *hv<sup>3</sup>* which can be explained by the principles of persistence and layering (Hopper 1991). Ambiguity between ‘fit to’ and ‘can’ emerges when *hv<sup>3</sup>* denotes circumstantial possibility. In addition to contextual information, the syntactic units and semantic components of a sentence are also important in interpreting the meaning of *hv<sup>3</sup>*. Compare examples (48) and (49) of circumstantial possibility below. Each component of the sentence adds to its interpretation. In (48), the verb *tɿ<sup>3</sup>tɕa<sup>5</sup>* ‘pay a debt in kind’ implies that the items used to pay a debt are of a certain value, thereby implying that items of a certain value ‘fit to’ and ‘can’ be used to pay a debt. In contrast, (49) is a simple statement that lettuce, a common vegetable, can be served after a simple preparation. The meaning ‘fit to’ is not compatible with this particular sentence.

- (48) 值铜钿个东西好抵债个□。  
 dzə<sup>8</sup> doŋ<sup>2</sup>djɛ<sup>2</sup> gə<sup>8</sup> toŋ<sup>1</sup>ci<sup>1</sup> hv<sup>3</sup> ti<sup>3</sup>tɕa<sup>5</sup> gə<sup>8</sup> jə<sup>8</sup>.  
 worth money REL thing GOOD repay AFF PRT  
 ‘Anything of value is **suitable** for repaying the debt.  
 ‘Anything of value **can** (be used to) repay my debt.’
- (49) 生菜水里余一记就好吃哉。  
 saŋ<sup>1</sup>ts<sup>h</sup>ɛ<sup>5</sup> sɿ<sup>3</sup> li<sup>4</sup> ts<sup>h</sup>ə<sup>1</sup> ʔjə<sup>7</sup> tci<sup>5</sup> zjə<sup>6</sup> hv<sup>3</sup> tɕ<sup>h</sup>jə<sup>7</sup> dze.  
 lettuce water inside blanch one VCLF then GOOD eat CRS  
 ‘Just blanch in boiling water, and the lettuce **can** be eaten then.’

Unlike in cases of circumstantial possibility, when denoting deontic permission, weak obligation, participant-internal possibility, and epistemic possibility, *hv<sup>3</sup>* can hardly be interpreted as ‘fit to’. One more example of permission (deontic possibility) is given below. Interpreting *hv<sup>3</sup>* as ‘fit to’ in (50) is impossible. See (55) and (58) for examples of participant-internal possibility and epistemic possibility, respectively.

- (50) 小人□个好不懂礼貌□?  
 ɕjɔ<sup>3</sup>ŋiŋ<sup>2</sup> na<sup>8</sup>gə<sup>8</sup> hv<sup>3</sup> fə<sup>7</sup> toŋ<sup>3</sup> li<sup>4</sup>mɔ<sup>6</sup> ŋiŋ?  
 child how GOOD NEG know politeness PRT  
 ‘How **could** it be that children do not know about being polite?’

The ambiguity between ‘fit to’ and circumstantial ‘can’ is the major reason we have proposed in Figure 1 that, within the participant-external modality expressed by *hv<sup>3</sup>*, it is from circumstantial possibility that *hv<sup>3</sup>* extends to express deontic modality. Our hypoth-



esis conforms to general principles of grammaticalization. The fact that *hv*<sup>3</sup> exhibits a high frequency of ambiguity when denoting circumstantial possibility suggests the *hv*<sup>3</sup> of circumstantial possibility is less desemanticized and thus less grammaticalized. Cross-linguistically, it is also attested that circumstantial possibility can extend to express deontic possibility, such as ‘get to’ in English (Kuteva et al. 2019, p. 191) and Chinese *de*<sup>2</sup>/*dei*<sup>3</sup> 得 ‘obtain’ (Narrog 2012, pp. 215–20). See also *hao*<sup>3</sup> ‘good’ in the history of Chinese, as discussed in Section 6.5.

Like circumstantial possibility, permission is a kind of possibility determined by external conditions. The example below gives a case that can be understood either as circumstantial possibility or as permission. On the one hand, kids are usually thought to have fewer obligations and more leisure time than adults do. Under such circumstances, kids can have fun and hang out as they wish. On the other hand, (51) can also be read as giving permission, in that kids may play at will since they are free from many social obligations.

- (51) □大姑娘好随便搞[个□], □大人随便搞不来个□。  
 na<sup>4</sup> do<sup>6</sup>ku<sup>1</sup>njan<sup>2</sup> hv<sup>3</sup> dze<sup>2</sup>bje<sup>6</sup> kv<sup>3</sup> go<sup>8</sup>, ŋa<sup>4</sup> do<sup>6</sup>nin<sup>2</sup>  
 2PL girl GOOD at.will play AFF.PRT 1PL adult  
 dze<sup>2</sup>bje<sup>6</sup> kv<sup>3</sup>-və<sup>8</sup>-le<sup>2</sup> gə<sup>8</sup> jə.  
 at.will play-NEG-come AFF PRT  
 ‘You little girls **can/may** hang out and have fun as you wish, but as adults we can’t play at will.’ (Elicitation)

The stage of permission is probably an intermediate stage in *hv*<sup>3</sup>’s extension from circumstantial possibility to weak obligation (see van der Auwera and Plungian 1998, p. 99 for English *must* and German *müssen*) since we do not observe any ambiguous contexts of circumstantial possibility and weak obligation. Yet, ambiguity between permission and weak obligation is readily attested. Example (52) can be interpreted in two ways. If doing chores is the agreed daily routine prior to homework, *hv*<sup>3</sup> denotes permission. However, if doing chores is the choice of the participant and there is still homework to do, *hv*<sup>3</sup> is interpretable as weak obligation.

- (52) 是介[无有]事体哉, 依好做作业去哉。  
 ze<sup>4</sup>ka<sup>5</sup> ʔnɿə<sup>3</sup> zɿ<sup>6</sup>tʰi<sup>3</sup> dze, non<sup>4</sup> hv<sup>3</sup> tso<sup>5</sup>  
 apart.from.this NEG.have thing CRS 2SG GOOD do  
 tso<sup>7</sup>nɿə<sup>8</sup> tɕ<sup>h</sup>i<sup>5</sup> dze.  
 homework go CRS  
 ‘Apart from this, there are no chores. You **may/should** do your homework.’  
 (Elicitation)

In the example below, a father impatiently urges his child to do homework. The permission meaning of the clause *hv*<sup>3</sup> tso<sup>5</sup> tso<sup>7</sup>nɿə<sup>8</sup> is ruled out by the context and can only be understood as ‘(you) should do your homework’.

