Formation of Modern Chinese speech-quotative *nǐ shuō* 'you say' and feedback-seeking *nǐ shuō* 'you tell me'
Two grammaticalizational pathways

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In Modern Chinese, four construction types involving *nǐ shuō* may be distinguished. In this study, it is argued that the prosodically unseparated speech-quotative *nǐ shuō* (S1) develops from the prosodically separated speech-quotation *nǐ shuō* (S3) through a hypothesized complementation pathway which makes the *nǐ shuō* predicate the matrix clause of the following content clause. Prosodically unseparated feedback-seeking *nǐ shuō* (S2), in contrast, develops from a prosodically separated feedback-seeking *nǐ shuō* (S4) via a hypothesized conjoining pathway which involves the loss of a prosodic gap between the feedback-seeking *nǐ shuō* predicate and the clause that it occurs with. Contrary to the common assumption in the literature, S2 does not develop from S1. Meaning difference influences the selection of each of the two pathways, and in the source construction when an S3 or S4 is prosodically separated from the clause it occurs with, it is not the matrix clause of the latter. The account given in this study may also be used to explain the formation of English parenthetical predicate *you say*.

Keywords: *nǐ shuō*, quotative, feedback-seeking, complementation, conjoining

1. Introduction

Ever since the influential studies by Thompson & Mulac (1991) and Brinton (1996), the formation of parenthetical predicates has attracted more and more attention in the literature; e.g. Fischer (2007), Brinton (2008; 2017), and Dehé (2014). However, the literature still has not satisfactorily answered the question of whether or not a parenthetical predicate develops from a corresponding MATRIX CLAUSE. In this study, taking a cue from Dehé (2014: 1), we define a PARENTHET-

ICAL PREDICATE as a predicate that linearly occurs with another clause but is unrelated to the surrounding linguistic material whether in terms of syntactic structure, semantic meaning, and/or prosody.

Long (2017: 267–280), Long et al. (2018: 212–225), Long et al. (2019: 1–24), and Long et al. (2021) have distinguished a prosodically separated parenthetical predicate from a prosodically unseparated parenthetical predicate, where prosodically separated means that there is a prosodic gap between the parenthetical predicate and the clause it occurs with, indicated in writing by a comma, while prosodically unseparated means that there is no prosodic gap between the two. The authors have suggested a hypothesized CONJOINING PATHWAY leading from a prosodically separated parenthetical predicate to a prosodically unseparated parenthetical predicate, and argue that the pathway may account for the formation of Modern Chinese parenthetical predicates including *wǒ shuō* 'I say', *wǒ xiǎng* 'I think', *nǐ kàn* 'you see', and *huáiyí* 'doubt' predicates. Most importantly, the authors argue that a parenthetical predicate does not develop from a corresponding matrix clause structure.

In the current study, we adopt the hypothesized conjoining pathway and the commonly-accepted COMPLEMENTATION PATHWAY (cf. e.g. Givón 1980: 333–377) to account for the formation of Modern Chinese feedback-seeking *nǐ shuō* 'you tell me' and speech-quotative *nǐ shuō* 'you say' respectively. This study is divided into six sections: § 2 provides a review of the relevant literature; § 3 introduces speech-quotative *nǐ shuō* and feedback-seeking *nǐ shuō* in Modern Chinese; § 4 re-examines the two clausal structures from both a matrix clause and a parenthetical perspective, and argues that the former is a matrix clause structure of the following clause, while the latter is a parenthetical structure of the clause it occurs with; § 5 argues that the formation of speech-quotative *nǐ shuō* has followed a hypothesized complementation pathway (§ 5.1), while the formation of feedback-seeking *nǐ shuō* has followed a hypothesized conjoining pathway (§ 5.2). The difference in meaning between the two has influenced the selection of a hypothesized complementation pathway or conjoining pathway (§ 5.3). § 6 concludes and discusses the implication of the present study for the formation of English parenthetical predicate *you say*.

2.   Literature review

Fitzmaurice (2004: 441–445) assumes the hypothesized pathway in (1) to account for the formation of English parenthetical *you say* (e.g. *you say* in (2a)), and argues that it has developed from a reporting clause *you say* (e.g. *you say* in (2b)).

(1)   ₘₐₜᵣᵢₓ[*you say*] + (*that*) ₖₒₘₚₗₑₘₑₙₜ[Clause] → ₚₐᵣₑₙₜₕₑₜᵢₖₐₗ[*you say*] + ₘₐₜᵣᵢₓ[Clause]

(2)   a.   There's a Frank Sinatra song that ends, "Here's to the winners all of us can
              be." So tell that to the country's 650,000 unemployed **you say**?

                                                        (Taken from Brinton 2008: 98)

       b.   **You say** that on the morning of the forgery the prisoner was jumpy. Well,
              now, sir, what precisely do you mean by that word?

                                                        (Taken from Fitzmaurice 2004: 442)

According to the author, *you say* in an example like (2b) is a reporting matrix
clause that takes a complement clause (i.e. *on the morning of the forgery the pris-
oner was jumpy*), as indicated by the complementizer *that* joining the two. The
speaker usually uses a reporting matrix clause *you say* "to draw attention to a
proposition for his or her own communicative ends on the one hand, and for
the purpose of engaging the addressee on the other" (Fitzmaurice 2004: 442).
Speakers' common evocation of this latter function of engagement has triggered
a semantic-pragmatic shift whereby *you say* becomes a zero-*that* parenthetical
predicate of the clause that it takes. Since the evocation of this pathway argues
for a change from a matrix clause *you say* to a parenthetical *you say*, in the litera-
ture it is commonly called a hypothesized MATRIX CLAUSE PATHWAY; e.g. Brinton
(2008: 103).

Brinton (2008: 100–104) rejects the hypothesized matrix clause pathway for
the formation of a parenthetical predicate *you say* in English because from the
Middle English period when *you say* began to take a clause, "the frequency of
a complement clause (with or without an explicit *that*-complementizer) follow-
ing *you say* is low". Instead, the author argues for a hypothesized pathway leading
from an adverbial clause *as you say* (e.g. *as you say* in (3a)) to a parenthetical *you
say* (e.g. *you say* in (3b) and (2a)). In this study this is known as a hypothesized
ADVERBIAL CLAUSE PATHWAY.

(3)   a.   If I speake this rashlie and foolishlie, **as you say**, and your self learned as
              you boast, and I vnlearned, I shall be the more easily ouerthrowne

                                            (1593 Gifford, *A dialogue concerning witches and witchcrafts* B3R
                                                        [HC]; taken from Brinton 2008: 102)

       b.   Well, on Mistress Ford, **you say**.

                                            (1597 Shakespeare, *The merry wives of Windsor* II, ii, 47 [Evans];
                                                        taken from Brinton 2008: 102)

As an English adverbial clause like *as you say* usually appears in sentence-final
position (e.g. *as you say* in (3a)), the hypothesized pathway may account for the
formation of a sentence-final parenthetical *you say* (e.g. *you say* in (3b) and (2a)),
but may not expediently account for the formation of a sentence-initial paren-

thetical *you say* (cf. *you say* in (4a) and (4b)). For the latter, Brinton (2008: 110) argues that this may still have developed from a matrix clause *you say* (e.g. *you say* in (2b)). In other words, the author has adopted a mixture of the hypothesized matrix clause pathway and adverbial clause pathway to account for the formation of parenthetical *you say*.

(4) a. **You say**, *We preach another Gospel*: You do but *Say* it, and I thank God. *You can Do no more.*

> (1674 Penn, *A just rebuke to one & twenty learned and reverend divines* [LC]); taken from Brinton 2008: 103)

  b. Well we can't do that, how, and then you have to look at the legislation and **you say** what are the loop holes here?

> (*Pensioners' and Trades Union Association meeting*, recorded on 28 August 1991, in the British National Corpus)

A mixture of the two hypothesized pathways is by nature problematic. Closer observation may find that a sentence-final *as you say* predicate in Middle English is usually prosodically separated from the clause it occurs with (e.g. (3a)), while a sentence-final parenthetical predicate *you say* may be prosodically unseparated from the clause it occurs with (cf. e.g. *you say* in (2a)). In other words, the hypothesized adverbial clause pathway argued by Brinton (2008) entails a hypothesized change leading from a prosodically separated parenthetical predicate *as you say* to a prosodically unseparated parenthetical predicate *you say*. On the other hand, a matrix clause *you say* occupies a sentence-initial position and is prosodically unseparated from the clause that it takes (e.g. *you say* in (2b)), while a sentence-initial parenthetical predicate *you say* may be prosodically separated from the clause that it occurs with (e.g. *you say* in (4a)). Since Brinton (2008) adopts a hypothesized matrix clause pathway to account for the formation of a sentence-initial parenthetical predicate *you say*, she may need to argue for a hypothesized change leading from a prosodically unseparated matrix clause *you say* to a prosodically separated parenthetical predicate *you say*. If the above arguments are correct, Brinton (2008) is problematic because she seems to be arguing for two reverse hypothesized changes for the formation of sentence-initial parenthetical predicate *you say*, and sentence-final parenthetical predicate *you say*.

