Topic Prominence

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1 Introduction

The idea of topic prominence and subject prominence as typological parameters originates with Li and Thompson (1976; henceforth L&T). Assuming that the basic sentence structure of languages can be analyzed in terms of the relation

'subject-predicate', 'topic-comment', or both, L&T posited the binary features [±subject-prominent] and [±topic-prominent] to distinguish "subject-prominent" languages, exemplified by English, from "topic-prominent" languages, exemplified by Chinese. Languages such as Japanese, with overt marking for subjects and topics, were classified as both topic-prominent and subject-prominent. In characterizing Chinese and Japanese as topic-prominent languages, L&T were interested in sentences like (1)–(2), which we provide with Japanese counterparts (3)–(4).

(1) Chinese

Nèi chẳng huǒ, xìngkuī xiāofángduì lái de kuài.² that CL fire fortunately fire-brigade come DE fast 'That fire, fortunately the fire brigade came quickly.'

(2) Chinese

Nèixie shùmu shùshēn dà. those tree trunk big 'Those trees, (their) trunks are big.'

(L&T 1976, 461–462, exs 7, 8)

(3) Japanese

Sono syoobootai hayaku kazi saiwai kita. wa ga fire-brigade that fire fortunate NOM quickly came 'That fire, fortunately the fire brigade came quickly.'

(4) Japanese

Sore-ra no ki wa miki ga ookii. that-PL GEN tree TOP trunk NOM big 'Those trees, (their) trunks are big.'

(2) and (4) correspond to "split topicalization" in the sense of "XP splitting" defined by Fanselow and Ćavar (2002): the topic DP 'tree' can be related to a phrase headed by 'trunk' in the nuclear clause. (1) and (3) have no such relation; the relation between the topicalized DP and the rest of the clause is limited to the property that the latter is somehow "about" the former.

L&T's reliance on morphological marking to distinguish Japanese as topic- and subject-prominent at first seems arbitrary, since overt marking plays no part in their classification of Chinese. Chinese topics can be distinguished by syntactic criteria other than overt marking, but so can Chinese subjects.³ As we show below, however, the existence of topic particles, more precisely the non-occurrence of V2 (movement of a head in the extended verbal projection into the head of a Topic projection) turns out to capture best the way the label "topic-prominent" has been used in the typological literature. So-called topic-prominent languages fill heads on the left periphery by external merge of topic markers, or not at all. In most other respects topic-prominent languages do not differ from other languages with an active left periphery, nor are they uniform in the ways the left periphery is active. We show that the widespread assumption that East Asian languages display such uniformity, specifically the claim that "Topics in all these languages share a great

number of syntactic, semantic, and pragmatic properties" (Xu 2006, 138), oversimplifies the differences between them. We clarify these differences by an examination of the left periphery in Chinese and Japanese as well as Korean. Finally, we consider whether the external merge parameter correlates with other typological properties.

The chapter is organized as follows. Section 2 examines the fine structure of the left periphery in languages that have been classified as topic-prominent, focusing on Chinese, Japanese, and Korean. Section 3 reviews previous generative treatments of topic prominence. Section 4 examines the issue of a topic prominence parameter. Our approach is syntactically based; it is distinct from attempts to provide semantic or pragmatic definitions of topic (see Krifka 2007, among others). We show that syntactic topic positions can be associated with a range of semantic interpretations.

2 The fine structure of the left periphery in so-called topic-prominent languages

In this section we show that constructions involving material in the left periphery of the clause preceding the subject, often lumped together as showing "topic prominence," in fact reveal important differences between Chinese, Japanese, and Korean.

2.1 Major subject in Japanese and its potential Chinese counterparts

2.1.1 The major subject construction in Japanese

Variation in the fine structure of the left periphery is obvious in a comparison of Chinese (1)–(2) and Japanese (3)–(4). In addition to topic-marked patterns (3)–(4) with wa, Japanese allows the "major subject" (MSC) pattern in (5)–(6), where both NPs are nominative marked with ga:

(5) Japanese

Sono kazi *ga* syoobootai ga hayaku kita. that fire NOM fire-brigade NOM quickly came 'It is that fire that the fire brigade came quickly.'