- (53) 有有搞撑□□? 好做作业哉□!  
 fɿə<sup>4</sup> fɿə<sup>4</sup> kv<sup>3</sup>-tsʰan<sup>5</sup> le v? hv<sup>3</sup> tso<sup>5</sup> tso<sup>7</sup>nɿə<sup>8</sup> dze jə<sup>8</sup>!  
 have have play-enough PRT PRT GOOD do homework CRS PRS  
 ‘Are you done with (the games)? (You) should do your homework.’

## 6.2. Circumstantial Possibility > Participant-Internal Possibility

Under the framework of context-induced grammaticalization, we propose that it is from circumstantial possibility that participant-internal possibility is derived. As claimed by Narrog (2012, p. 10), “circumstantial possibility with animate agents usually presupposes ability”. As in (54), the action of crossing the ditch is enabled by two conditions. One is the width of the ditch, and the other is the physical ability of the participant. The former is the enabling circumstantial condition, while the latter is a determining inherent ability.

- (54) □道沟{只有}一些末儿劳什，一记过之**好**跨过去个□。

haŋ <sup>5</sup>	da <sup>6</sup>	kjə <sup>1</sup>	təjə <sup>5</sup>	ʔjə <sup>7</sup> sə <sup>7</sup> ma <sup>8</sup> -ŋ	lɔ <sup>2</sup> zə <sup>8</sup> ,	ʔjə <sup>7</sup>
DIST	CLF	ditch	only.have	a.little-DIM	thing	one
tɕi <sup>5</sup> -ku <sup>5</sup> tsɿ <sup>1</sup>	hɔ <sup>3</sup>	k <sup>h</sup> o <sup>1</sup> -ku <sup>5</sup> tɕ <sup>h</sup> i <sup>5</sup>	gə <sup>8</sup>	la.		
VCLF-DIM	GOOD	stride-pass.over	AFF	PRT		

‘That ditch is such a little thing. (I) **can** cross over by taking just one jump.’

Example (55) is a HAVE-construction used to express possibility. The possibility of earning money is enabled by the condition that the participant, *my father*, does woodworking. In fact, the HAVE-construction *tsoŋ<sup>3</sup> hja<sup>4</sup> ljaŋ<sup>4</sup> k<sup>h</sup>we<sup>5</sup> hɔ<sup>3</sup> ts<sup>h</sup>əŋ<sup>5</sup>* can denote circumstantial possibility even if the context is not considered. Namely, *there’s always some money that one can earn*. Given that it is the same referent who does woodworking and earns money, the meaning of circumstantial possibility can be ruled out. Example (56) offers a case where participant-internal possibility is the only interpretation.

- (55) □老爹做做木匠，总有两块钱**好**趁。

ŋa <sup>4</sup>	lɔ <sup>4</sup> tja <sup>1</sup>	tso <sup>5</sup> tso <sup>5</sup>	mə <sup>8</sup> hjaŋ <sup>6</sup> ,	tsoŋ <sup>3</sup>	hja <sup>4</sup>	ljaŋ <sup>4</sup>
1SG.POSS.KIN	dad	do.DLM	carpenter	somehow	have	several
k <sup>h</sup> we <sup>5</sup>	hɔ <sup>3</sup>	ts <sup>h</sup> əŋ <sup>5</sup> .				
CLF	GOOD	earn				

‘My father does some woodworking on and off and (he) **can** somehow make some money (out of it).’

- (56) 我眼睛是**不好**，介我**好**听个□。

ŋo <sup>4</sup>	ŋjæ <sup>4</sup> tɕiŋ <sup>1</sup>	zɛ <sup>4</sup>	fə <sup>7</sup>	hɔ <sup>3</sup> ,	ka <sup>7</sup>	ŋo <sup>4</sup>	hɔ <sup>3</sup>	t <sup>h</sup> iŋ <sup>5</sup>	gə <sup>8</sup>	ja.
1SG	eye	indeed	NEG	GOOD	but	1SG	GOOD	hear	AFF	PRT

‘My eyes aren’t good, but (even so) I **can** hear.’

When denoting participant-internal possibility, there exist restrictions for *hɔ<sup>3</sup>* that may be related to both circumstantial possibility and its lexical meaning.

In Jidong Shaoxing, potential constructions are commonly used to express participant-internal possibility (see also Sheng 2021, p. 415). In this domain, the distribution of potential constructions and *hɔ<sup>3</sup>* partially overlap. *hɔ<sup>3</sup>* can be replaced by a potential construction in most cases, except for modal HAVE-constructions, which exclusively use *hɔ<sup>3</sup>*. For example, the second clause of (56), reproduced below, can also be realized by a potential construction.

- (57) 介我听得见个□。

ka <sup>7</sup>	ŋo <sup>4</sup>	t <sup>h</sup> iŋ <sup>5</sup> -tə <sup>7</sup> -ŋjɛ <sup>6</sup>	gə <sup>8</sup>	ja.
but	1SG	hear-POT-see	AFF	PRT

‘but (even so) I can hear.’

When denoting participant-internal possibility, potential constructions are more generalized and neutral, while *hɔ<sup>3</sup>* is most often observed in one of two specific contexts. The first often involves an enabling condition, external or internal, as in (54). In the second, *hɔ<sup>3</sup>* expresses a possible option. This is the case in (56), a sentence produced in the context of a concert. Here, the ability to hear provides an option for enjoying a concert, even though one’s eyesight is not good. These two types of contexts contain traces of *hɔ<sup>3</sup>*’s use denoting circumstantial possibility, i.e., possibility enabled by external circumstances. The example below shows a case where *hɔ<sup>3</sup>* cannot be used to express inherent ability. To answer the question ‘Can you hear (me)?’, only the potential construction can be used, as in (58<sub>Ai</sub>). *hɔ<sup>3</sup>* can neither be used to form the question ‘Can you hear (me)?’ nor be used to answer the question, as in (58<sub>Aii</sub>).