The other problem with the account given in Brinton (2008) is that if there was a derivational relationship between a parenthetical predicate *as you say* and a parenthetical predicate *you say*, the two constructions should be consistent in meaning, but Brinton cannot explain why there is a meaning discrepancy between the two constructions:

> *You say* highlights or recalls information expressed (or implicitly assumed) by the interlocutor in order to confirm understanding or to introduce disagreement with

or query the truth value of this information. In contrast, *as you say* generally asserts agreement with the interlocutor's ideas but may have an additional met-alinguistic function in accompanying a figure of speech. (Brinton 2008: 109–110)

When discussing the formation of Modern Chinese parenthetical *nǐ shuō* 'you say', a number of linguists have assumed a hypothesized pathway of (5), adopted from Guan (2011: 9), and exemplified as from (6a) to (6b),[1] taken from Hu (2011: 135); similar arguments are put forward by Chui (1994: 1), Dong (2003: 46–57), Yao (2008: 47), Cao (2010: 43–44), Guan (2011: 6), Hu (2011: 137), Li (2013: 12–18), Sheng (2013: 32–34), and Yu (2015: 17).

(5)　*nǐ* + *shuō* + Clause → *nǐ shuō* + Clause

(6)　a.　**你　說**　與　聯合國　　沒有　　往來，這　話　　不　對。
　　　　　***Nǐ　shuō** yǔ　Liánhéguó méiyǒu　wǎnglái, zhè huà　bù duì.*
　　　　　you say　with UN　　　not.have contact dem words neg right
　　　　　'**You said** that we did not have contact with the UN. That was wrong.'

　　　b.　**你　說**　來　　就　來　　吧，還　帶　　什麼　　東西？
　　　　　***Nǐ　shuō** lái　jiù　lái　ba, hái dài　shénme dōngxī?*
　　　　　you say　come thus come FP　also bring what　thing
　　　　　'**You tell me,** if you want to come, then just come. Do you really need to bring a gift?'[2]

Cao (2010: 43–44), for example, argues that there was an earlier predicate construction of *nǐ shuō* 'you say', with *nǐ* 'you' as subject and *shuō* 'say' functioning as a lexical verb taking a clause as its object. The object clause later became the foreground semantic nucleus of the sentence, with the effect that *nǐ shuō* became a background constituent, which underwent lexicalization and univerbation, and gave rise to parenthetical *nǐ shuō*.

　　Long (2017) did not discuss the formation of a comment clause *nǐ shuō* in Modern Chinese, but did discuss the formation of a Modern Chinese matrix clause *wǒ shuō* 'I say' (e.g. in (7a)) and the parenthetical predicate *wǒ shuō* 'I

1.　Text examples in this study have four lines, as per standard Leipzig Glossing Rules (https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf). The first line contains the text in Chinese script, the second line provides a corresponding *pinyin*, the third line interlinear glosses, and the fourth line an approximate English translation. For the meanings of the abbreviations please refer to lists at the end of the paper.

2.　A literal translation should delete the comma between *you tell me* and the following clause (i.e. *if you want to come, then just come*). We are adding the comma here only because it is otherwise not grammatical in English. This also applies to the translations of (11), (12), (13a–b), and the translations of the other sentence examples of parenthetical *nǐ shuō* 'you tell me' to be discussed in this study.

say' (e.g. *wǒ shuō* in (8a)). He argues that the formation of the former clause follows a hypothesized complementation pathway making the following clause (i.e. *nǐ bùhǎo shuō wǒ shuō!* 'if it isn't in convenient for you, I'll say it!' in (7b)) its complement clause. The process is illustrated as one from (7b) to (7a); for discussions of a hypothesized complementation pathway please cf. e.g. Givón (1980: 333–377), Thompson & Mulac (1991: 317), Frajzyngier (1995: 476–477), Harris & Campbell (1995: 170–172), Biber et al. (1999: 658–759), Thompson (2002: 125), and Noonan (2007: 121–124).

(7) a. **我 說** 他 不 好 說 我 說，沒 下 船 之 前 我
    ***Wǒ shuō** tā bù hǎo shuō wǒ shuō, méi xià chuán zhī qián wǒ*
    I say he NEG good say I say NEG get.off boat REL before I
    就 說 了。
    jiù shuō le.
    already say PFV
    '**I said** that if it wasn't convenient for him I'd say it. I said it before we got off the boat.'

   b. **我 說**："你 不 好 說 我 說！" 沒 下 船 之 前 我
    ***Wǒ shuō**: "Nǐ bù hǎo shuō wǒ shuō!" Méi xià chuán zhī qián wǒ*
    I say you NEG good say I say NEG get.off boat REL before I
    就 說 了。
    jiù shuō le.
    already say PFV
    '**I said**, "If it isn't convenient for you, I'll say it!" I said it before we got off the boat.'

For the formation of a parenthetical predicate *wǒ shuō* (cf. e.g. (8a)), the current author argues that it has followed a hypothesized conjoining pathway that involved no syntactic operations, simply the loss of prosodic gap between a prosodically separated parenthetical predicate *wǒ shuō* (cf. e.g. *wǒ shuō* in (8b)) and the clause it occurs with (cf. e.g. *nǐmén bùnéng zhèyàng duì rénjiā ba?* 'you can't treat others like this, can you?' in (8b)); for discussions of this hypothesized conjoining pathway, please see Long et al. (2018: 212–225), Long et al. (2019: 1–24), and Long et al. (2021).

(8) a. **我 說** 你們 不 能 這樣 對 人家 吧？
    ***Wǒ shuō** nǐmén bù néng zhèyàng duì rénjiā ba?*
    I say you NEG can so to other Q
    '**I say** you can't treat others like this, can you?'

b. **我 說**： 你們 不 能 這樣   對 人家 吧？
    Wǒ shuō: *nǐmén bù   néng zhèyàng duì rénjiā ba?*
    I   say you   NEG can so   to other Q
    '**I say (it)**, you can't treat others like this, can you?'

This hypothesized conjoining pathway represents not only a rejection of the commonly accepted matrix clause pathway as argued for by, for example, Chui (1994: 1), Dong (2003: 46–57), Fitzmaurice (2004: 441–445), Yao (2008: 47), Cao (2010: 43–44), Guan (2011: 6), Hu (2011: 137), Li (2013: 12–18), Sheng (2013: 32–34), and Yu (2015: 17), but also a rejection of the hypothesized adverbial clause pathway argued for by Brinton (2008; 2017). Such a hypothesis is naturally confronted with the following three questions:

a. Can the pathway account for the formation of a Modern Chinese parenthetical predicate *nǐ shuō*?
b. If it can, what determines the selection of the pathway?
c. Can such a pathway also be identified for comparable constructions in other languages, such as the English parenthetical *you say* discussed earlier?

To answer the above questions, we first need to investigate the syntactic features of Modern Chinese *nǐ shuō* predicates.

3.   Modern Chinese *nǐ shuō* predicates

A *nǐ shuō* 'you say' predicate may take an NP (i.e. nominal phrase) as its patient object, as in, for example, item (9):[3]

(9) **你 說 這 句 話**   很 有 勇氣。
    Nǐ shuō zhè jù huà *hěn yǒu yǒngqì.*
    you say   DEM CLS words very have courage
    'It is very courageous **of you to say the words**.'

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3. Sentence examples in this study have been obtained from three sources: (i) the spoken language section of the Corpus of the Center for Chinese Linguistics, Peking University, which consists of 13,960,677 Chinese characters of transcribed scripts from Modern Chinese TV programs; (ii) the Media Language Corpus of the Communication University of China (MLC Corpus), which consists of more than 200 million characters of transcriptions of radio and TV programs including dialogue, monologue, narration, and broadcasts; (iii) scripts of the soap opera *Home with Kids* (400 minutes), which consist of conversations between two or more interlocutors.

When followed by a clause, Modern Chinese *nǐ shuō* may be used to indicate that the following clause expresses what the subject referent (i.e. *nǐ* 'you') says, cf. (10). Following Harris & Campbell (1995: 168), in this study we shall call it a speech-quotative *nǐ shuō* (hereafter S1).

(10) **你 說** 我 是 騙子， 你 已經 做 出 人　 身 攻擊 了，　(S1)
　　　Nǐ shuō *wǒ shì piànzi, nǐ yǐjīng zuò chū rén　 shēn gōngjī le,*
　　　you say　I　COP swindler you already do　out human body attack PFV
　　　辟穀　　　　　　　這 兩 個 字　 是 我 發明 的 嗎？
　　　bìgǔ　　　　　　zhè liǎng gè zì　 shì wǒ fāmíng de ma?
　　　abstinence.from.cereal DEM two　CLS word COP I　invent REL Q
　　　'**You said** that I'm a swindler. You've already conducted a personal attack. Did I invent the two words Bìgǔ (i.e. abstinence from cereals)?'

