

The Grammaticalization of *Jiushi* and *Jiushishuo* in Mandarin Chinese*

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This paper takes the corpus-based approach to conduct a case study concerning the interaction between discourse and grammar and offer support from Chinese to the hypothesis that grammaticalization is a result of daily, routinized use of language. In particular, two related Chinese expressions, *jiushi* and *jiushishuo* (and their reduced form, *jiushuo*) are examined for their respective uses in speech as compared with in writing and their collocation with prosodic and discourse features characteristic of conversation. We argue that grammaticalization for the expression, *jiushi*, is currently on-going, in which the copula sense of the expression is first reduced to a connective marking textual coherence. This semantic “reduction” is developed with the help of *jiushi*'s collocation with the verb of saying, *shuo*. Then, the connective sense becomes semantically even “emptier” when *jiushi* and *jiushishuo* serve as pause fillers in interactive speech. Again, their contiguity with intonation unit boundaries, continuing intonational breaks, and other discourse markers in speech may have led to this semantic “reduction”. The case study not only shows that repeated daily language use is where early stages of grammaticalization take place, but also supports the hypothesis that linguistic contiguity is one of the important sources leading to the inception of grammaticalization.

Keywords: grammaticalization, lexical semantics, collocation, contiguity

1. Introduction

The relationship between discourse and grammar has been extensively studied in recent years (Biq 2000). Many linguists have become convinced that one of the beneficial ways to understand linguistic structure is to consider it as an adaptive response to recurrent habits in the way people talk to each other (e.g. Bybee & Scheibman 1999; Chafe 1994; Croft 1995; Du Bois 1987; Givon 1979; Haiman 1994; Hopper 1988, 1998; Ochs et al. 1996). In this paper, we would use the corpus-based approach to conduct a case study concerning the interaction between discourse and

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grammar and offer support from Chinese to the hypothesis that grammaticalization is a result of daily, routinized use of language. In particular, we compare how two related Chinese expressions, *jiushi* and *jiushishuo* (and their reduced form, *jiushuo*) are used in both speech and writing and examine the collocation of the three expressions with prosodic and discourse/interactional features characteristic of conversation. We argue that grammaticalization for the expression, *jiushi*, is currently on-going, in which the copula sense of the expression is first reduced to a connective marking textual coherence. This semantic “reduction” is developed with the help of the collocation that *jiushi* has with the verb of saying, *shuo*. Then, the connective sense becomes semantically even “emptier” when *jiushi* and *jiushishuo* serve as pause fillers in interactive speech. Again, their contiguity with intonation unit boundaries, continuing intonational breaks, and other discourse markers in spontaneous speech may have led to their semantic “reduction”. The behavior of these expressions not only evidences that repeated daily language use is where early stages of grammaticalization take place, but also supports the hypothesis that linguistic contiguity is one of the important sources leading to the inception of grammaticalization (Bybee et al. 1994; Croft 1995). Along with other recent efforts made from the interactionist perspective (e.g. Biq 1995; Chang 1998; Chui 2000a; Fang 2000; Huang 1999, 2000; Li 1999; Su 1998; Wang et al. 2000; Zhang & Fang 1996), which all document the multiple grammatical/textual/interactional roles of grammatical words in conversation, this paper also aims to call attention to the methodological significance of spontaneous speech as the critical site for our understanding of the shaping of grammaticalization at its early stages.

In the following, Section 2 describes the database used for this study. Section 3 describes the three expressions as used in press reportage. Section 4 describes their uses in conversational speech and contrasts them with those in press reportage. Section 5 discusses the contiguous relationship between these expressions with prosodic features and with discourse markers in conversation. Section 6 is the conclusion.