- (58) Q- 依耳朵好不好□? 听不听得见□?  
 non<sup>4</sup> nɪ<sup>4</sup>to hɒ<sup>3</sup> və<sup>8</sup> hɒ<sup>3</sup> lɛ? tʰiŋ<sup>5</sup> və<sup>8</sup> tʰiŋ<sup>5</sup>-tə<sup>7</sup>-ŋjɛ<sup>6</sup> lɛ?  
 2SG ear GOOD NEG GOOD PRT hear NEG hear-POT-see PRT  
 ‘Did you get your hearing back? Can you hear (me)?’
- A<sub>i</sub>- 听得见{个□}。  
 tʰiŋ<sup>5</sup>-tə<sup>7</sup>-ŋjɛ<sup>6</sup> go<sup>8</sup>.  
 hear-POT-see AFF.PRT  
 ‘(Yes, I) can.’
- A<sub>ii</sub>- \*好听{个□}。  
 \*hɒ<sup>3</sup> tʰiŋ<sup>5</sup> go<sup>8</sup>.  
 GOOD hear AFF.PRT  
 Attempted: ‘Yes, I can.’ (Elicitation)

In addition, we observe that *hɒ<sup>3</sup>* is not compatible with the [V-tə<sup>7</sup>-COMP] potential construction. A pair of contrastive sentences is given in (59) to better illustrate this restriction on the use of *hɒ<sup>3</sup>*. The context of (59a) entirely suits *hɒ<sup>3</sup>* in that the possibility of seeing clearly is allowed or enabled by wearing glasses. However, since the possibility of seeing clearly is expressed by the potential construction *kʰə<sup>5</sup>-tə<sup>7</sup>-ŋjɛ<sup>6</sup>* ‘can see clearly’, using *hɒ<sup>3</sup>* here is ungrammatical. To produce a grammatical sentence with *hɒ<sup>3</sup>* in such a context, the potential construction cannot be used, as in (59b).

- (59) a. 渠近视, 要戴眼镜会 (\*好) 看得见。  
 fi<sup>4</sup> dʒiŋ<sup>4</sup>zɪ<sup>6</sup>, ʔp<sup>5</sup> ta<sup>5</sup> ŋjæ<sup>4</sup>tɕiŋ<sup>5</sup> fiwɛ<sup>6</sup> (\*hɒ<sup>3</sup>) kʰə<sup>5</sup>-tə<sup>7</sup>-ŋjɛ<sup>6</sup>.  
 3SG short-sighted need wear glasses only.then GOOD look-POT-see  
 ‘He’s short-sighted. (He) must wear glasses and only then he **can** see clearly.’  
 (Elicitation)
- b. 渠近视个□, 要戴眼镜□, 好看个□。  
 fi<sup>4</sup> dʒiŋ<sup>4</sup>zɪ<sup>6</sup> gə<sup>8</sup> jæ, ʔp<sup>5</sup> ta<sup>5</sup> ŋjæ<sup>4</sup>tɕiŋ<sup>5</sup> mə<sup>8</sup>,  
 3SG short-sighted AFF PRT need wear glasses PRT  
 hɒ<sup>3</sup> kʰə<sup>5</sup> gə<sup>8</sup> jə<sup>8</sup>.  
 GOOD look AFF PRT  
 ‘He’s short-sighted and he **can** see only if he wears glasses.’

This restriction might be related to the source meaning of *hɒ<sup>3</sup>*, ‘fit to’. As the meaning ‘fit to’ implies possibility, a possible explanation is that *hɒ<sup>3</sup>* does not co-occur with a potential construction to avoid semantic redundancy. An analogy would be an awkward and redundant English construction, ‘fit to be able to’. This trace persists when *hɒ<sup>3</sup>* is used as a modal auxiliary.<sup>6</sup>

The development of circumstantial possibility into participant-internal possibility was neglected in the early literature on modality, with the reverse pathway, participant-internal possibility > circumstantial possibility, generally being accepted by scholars (Bybee et al. 1994, chp. 6; Traugott and Dasher 2001, chp. 3; van der Auwera and Plungian 1998). With the addition of linguistic evidence from Southeast Asian languages, the proposed diachronic development from participant-internal possibility to circumstantial possibility was then revised (van der Auwera et al. 2009, sct. 5). Narrog (2012, pp. 205–8) further confirms the pathway from circumstantial possibility to participant-internal possibility with the development of the Thai verb *dāy* ‘emerge’ and the Japanese *idek-* ‘appear’. A view of bidirectional development between participant-internal and circumstantial possibility has now become mainstream (Kuteva et al. 2019, p. 344).

### 6.3. Circumstantial and Participant-Internal Possibility > Epistemic Possibility

We propose that in Jidong Shaoxing, the epistemic use of *hɒ<sup>3</sup>* is the extension of both circumstantial and participant-internal possibility, contexts for both of which can be observed separately. Example (60) is understood as a case of epistemic possibility when the speaker makes a guess before fetching the clothes laid out in the sun. *hɒ<sup>3</sup>* in this sentence can be interpreted as circumstantial ‘can’ if being in the sun long enough is considered as an enabling condition for drying the clothes.

## Circumstantial–Epistemic

(60) 晒起□两件衣裳好燥□哉。

sa<sup>5</sup>-tɕ<sup>h</sup>i<sup>3</sup>                      doŋ    ljaŋ<sup>4</sup>              dzjɛ<sup>6</sup>    ʔi<sup>1</sup>zjoŋ<sup>2</sup>    **hɒ<sup>3</sup>**    sɒ<sup>5</sup>    doŋ    dze.  
 dry.in.the.sun-INC              DUR    several    CLF    clothes    GOOD    dry    PRF    CRS  
 ‘The clothes in the sun **may** have dried.’

Example (61) is a case of participant-internal–epistemic polysemy. Example (62) gives an ambiguous case of circumstantial, participant-internal, as well as epistemic interpretations.