When followed by a clause, *nǐ shuō* may also mean 'you tell me', cf. (11), and is used to seek the hearer's attention in order to get feedback;[4] for similar arguments please see Cao (2010: 39), Guan (2011: 5–7), Hu (2011: 134–135), Xian (2012: 50–56), Sheng (2013: 31–32), and Yu (2015: 12–13). In this study it will be referred to as a feedback-seeking *nǐ shuō* (hereafter S2)

(11) **你 說** 這 後媽　　多 不 容易 啊！　　　　　　(S2)
　　　Nǐ shuō *zhè hòumā　　duō bù róngyì a!*[5]
　　　you say　DEM stepmother how NEG easy　FP
　　　'**You tell me**, how hard it is to be a stepmother!'

Different from an S1, which is used to quote what the subject referent (i.e. *nǐ* 'you') says, when an S2 takes a clause, the clause is usually not said by the subject referent of an S2. In (12) of the following, for example, an S2 occurs with another speech-quotation clause (i.e. *māmā wèn* 'the mother asked'). It indicates that the following clause (i.e. *yuèliàng xiàng shénme ya?* 'what does the moon look like?') is not said by the subject referent of an S2 (i.e. *nǐ* 'you'), but by the locutor (i.e. *māmā* 'the mother').

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4. Cao (2010: 39) has listed six pragmatic functions of parenthetical *nǐ shuō* 'you tell me' as follows: advice-seeking, confirmation-seeking, comforting and convincing, reproaching and complaining, explaining and vindicating, and appreciating and complementing. Guan (2011: 6) and Hu (2011: 135) argue that the different pragmatic functions of *nǐ shuō* 'you tell me' have developed from its feedback-seeking function. In this study, following Cao (2010: 39), Guan (2011: 6), and Hu (2011: 135) and others, we use feedback-seeking as a cover term for the different pragmatic functions of *nǐ shuō* 'you tell me'.

5. Notice that the exclamation particle *a* in (11) has scope over the clause *zhè hòumā duō bù róngyì* 'how hard it is to be a stepmother' but not over S2, as indicated by the translation. This applies to all sentence examples of an S2 occurring with a clause.

(12) 那　**媽媽　問，你　說**　月亮　　像　　　什麼　呀？他 說　　　(S2)
　　　Nà　**mámā wèn, nǐ　shuō** *yuèliàng xiàng*　　*shénme ya? Tā shuō*
　　　then mother ask　you say　moon　resemble what　 Q　he say
　　　月亮　　像　　　香蕉。
　　　yuèliàng xiàng　　*xiāngjiāo.*
　　　moon　resemble banana
　　　'Then **the mother asked, you tell me,** what does the moon look like? He said the moon looks like a banana.'

A speech-quotative *nǐ shuō* (S1) is different from a feedback-seeking *nǐ shuō* (S2) in at least the following ten contextual properties:

A.　**Permitting combination with other clause types or not.** An S1 precedes and combines with a declarative clause indicating a proposition only, cf. e.g. *wǒ shì piànzi* 'I'm a swindler' in (10). An S2 may precede and combine with not only an exclamation clause (cf. *zhè hòumā duō bù róngyì a!* 'how hard it is to be a stepmother!' in (11)), but also a declarative clause indicating a proposition (cf. *dōu shì xiǎo niánqīng'er de* 'they are all young people' in (13a)) or an interrogative clause (cf. *zánmén shì bù shì děi guǎnguǎn tā ya?* 'should we restrain him a little?' in (13b)).

(13)　a.　**你　說**　都　是　小　年輕兒　　　的，我 跟　人　　坐　(S2)
　　　　　　Nǐ　shuō *dōu shì*　*xiǎo niánqīng'er*　*de,*　*wǒ gēn rén*　*zuò*
　　　　　　you say　all COP little young.people NOMZ I　with people sit
　　　　　　不　到　一塊兒。
　　　　　　bù　*dào yīkuài'er.*
　　　　　　NEG get　together
　　　　　　'**You tell me**, they are all young people. I can't sit with them together.'
　　　b.　哎，**你 說**　咱們　是 不 是 得　　管　　管　　他 (S2)
　　　　　　Āi,　**nǐ　shuō** *zánmén shì bù shì děi*　*guǎn*　*guǎn*　*tā*
　　　　　　INTJ you say　we　　COP NEG COP should restrain restrain him
　　　　　　呀？
　　　　　　ya?
　　　　　　Q
　　　　　　'Hey, **you tell me**, should we restrain him a little?'

B. **Permitting the following clause to be replaced by an NP meaning 'statement' or not.**[6] A clause following an S1 may be replaced by an NP meaning 'statement', cf. e.g. (14a). In contrast, a clause following an S2 may not be replaced by an NP meaning 'statement'; cf. e.g. (14b).[7]

(14) a. **你 說** 我 是 騙子   **(這 句 話)**，你 已經 做 出 人
    ***Nǐ shuō* wǒ shì piànzi *(zhè jù huà)*, nǐ yǐjīng zuò chū rén**
    you say I   COP swindler DEM CLS words you already do out human
    身 攻擊 了。
    shēn gōngjī le.
    body attack PFV
    '**You said (the words)** that I'm a swindler. You've already conducted a personal attack.'

   b. **你 說** 都 是 小 年輕兒   的 (**??這 句 話**)，我 跟
    ***Nǐ shuō* dōu shì xiǎo niánqīng'er de, (**??zhè jù huà**) wǒ gēn**
    you say all COP little young.people NOMZ DEM CLS words I   with
    人 坐 不 到 一塊兒。
    rén zuò bù dào yīkuài'er.
    people sit NEG get together
    '**You tell me** (**??the words**) that they are all young people. I can't sit with them together.'

C. **Permitting relativization of the following clause or not.** A clause following an S1 may be relativized; cf. (15).

(15) 我 懂   了，**你 說 的 是** 將軍 應該 衝 在   (S1)
    *Wǒ dǒng   le, **nǐ shuō de shì** jiāngjūn yīnggāi chōng zài*
    I   understand CSR you say REL COP general should charge at
    最 前面。
    zuì qiánmiàn.
    most front
    'I get it now, **what you said is** that the general should be at the forefront in a charge.'

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6. An S2 may occupy a sentence-initial, sentence-medial, or sentence-final position; e.g. (11), (27a), and (27b), and cf. Cao (2010: 47) for similar arguments. When discussing Properties B and C, for the convenience of comparison, we only consider sentence-initial S2s.

7. Note that a sentence example of S2 should have feedback-seeking meaning. The sentence example in (14b) may sound acceptable to the ears of some native speakers as the example of an S1, but it is unacceptable as the example of an S2 because it does not have feedback-seeking meaning. This also applies to the sentence examples (16), (18), and (20). To capture that difference, we use double question marker "??" instead of asterisk "*" to indicate these examples.

In contrast, a clause following an S2 is not said by the subject referent of S2 (i.e. *nǐ* 'you') and thus may not be relativized; cf. (16).

(16) ??**你 說 的 是 這 後媽 多 不 容易 啊！**   (S2)
　　 ??**Nǐ shuō de shì zhè hòumā duō bù róngyì a!**
　　 you say REL COP DEM stepmother how NEG easy FP
　　 '??**What you told me was** how hard it is to be a stepmother!'

D.　**Permitting combination with an adverbial expression indicating past time/ frequency or not.** *Shuō* in an S1 may combine with an adverbial expression indicating past time (cf. e.g. *nǐ céngjīng shuō* 'you once said' in (17a)) or frequency (cf. e.g. *nǐ jīngcháng shuō* 'you often say' in (17b) and *nǐ yīzhí shuō* 'you're always saying' in (17c)).

(17)　a.　我 看 到 **你 曾經 說** 這 個 《天水圍 的 日   (S1)
　　　　　 Wǒ kàn dào **nǐ céngjīng shuō** *zhè gè Tiānshuǐ Wéi de rì*
　　　　　 I see get you once say DEM CLS Tianshui.Wei NOMZ day
　　　　　 與 夜》 對 你 意義 非常 重大， 怎麼 講？
　　　　　 yǔ yè duì nǐ yìyì fēicháng zhòngdà, zěnme jiǎng?
　　　　　 and night to you meaning very significant how say
　　　　　 'I see that **you ever said** that this *Days and nights at Tianshui Wei* is of significant meaning to you. How do you illustrate that?'
　　b.　**你 經常 說** 和 我 在 一起 很 幸福，是 真   (S1)
　　　　 Nǐ jīngcháng shuō *hé wǒ zài yīqǐ hěn xìngfú, shì zhēn*
　　　　 you often say with me at together very happy COP true
　　　　 的 嗎？
　　　　 de ma?
　　　　 NOMZ Q
　　　　 '**You often say** that you are very happy together with me, is that true?'
　　c.　**你 一直 說** 你 要 問 的 是 湯光文，   (S1)
　　　　 Nǐ yīzhí shuō *nǐ yào wèn de shì Tāng Guāngwén,*
　　　　 you all.the.time say you want ask REL COP Tang.Guangwen
　　　　 但是 你 又 從來 沒 找 過 湯光文。
　　　　 dànshì nǐ yòu cónglái méi zhǎo guo Tāng Guāngwén.
　　　　 but you again hitherto NEG seek EXP Tang.Guangwen
　　　　 '**You're always saying** that it is Guangwen Tang that you wanted to ask, but you have never ventured to ask him.'