2. Database

The primary database for this study consists of recordings of naturally occurring Mandarin conversation. (See Appendix for transcription notations.) A corpus of written Chinese in press reportage drawn from the People's Daily published in Mainland China is also consulted for the purpose of comparison. Daily conversation is worth investigating because it is the most common context in which language use is situated. On the other hand, (written) press reportage is a good contrast to daily conversation: the two genres occupy almost the two ends of a continuum of text types in terms of their gradation of “editedness” and “plannedness” (Biber 1988). For ease of reference, we shall call the conversational data CS (for conversational speech) and the People's Daily data PR (for press reportage) in the remainder of this paper.

3. The three expressions in press reportage

In this section, we discuss the senses of the three expressions as they are used (if at all) in PR. Since PR is generally considered the most “conservative” (written) text type, senses identified in PR are taken as “canonical”. These canonical senses will be our basis when we proceed to discuss how the three expressions are used in CS in Section 4.

3.1 *Jiushi*

The first expression, *jiushi*, consists of the adverb *jiu* and the copula *shi*. *Jiu* is a versatile adverb able to carry out a number of functions in different contexts. Most relevant to our purpose here, *jiu* is a backward-linking connective positioned before the predicate in the main clause indicating the temporal and/or causal relationship between the situation denoted in the antecedent clause and the situation denoted in the main clause. Consider the following (constructed) examples:

- (1) Ta da le dianhua **jiu** zou le.
3s call PF telephone JIU walk PRT

‘(After) s/he made the phone call (**then**) s/he left. → S/He left after s/he made the phone call.’

- (2) Ni bu da dianhua lai, wo **jiu** bu qu jie ni.
 you NEG call telephone come I JIU NEG go pick up you

‘(If) you don’t phone me (**then**) I don’t pick you up. --> I won’t pick you up unless you phone me.’

The expression *jiushi*, literally ‘... then be/is ...’, is mostly used as a copula with an emphasis on the preciseness of the equation. Consider the following example from PR:

- (3) Shanghai jinnian yao ban de shier jian shi shi, diyi jian **jiushi**
 youguan Shanghai this year want do DE twelve M concrete thing first M
 JIUSHI concern chengshi jiaotong sheshi de.
 city transportation facility DE

‘The first of the twelve important things to be accomplished this year in Shanghai **is (precisely)** about the city transportation facilities.’

However, through the same pragmatic inferences that polysemize the meanings of English scalar words such as *just* (Traugott 1986), the Chinese *jiushi* can also denote an equational with either an uptoner (i.e. ‘is as much as’) or with a downtoner (i.e. ‘is as little as -- is just/only’). Consider the following examples from PR:

- (4) Tamen chengbao de gongcheng danwu yitian sunshi **jiushi** sanqian yuan.
 they contract DE construction delay one day loss JIUSHI three thousand
 dollar

‘For the construction project they contracted, the business loss for any delay **is (as much as)** 3,000 dollars per day.’

- (5) Ta shuo, jiaoyu gaige guigenjiedi yiju hua, **jiushi** yao shizhong
 an 3s say education reform ultimately one M sentence JIUSHI want
 always follow
 jiaoyu jiaoxue guilu ban shi.
 Education teaching principle do business

‘He says that the bottom line for educational reform **is just/simply** to follow the principles of teaching and education.’

Jiushi is further used to denote specific meanings in some specific constructions, e.g. as the expression prefacing the second element in the choice construction, *bushi A, jiushi B* ‘if not A, (then) B -- either A or B’, or as the expression prefacing concession

in the construction, *jiushi ... ye...* ‘even (concession) ... still (consequence)...’ (Lu 1980: 285-86). Consider the following examples from PR:

- (6) Meidang haizi tan wan shi, **bushi** xunchi, **jiushi** dashang ji bazhang.
whenever kid greed play time BUSHI scold JIUSHI hit up several slap

‘Whenever the kids were being mischievous, they **either** got scolded **or** got slapped.’

- (7) Rujin yushang zheli you huo, ta shuo **jiushi** deng dao wanshang guan men
ye now encounter here have goods 3s say JIUSHI wait until evening close
door also
yao deng.
want wait

‘Now that this place has the goods (she wants), she says she'll wait (in line) **even if** it means she has to wait till the evening closing hour.’