## Participant-internal–Epistemic

(61) 渠一百斤都挑得来□，八十斤咸般也好挑个□。

fi<sup>4</sup>              ʔjə<sup>7</sup>pa<sup>7</sup>              tɕiŋ<sup>1</sup>              tu<sup>1</sup>              t<sup>h</sup>jɒ<sup>1</sup>-tə<sup>7</sup>-le<sup>2</sup>              le,    pa<sup>7</sup>zə<sup>8</sup>    tɕiŋ<sup>1</sup>  
 3SG              one.hundred    a.half.kilo              all              carry-POT-come    PRT    eighty    a.half.kilo  
 fiæ<sup>2</sup>pæ<sup>1</sup>    fiæ<sup>4</sup>              **hɒ<sup>3</sup>**              t<sup>h</sup>jɒ<sup>1</sup>              gə<sup>8</sup>              jə<sup>8</sup>.  
 certainly    also              GOOD              carry    AFF              PRT  
 ‘(Since) he can lift 50 kilos, he **can/may** certainly lift 40 kilos.’

## Circumstantial–Participant-internal–Epistemic

(62) 毕业哉个说话，渠好做个老师{个□}。

pjə<sup>7</sup>njə<sup>8</sup>              dze    gə<sup>8</sup>ɕjo<sup>7</sup>fiwo<sup>6</sup>,    fi<sup>4</sup>              **hɒ<sup>3</sup>**              tso<sup>5</sup>              gə<sup>8</sup>    lɒ<sup>4</sup>sɿ<sup>1</sup>              go<sup>8</sup>.  
 graduation    CRS    if              3SG              GOOD              do              CLF    teacher              AFF.PRT  
 ‘He **can/may** be a teacher after graduation.’

Cross-linguistically, deontic–epistemic polysemy is well attested and studied. English *must* is a well-known example (Traugott and Dasher 2001, pp. 120–21). Even though *hɒ<sup>3</sup>* can be used to express both deontic and epistemic meanings, we do not posit an evolutionary relation between the two meanings in Jidong Shaoxing, as polygrammaticalization (Craig 1991) may also be possible. The main reason for this conclusion is that a bridging context of deontic–epistemic polysemy is rarely observed among conservative speakers. The three conservative speakers in this study considered the sentence in (63) to suggest permission or weak obligation, while only the innovative speaker involved in this study claimed that the sentence can express both deontic and epistemic meanings.

(63) 五点钟哉，渠好去哉。

ŋ<sup>4</sup>              tɕjɛ<sup>3</sup>tɕjoŋ<sup>1</sup>              dze,              fi<sup>4</sup>              **hɒ<sup>3</sup>**              tɕ<sup>h</sup>i<sup>5</sup>              dze.  
 five              o'clock              CRS              3SG              GOOD              go              CRS  
 ‘It’s five o’clock (and time to get off). He **may/should** leave.’  
 ‘It’s five o’clock (and time to get off). #He **may probably be gone**.’

For this study, we also tested quite a few deontic expressions formed by *hɒ<sup>3</sup>* in epistemic contexts. The tests turned out to be failures with the three conservative speakers. One of the examples is given below. The clause *hɒ<sup>3</sup> tɕjə<sup>7</sup>hwəŋ<sup>1</sup> dze jə<sup>8</sup>* ‘(he) should get married’ expressed by *hɒ<sup>3</sup>* in (64ii) is a speaker’s advice. Using it to answer the question ‘Is he married?’ in (65Q) to express one’s presumption was ungrammatical for our conservative speakers but caused no problems for the innovative speaker, as shown in (65A<sub>i</sub>). Instead, the conservative speakers used *ʔiŋ<sup>1</sup>ke<sup>1</sup>* ‘should’ to form a presumption as an answer to the question, as in (65A<sub>ii</sub>).

- (64) 渠年纪也不小□哉，好结婚哉□。  
 (i) fi<sup>4</sup> nje<sup>2</sup>tci<sup>5</sup> fia<sup>4</sup> fə<sup>7</sup> ɕjɔ<sup>3</sup> doŋ dze.  
 3SG age also NEG small PRF CRS  
 (ii) hɔ<sup>3</sup> tɕjə<sup>7</sup>hwəŋ<sup>1</sup> dze jə<sup>8</sup>.  
 GOOD marry CRS PRT  
 ‘He’s not young. (He) **should** get married.’  
 (65) Q- 渠婚有有结□□?  
 fi<sup>4</sup> hwəŋ<sup>1</sup> hje<sup>4</sup> hje<sup>4</sup> tɕjə<sup>7</sup> le fia?  
 3SG marriage have have marry PRT PRT  
 ‘Is he married?’  
 Ai- #渠好结婚□哉{个□}。  
 #fi<sup>4</sup> hɔ<sup>3</sup> tɕjə<sup>7</sup>hwəŋ<sup>1</sup> doŋ dze go<sup>8</sup>.  
 3SG GOOD marry PRF CRS AFF.PRT  
 ‘He may probably be married.’ (Elicitation)  
 Aii- 渠应该结婚□哉{个□}。  
 fi<sup>4</sup> ʔiŋ<sup>1</sup>ke<sup>1</sup> tɕjə<sup>7</sup>hwəŋ<sup>1</sup> doŋ dze go<sup>8</sup>.  
 3SG should marry PRF CRS AFF.PRT  
 ‘He may probably be married.’

Epistemic possibility is probably the latest layer of the semantic and functional extension of *hɔ*<sup>3</sup>. There are two main pieces of evidence in support of this hypothesis.

First, when denoting epistemic possibility, the use of *hɔ*<sup>3</sup> is still dependent not only on its circumstantial possibility use, but in many cases, on the source meaning ‘fit to’. This means that there needs to be a certain enabling condition for a grammatical proposition of epistemic possibility realized with *hɔ*<sup>3</sup>, whose surface meaning corresponds to ‘may’ but whose underlying meaning is ‘it is the right or proper moment for’. Example (66) is one such grammatical example where *hɔ*<sup>3</sup> is used to express a presumption based on the speaker’s judgement and knowledge. Here, the sentence was produced during the airtime of a frequently watched television program. Similarly, example (60) can also be read ‘it’s the right time for the clothes to have dried’.

- (66) 介光折电视**好**开始□哉。  
 ka<sup>5</sup>kwɔŋ<sup>1</sup> tsə<sup>7</sup> djɛ<sup>6</sup>zɿ<sup>6</sup> hɔ<sup>3</sup> k<sup>h</sup>ɛ<sup>1</sup>sɿ<sup>3</sup> doŋ dze.  
 now CLF TV GOOD begin PRF CRS  
 ‘The TV show **may** have been on.’