(6) Japanese

Sore-ra no ki *ga* miki ga ookii. that-PL GEN tree NOM trunk NOM big 'It is those trees that (their) trunks are big.'

As noted by Xu (2006, 165), the Chinese pattern in (2) above, $N\grave{e}ixi sh\grave{u}mu sh\grave{u}sh\bar{e}n d\grave{a}$ "Those trees, (their) trunks are big', is also sometimes called a "double subject" (see L&T 1976) or "double nominative" construction. The question is whether the Chinese pattern has the properties of Japanese (4), where the leftmost DP is topic-marked (wa), or the properties of (6), where the leftmost DP or major subject is nominative marked (ga). In Japanese, the leftmost nominative-marked DP is associated in matrix clauses with a narrow focus interpretation (Kuno 1973). Since Chinese

lacks morphological subject marking, it is in principle not excluded that Chinese topicalization constructions such as (1)–(2) are ambiguous, with a covert MSC co-existing with the structure associated with the topic interpretation in (1)–(2).

2.1.2 Lack of the major subject construction in Chinese

Two tests indicate that Chinese lacks a counterpart to the Japanese MSC pattern. First, it turns out that the leftmost DP in Chinese sentences like (2) fails exclusivity diagnostics for narrow focus status; an alternative can be introduced for which the same situation holds as for the first topic. This fact has been unremarked in the functional/typological literature, which in general treats Chinese and Japanese alike.

(7) Chinese

- a. Făguó de dà chéngshì, jiāotōng bǐjiào luàn. France SUB big city traffic relatively chaotic
- b1. Měiguó de dà chéngshì, jiāotōng yě bǐjiào luàn. USA SUB big city traffic also relatively chaotic
- #Bù, b2. měiguó de dà chéngshì, jiāotōng bĭjiào luàn. **USA** SUB big city traffic relatively chaotic a. 'As for big cities in France, the traffic is rather chaotic.'
 - b1. 'As for big cities in the USA, the traffic is rather chaotic as well.'
 - b2. #'Wrong, as for big cities in the USA, the traffic is rather chaotic.'

In contrast, the continuation corresponding to (7b2) is felicitous with a nominative-marked (*ga*) major subject in Japanese.

(8) Japanese

- a. Huransu no daitokai *ga* miti ga itumo zyuutaisite iru. France GEN big.city NOM road NOM always jammed is 'It is French big cities that the roads are always jammed.'
- b. Tigau, Beikoku no daitokai ga miti ga itumo zyuutaisite iru. wrong USA GEN big.city NOM road NOM always jammed is 'Wrong, it is US big cities that the roads are always jammed.'

But this continuation is infelicitous when the leftmost DP is topic-marked (wa):

(9) Japanese

- a. Huransu no daitokai wa miti ga itumo zyuutaisite iru. France big.city TOP road NOM always jammed is GEN 'As for big cities in France, the traffic is always congested.'
- b. *Tigau, Beikoku no daitokai wa miti ga itumo zyuutaisite iru. wrong USA GEN big.city TOP road NOM always jammed is 'Wrong, as for US big cities the traffic is always congested.'

Chinese must use an S-initial cleft construction with the copula *shì* 'be' to force the exclusive reading (see Paul and Whitman 2008; Pan 2014):⁶

(10) Shì făguó de dà chéngshì jiāotōng bǐjiào luàn, be France SUB big city traffic relatively chaotic bù shì měiguó de dà chéngshì/ # yě shì měiguó de dà chéngshì. NEG be USA SUB big city also be USA SUB big city 'It is the traffic in French big cities that is rather chaotic, not the traffic in US big cities/[#]it is also the traffic in US big cities.'

Second, Chinese disallows relativization of gapless topics, in contrast to Japanese major subjects (Sakai 1994) and Korean (Han and Kim 2004), which can be relativized. For Japanese, this can be shown using Kuroda's (1988) subtype of MSCs in which the major subject cannot be derived from any other position in the clause (see also Tateishi 1994; 2006):

(11) Japanese

[DP Tookyoo wan no sakana] ga [[[koozyoo haisui] ni yoru] kaisui Tokyo bay GEN fish factory wastewater-to due NOM nol osen de] moo-sudeni [DP sisya] dete iru. ga san-mei GEN pollution by already fatality NOM 3-person occurring is 'It is fish of Tokyo Bay that due to the pollution of seawater by wastewater from factories three fatalities have already occurred.'