3.2 *Jiushishuo*

Our second expression, *jiushishuo*, consists of the first expression *jiushi* and the verb of saying, *shuo*, ‘say’. It literally translates as ‘(that) is to say (that)’, with the verb of saying currently being grammaticalized into a complementizer (Wang et al. 2000:197-201). In written Chinese the expression is typically used as a textual connective, equivalent of the English ‘namely’ or ‘in other words’. Consider the following example from PR:

- (8) Bing bu shi mei yiben shu dou you zhishi, dou you yichu, ye
yet NEG be every one M book all have knowledge all have benefit also
jiushishuo bing bu shi mei yiben shu dou shi nide pengyou, nide
JIUSHISHUO yet NEG be every one M book all be your friend your
yizhongren.
Sweetheart

‘Not every book contains knowledge and is good for you. **That is to say**, not all books are friends or sweethearts of yours.’

3.3 *Jiushuo*

The third expression, *jiushuo*, consists of the adverb *jiu* and the verb of saying, *shuo*. It rarely appears in written Chinese. We could not find any *jiushuo* token in PR. The expression is believed to be the reduced form of *jiushishuo* in casual speech.

3.4 Interim summary

From 3.1 to 3.3 we have examined the canonical senses of the three expressions as seen in PR. The first expression, *jiushi*, is found to be a copula expressing preciseness. It can be an uptoner or a downtoner depending on the pragmatic inferences created in the context. It can also be used in combination with other grammatical items to form constructions expressing choice or concession. The second expression, *jiushishuo*, is a textual connective in PR. The last expression, *jiushuo*, does not appear in PR and is identified as a reduced form of *jiushishuo* in casual speech.

4. The three expressions in conversational speech

Since conversation and press reportage respectively represent the unplanned and planned types of discourse, the three expressions with their various senses are expected to differ in their distribution across the two text types. Indeed, the three expressions are used in quite different ways in CS as compared with in PR. First of all, they all appear in CS with a relative high frequency. Most strikingly, however, is the fact that many of their occurrences serve as pause fillers in conversational contexts with hardly any substantial meaning attributable to them.

4.1 *Jiushi*

The canonical senses of *jiushi* are well alive in CS. Consider the following CS examples, in each of which *jiushi* is used to convey a canonical meaning variant identified in 3.1.

(9) (copula + ‘precisely’)

B: ...(1.2) Suoyi ta,
so it

B: .. chenggong a,
succeed PRT

B: .. **jiushi** zhege yuanyin.
JIUSHI this M reason

A: .. Um.
Um

B: ... (1.2) So its,
B: .. success,

B: .. **is (precisely)** because of this reason.

A: .. Um.

(10) (copula + ‘just/only’)

B: .. Wanshang ne,
evening PRT

B: .. wo gei tamen,
I for they

B: .. bao jiaozi,
wrap dumpling

B: ... gei tamen zuo jige cai.
for they make several M dish

B: ... (0.8) bu shi shenme da cai.
NEG be some big dish

B: .. **jiushi** zuo dian xiao liang cai.
JIUSHI make bit small cold dish

B: .. In the evening,

B: .. I'll make,

B: .. dumplings for them,

B: ... and make a few dishes for them.

B: ... (0.8) Nothing special.

B: .. **just** a few cold dishes.

(11) (either A, or B)

A: .. Ni you caoping ni bu weichi bu xing,
you have lawn you NEG maintain NEG OK

A: .. ni yao weichi,
you want maintain

A: .. **bushi** ziji,
NEG be self

A: ... (0.7) **jiushi** yao qing ren lai gao.
JIUSHI want hire person come do

A: .. If you have a lawn, it simply won't do not to maintain it,

A: .. If you want to maintain it,

A: .. **either** you do it yourself,

A: ... (0.7) **or** you hire somebody to do it.

(12) (‘even’) (In America, money is all important.)