In comparison, although (67) is similarly an expression of probability based on one’s judgement, the use of *hɔ*<sup>3</sup> would be ungrammatical. As mentioned above, *hɔ*<sup>3</sup>’s epistemic use is still restricted by its source uses. Looking awful is neither an enabling condition for falling ill, nor reflective of the moment for falling ill. Rather, it is a sign of being ill.

- (67) 渠人介难看，\***好**生毛病□哉□。  
 fi<sup>4</sup> niŋ<sup>2</sup> ka<sup>5</sup> næ<sup>2</sup>k<sup>h</sup>ə<sup>5</sup>, \*hɔ<sup>3</sup> saŋ<sup>1</sup> mɔ<sup>2</sup>biŋ<sup>6</sup> doŋ dze d.  
 3SG person so out.of.sorts GOOD have sickness PRF CRS PRT  
 ‘He looks awful and **may** be sick.’ (Elicitation)

Second, different speakers show different degrees of tolerance for using *hɔ*<sup>3</sup> to express epistemic possibility. The cases of (63) and (65) have already provided a glimpse into this situation. Examples (68) and (69a) were only accepted by our innovative consultant. Sometimes it is difficult to determine whether or not the epistemic meaning of *hɔ*<sup>3</sup> can be accepted. We reproduce example (42) in (69b) to highlight cases of arbitrariness. The only difference between (69a) and (69b) is the subject. Our conservative consultants could only accept (69b), and when replacing the subject ‘car’ with the third person pronoun the sentence turns out to be ungrammatical.

- (68) #渠今年好有五岁□哉。  
 #hi<sup>4</sup> tci<sup>4</sup>nje<sup>2</sup> ho<sup>3</sup> hja<sup>4</sup> ŋ<sup>4</sup> se<sup>5</sup> doŋ dze.  
 3sg this.year good have five year PRF CRS  
 ‘He **may** have been five years old this year.’ (Elicitation)
- (69) a. #渠好来□哉。  
 #hi<sup>4</sup> ho<sup>3</sup> le<sup>2</sup> doŋ dze.  
 3sg GOOD come PRF CRS  
 ‘He is **probably** coming.’ (Elicitation)
- b. 车好来□哉。  
 tɕ<sup>h</sup>jo<sup>1</sup> ho<sup>3</sup> le<sup>2</sup> doŋ dze.  
 car GOOD come PRF CRS  
 ‘The car/bus is **probably** coming.’

Restrictions on using the epistemic *ho*<sup>3</sup> reflect the fact that *ho*<sup>3</sup> is in the process of functional extension or grammaticalization. As can be observed from the examples above, the generalization of the epistemic *ho*<sup>3</sup> varies among different speakers. Still, all of this information suggests that the epistemic use of *ho*<sup>3</sup> is its latest layer of extension.

#### 6.4. Accelerating Factors

We have identified the auxiliary *ho*<sup>3</sup> ‘fit to’ as the source of its modal meanings including ‘can’, ‘may’, and ‘should’. Other factors may also accelerate or generalize the extension of *ho*<sup>3</sup>.

First, *ho*<sup>3</sup> itself can be used independently to ask for agreement, which is probably an extension from the meaning ‘good’, as in (70). Since asking for agreement presupposes permission, this use of *ho*<sup>3</sup> can definitely promote extension to permission.

- (70) 介我前拨依换个，好？  
 ka<sup>7</sup> ŋo<sup>4</sup> zjɛ<sup>2</sup> pə<sup>7</sup> noŋ<sup>4</sup> fɪwə<sup>6</sup> gə<sup>8</sup> ho<sup>3</sup>?  
 so 1sg first BEN 2sg change CLF GOOD  
 ‘I’ll change it for another one for you, **OK?**’

Second, though rare, we do observe some contexts of ‘easy’-‘can’ polysemy, which means that ‘be easy to’ is also a possible source for ‘can’. Example (71) is a case where *ho*<sup>3</sup> can either be interpreted as ‘be easy to’ or as the ‘can’ of circumstantial possibility, that is, either the thin and watery texture of corn porridge makes it easy to swallow, or one could drink the porridge (like drinking water). In addition, example (40) showed a case of ‘fit’-‘easy’-‘can’ polysemy, which can be interpreted as ‘(leaves) easily float on the surface of the water’.

- (71) □辰光六谷糊煞煞薄{个□}, □□好呷个□。  
 haŋ<sup>5</sup> zəŋ<sup>2</sup>kwəŋ<sup>1</sup> lo<sup>8</sup>kwo<sup>7</sup> fu<sup>2</sup> sa<sup>7</sup>sa<sup>7</sup>bo<sup>8</sup> go, do<sup>6</sup>do<sup>6</sup> ho<sup>3</sup> ha<sup>7</sup>  
 DIST moment corn porridge thin AFF.PRT ONO GOOD drink  
 gə<sup>8</sup> la.  
 AFF PRT  
 ‘The corn porridge (we used to eat before) was very thin.  
 a. [*ho*<sup>43</sup> *ha*<sup>7</sup>]: It was **easy to** drink (like drinking water).’ Elicitation  
 b. [*ho*<sup>44</sup> *ha*<sup>7</sup>]: (One) **could** drink (instead of chewing it, like drinking water).’

The reason the meaning ‘be easy to’ is not identified as the source for the modal *ho*<sup>3</sup> is that contexts suggesting ‘easy’-‘can’ polysemy are less frequent than those suggesting ‘fit’-‘can’ polysemy. Moreover, the sandhi patterns of *ho*<sup>3</sup> are different when denoting these two different meanings. As given in the translations of (71), *ho*<sup>43</sup> *ha*<sup>7</sup> denotes ‘easy to drink’, a sandhi pattern of forming a compound word, while *ho*<sup>44</sup> *ha*<sup>7</sup> signifies ‘can drink’.

Undoubtedly, these factors illustrated above contribute to the generalization of the modal uses of *ho*<sup>3</sup>. It is true that grammaticalization is unpredictable to a certain degree, but frequency of use still plays a role in expanding the possibilities a given form has for grammaticalization (Hopper and Traugott 2003, pp. 106, 126–30).