In contrast, *shuō* in an S2 may not combine with an adverbial expression indicating past time or frequency; cf. (18), and similar arguments please cf. Cao (2010: 44).

(18) ??你　曾經　　說／ ??你 經常　　　說／ ??你 一直　　　 說　這　　(S2)
　　??*Nǐ　céngjīng shuō/* ??*Nǐ jīngcháng shuō/* ??*Nǐ yīzhí　　　 shuō zhè*
　　you once　　say　you often　　　say　you all.the.time say　DEM
　　後媽　　　 多　不　容易　啊！
　　hòumā　　　 duō bù　róngyì a!
　　stepmother how NEG easy　FP
　　'??**You have previously told me** / ??**You often tell me**/ ??**You tell me all the time** how hard it is to be a stepmother!'

E.　**Permitting combination with *guo/le* or not.** *Shuō* in an S1 may combine with an experiential aspect marker *guo* (cf. e.g. *nǐ shuō guo* 'you have said' in (19a)) or a perfective aspect marker *le* (cf. e.g. *nǐ shuō le* 'you said' in (19b)); similar arguments please cf. Cao (2010: 44).

(19)　a.　**你 說　過** 你 不　會　愛　我，你 說　過　的。　　　　(S1)
　　　　Nǐ　shuō guo nǐ　bù　huì　ài　wǒ,　nǐ　shuō guo de.
　　　　you say　EXP you NEG will love me　you say　EXP FP
　　　　'**You have said** that you wouldn't love me. You have said that.'
　　b.　**你 說　了** 你 要　管　　　　 到　底　的。　　　　　(S1)
　　　　Nǐ　shuō le　nǐ　yào guǎn　　　 dào dǐ　de.
　　　　you say　PFV you will be.responsible to　end FP
　　　　'**You said** you would take the responsibility to the end.'

In contrast, *shuō* in an S2 may not combine with an experiential aspect marker *guo* or a perfective aspect marker *le*; cf. (20).

(20) ??你 說　過／ ??你 說 了 這 後媽　　　多 不　容易 啊！　(S2)
　　??*Nǐ　shuō guo/* ??*Nǐ shuō le　zhè hòumā　　　 duō bù　róngyì a!*
　　you say　EXP　you say　PFV DEM stepmother how NEG easy　FP
　　'??**You have told me**/ ??**You told me** how hard it is to be a stepmother!'

F.　**Being transparent to a factive sentence adverb or not.** When the factive sentence adverb *qíshí* 'actually' precedes an S1, it has scope over both S1 and the following clause; cf. (21), as indicated by the translation.

(21)　其實　　你　說　你　是　戒除　了　網　　　癮，　　　我　覺得　(S1)
　　　Qíshí　nǐ　shuō *nǐ　shì　jièchú　le　wǎng　yǐn,　　wǒ juédé*
　　　actually you say　you COP abstain PFV Internet addiction I　feel
　　　要是　這麼　說　的　　話　就　不　是　太　恰當　　　了。
　　　yàoshì zhème shuō de　　huà jiù　bù　shì tài　qiàdàng　　le.
　　　if　　so　　say　NOMZ word thus NEG COP very appropriate CSR
　　　'**Actually you said** that you have kicked your Internet addiction. I feel that
　　　it is not quite right if you say so.'

An S2 is different in that it is "transparent" to a factive sentence adverb.[8] In
(22), for example, the factive sentence adverb *qíshí* 'actually' precedes an S2,
yet it has scope over the following clause, not an S2.

(22)　七萬　　　　　個　人　　多　　嗎？其實　　你　說　從　　(S2)
　　　*Qīwàn　　　　gè　rén　　duō　ma? **Qíshí　nǐ　shuō*** *cóng*
　　　seventy.thousand CLS person many Q　　actually you say　from
　　　整體　市場　來　　講，　網絡　市場　　來　　講，　那　當然
　　　zhěngtǐ shìchǎng lái　　jiǎng, wǎngluò shìchǎng lái　　jiǎng, nà　dāngrán
　　　total　　market　come talk　internet market　come talk　DEM of.course
　　　是　少　之　　又　　少。
　　　shì　shǎo zhī　　yòu　shǎo.
　　　COP few　NOMZ again few
　　　'Is seventy thousand people too many? **Actually you tell me**, if we talk
　　　from the perspective of the whole market, from the perspective of the
　　　Internet market, it is an extremely small amount.'

G.　**Being transparent to a tag question or not.** When there is a tag question fol-
　　lowing the clause after an S1, the tag question has scope over S1 and the fol-
　　lowing clause; cf. (23), as indicated by the translation.

(23)　可　不　　是　　嘛，　剛才　　**你　說**　你　媳婦　剛　　(S1)
　　　*Kě　bù　　shì　　ma,　gāngcái　**nǐ　shuō***　*nǐ　xífù　gāng*
　　　may NEG　right　FP　just.now you say　you wife　just
　　　懷孕　　是　吧？
　　　*huáiyùn　**shì**　**ba?***
　　　pregnant　right　Q
　　　'Isn't that right? Just now **you said** that your wife has become pregnant,
　　　didn't you?'

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8. According to Hooper (1975: 111–112), a predicate is "transparent" to a sentence adverb
when the predicate is accompanied by a sentence adverb which applies not to the predicate but
to the assertion of the clause the predicate occurs with; for similar arguments see Van Bogaert
(2011: 299).

An S2 in contrast, is "transparent" to a tag question.[9] When there is a tag question following a clause after an S2, the tag question has scope over that clause, not S2; cf. (24), as indicated by the translations.

(24) 說 你 是 上海   人   的 走狗，**你 說** 這 事兒   (S2)
   *Shuō nǐ shì Shànghái rén   de zǒugǒu, **nǐ shuō** zhè shì'er*
   say   you COP Shanghai people POSS lackey you say   DEM thing
   根本   不 貼譜 **是 吧？**
   gēnběn bù tiēpǔ shì ba?
   basically NEG reliable right Q
   'They say I'm the lackey of Shanghai people. **You tell me**, this is basically nonsense, **isn't it?**'

H. **Permitting repetition of *shuō* or combination with *yīxià* 'once' or not.** In an utterance containing an S1, *shuō* in S1 may not appear in repetition or combine with *yīxià* 'once'; cf. (25).[10]

(25) ??**你 說 說／**??**你 說** 一下 我 是 騙子， 你 已經   做 出 (S1)
   ??***Nǐ shuō shuō/*** ??***Nǐ shuō yīxià wǒ shì piànzi, nǐ yǐjīng zuò chū***
   you say say you say once I   COP swindler you already do out
   人   身   攻擊 了。
   rén   shēn gōngjī le.
   human body attack PFV
   '??**You said a little/**??**You said a little** that I'm a swindler. You've already conducted a personal attack.'

In contrast, in an utterance containing an S2, *shuō* in S2 may be repeated (cf. (26a)) or combine with *yīxià* 'once'; cf. (26b); for similar arguments please see Cao (2010: 44).

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9. According to Hooper (1975: 111–112), a predicate is "transparent" to a tag question when the tag question only "reaches" the clause that the predicate occurs with, but cannot reach the predicate itself; for similar arguments cf. e.g. Quirk et al. (1985: 811), Huddleston & Pullum (2002: 893), and Van Bogaert (2011: 298).

10. Note that a sentence example of S1 should have speech-quotative meaning. The sentence example in (25) may sound acceptable to the ears of some native speakers as the example of an S2, but it is unacceptable as the example of an S1 because it does not have speech-quotative meaning. This also applies to the sentence examples in (28).

(26) a. 你 說 說 這 個 是 不 是 形成 一 個 大   (S2)
　　　　Nǐ shuō shuō zhè gè shì bù shì xíngchéng yī gè dà
　　　　you say　say　DEM CLS COP NEG COP form　　　one CLS big
　　　　的　 壟斷？
　　　　de　lǒngduàn?
　　　　NOMZ monopoly
　　　　'**You tell me a little**, hasn't this formed a big monopoly?'

　　　b. 你 說 一下 快 兩 年 了 都 不 交 算 怎麼
　　　　Nǐ shuō yīxià kuài liǎng nián le dōu bù jiāo suàn zěnme
　　　　you say　once almost two year PFV all NEG pay count how
　　　　回　 事兒？
　　　　huí　shì'er?
　　　　round thing
　　　　'**You tell me a little,** how do we think of it now that they have not paid it for two years?'

I. **Permitting positional mobility or not.** An S1 usually occupies the sentence-initial position (e.g. (10)). An S2, in contrast, may appear in a sentence-initial position (e.g. (11)), a sentence-medial position (e.g. (27a)) or a sentence-final position (e.g. (27b)); for similar arguments please see Cao (2010: 47).