B: .. Jiu **jiushi** jiao pengyou ma= ye dei kan kan ni zhege xiaozi
tamade

JIU JIUSHI make friend PRT also have to see see you this M guy fuck
you qianr mei qianr.

have money NEG money

B: .. **Even** when making friends they (the Americans) would (first) consider if you've got money or not.

However, many of the *jiushi* tokens in CS do not convey the canonical senses. Some are used just like *jiushishuo*, i.e. to serve as an expression connecting two units of talk in which the second unit presents a further clarification or elaboration on something that was already been commented on in the first unit. Consider the following CS example:

(13) ('That is', 'In other words', 'Namely')

B: .. Neige nuhaizi jia ne,
that M girl home PRT

B: .. shi Beijing de,
be Beijing POSS

B: .. pinminqu.
ghetto

B: ... (1.4) **Jiushi**,
JIUSHI

B: ... eh= shenghuo huanjing hen cha la.
eh life environment INT bad PRT

B: .. That girl's place,

B: .. was in Beijing's,

B: .. poor area.

B: ... (1.4) **Which means that**,

B: ... eh= the living environment was pretty bad.

There are yet some other *jiushi* tokens that are used in CS with hardly any substantial meaning attributable to them. Consider the following example, in which *jiushi* is used with "empty meaning":

(14) (floor holder)

B: .. Danshi,
but

B: Zhongguo ne,
China PRT

B: .. fan guolai ne **jiushi**,
reverse over PRT JIUSHI

B: .. hen zhongshi zhege wenrenhua.
INT emphasize this M literati painting

B: .. But,

B: .. China,

B: .. on the contrary **jiushi**,

B: .. regards literati paintings as important.

What is said after *jiushi* in this example is not an elaboration or clarification on something that is previously commented on. Rather, ‘regards literati paintings as important’ is an initial statement about the subject, ‘China’, in this stretch of talk. Also, we notice that if *jiushi* were omitted, the talk would be understood in the same way. In other words, *jiushi* in this example is semantically reduced from its canonical copula sense to a mere pause filler, or a "dummy" floor holder, in conversational interaction, which serves the communicative function of indicating the speaker's intention to continue with his/her turn, but contributes hardly any meaning to the proposition of what is said in that stretch of talk.

In highlighting the communicative/metalinguistic function that *jiushi* fulfills in these examples, we point out that the expression does not make much semantic contribution to the proposition of what is being said. However, this does not mean that the evolution of *jiushi* into pause filler is not constrained by its basic meaning expressing preciseness. On the contrary, studies of pause and filled pause in speech have argued that different pausing devices are associated with referents (of the following NPs) of different information status (Huang 1999:88). Fang (2000:463-464) further points out that *jiushi*, as a discourse marker, foregrounds semi-active and accessible information in the speaker/hearer world (Chafe 1994: ch. 6) exactly because this “specifying” function can be derived from its canonical meaning of ‘precisely’.

It is usually hard to determine what a polysemous word is intended to mean in a particular context, and very often more than one sense may be implied. Nevertheless, we did a rough meaning categorization of all of the *jiushi* tokens in CS by assigning one and only one most appropriate sense to each token as it is situated in the context. Table 1 shows the result of this categorization. There are altogether 114 valid *jiushi* tokens in CS after disregarding indeterminable cases caused by restart or interruption. More than one third (n = 42, 37%) of the tokens display one of the canonical (prepositional) uses as seen in PR. A total of 27 tokens (24%) are used as a (textual) connective to relate further elaboration or clarification to something that was just commented on. Finally, 45 tokens (39%) are identified as an (interactional) floor

holder for the speaker's turn, without much substantial meaning attributable to them.