### 6.5. Hao<sup>3</sup> 好 ‘Good’ in the History of Chinese

We have reconstructed the functional extension of *hv*<sup>3</sup> in Jidong Shaoxing in Sections 6.1–6.3 by adopting the model of context-induced grammaticalization proposed by Heine (2002). Although our reconstruction of *hv*<sup>3</sup> cannot be directly supported due to a lack of diachronic records of Jidong Shaoxing,<sup>7</sup> it conforms to the evolution of *hao*<sup>3</sup> 好 ‘good’ (the etymon of *hv*<sup>3</sup>) in the history of Chinese. Based on Li’s work (2017), and diachronic analyses proposed by J. Li (2005) and Jiang and Cui (2017), the evolution of *hao*<sup>3</sup> in the history of Chinese is reorganized and adapted in Table 2.

**Table 2.** Evolution of *hao* in the history of Chinese.

Periodization *	C-POSS/‘Fit to’	D-NEC	Pi-POSS	‘Easy to’
Early Medieval (3rd–6th century)				
Late Medieval (6th century–1250)				
Pre-Modern (1250–1400)				
Modern (15th–18th century)				
Contemporary (19th cent.–present)	<i>zhi</i> <sup>3</sup> <i>hao</i> <sup>3</sup> ‘can only’			

\* The periodization of Chinese we follow in this paper is that proposed by Peyraube (1988).

According to J. Li (2005), M. Li (2017, p. 69), and Jiang and Cui (2017), modal uses of *hao*<sup>3</sup> can be first observed in Early Medieval Chinese (3rd century–6th century).<sup>8</sup> During this time, it was used to express circumstantial possibility and could be interpreted as ‘fit to’ or ‘can’, as shown in (72). Compare this example with the Jidong Shaoxing example (26), reproduced here in (73).

- (72) 羔有死者，皮好作裘褥，肉好做干腊，及作肉酱，味又甚美。  
 gao<sup>1</sup> you<sup>3</sup> si<sup>3</sup> zhe<sup>3</sup>, pi<sup>2</sup> hao<sup>3</sup> zuo<sup>4</sup> qiu<sup>2</sup>ru<sup>4</sup> rou<sup>4</sup> hao<sup>3</sup>  
 lamb have die NMLZ skin GOOD do fur.mattress meat GOOD  
 zuo<sup>4</sup> gan<sup>1</sup>la<sup>4</sup>, ji<sup>2</sup> zuo<sup>4</sup> rou<sup>4</sup>jiang<sup>4</sup>, wei<sup>4</sup> you<sup>4</sup> shen<sup>4</sup> mei<sup>3</sup>.  
 do cured.meat and do meat.sauce flavor also very pretty  
 ‘(If) there’s a dead lamb, the fur [can be]/[fits to be] made into a mattress and the meat [can be]/[fits to be] made into cured meat and meat sauce which is extremely delicious.’

Qi Min Yao Shu · Yang Yang 齐民要术·养羊 (544AD) [Essential techniques for the welfare of the people · Raising sheep]

(Cited from M. Li (2017, p. 69) and glossed and translated by S. Lü)

- (73) Jidong Shaoxing  
 甲鱼背好做药个口。  
 ka<sup>7</sup>ŋ<sup>2</sup> pe<sup>5</sup> ho<sup>3</sup> tso<sup>5</sup> fja<sup>8</sup> gə<sup>8</sup> jæ.  
 soft.shell.turtle back GOOD do medicine AFF PRT  
 ‘Turtle shells can be made into (Chinese traditional) medicine.’

The ‘fit’-‘can’ polysemy of *hao*<sup>3</sup> persisted until its circumstantial possibility use began to decline in Modern Chinese, specifically during the Qing Dynasty. In contemporary Standard Mandarin, only the fossilized *zhi*<sup>3</sup>*hao*<sup>3</sup> 只好 ‘can only’ is used to denote circumstantial possibility. As shown in (74), the deletion of the adverb *zhi*<sup>3</sup> ‘only’ is ungrammatical in Standard Mandarin.

- (74) Standard Mandarin  
 他腿断了，\*(只)好在家休息。  
 ta<sup>1</sup> tui<sup>3</sup> duan<sup>4</sup> le, \*(zhi<sup>3</sup>) hao<sup>3</sup> zai<sup>4</sup> jia<sup>1</sup> xiu<sup>1</sup>xi<sup>4</sup>.  
 3SG leg break CRS only GOOD at home rest  
 ‘His leg is broken and he can only take a rest at home.’

As indicated in Table 2, towards the end period of Late Medieval Chinese, which corresponds to the Song Dynasty (960AD–1279), a significant new meaning of *hao*<sup>3</sup> emerged—the deontic meaning ‘should’. However, this use only lasted to Pre-Modern Chinese. See (75).

- (75) 似这般汉，正好募头募面唾。  
 si<sup>4</sup> zhe<sup>4</sup>ban<sup>1</sup> han<sup>4</sup>, zheng<sup>4</sup> hao<sup>3</sup> mo<sup>4</sup>tou<sup>2</sup>mo<sup>4</sup>mian<sup>4</sup> tuo<sup>4</sup>.  
 resemble so man just GOOD in.the.face spit  
 ‘A person like this, (one) **should** spit on him in the face.’  
*Bi Yan Lu · 78 Ze 碧岩录·78则* (1125) [Blue Cliff Record · Verse 78]  
 (Cited from M. Li (2017, p. 132) and glossed and translated by S. Lü)

A bit later than the deontic use of *hao*<sup>3</sup>, the interpretation of participant-internal possibility appeared in Pre-Modern Chinese during the Yuan and Ming Dynasties (1271–1644), as shown below. Note that M. Li (2017, p. 153) does not single out the meaning of participant-internal possibility for *hao*<sup>3</sup>.