(27) a. 半途而廢 這 詞 用 他身 上 你 說 行   (S2)
　　　　Bàntú' érfèi zhè cí yòng tā shēn shàng nǐ shuō xíng
　　　　give.up.halfway DEM word use he body top　you say　OK
　　　　嗎？
　　　　ma?
　　　　Q
　　　　'Is it OK, **you tell me**, that I use the expression 'to give up halfway' to describe him?'

　　　b. 這 玩意兒 聽 誰 的 你 說。   (S2)
　　　　Zhè wányì'er tīng shuí de nǐ shuō.
　　　　DEM gadget listen.to who POSS you say
　　　　'For this small thing, whose suggestions do I adopt? **You tell me.**'

J. **Permitting prosodic separation or not.** An S1 may not be prosodically separated from the following clause; cf. (28).

(28) ??**你 說，** 我 是 騙子， 你 已經 做 出 人 身 攻擊 (S1)
 ??***Nǐ shuō,** wǒ shì piànzi, nǐ yǐjīng zuò chū rén shēn gōngjī*
 you say I COP swindler you already do out human body attack
 了。
 le.
 PFV
 '??**You said,** I'm a swindler. You've already conducted a personal attack.'

In contrast, an S2 may be prosodically separated from the following clause, indicated in (29) by a comma; similar arguments please cf. Cao (2010: 43).

(29) **你 說，** 這 後媽 多 不 容易 啊！
 ***Nǐ shuō,** zhè hòumā duō bù róngyì a!*
 you say DEM stepmother how NEG easy FP
 '**You tell me**, how hard it is to be a stepmother!'

With the above contextual differences between an S1 and S2, one may wonder if there is a derivational relationship between them, specifically, whether the commonly accepted hypothesized matrix clause pathway may be adopted to account for the relationship. We come to this in the next section.

4. Matrix clause perspective or parenthetical perspective

In order to argue whether there is a derivational relationship between an S1 and S2, we first need to establish their respective syntactic statuses. The contextual properties of an S1 and S2 may be summarized in Table 1 below.

Table 1. Differences in contextual properties between an S1 and an S2

Contextual properties	S1 (Speech-quotative *nǐ shuō*)	S2 (Feedback-seeking *nǐ shuō*)
(A) Permitting combination with other clause types or not.	Not permitting	Permitting
(B) Permitting the following clause to be replaced by an NP meaning 'statement' or not.	Permitting	Not permitting
(C) Permitting relativization of the following clause or not.	Permitting	Not permitting
(D) Permitting combination with an adverbial expression indicating past time/frequency or not.	Permitting	Not permitting

Table 1. *(continued)*

Contextual properties	S1 (Speech-quotative *nǐ shuō*)	S2 (Feedback-seeking *nǐ shuō*)
(E) Permitting combination with *guo/le* or not.	Permitting	Not permitting
(F) Being transparent to a factive sentence adverb or not.	Not transparent	Transparent
(G) Being transparent to a tag question or not.	Not transparent	Transparent
(H) Permitting repetition of *shuō* or combination with *yīxià* 'once' or not.	Not permitting	Permitting
(I) Permitting positional mobility or not.	Not permitting	Permitting
(J) Permitting prosodic separation or not.	Not permitting	Permitting

Long et al. (2019: 10–11) and Long et al. (2021) cite Huddleston & Pullum (2002: 47) in defining a matrix clause as a clause in which a complement clause is syntactically subordinate and embedded; for similar arguments cf. Quirk et al. (1985: 991–993), Biber et al. (1999: 1135), and Brinton (2008: 35–43). The authors have adopted Huddleston & Pullum's definition to re-examine the contextual properties of *nǐ kàn* 'you see' and *huáiyí* 'doubt' predicates in Chinese. Following the above authors, we also adopt this definition to similarly define the syntactic status of an S1 and an S2.

A. **Permitting combination with other clause types or not.** Long et al. (2019: 10–11), Long et al. (2021) cite Thompson (2002: 147–150), Dixon (2006: 15), Brinton (2008: 12), and Dehé (2014: 86) to argue that the notion of complement clause should only describe a proposition "that can be a fact, an activity, or a potential state, etc." We have argued in § 3 that an S1 takes only a declarative clause indicating a proposition, as in (10); while an S2 may take not only a declarative clause indicating a proposition, as in (13a), but also an exclamative clause, as in (11), or an interrogative clause, as in (13b). Following the above authors, we argue that a clause with an S1 is its complement clause, while a clause with an S2 is not its complement clause.

B. **Permitting the following clauses to be replaced by an NP meaning 'statement' or not.** Long et al. (2019: 10–11) and Long et al. (2021) have cited Dixon (2006: 15) to argue that a complement clause should "function as a core argument (i.e. object or dative) of a higher clause".[11] We have also argued in § 3 that an NP meaning 'statement' may function as the patient object of a *nǐ shuō* predicate. Since a clause that an S1 takes may be replaced by an NP meaning 'statement' (cf. (14a)), following the above authors, we argue that it has the same syntactic function of patient object. In other words, it is the

complement clause of an S1. A clause that an S2 takes, in contrast, cannot be replaced by an NP meaning 'statement', cf. (14b), and we argue it is not the complement clause of an S2.

C. **Permitting relativization of the following clause or not.** Guo (2009: 34–35), Xu (2012: 655), Kou & Yuan (2019: 693) argue that a core argument of a Chinese matrix clause (including the subject, the patient object, and the dative object) may be relativized. We have argued in § 3 that a clause following an S1 may be relativized (cf. e.g. (15)). In contrast, a clause following an S2 may not be relativized (cf. e.g. (16)). Again, following Dixon (2006: 15), Long et al. (2019: 10–11), and Long et al. (2021), we argue that a clause following an S1 is its complement clause and a clause following an S2 is not its complement clause.

From the above three contextual properties of an S1 and an S2, we argue that a clause that an S1 takes is its complement clause and a clause that an S2 takes is not its complement clause. In other words, an S1 is the matrix clause of its following clause, and an S2 is not the matrix clause of its following clause.

One may wonder what exact syntactic status an S2 has if it is not the matrix clause of its following clause. Brinton (2008: 35) argues that a parenthetical has at least three defining properties: (1) movability, (2) epistemicity, and (3) possibility of prosodic independence. These properties are in accordance with the Properties I, A, and J of an S2 discussed in § 3 above. Van Bogaert (2011: 298) argues that a parenthetical is transparent to a factive sentence adverb (cf. Property F of an S2) and to a tag question (cf. property G of an S2). Since an S2 construction matches the proposed properties of a parenthetical argued by Brinton (2008: 35) and Van Bogaert (2011: 298), we argue that an S2 is actually a parenthetical predicate.

Accordingly, if the hypothesized matrix clause pathway is in fact correct, we are led to conclude that in Chinese there may have been the hypothesized pathway shown in (30).

(30)   S1 > S2

Now in § 3 above we have already seen that an S1 and an S2 differ in at least ten contextual properties (cf. Table 1). If we treat an S1 as a matrix clause and an S2 as a parenthetical of the following clause, and adopt the hypothesized matrix clause pathway, we may find it easier to explain why an S1, but not an S2, may be relativized (Property C), combine with an adverbial expression indicating past time or frequency (Property D), or combine with *guo/le* (Property E): as the main verb

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11.   By OBJECT, Dixon (2006: 15) is really referring to an accusative object, or what here we are calling a patient object.

of a matrix clause, *shuō* 'say' in an S1 is no different from any other lexical verb in that it may accept relativization, and combine with an adverbial expression indicating past time/frequency or with an aspect marker. An S2, in contrast, according to the pathway, is supposed to be a grammaticalized parenthetical, with the *shuō* in it having lost the ability to relativize or to combine with an adverbial expression indicating past time/frequency or an aspect marker.

The hypothesized matrix clause pathway also explains why an S1 and an S2 behave differently when combining with a factive sentence adverb (Property F) or a tag question (Property G). As the matrix clause of a sentence, an S1 can naturally be modified by a factive sentence adverb or be questioned by a tag question. As a parenthetical disjunct, by contrast, an S2 is "transparent": it may have lost these two properties, so that a factive sentence adverb or a tag question may reach the following clause directly.

Of the properties listed in Table 1 above, Property A (Clause type) and J (Prosody) are said to be explicable by pragmaticalization (cf. e.g. Aijmer 1997: 1–11; Norde 2009: 22), while Properties H and I seem to be problematic for the hypothesized matrix clause pathway. As far as Properties C, D, E, F, and G are concerned, the *nǐ shuō* construction clearly loses its categorial status on the hypothesized pathway from an S1 to an S2. It may thus be construed as a case of DECATEGORIALIZATION.[12] A decategorialized construction is expected to lose part of (or most of) its internal variations (cf. Hopper 1991: 30–31; Norde 2009: 20–21; Brinton 2015: 149) and positional mobility (cf. Lehmann 1985: 308; Van Bogaert 2011: 302–308), that is to say, compared with an S1, the more decategorialized S2 is expected to show more restrictions in internal variation and positional mobility. Yet when comparing Properties H and I in an S1 compared to an S2, we are clearly getting the opposite picture: an S2 shows more internal variations (cf. (26a) and (26b)) and positional mobility (cf. (27a) and (27b)) than an S1.