Table 1. The various uses of *jiushi* in CS

<i>JIUSHI</i> USES in CS	NUMBER	%
"canonical" meanings (propositional)	42	37
followed by further elaboration (textual)	27	24
floor holder (interactional)	45	39
TOTAL	114	100

It is apparent, then, that while in CS the canonical (prepositional) senses of *jiushi* are quite prevalent, many *jiushi* tokens have displayed uses that require a semantically bleached interpretation of the expression. Some of these tokens are used just like *jiushishuo* as a textual connective to indicate further elaboration or clarification. Some are even more semantically reduced and become a floor-holding device in the turn-taking system of spontaneous verbal interaction.

4.2 *Jiushishuo*

The canonical sense of *jiushishuo*, as a textual connective relating two sets of clauses in PR with the second set expressing a further elaboration or clarification of what is said in the first set, is well alive in the *jiushishuo* tokens found in CS. Consider the following CS example, in which *jiushishuo* means ‘namely’, ‘that is to say’, or ‘in other words’:

- (15) (‘namely’, ‘that is to say’, ‘in other words’)
- B: .. Min yi shi wei tian.
 people take eat be heaven
- A: .. Uhm.
 uhm
- B: .. **jiushishuo** xian dei chi bao fan,
 JIUSHISHUO first must eat full meal
- B: .. bie de zai zuo.
 other POSS then do
- B: .. "People take food as the utmost important".
- A: Uhm.
- B: .. **It means that** you have to have enough to eat,
- B: .. before you do anything else.

However, many *jiushishuo* tokens have gone through a semantic bleaching process

similar to the one we have seen for *jiushi* above. In these cases, *jiushishuo* is used as a floor holder device, or a pause filler, without carrying any substantial meaning.

Consider the following example from CS:

- (16) (floor holder)
 B: .. Ta yuanlai shi,
 3s originally be
 B: .. women= xuexiao de laoshi.
 our school POSS teacher
 B: .. Yuanlai,
 originally
 B: .. [zui zao shi wode laoshi.]
 most early be my teacher
 A: .. [Ni-
 you
 A: .. nide xuexiao shi,
 your school be
 A: .. neibian de xuexiao?]
 which side POSS school
 B: .. Dalu.
 Mainland
 A: .. XX
 (indiscernable speech)
 B: .. Yunnan.
 Yunnan
 A: .. Oh Yunnan.
 oh Yunnan
 B: .. Yunnan Yishu Xueyuan.
 Yunnan art college
 A: .. Oh.
 oh
 B: .. **Jiushishuo** ta shi women xuexiao de laoshi.
 JIUSHISHUO 3s be our school POSS teacher
 B: .. Nage shihou women hai zuo xuesheng ma.
 that M time we still do student PRT
- B: .. He used to be,
 B: .. a teacher at our school.
 B: .. Originally,
 B: .. [(He) was my teacher long time ago.]
 A: .. [You-
 A: .. your school is,
 A: .. where was your school?]
 B: .. In the Mainland.

- A: .. XX
 B: .. Yunnan.
 A: .. Oh Yunnan.
 B: .. The Yunnan Art Institute.
 A: .. Oh.
 B: .. **Jiushishuo** He used to be a teacher at our school.
 B: .. Back then we're still students.

In the above segment, B's narrative about his former teacher was side-tracked by A's check on background information ('Where was your school?') After the digression was handled, B resumed his narration by prefacing it with *jiushishuo*. Notice the expression is not to connect an upcoming elaboration with the immediately preceding topic. Rather, the speaker simply re-iterates what he had already said before the digression, 'He used to be a teacher at our school'. Thus, in Chui's terms (2000b:182), *jiushishuo* is a discontinuity marker at (sub-)sub-topic boundaries here. The canonical use of the expression as a marker indicating that an elaboration is coming-up is not evoked here. The speaker uses the expression simply to claim for the floor, or to tell the interlocutor, 'I have got things to say'. Thus, this kind of *jiushishuo* is identified as a floor holder for interactional purposes.

Just as for *jiushi*, we also did a rough meaning categorization for all of the *jiushishuo* tokens found in CS, assigning one and only one most appropriate sense to each token. As Table 2 shows, among the 51 valid *jiushishuo* tokens found in CS, 22 tokens (43%) display the canonical, "elaboration-coming-up" use as seen in PR, and 29 tokens (57%) are identified as a floor holder without contributing much meaning to the proposition of what is said in the stretch of talk.