(Kuroda 1988, 129)

In (11), there are two phrases in the periphery preceding the inner subject *sisya ga* 'fatality': the major subject *Tookyoo wan no sakana ga* 'fish of Tokyo Bay' and a complex adjunct phrase 'due to the pollution of seawater by wastewater from factories'. (12) results from relativization of the major subject *Tookyoo wan no sakana ga* in (11):

(12) Japanese

[DP [[[[koozyoo haisui] ni yoru] kaisui no] osen de] [moo sudeni factory wastewater to due seawater GEN pollution by already [sisya]] ga san-mei dete iru [DP Tookyoo wan no sakana]] fatality NOM 3-person occurring is Tokyo bay GEN fish 'fish of Tokyo Bay such that due to the pollution of seawater by wastewater from factories three fatalities have already occurred.'

This cannot be replicated for Chinese; there is no corresponding relative clause (cf. (14)) for the structure in (13) where the subject $s\bar{a}n$ ming sizhě 'three fatalities' is preceded by two topics, the DP 'fish of Tokyo Bay' and the adjunct PP headed by $y\acute{o}uy\acute{u}$ 'due to'.

(13) Chinese

[TopP [DP Dongjing wan de yú], [TopP [PP youyú [DP [TP [NP gongchang Tokyo bay SUB fish due.to páishuǐ] de [hǎishuǐ wūrǎn]]], [TP [DP sān míng yĭnqĭ] wastewater provoke SUB seawater pollution CLF] vijīng chūxiàn -le]]]. fatality already -PRF

'As for fish of Tokyo Bay, due to the seawater pollution provoked by wastewater from factories, three fatalities have already occurred.'

(modified example from Shyu 1995, 168, ex. 86; bracketing added)

*[DP [PP youyu | DP [TP [NP gongchang páishuĭ] **[hǎishuǐ** yĭngĭ] de due.to factory wastewater provoke SUB seawater wūrǎn]]] $[_{TP}]_{DP}$ sān míng sĭzhě] yĭjīng chūxiàn -le]]] de pollution fatality already occur 3 CLF -PRF SUB [DP dōngjīng wān de yú]] Tokyo fish bay SUB

The relative clause in (14) is uniformly rejected by Chinese speakers. In fact, the topic structure (13) itself is judged to be only marginally acceptable, due to the lack of a relation between the topic DP 'Tokyo bay fish' and the comment sentence 'three fatalities occurred'.⁷

2.1.3 Wa versus ga in Japanese and their counterparts in Chinese

Returning to Japanese, in contrast to major subjects, *wa*-marked topics which cannot be derived from any other position in the sentence cannot be relativized. Tateishi (1991; 1994) shows that Japanese has a class of "pure topics" which cannot be realized as major subjects.⁸

(15) Japanese

Hannin wa/*ga Saburoo ga ayasii.
perpetrator TOP/NOM Saburoo NOM suspicious 'As for the perpetrator, Saburoo is suspicious.'

(Tateishi 2006, 65)

These cannot be relativized:

(16) Japanese
*Saburoo ga ayasii hannin
Saburoo NOM suspicious perpetrator
('The perpetrator such that Saburoo is suspicious.')

Chinese topics thus behave like Japanese *wa*-topics, not *ga*-marked major subjects. The existence of the following topicalization–relativization pairs in Chinese at first sight seems to invalidate this conclusion:⁹

- (17) Chinese
 - a. Nà ge gūniang, yănjīng hen dà. that CLF girl eye very big 'That girl, (her) eyes are big.'
 - yǎnjīng dà de b. hen nà gūniang ge very big SUB that girl eve CLF 'that girl whose eyes are big'
- (18) a. Nà ge bānjí, yi ge rén dōu méi lái. that CLF class 1 CLF person all NEG come 'As for that class, not a single person came.'
 - b. yi ge rén dōu méi lái de nà ge bānjí 1 CLF person all NEG come SUB that CL class 'that class of which not a single person came'