In this section we have investigated the syntactic properties of an S1 and S2, and argued against the hypothesized matrix clause pathway for the formation of an S2 in Chinese. One may wonder what pathway the formation of an S2 has followed if the commonly-accepted matrix clause pathway is to be rejected. We come to this question in § 5, immediately following.

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12. Following Heine & Kuteva (2002: 2) and Kuteva et al. (2019: 3), we define decategorialization as "loss in morphosyntactic properties characteristic of lexical or other less grammaticalized forms"; also cf. Lehmann (1985).

5.   Discussion

In this section, we adopt the hypothesized complementation pathway to argue for the formation of an S1 (§ 5.1), and adopt the hypothesized conjoining pathway to argue for the formation of an S2 (§ 5.2). We finally discuss the criteria for the selection of the two pathways (§ 5.3).

5.1   Hypothesized complementation pathway and formation of speech-quotative *nǐ shuō* (S1)

We note that there is a prosodically separated speech-quotation *nǐ shuō* in Modern Chinese, cf. (31a), referred to in this study as S3. We argue that it is the source construction for an S1; illustrated as from (31a) to (31b), and formularized as (32). We argue that this change may be explained as having followed a hypothesized complementation pathway; for discussions of such a pathway please see Givón (1980: 333–377), Thompson & Mulac (1991: 317), Frajzyngier (1995: 476–477), Harris & Campbell (1995: 170–172), Biber et al. (1999: 658–759), Thompson (2002: 125), and Noonan (2007: 121–124).

(31) a. **你 說：** "我 不 能 常常 陪 你。"   (S3)
         Nǐ shuō*:* "*Wǒ bù néng chángcháng péi nǐ.*"
         you say I NEG can often accompany you
         '**You said,** "I can't often accompany you."'

      b. **你 說** 你 不 能 常常 陪 他。   (S1)
         Nǐ shuō *nǐ bù néng chángcháng péi tā.*
         you say you NEG can often accompany he
         '**You said** that you couldn't often accompany him.'

(32) S3 > S1

Following the pathway, in the target construction the S1 has become a matrix clause with the following clause, e.g. *nǐ bùnéng chángcháng péi tā* 'you couldn't often accompany him', as its complement clause. This explains all the contextual properties of an S1 except Property H.

      According to this pathway, an S1 is a matrix clause structure. That explains why an S1 has all the typical contextual features of a matrix clause, i.e. permitting relativization of the following clause (Property C), permitting combination with an adverbial expression indicating past time/frequency (Property D), permitting combination with *guo/le* (Property E), not being transparent to a factive sentence adverb (Property F), and not being transparent to a tag question (Property G).

Also, according to this pathway, a clause that an S1 takes is its complement clause structure, and it can only consist of a declarative clause indicating a proposition and functioning as a core argument of a matrix clause; cf. e.g. Dixon (2006: 15). That explains why a clause following an S1 can only be a declarative clause indicating a proposition (Property A) and may be replaced by an NP meaning 'statement' that is the patient object of a matrix clause (Property B). Also in Chinese, unless for topicalization reasons, a patient object of a clause takes a fixed position and may not be prosodically separated from the clause. Since a complement clause has the same syntactic status as a patient object, naturally it also takes a fixed position and may not be prosodically separated from the clause. This explains why an S1 does not enjoy positional mobility (Property I), and may not be prosodically separated from the clause that it takes (Property J).

As for why an S1 does not permit repetition of *shuō* or the combination with *yīxià* 'once' (Property H), we have found that in the source construction an S3 also does not permit the repetition of *shuō* or the combination with *yīxià* 'once'; cf. (33).[13]

(33) ??你 說　說／??你 說　一下: "你 是　騙子。" 你 已經　做 出　　(S3)
　　??*Nǐ shuō shuō/* ??*Nǐ shuō yīxià:　"Nǐ shì piànzi."　Nǐ　yǐjīng　zuò chū*
　　you say　say　you say　once　you COP swindler you already do out
　　人　　身　攻擊　了。
　　rén　　shēn gōngjī le.
　　human body attack PFV
　　'??**You tell me a little, / **??**You tell me a little,** "You are a swindler". You've already conducted a personal attack.'

Since according to the hypothesized complementation pathway in (32), an S1 develops from an S3, that explains why the repetition of *shuō* or the combination with *yīxià* 'once' is not permitted for an S1.

5.2　Hypothesized conjoining pathway and formation of feedback-seeking *nǐ shuō* (S2)

In § 3 we have argued that an S2 may be prosodically separated from the clause that it takes, cf. (34): in this study we refer to this usage of a *nǐ shuō* predicate as an S4.

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13. The sentence example may sound acceptable to the ears of some native speakers as examples of a prosodically-separated feedback-seeking *nǐshuō*, but they are unacceptable as examples of a prosodically-separated speech-quotation *nǐshuō* (i.e. S3).

(34) **你 說，** 這 後媽　　多 不 容易 啊！　　　　　　　(S4)
　　　 Nǐ shuō, *zhè hòumā　 duō bù róngyì a!*
　　　 you say　 DEM stepmother how NEG easy　 FP
　　　 '**You tell me**, how hard it is to be a stepmother!'

We argue that an S4 like *nǐ shuō* in (34) has served as the source construction for the formation of S2 construction through the hypothesized conjoining pathway that involves no syntactic operations but merely the loss of a phonetic gap between an S4 and the following clause; cf. (35), as illustrated as from (34) to (36).

(35)　 S4 > S2

(36) **你 說** 這 後媽　　多 不 容易 啊！　　　　　　　(S2)
　　　 Nǐ shuō *zhè hòumā　 duō bù róngyì a!*
　　　 you say　 DEM stepmother how NEG easy　 FP
　　　 '**You tell me**, how hard it is to be a stepmother!'

A hypothesized conjoining pathway may account for the contextual properties of an S2 discussed in § 3, because as the presumed source construction, it has the following contextual properties:

　　 A feedback-seeking S4 may be followed by an interrogative clause (cf. (37a)), a declarative clause indicating a proposition (cf. (37b)), or an exclamation clause (cf. (37c)).

(37) a. 那 **你 說，** 你 現在　 瞭解 的 通貨膨脹，　　　 能　達到 (S4)
　　　　 Nà ***nǐ shuō,*** *nǐ xiànzài liǎojiě de tōnghuòpéngzhàng, néng dádào*
　　　　 DEM you say　 you now　 know REL inflation　　　　 can　get
　　　　 多少？
　　　　 duōshǎo?
　　　　 how.much
　　　　 'In that way **you tell me**, for the inflation that you know now, how much can it reach?'
　　 b. **你 說，** 很 大 程度　上，　他 自己 已經　把 自己 喝 (S4)
　　　　 Nǐ shuō, *hěn dà chéngdù shàng, tā zìjǐ yǐjīng bǎ zìjǐ hē*
　　　　 you say　 very big degree up　　he self　already PM self　drink
　　　　 醉　　了。
　　　　 zuì　 le.
　　　　 drunk PFV
　　　　 '**You tell me**, in a large degree, he made himself drunk.'
　　 c. **你 說，** 她 多　厲害！ (S4)
　　　　 Nǐ shuō, *tā duō lìhài!*
　　　　 you say　 she how awesome
　　　　 '**You tell me**, how awesome she was!'

When an S4 occurs with a clause, the clause may not be relativized; cf. (38).[14]

(38) ??你　說　的　是：這　後媽　　多　不　容易　啊！　　　　(S4)
　　　??*Nǐ shuō de shì: zhè hòumā   duō bù róngyì a!*
　　　you say   REL COP DEM stepmother how NEG easy   FP
　　　'??**What you told me was,** how hard it is to be a stepmother!'

Shuō in an S4 is a verb used to describe a spontaneous action. It does not combine with an adverbial expression indicating past time or frequency, cf. (39).

(39) ??你　曾經　　說／??你　經常　　　說／??你　一直　　說，這　　(S4)
　　　??*Nǐ céngjīng shuō/ ??nǐ jīngcháng shuō/ ??nǐ yīzhí   shuō zhè*
　　　you ever   say/ you usually   say/ you all.the.time say   DEM
　　　後媽　　多　不　容易　啊！
　　　hòumā   duō bù róngyì a!
　　　stepmother how NEG easy   FP
　　　'??**You have previously told me/** ??**You often tell me/** ??**You tell me all the time,**
　　　how hard it is to be a stepmother!'

Shuō in S4 may not combine with an experiential aspect marker *guo* or a perfective marker *le*; cf. (40).

(40) ??你　說　過／??你說　了，這　後媽　　多　不　容易　啊！　　(S4)
　　　??*Nǐ shuō guo/ ??Nǐ shuō le,   zhè hòumā   duō bù róngyì a!*
　　　you say   EXP/ you say   PFV DEM stepmother how NEG easy   FP
　　　'??**You have told me/** ??**You told me,** how hard it is to be a stepmother!'