Table 2. The various uses of *jiushishuo* in CS

<i>JIUSHISHUO</i> USES in CS	NUMBER	%
followed by further elaboration (textual)	22	43
floor holder (interactional)	29	57
TOTAL	51	100

Thus, while its canonical use is still visible in CS, *jiushishuo* has, just like what has happened to *jiushi*, developed into a semantically bleached communicative device required for interactional discourse, i.e. as a floor holder in the turn-taking system of spontaneous conversation.

4.3 *Jiushuo*

We find 4 tokens of *jiushuo* in CS. Literally, *jiushuo* means '... then say ...'. But the 4 tokens are all used idiomatically either as *jiushishuo* to mean 'that is to say' or as a floor holder or pause filler without conveying much substantial meaning. Consider the following CS example:

(17) (floor holder)

A: .. Uhm.

uhm

B: ... (2.2) Name **jiushuo** zhege shi Zhongguo,
so JIUSHUO this M be China

B: .. yishu zhongjian yige feichang zhongyao de chuantong.
art middle one M INT important DE tradition

A: .. Uhm.

Uhm

A: .. Uhm.

B: ... (2.2) So **jiushuo** this/it is,

B: .. a very important tradition in Chinese art.

A: .. Uhm.

4.4 Interim summary

From 4.1 to 4.3 we have seen the various ways the three expressions are used in CS. *Jiushi* has displayed (1) not only its canonical sense as a copula at the intra-clausal level, but also (2) as a connective indicating further elaboration at the inter-clausal, inter-speech-unit level, and (3) as a floor holder for communicative purposes at the interactional level. In like fashion, *jiushishuo* has not only displayed its canonical use as a connective indicating the coming of further elaboration at the inter-clausal, inter-speech-unit level, but also as a floor holder for communicative purposes at the interactional level. Finally, *jiushuo* is also used idiomatically as a floor holder in interactive discourse with no bearing on the literal meaning of the two constituting morphemes. The reason that *jiushuo* can be used idiomatically as a floor holder in interactive discourse, just as *jiushishuo* (and *jiushi*), is because it is the reduced form of *jiushishuo* in rapid colloquial speech after repeated use (cf. Bybee & Scheibman 1999; Scheibman 2000).

In the following, we will examine the syntagmatic aspect of the three expressions in

CS, i.e. the various features that typically co-occur with the three expressions, and the way these features assist the three expressions in acquiring their non-canonical meanings in CS.

5. Linguistic contiguity of the three expressions in CS

That the three expressions are on their way to become grammaticalized as discourse markers without carrying their “original” meaning is to a large extent evidenced by the sorts of linguistic features that cluster around them. In the following, we consider the metonymic relationships (1) between these expressions and the neighboring prosodic features, and (2) between these expressions and some other Chinese discourse markers that are their frequent company.

5.1 *Jiushi*, *Jiushishuo*, and IU boundary

First, let us consider the relationship between the three expressions and the intonation unit in which they appear. An intonation unit (IU hereafter) is roughly "a stretch of speech uttered under a single coherent intonation contour" (Du Bois et al. 1993: 47). IUs are also typically (although not always) separated from one another by pauses. The intonation contour and the pause break are reflexive and indicative of the operation of the human mind, because, as a result of the way the human mind handles information flow, speakers typically deliver no more than one new idea in each IU (Chafe 1994, ch. 9). On the other hand, the more (filled or not filled) pauses there are in a speaker's speech, the more likely it is that the speaker is trying hard to come up with accurate or appropriate information at that particular point of speaking (Huang 1993).