However, (17)–(18) do not illustrate gapless topics; instead, the subject DP in the comment-TP involves a covert possessor. This holds both for relational nouns such as body parts (cf. $y\check{a}nj\bar{t}ng$ 'eye' in (17)) and part—whole relations as in (18) where $y\bar{t}$ ge $r\acute{e}n$ 'one person' represents a member of the collective noun $b\bar{t}anj\acute{t}$ 'class'. The contrast in (19a)–(19b) below (due to Meng Fanjun) demonstrates that it is indeed the inalienable possession relation which establishes the necessary link between topic and comment:

(19) Chinese

- a. Nà ge gūniang, gē-shēng hěn dòngtīng. that CLF girl song-voice very pleasant.to.listen 'That girl, her singing voice is beautiful.'
- b. Nà ge gūniang, *(tā de) shīgē hĕn dòngrén. that CLF girl 3sG SUB poetry very moving 'That girl, her poetry is moving.'

 $Sh\bar{\imath}g\bar{e}$ 'poetry' not being a relational noun, the link between topic and comment in (19b) must be established explictly via a pronoun.¹⁰

The presence of a covert possessor in (17)–(18) is confirmed by the observation going back to Huang (1984) that coindexation of the covert possessor with the topic DP requires adjacency between the two DPs; hence it is excluded between the topic and a relational noun in object position:

(20) Chinese

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??? Nà ge gūniang, wò tèbié xǐhuān yǎnjīng.
that CLF girl 1sG particularly like eye
(Intended: 'That girl, I particularly like her eyes.')
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To sum up, in Chinese only topicalization structures with a gap have a "corresponding" relative clause. ¹¹ Consequently no relatives exist for gapless topics such as (13) above and (21a) below:

(21) Chinese

- a. Nà chẳng huǒ, xìngkuī xiāofángduì lái de kuài.
 that CLF fire fortunate fire-brigade come DE fast (= (1) above)
 'That fire, fortunately the fire brigade came quickly.'
- xìngkuī *xiāofángduì lái de kuài nà chǎng huŏ fire-brigade fortunate come fast that DE SUB CLF fire (Intended: 'the fire such that the fire brigade fortunately came quickly')

Thus Chinese (gapless) topics pattern with *wa*-marked topics in Japanese, not with major subjects. Recall as well that in Chinese any topic, gapless or gapped, fails the exclusivity diagnostics holding for the Japanese major subject. The major subject construction *sensu stricto* does not occur in Chinese.

2.1.4 Fusion of FocusP and FiniteP in Japanese and Korean

Kishimoto (2009) shows that Japanese major subjects occupy a position lower than topics. Kishimoto uses a test where the association with focus particle *dake* 'only' is attached outside tense. In this position, *dake* may undergo association with focus with a nominative marked major subject, but not with a *wa*-marked topic:

(22) Japanese

- a. Zoo ga hana ga nagai dake da. elephant NOM trunk NOM long only COP 'Only the elephant has a long trunk.'
- b. Zoo wa hana ga nagai dake da. elephant TOP trunk NOM long only COP 'The elephant has only a long trunk.'

(Kishimoto 2009, 490)

Kishimoto explains this contrast by hypothesizing that Japanese clauses are split into two layers corresponding to the Complementizer, Inflectional, and Lexical layers posited by Rizzi (1997):

(23) a.
$$\frac{\text{Complementizer layer}}{\text{CP-ForceP-TopP*-FocP-TopP*}} \frac{\text{Inflectional layer}}{\text{FinP-TP}} \frac{\text{Lexical layer}}{\text{vP-VP...}}$$
(Rizzi 1997) b.
$$\frac{\text{Complementizer domain}}{\text{CP (TopP)}} \frac{\text{Propositional domain}}{\text{TP vP VP}}$$
(Kishimoto 2009)

Kishimoto accounts for the contrast in scope facts in (22) by locating *wa*-marked topics in the Complementizer domain, but nominative-marked subjects in the Propositional domain. Recall that the leftmost nominative-marked DP in a Japanese MSC receives a narrow focus interpretation. We can account for this fact by making a slightly different "cut" in the left periphery, applying the hypothesis of Haegeman (2004) that adjacent functional heads on the periphery may be conflated or fused, subject to crosslinguistic variation.¹² We propose the following cut for Japanese:

(24) exploits the hypothesis of Whitman (1998; 2001) that topic particle *wa* and nominative particle *ga* occupy the heads of functional projections. That is, these particles are inserted by external merge as the heads of the Topic Phrase and Focus/Finite Phrase, respectively. The relationship between nominative *ga* and Tense follows Takezawa (1987), who shows that nominative *ga* is restricted to tensed clauses. ¹⁴ The view that FocusP and FiniteP in Japanese and Korean are fused explains why nominative case is assigned to the focused DP, and also why this DP, in contrast to "pure" (i.e., base-generated) *wa*-topics, may be relativized: a chain created by extraction of the latter DP is case-marked, while a chain involving extraction of a

pure topic is not. On this view, a Japanese MSC such as (25) (= (5) above) is assigned the following structure:

(25) Japanese

The contrasts between Chinese and Japanese with respect to MSCs can then be attributed to the fact that Chinese lacks a fused FocusP/FiniteP projection between TopP and TP. In this specific sense, Chinese lacks MSCs altogether (see section 2.3.1 below).

2.2 Scrambling

A second difference between the left periphery in Chinese and languages such as Japanese and Korean has to do with fronted non-subjects. In L&T and subsequent literature on Chinese, these are simply treated as non-subject topics:

(26) Chinese

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[Nèi zhī gǒu], wǒ yǐjīng kàn-guo le. that CL dog 1sG already see-EXP SFP 'That dog, I have already seen.'
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(L&T 1981, 88, ex. 2)

However, in languages with a richer array of morphological marking such as Korean and Japanese, the OSV word order in (27) has two possible realizations.

(27) Korean

- a. Ku kay nun, nay ka pelsse poassta. that dog top 1sg nom already saw 'As for that dog, I have already seen (it).'
- b. Ku kay lul, nay ka pelsse poassta. that dog ACC 1sG NOM already saw 'That dog, I have already seen.'

In languages with morphologically expressed case, the pattern (27b) with a structurally case-marked fronted argument is distinguished from the topicalization pattern in (27a) as scrambling. It is well known that the two patterns have different syntactic properties. For example, argument topicalization can readily violate relative islands (28a) in Korean and Japanese, while scrambling cannot (Saito 1985):

(28) Korean

a. Ku kay nun/*lul, ecey [[[e] cohahanun] yeca] ka that dog TOP/ACC yesterday fond.of woman NOM ipwenhayssta.
hospitalized.was

'That dog, the lady who was fond of [e] was hospitalized yesterday.'

Japanese

b. Sono inu wa/*o, kinoo [[[e] kawaigatteita] zyosei] ga that dog top/acc yesterday fond.of woman nom nyuuinsita.

hospitalized.was

'That dog, the lady who was fond of [e] was hospitalized yesterday.'

In Chinese, the island sensitivity of topicalization has been the subject of a long dispute (Huang 1984; Xu and Langendoen 1985; Xu 2006; Huang and Yang 2013). However, these authors agree that topics in Chinese can be base-generated and bind a (potentially null) resumptive pronoun, perhaps subject to further conditions of the kind proposed by Huang (1984). In Japanese, the consensus is that scrambling is the result of movement, while topicalization may be the result of movement or base generation (Kuroda 1988). As shown by Saito (1985), fronted PPs are sensitive to islands whether they are topic-marked or not, and thus must be derived by movement:

(29) Japanese

- a. Mary ni (wa), watakusi ga [[John ga [e] denwasita] to] omotteita. Mary to (top) I Nom John Nom telephoned comp thought '(To) Mary, I thought that John made a telephone call [e].'
- b. *Mary ni (wa), watakusi ga [[[e] denwasita] dansei o] sitteiru.

 Mary to (top) I nom telephoned man acc know

 ('(To) Mary, I know the man who made a telephone call [e].')

Paul and Whitman (2008) show that PP fronting is also sensitive to islands in Chinese. PP topicalization is possible from the complement clause in (30a), but not from the relative clause in (30b).