Shuō in S4 may be repeated (cf. (41a)) or combine with *yīxià* (cf. (41b)).

(41) a. 你　說　說，你　心　裡　　到底　　想　的　是　什麼？　　(S4)
　　　　　 Nǐ shuō shuō, nǐ xīn lǐ   dàodǐ   xiǎng de shì shénme?
　　　　　 you say   say   you heart inside on.earth think REL COP what
　　　　　 '**You tell me a little**, what on earth are you thinking?'

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14. Note that the sentence example in (38) may sound acceptable to the ears of some native speakers as an example of an S3, but it is unacceptable as an example of S4. It also applies to the sentence examples in (39) and (40).

b. **你 說** 一下， 你 覺得 廣昌　　　會 拿 出於 什麼　　　(S4)
   Nǐ shuō yīxià,　nǐ juédé Guǎngchāng huì ná chūyú shénme
   you say once　you think Guangchang will pay for　what
   原因？
   yuányīn?
   reason
   '**You tell me a little**, for what reason do you think Guangchang will pay the money?'

S4 as a feedback-seeker does not have propositional meaning, and so it is transparent to a factive sentence adverb (cf. (42a)) or a tag question (cf. (42b)).

(42) a. 所以 **其實**　**你 說**，從 小　到 大 日本 那　個 Johnny's　(S4)
   Suǒyǐ qíshí　nǐ shuō, cóng xiǎo dào dà Rìběn nà　gè Johnny's
   so　actually you say　from small to　big Japan DEM CLS Johnny's
   事務所，有　多少　　的　　風波，　　就 是 圍繞　　這 一
   shìwùsuǒ, yǒu duōshǎo de　fēngbō,　jiù shì wéirào　zhè yī
   Office　have how.many NOMZ disturbance just COP surround DEM one
   方面？
   fāngmiàn?
   aspect
   'So **actually you tell me**, how many disturbances, small or big, that Johnny's Office in Japan have been involved in?'

   b. 你 李 編輯 吧，真　是 哪兒 哪兒 都 好，**你 說**，人　(S4)
   Nǐ Lǐ biānjí ba,　zhēn shì nǎ'er nǎ'er dōu hǎo, nǐ shuō, rén
   you Li editor FP　truly COP where where all　nice you say　person
   厚道，　**是　吧**？
   hòudào, shì ba?
   virtuous right Q
   'Editor Li. You are really an all-around nice person. **You tell me**, you are virtuous, **aren't you?**'

S4 may appear not only in sentence-initial position, e.g. (37b) and (37c), but also in sentence-medial position, e.g. (43a), or sentence-final position, e.g. (43b).

(43)　a.　更　　明顯　　　的　　　例子　　就　是　**你　說**，你　好端端　　　　(S4)

　　　　*Gèng　míngxiǎn de　　lìzi　　jiù　shì　**nǐ　shuō**, nǐ　hǎoduānduān*

　　　　more obvious　NOMZ example just COP you say　you no.problem

　　　　的　考　　　　了，你　的　名字　就　　會　　被　　盜用。

　　　　de　kǎo　　　le,　nǐ　de　míngzì jiù　huì　bèi　dàoyòng.

　　　　ADV take.exam PFV　you POSS name　then　will PASS misuse

　　　　'A more obvious example is, **you tell me**, you took the exam without problems, and your name would then be misused.'

　　b.　"當嘰"　就　被　高　壓　　電　　　電　得　掉 地　　下

　　　　"Dāngjī" jiù　bèi　gāo yā　　diàn　　diàn de　diào dì　　xià

　　　　in.a.clap　thus PASS high voltage electricity shock ADV fall　ground down

　　　　死　了，**你　說**。

　　　　*sǐ　le,　　**nǐ　shuō**.*

　　　　die PFV　you say

　　　　'Thus in a clap she was shocked by the high voltage electricity and fell to the ground dead, **You tell me.**'

If we assume a hypothesized grammaticalizational pathway of (35), these properties correspond to, and thus help to explain the properties of S2 in the target sentence: (37a–c) correspond to Property A, (38) corresponds to Property C, (39) to Property D, (40) to Property E, (41a–b) to Property H, (42a) to Property F, and (42b) to Property G, and (43a–b) to Property I.

　　　The hypothesized conjoining pathway may also account for Properties B (i.e. not permitting the following clause to be replaced by an NP meaning 'statement') and J (i.e. permitting prosodic separation) of an S2. Since according to the hypothesized conjoining pathway, either in the source construction (i.e. S4) or in the target construction (i.e. S2), the following clause is not an argument (including a patient object) of the *nǐ shuō* predicate, that explains why it cannot be replaced by a patient object meaning 'statement'. Also, according to Long (2017: 13), Long et al. (2019: 3), and Long et al. (2021), the change from a prosodically separated parenthetical predicate to a prosodically unseparated parenthetical predicate involves no syntactic operation but a loss of prosodic gap, and may be restored for communication reasons. That explains the Property J of an S2.

5.3　Selection of the pathways

In this study we have argued for a hypothesized complementation pathway illustrated as from (44a) = (31a) to (44b) = (31b) for the formation of a speech-quotative *nǐ shuō* predicate, i.e. an S1.

(44) a. 你 說：“我 不 能 常常 陪 你。” (S3)
     Nǐ shuō: "Wǒ bù néng chángcháng péi nǐ."
     you say   I   NEG can often   accompany you
     '**You said**, "I can't often accompany you".'

    b. 你 說 你 不 能 常常 陪 他。 (S1)
     Nǐ shuō nǐ bù néng chángcháng péi tā.
     you say   you NEG can often   accompany he
     '**You said** that you couldn't often accompany him.'

We have also argued for a hypothesized conjoining pathway illustrated as from (45a) = (34) to (45b) = (36) for the formation of a feedback-seeking *nǐ shuō*, i.e. an S2.

(45) a. 你 說，這 後媽 多 不 容易 啊！ (S4)
     Nǐ shuō, zhè hòumā duō bù róngyì a!
     you say   DEM stepmother how NEG easy   FP
     '**You tell me**, how hard it is to be a stepmother!'

    b. 你 說 這 後媽 多 不 容易 啊！ (S2)
     Nǐ shuō zhè hòumā duō bù róngyì a!
     you say   DEM stepmother how NEG easy   FP
     '**You tell me**, how hard it is to be a stepmother!'

The source constructions of the two hypothesized pathways similarly consist of a prosodically separated parenthetical predicate *nǐ shuō* and a content clause. One may wonder what factors have decided the selection of the two different hypothesized pathways. Suppose there is an NP + *shuō* predicate in Chinese, with NP being the subject of *shuō*, and the NP + *shuō* predicate occurs with, but is prosodically separated from the following clause; cf. (46).

(46)   NP + *shuō*, + Clause

We have found that in Chinese, if in the source construction an NP + *shuō* predicate is used to indicate the reproduction of what the referent of the NP has said, then the NP + *shuō* predicate and the following clause may have the possibility of following a hypothesized complementation pathway to develop into a [Matrix Clause + Complement Clause] construction. If in the source construction the NP + *shuō* predicate is used to perform other speech acts, then the NP + *shuō* predicate and the following clause may follow a hypothesized conjoining pathway to develop into a construction in which the two structures are conjoined with no syntactic operation involved.

    Note that the NP + *shuō* predicate indicating the reproduction of what the subject referent of NP has said in the source construction is a required condition, not a sufficient condition for the selection of a hypothesized conjoining pathway.

We have found that even if the NP + *shuō* predicate is used to indicate the reproduction of what the referent of NP has said in the source construction, the NP + *shuō* predicate and the clause that it occurs with may still follow a hypothesized conjoining pathway: cf. (47), taken from Zhang & Xiao (2016: 318); for similar arguments cf. Dong (2008: 374–375).

(47) **他 說₁** "我 既   感到   她 很   獨特，也   感到   我 自己 很
      Tā shuō₁ *"wǒ jì*   *gǎndào tā   hěn dútè,   yě   gǎndào wǒ zìjǐ   hěn*
      he say   I   not.only feel   she very special but.also feel   I   self   very
      自豪。如果 說   我 的   妻子 她 就   在 律師 樓   裡   工作，
      zìháo. Rúguǒ shuō wǒ de   qīzi tā jiù   zài lǜshī lóu   lǐ   gōngzuò,
      proud if   say I   POSS wife she only in   lawyer building inside work
      或 她 是 一 個 會計"，   **他 說₂** "我 會 覺得 她 很   平凡"，**他**
      *huò tā shì yī gè kuàijì",   **tā shuō₂** "wǒ huì juédé tā   hěn píngfán", tā*
      or   she COP one CLS accountant he say   I   will feel   she very common he
      說₃ "所以 呢"，**他 說₄** "我 寧可 你 是 不 要   去 工作"。
      shuō₃   "suǒyǐ ne",   tā shuō₄ "wǒ nìngkě nǐ   shì bù   yào   qù gōngzuò".
      say   so   FP   he say   I   rather you COP NEG want go work
      '**He says₁** "I not only think that she is special, but also feel proud of her. If my wife works in a lawyer's office, or she works as an accountant"; **he says₂** "I will feel that she is too common"; **he says₃** "so"; **he says₄** "I would rather you didn't want to work".'