Now, let us examine the position at which the expressions occur in the IU. We will disregard *jiushuo* because the sample size is too small (only 4 tokens found in CS). We focus on *jiushi* and *jiushishuo*. As Table 3 shows, among the 114 *jiushi* tokens, 17 (15%) constitute an IU by themselves, i.e. without other accompanying linguistic elements in the same IU, 31 (27%) occur at the beginning of an IU, and 28 (25%) appear at the end of an IU. Only 38 tokens (33%) occur in the middle of an IU. In other words, 76 tokens (67%) occur next to an IU boundary (i.e. on either side, or on

both).

Jiushishuo displays the same tendency even more distinctly. Among the 51 tokens, 15 (30%) constitute an IU by themselves, 17 (34%) occur at the beginning of an IU, and 13 (25%) occur at the end of an IU. Only 6 (11%) occur in the middle of an IU. Therefore, 45 tokens (89%) occur next to an IU boundary.

Table 3. *Jiushi* and *jiushishuo* position in relation to IU boundary

POSITION	<i>JIUSHI</i> (total: 114)		<i>JIUSHISHUO</i> (total: 51)	
entire IU	17	15%	15	30%
front of IU	31	27%	17	34%
end of IU	28	25%	13	25%
(next to IU boundary	76	67%	45	89%)
middle of IU	38	33%	6	11%

To summarize, both *jiushi* and *jiushishuo* are more likely than not to be uttered next to an IU boundary in CS. *Jiushishuo* is even more so than *jiushi*. Their routinized contiguous relationship with the IU boundary has provided momentum for the inception of the grammaticalization of their role as fillers of the pauses between the boundaries.

5.2 *Jiushi*, *Jiushishuo*, and speaker continuation

An IU boundary may indicate either a projection of turn completion or a projection of turn continuation. Cases in which the two expressions occur next to an IU boundary are further examined to identify the types of turn projection. As shown in Table 4, 42% of *jiushi* tokens (n = 48) and 63% of *jiushishuo* tokens (n = 32) are immediately preceded by an IU boundary, whereas 39% of *jiushi* tokens (n = 45) and 55% of *jiushishuo* tokens (n = 28) are immediately followed by an IU boundary. The latter case -- where *jiushi* or *jiushishuo* is followed by an IU boundary -- is straightforward in our database: the IU boundary always carries a continuing intonation, thus projecting the continuation of the turn by the current speaker. In other words, the speaker is not complete with his/her turn when *jiushi* or *jiushishuo* occurs immediately before an IU boundary.

Table 4. Sequential Relationship between IU boundaries and *Jiushi* or *jiushishuo*

POSITION TO IU BOUNDARY	<i>JIUSHI</i>		<i>JIUSHISHUO</i>	
preceded by IU boundary	17+31=48	42%	15+17=32	63%
followed by IU boundary	17+28=45	39%	15+13=28	55%

On the other hand, the former case -- where *jiushi* or *jiushishuo* is preceded by an IU boundary -- is more complicated. As shown in Table 5, the two expressions can be used at the beginning of a new turn after speaker change, i.e. uttered by a speaker other than the one who just spoke the last IU. However, this is by no means the dominant case (27% or 13 tokens for *jiushi*, and 22% or 7 tokens for *jiushishuo*). Rather, the two expressions are mainly used by the same speaker between his/her own IUs. Furthermore, more than half of the IU boundaries preceding *jiushi* or *jiushishuo* carry a continuing intonational break, i.e. 54% (n = 26) for *jiushi*, and 52% (n = 17) for *jiushishuo*. By contrast, only 19% (n = 9) of *jiushi* tokens are preceded by an IU (spoken by the same speaker) with a final intonational break; for *jiushishuo*, only 25% (n = 8). The last type refers to instances where, after s/he reaches the projected completion of the previous turn, the current speaker extends his/her turn to talk more.