- (76) 您兄弟量窄，只好陪哥哥一小钟。  
 nin<sup>2</sup> xiong<sup>1</sup>di<sup>4</sup> liang<sup>4</sup> zhai<sup>3</sup>,  
 2SG.HON sibling capacity narrow  
 zhi<sup>3</sup> hao<sup>3</sup> pei<sup>2</sup> ge<sup>1</sup>ge<sup>1</sup> yi<sup>4</sup> xiao<sup>3</sup> zhong<sup>4</sup>.  
 only GOOD accompany brother one small cup  
 ‘I’m not good at drinking (alcohol) and I **can** only drink a small cup to accompany you.’  
*Yuan Qu Xuan · Zhusha Dan 元曲选·朱砂担* (1616) [Selected Yuan Theatre Plays · A Picul of Cinnabar]  
 (Cited from M. Li (2017, p. 153) and glossed and translated by S. Lü)

Like the deontic use, the participant-internal possibility use of *hao*<sup>3</sup> did not last long and was not further generalized.

As for the meaning ‘be easy to’, the ‘easy’-‘can’ polysemy can also be observed for *hao*<sup>3</sup>, as in (77).

- (77) 嫂嫂，你如今真个不好过日子，不如跟着我一同回去住罢。  
 sao<sup>3</sup>sao ni<sup>3</sup> ru<sup>2</sup>jin<sup>1</sup> zhen<sup>1</sup>ge<sup>4</sup> bu<sup>4</sup> hao<sup>3</sup> guo<sup>4</sup> ri<sup>4</sup>zi  
 sister-in-law 2SG now indeed NEG GOOD live life  
 bu<sup>4</sup>ru<sup>2</sup> gen<sup>1</sup>-zhe wo<sup>3</sup> yi<sup>4</sup>tong<sup>2</sup> hui<sup>2</sup>-qu<sup>4</sup> zhu<sup>4</sup> ba.  
 inferior follow-DUR 1SG together return-go live PRT  
 ‘Sister, you [**aren’t easy to**]/[**can’t**] make a living now. It would be better to come to live with me.’  
*Yuan Qu Xuan · Ren Fengzi 元曲选·任风子* (1616) [Selected Yuan Theatre Plays · Ren Fengzi]  
 (Cited from M. Li (2017, p. 153) and glossed and translated by S. Lü)

Nevertheless, as can be seen in Table 2, *hao*<sup>3</sup>’s meaning ‘be easy to’, considered as an evaluative meaning by M. Li (2017, p. 104), emerged later than the meaning ‘fit to/can’, sometime between the Tang and the Five Dynasties (618–960AD) (see also J. Li 2005; Jiang and Cui 2017). This suggests that ‘be easy to’ is not the direct source for the modal uses of *hao*<sup>3</sup>. The meaning ‘be easy to’ for *hao*<sup>3</sup> maintains an active status in Standard Mandarin.

The evolution of *hao*<sup>3</sup> in the history of Chinese parallels the extension of *hv*<sup>3</sup> in Jidong Shaoxing and supports our reconstruction of *hv*<sup>3</sup>. The fact that *hao*<sup>3</sup> ‘good’ is used to denote weak obligation and participant-internal possibility in the history of Chinese sheds some light on the evolution of *hv*<sup>3</sup> ‘good’ in Jidong Shaoxing. Both of these uses appeared much later than the circumstantial possibility use, suggesting that the chain ‘circumstantial possibility > participant-internal possibility’ for *hv*<sup>3</sup> in Jidong Shaoxing is plausible. Furthermore, the emergence and generalization of *hao*<sup>3</sup>’s meaning ‘be easy to’ can also be mapped onto Jidong Shaoxing *hv*<sup>3</sup>. That ‘be easy to’ emerged later than the meaning of circumstantial possibility suggests the implausibility of identifying ‘be easy to’ as the source meaning for circumstantial ‘can’.

## 7. Conclusions

This paper has provided a case study on the modal uses of the lexeme *hv*<sup>3</sup> ‘good’ in Jidong Shaoxing. The lexeme *hv*<sup>3</sup> is a polysemous and multi-functional word. *hv*<sup>3</sup> can serve as an adjective/adjectival verb ‘good, fitting, ready, done, ok’. Its modal uses include circumstantial ‘can’, participant-internal ‘can’, permission ‘may’, weak obligation ‘should’, and epistemic ‘can’. *hv*<sup>3</sup> shows asymmetrical semantic extension in Jidong Shaoxing. While the positive form of *hv*<sup>3</sup> possesses modal functions, the negated form *fə*<sup>7</sup> *hv*<sup>3</sup> only denotes ‘not good’ or ‘not suitable’.

We have proposed that it is from the meaning ‘fit to’ but not directly from the lexical meaning ‘good’ that the modal meanings of *hv*<sup>3</sup> are derived. This pathway is different from the ‘good’ > deontic permission route found in some other languages (Kuteva et al. 2019, pp. 219–20). Adopting the context-induced grammaticalization model, we have reconstructed the process of extension of *hv*<sup>3</sup> in Jidong Shaoxing, proposing that the *hv*<sup>3</sup> of ‘fit to’ has followed a multidirectional or polygrammaticalization pattern. This pattern contains an intermediate stage of circumstantial possibility in the development of both its deontic and participant-internal uses:

Chain 1: ‘fit to’ > circumstantial ‘can’ > deontic ‘may, should’.

Chain 2: ‘fit to’ > circumstantial ‘can’ > participant-internal ‘can’.

Within deontic modality, the *hv*<sup>3</sup> of permission is reconstructed as the source for the *hv*<sup>3</sup> of weak obligation, i.e., circumstantial ‘can’ > permission ‘may’ > weak obligation ‘should’.

Although the chain of circumstantial possibility > participant-internal possibility is cross-linguistically less common than the reverse, our proposition is based on linguistic facts in Jidong Shaoxing and conforms to the evolution of the etymon *hao*<sup>3</sup> ‘good’ of *hv*<sup>3</sup> in the history of Chinese. A similar pathway can be found in Chinese: *ke*<sup>3</sup> 可 ‘suitable’ > root possibility > ability (Meisterernst 2008a, 2008b; see also Kuteva et al. 2019, p. 415). Our findings contribute some new evidence for two proposed bidirectional developments in the modal domain: circumstantial ↔ participant-internal and deontic permission ↔ deontic necessity (Narrog 2012, pp. 185–221).

The epistemic use of *hv*<sup>3</sup> is proposed as the latest stage of extension in the current Jidong Shaoxing. It is from both circumstantial and participant-internal ‘can’ that the epistemic ‘can’ is developed:

Chain 3: circumstantial-participant-internal ‘can’ > epistemic ‘can, may’.