Under these conditions, in order to determine whether the two structures have followed a hypothesized complementation ation pathway or a conjoining pathway, one may need to adopt the criteria identified by Dixon (2006), and argue whether or not the NP + *shuō* predicate is the matrix clause of its following clause in the target construction. If it is in the target construction, then the change has followed a hypothesized complementation pathway; otherwise the change may still have followed a hypothesized conjoining pathway.

   But whatever hypothesized pathways followed by the two structures, one must bear in mind that in the source construction when an NP + *shuō* predicate is prosodically separated from the clause that it occurs with, they do not necessarily have a [matrix clause + complement clause] relationship; for similar arguments cf. Huang (2013: 240–241). It is only when there is no prosodic gap between the two structures, that we can argue for a real syntactic relationship between them. This is an important argument which unfortunately has generally been neglected in the literature; cf. e.g. Wang et al. (2003: 480) and Gu (2007: 232).

6.   Conclusion and further comments

We have argued in this study that a prosodically unseparated speech-quotative *nǐ shuō*, i.e. S1, e.g. *nǐ shuō* in (44b) = (31b), develops from a prosodically separated speech-quotation *nǐ shuō*, i.e. S3, e.g. *nǐ shuō* in (44a) = (31a), through a hypothesized complementation pathway that makes the following clause the complement clause of the *nǐ shuō* predicate.

   We have also argued that a prosodically unseparated feedback-seeking *nǐ shuō*, i.e. S2, e.g. *nǐ shuō* in (45b) = (36), develops from a prosodically separated feedback-seeking *nǐ shuō*, i.e. S4, e.g. *nǐ shuō* in (45a) = (34), through a hypothesized conjoining pathway that conjoins *nǐ shuō* with the following content clause.

   One may wonder if there is a derivational relationship between an S1 and an S4. The COOPTATION PATHWAY proposed by Heine (2013: 1218–1221; 2016: 251–252), Heine et al. (2013: 185–187), Heine et al. (2014: 148–151), and Heine et al. (2017: 813–855) may be adopted to account for such a hypothesized derivational relationship. According to the pathway, a parenthetical predicate like S4, cf. e.g. *nǐ shuō* in (48a) = (34), what the authors term a THETICAL, is taken from a sentence, e.g. *nǐ shuō* in (48b) = (31b), to serve certain discourse functions. If the pathway is justifiable, we may be dealing with a change of S3>S1>S4>S2, not of S3>S1>S2>S4, as has been claimed in a range of publications; cf. Chui (1994: 1), Dong (2003: 46–57), Yao (2008: 47), Cao (2010: 43–44), Guan (2011: 6), Hu (2011: 137), Li (2013: 12–18), Sheng (2013: 32–34), and Yu (2015: 17).

(48) a. **你 說，**這 後媽   多 不 容易 啊！   (S4)
         Nǐ shuō, zhè hòumā   duō bù róngyì a!
         you say   DEM stepmother how NEG easy   FP
         '**You tell me**, how hard it is to be a stepmother!'

     b. **你 說** 你 不 能 常常   他。   (S1)
         Nǐ shuō nǐ bù néng chángcháng péi   tā.
         you say   you NEG can often   accompany he
         '**You said** that you couldn't often accompany him.'

Another possibility, however, is that an S4 as an utterance functions as a speech act, i.e. seeking the attention of an interlocutor to get feedback, while an S3 as an utterance functions as another speech act, i.e. quoting speech. It may so happen that these two parallel parenthetical predicates refer to different speech acts and have followed different hypothesized pathways to develop respectively into another structure: one having followed a hypothesized complementation pathway to develop into a matrix clause structure, and the other having followed a hypothesized conjoining pathway to develop into a prosodically unseparated parenthetical predicate.

Similar arguments may also be adopted to account for the formation of the English matrix clause *you say*, e.g. *you say* in (49) = (2b), and the English sentence-initial parenthetical predicate *you say*, e.g. *you say* in (50a) = (4b)). We argue that the former may have followed a hypothesized complementation pathway in developing from a speech-quotation parenthetical predicate *you say*; and the latter may have followed a hypothesized conjoining pathway in developing from a prosodically separated parenthetical predicate *you say*; cf. e.g. *you say* in (50b).

(49)   **You say** that on the morning of the forgery the prisoner was jumpy. Well, now, sir, what precisely do you mean by that word?

(Taken from Fitzmaurice 2004: 442)

(50)   a.   Well we can't do that, how, and then you have to look at the legislation and **you say** what are the loop holes here?

(*Pensioners' and Trades Union Association meeting*, recorded on 28 August 1991, in the British National Corpus)

   b.   **You say**, *We preach another Gospel*: You do but *Say* it, and I thank God. *You can Do no more.*

(1674 Penn, *A just rebuke to one & twenty learned and reverend divines* [LC]); taken from Brinton 2008: 103)

As for the formation of the sentence-final parenthetical predicate *you say*, e.g. *you say* in (51) = (2a), we argue that it has not developed from a sentence-final parenthetical predicate *as you say*, e.g. *as you say* in (52) = (3a), but rather has also followed a hypothesized conjoining pathway in developing from a prosodically separated sentence-final parenthetical predicate *you say*, e.g. *you say* in (53) = (3b).

(51)   There's a Frank Sinatra song that ends, "Here's to the winners all of us can be." So tell that to the country's 650,000 unemployed **you say**?

(Taken from Brinton 2008: 98)

(52)   If I speake this rashlie and foolishlie, **as you say**, and your self learned as you boast, and I vnlearned, I shall be the more easily ouerthrowne.

(1593 Gifford, *A dialogue concerning witches and witchcrafts* B3R [HC]; taken from Brinton 2008: 102)

(53)   Well, on Mistress Ford, **you say**.

(1597 Shakespeare, *The merry wives of Windsor* II, ii, 47 [Evans]; taken from Brinton 2008: 102)

Since according to the hypothesized conjoining pathway, *you say* does not make the clause it occurs with – e.g. *what are the loop holes here?* in (50a) and *on*

Mistress Ford in (53) – its complement clause, a complementizer *that*, which is used to indicate a [matrix clause + complement clause] relationship between two clauses, does not need to appear between the two clauses. That explains why in Middle English when a *you say* predicate took a clause, there frequently was not a complementizer *that* between *you say* and the clause; cf. Brinton (2008: 100–101).

Our account may also solve the two problems of the hypothesized adverbial clause pathway argued for by Brinton (2008). Since according to our account, a parenthetical predicate *you say* does not develop from a parenthetical predicate *as you say*, we do not need to account for their meaning discrepancy. Also, according to our account, the development of both a sentence-initial parenthetical predicate *you say* and a sentence-final parenthetical *you say* may be explained as having followed the same hypothesized change from being prosodically separated to being prosodically unseparated. Therefore, we do not need to adopt a mixture of two reverse hypothesized changes as proposed by Brinton (2008) to argue for their development.

Furthermore, our account may also help to account for the formation of certain other parenthetical *say*-predicates in English. Brinton (2008: 95) has argued that a parenthetical predicate *I dare say* first occurred in Middle English without the complementizer *that* and was prosodically separated from the clause that it occurred with, e.g. *I dare well say* in (54a). Brinton (2017: 218) has also argued that a parenthetical predicate *I only say* first occurred in 19th century English without the complementizer *that* and was prosodically separated from the clause that it occurred with, e.g. *I only say* in (54b). It would be difficult to account for these sentence examples if we assume a hypothesized matrix clause pathway or adverbial clause pathway. Yet they fall exactly within the predictions of our hypothesized conjoining pathway.

(54) a. *Gode son, intromytt not yowrsylff in þer cumpeny. þei harde not a mass þis twelmonyth, **I dare well say.***
        'Good son, do not mix yourself in their company. They have not heard a mass in this twelve-month, **I dare well say**'
                                    (c1475 *Mankind* [HC]; taken from Brinton 2008: 95)
      b. So **I only say**, your obliging epistle was like you.
          (1780–1796 Brownings, *Letters* [CLMET3.0]; taken from Brinton 2017: 218)

Nevertheless, more evidence, especially evidence of *you say* predicates in history of English is needed in order to further validate the pathways proposed here.

Acknowledgements

Abbreviations

ADV	adverbial phrase marker	PM	patient marker
CLS	classifier	POSS	possessive marker
COP	copula	Q	question particle
CSR	current state related marker	REL	relativizer
DEM	demonstrative	s1	prosodically unseparated speech-quotative *nǐ shuō*
EXP	experiential aspect marker		
FP	final particle	s2	prosodically unseparated feedback-seeking *nǐ shuō*
INTJ	interjection		
NEG	negative marker	s3	prosodically separated speech-quotation *nǐ shuō*
NOMZ	nominalizer		
NP	nominal phrase	s4	prosodically separated feedback-seeking *nǐ shuō*
PASS	passive marker		
PFV	perfective aspect marker		

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