Table 5. Types of speaker continuation found when IU boundary immediately precedes *jiushi* or *jiushishuo*

TYPES	<i>JIUSHI</i> (total: 48)		<i>JIUSHISHUO</i> (total: 32)	
Self-continuation	26	54%	17	52%
Self-extension	9	19%	8	25%
After speaker change	13	27%	7	22%

To summarize, we have found that in the prototypical case where the two expressions occur next to an IU boundary (as discussed in 5.1), they are not only typically used between units of talk by the same speaker, but they are predominantly next to (preceding, following, or both) a continuing intonational break, which indicates that the current speaker's turn is yet to be completed. This routinized contiguous relationship of the two expressions with the continuing intonational break has also provided momentum for the inception of the grammaticalization of their role as a floor holder in spontaneous, interactional speech.

- this M
- A: [Zhongguo ren bu shou fa.
China person NEG follow law
- B: .. /zhzhzhzh/ zhezhong shehui= de,
this M society POSS
- B: ... **um**,
um
- B: .. /ts-/,
(paralinguistic interjection)
- B: .. **zeme= zeme shuo ne jiushishuo**,
how how say NE JIUSHISHUO
- B: .. **bifang shuo= zhege=**,
for example say this M
- B: .. ta,
3s
- B: .. ni hen nan= yao Zhongguo ren,
you INT difficult want China person
- B: .. na chu qian lai ba ziji de,
take out money come BA self DE
- B: .. shenghuo huanjing gaode hen piaoliang.
life environment make into INT pretty
- B: ... (10.0) Moreover **jiushi=**,
B: .. /ts-/,
- B: ... **jiushi how can I put this**,
B: ... **like-**,
B: ... (1.5) The [kind --,
A: [Chinese defy laws.
B: .. /zhzhzhzh/ the kind of social --,
B: ... **um**,
B: .. /ts-/,
- B: .. **how how should I say jiushishuo**,
B: .. **like** the=,
B: .. it,
B: .. it is very difficult to get a Chinese,
B: .. to take money out of his pocket,
B: .. to beautify his life's surroundings.

5.4 Interim summary

In Sections 5.1 to 5.3 we have shown that the expressions frequently collocate with the IU boundary, the continuing intonational break, and with various other discourse markers. That the occurrence of the expressions is often immediately accompanied with intonational boundaries indicates that these expressions are associated with the

speaker's disfluencies. That the majority of these disfluency cases are marked with a continuing intonation, however, suggests that the speaker intends to keep on going with his turn and the expressions are employed as pause fillers to hold his/her turn. That the three expressions often co-occur with other Chinese expressions marking topic transitions or other varieties of discourse continuation further suggests that these expressions are on their way to become linguistic elements more and more significant at the textual/discourse/pragmatic level but less and less significant at the clausal/prepositional/semantic level (Sweetser 1990; Traugott 1982, 1989, 1995).

6. Conclusion

In this paper, we have examined the diverse ways *jiushi*, *jiushishuo*, and *jiushuo* are used in CS as these diverse uses are compared with the restricted but "canonical" uses they display in PR. Despite distributional and diversity differences between each other, all three expressions are used as a pause filler in conversation, i.e. a floor holder for the speaker who intends to continue with his/her turn. We have also shown that the development from the "original" copula meaning (of *jiushi*) to the semantically bleached floor holder function (of all three expressions) can be accounted for by the metonymic associations that these three expressions have with intonational boundaries, continuing intonation, and other discourse markers in casual conversation. Through this corpus-based study, we hope to have not only documented a case of grammaticalization that is currently on-going in Mandarin speech, but have also shown the impact of linguistic contiguity and clustering to the inception and evolution of grammaticalization.

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APPENDIX: TRANSCRIPTION CONVENTIONS FOR CONVERSATIONAL

DATA (adapted from Du Bois et al. 1993 with minor modifications)

speaker identity and intonation unit	:
word	{space}
truncated intonation unit	--
truncated word	-
beginning of speech overlap	[
ending of speech overlap]
final intonation	.
continuing intonation	,
appeal intonation	?
lengthening	=
long pause	... (N)
medium pause	...
short pause	..
indiscernible speech	XX
researcher's English paraphrase	()
phonetic sounds	//

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