The epistemic use of *hv*<sup>3</sup> is often restricted by the source meaning of circumstantial ‘can’ or ‘fit to’. Additionally, the degree of generalization of epistemic *hv*<sup>3</sup> varies between different speakers.

The use of the lexeme *hao* ‘good’ as a modal verb can be considered a regional phenomenon. According to a preliminary cross-linguistic survey, this phenomenon is found across Shanghai, Jiangsu, and Zhejiang Provinces, an area usually known as the Yangtze River Delta, which covers the entire Wu speaking area and some Jianghuai Mandarin 江淮官话 speaking areas. For Wu dialects, *hao* ‘good’ as a modal verb is reported in Chongming 崇明 (Zhang 1993, p. 103), Shanghainese (B. Huang 1996, p. 295), Suzhou 苏州 (Ye 1993, p. 60), Hangzhou 杭州 (Bao 1998, p. 110), Shaoxing, Yuyao 余姚 (Zhou 2019, pp. 23–46), Ningbo (Tang et al. 1997, p. 92), Xianju, Wenzhou 温州 (You and Yang 1998, p. 179), and Jinhua 金华 (Cao 1996, p. 141). For Jianghuai Mandarin, the phenomenon is attested in Nantong 南通 (Tao 2007, p. 154), Yangzhou 扬州 (J. Huang 1996, p. 165), and Nanjing 南京 (Liu 1995, p. 150). In addition, *hao* as a modal auxiliary is also attested in some discontinuous areas in Guangdong and Taiwan, that is, in Jieyang Southern Min and Hakka, as mentioned at the beginning of the paper. Certainly, the modal uses of *hao* vary in different languages and dialects. More work needs to be carried out to figure out how the modal functions of *hao* extend and to what extent its modal uses can be generalized in individual languages.

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## Abbreviations

\* ungrammatical, # accepted only by innovative speakers, ( ) omissible, { } erosion, □ unknown etymon, 1 first person, 2 second person, 3 third person, ADV adverbializer, AFF affirmative, ALL allative, BEN benefactive, C-POSS circumstantial possibility, CLF classifier, COP copula, COMP complement, CRS currently relevant state, D-NEC deontic necessity, DIM diminutive, DIST distal demonstrative, DLM delimitative, DUR durative, HON honorific, IMP imperative, INC inchoative, KIN kinship, LIT literal meaning, MOD modifier marker, NEG negator, ONO onomatopoeia, PASS passive agent marker, PI-POSS participant-internal possibility, PL plural, POT potential marker, PRF perfect, PROSP prospective, PRT particle, Q question, REL relativizer, s\_PROX speaker-based proximal demonstrative, SG singular, TOP topic marker, VCLF verbal classifier, VCOMP verb complementizer, VIV vivid form of adjective.

## Notes

- <sup>1</sup> A rare source for *can* modals observed in Jidong Shaoxing is the potential construction  $t\epsilon^h j\alpha^7-t\alpha^7-l\alpha^8$  吃得落 ‘can < eat-pot-fall’. This construction can function like an auxiliary denoting possibility in the form of  $[t\epsilon^h j\alpha^7-t\alpha^7-l\alpha^8$  VP]. We do not identify  $t\epsilon^h j\alpha^7-t\alpha^7-l\alpha^8$  as an auxiliary verb because it is subject to a different negation strategy from that of negating an auxiliary. Instead of negating the whole potential construction in the form of  $[NEG\ t\epsilon^h j\alpha^7-t\alpha^7-l\alpha^8$  VP], it is the complement  $l\alpha^8$  that is negated, i.e.,  $[t\epsilon^h j\alpha^7-v\alpha^8-l\alpha^8$  VP] 吃不落 VP ‘eat-NEG-fall’ to signify ‘cannot VP’. See also Sheng (2021, pp. 415–16).
- <sup>2</sup> The HAVE-construction might be considered to be a type of “modal possessive construction” (Narrog 2012, p. 269) derived from a possessive-existential construction. However, unlike the constructions which are claimed to contain no overt modal elements by Narrog (2012, p. 269), the overt modal verb  $hw^3$  must be used in the modal HAVE-construction in Jidong Shaoxing. Such a modal HAVE-construction is absent in Narrog’s findings. See also Note 3.
- <sup>3</sup> The construction with  $hja^4$  ‘have’ in (30A-ii) is probably a bridging context (or an ambiguous context) between the possessive construction and the modal construction with  $hja^4$  ‘have’. If the context of (30) is not taken into consideration, (30A-ii) can be interpreted either as ‘you have only one (candy) that you can eat’ or as ‘you can only eat one candy’. The covert subject ‘you’ of (30A-ii) can still be treated as the possessor of the candy, which is quite different from the case of (27). In (27), ‘three cups of rice’ is neither the possessor of ‘five bowls of (rice)’ nor the real subject of the sentence, but a topic whose semantic role is the material for ‘five bowls of (rice)’. From the perspective of semantic bleaching, example (27) is more generalized than (30A-ii). Since the development of possessive construction into a modal construction is not a focus of this paper, its grammaticalization pathway is not addressed.
- <sup>4</sup> Shanghainese belongs to the Shanghai subdivision 上海小片 of the Taihu division, while Xianju Wu belongs to the Taizhou division 台州片 (Wang and Cao 2012, p. 104).
- <sup>5</sup> This term can be traced back to Evans and Wilkins (2000).
- <sup>6</sup> One should note that this is not a general restriction of the lexeme ‘good’ in all the Wu dialects. For example, according to our analysis of one hour of video material, the modal use of  $hw^3$  ‘good’ in Shanghainese is more generalized and can co-occur with a potential construction in a sentence.
- <sup>7</sup> Historical documents compiled by missionaries concerning early Wu languages can be dated back to the mid-19th century, including Shanghainese, Ningbo, Wenzhou, Taizhou, Suzhou, and Jinhua (You 2021).

- <sup>8</sup> Jiang and Cui (2017) propose that the meaning ‘fit to, easy to’ is derived from the meaning ‘love, like’ of *hao*<sup>4</sup> rather than the meaning ‘good’. We do not address this proposition here because *hv*<sup>3</sup> in Jidong Shaoxing does not possess the meaning ‘love’.

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