(30) Chinese

- nǚpéngyou]. a. [Zài Běijīng], hěn duō wŏ yĭwèi |tā t_{PP} yŏu Beijing 1sg think he have very much girl.friend in 'In Beijing, I think he has many girlfriends.'
- hěn *[Zài Běijīng], wǒ rènshi [[t_{PP} yǒu duō nüpéngyou] de] in Beijing 1sGknow have very much girl.friend **SUB** nà ge nánhái]. CLF boy that (*'In Beijing, I know the boy who has many girlfriends.')

These facts indicate that Chinese also has a fronting process, PP topicalization, that it is derived by movement, not base generation. 15

However, it is possible to show that Chinese fronting lacks another property of scrambling in Japanese and other so-called "scrambling" languages. It is well known that "intermediate" scrambling to the immediate left of the local subject in Korean and Japanese can display A-movement properties. Thus an argument

scrambled to the immediate left of the subject (31) can antecede an A-anaphor internal to the subject:

(31) Korean

[Yenghuy wa Mica] $_i$ lul sele $_i$ uy chinkwu-tul i chohahayssta. Yeonghi and Mija ACC each.other GEN friend -PL NOM liked '[Yeonghi and Mija] $_i$ each other $_i$'s friends liked t_i .'

(Park 2001, 651)

Chinese argument fronting to the immediate left of the subject contrasts sharply with this:

(32) Chinese

*Nà ge lǜshī_i, tā-zìjǐ_i de lǎopo shāsǐ -le t_i. that clf lawyer 3sg-self sub wife kill -prf ('That lawyer, his own wife killed.')

(Pan 2013, 60, ex. 53b)

Furthermore, it has been known since Kuroda (1971) that intermediate scrambling in Japanese induces scope ambiguity. By contrast, Chinese object fronting examples (33) are scopally unambiguous (see Kuno, Takami, and Wu 1999; 2001).

(33) Chinese

 $[H\mbox{\'e}ndu\mbox{\~e} zh\mbox{\`e}xi\mbox{\~e} shu]_i, \mbox{ w\'emen dou kan-guo t_i.}$ $many \mbox{ these book we all read-exp} \mbox{\'e}Many of these books, all of us have read.' (many > all)} \mbox{\'e}Many of these books, all of us have read.' (many > all)}$

(Kuno, Takami, and Wu 2001, 138)

The corresponding intermediate scrambled example in Japanese displays scopal ambiguity:

(34) Japanese

Ooku no korera no hon o subete no gakusei ga yonda. many GEN these GEN book ACC all GEN student NOM read 'Many of these books, all of the students have read.' (many > all, all > many)

However, when the fronted quantified DP is topic-marked, it must take wide scope, as in Chinese:

(35) Japanese

Ooku no korera no hon wa subete no gakusei yonda. many GEN these GEN book top all GEN student NOM read 'Many of these books, all of the students have read.' (many > all, *all > many)

These facts again indicate that Chinese and Japanese topicalization have broadly similar properties, but that Chinese lacks an operation comparable to scrambling (specifically, intermediate scrambling). One structural account for the A-movement properties of Japanese intermediate scrambling due to Miyagawa (2001), building

on insights of Kuroda (1988), is that A-type intermediate scrambling moves to a specifier of T. This approach requires making either multiple specifiers of T available, or stipulating that the subject in intermediate scrambling clauses remains in situ. We do not choose between these alternatives here, but given the structure we proposed in (24), Japanese and Korean have another A-position to the left of the subject, the specifier of the fused FocusP/FinP projection, to host scrambled material. The absence of such a position in Chinese may account for the absence of A-type scrambling.

2.3 More on the contrast between Chinese and Japanese/Korean

2.3.1 The topic field

We use the term "topic field" here (due to Benincà and Poletto 2004, 53) to describe the sector of the left periphery that some researchers have analyzed as involving a recursive Topic Phrase, others more finely differentiated subvarieties of topics. As is well known, Chinese, Japanese, and Korean allow multiple topics. One type is exemplified by the split topic pattern, where each topicalized constituent is related, for example by a superset/subset relation, to the constituent on its right:

(36) Chinese

Zhōngguó, dà chéngshi, Shànghǎi, jiāotōng bǐjiào luàn. China big city Shanghai traffic relatively chaotic 'As for China, as for big towns, Shanghai, the traffic is rather chaotic.'

(37) Japanese

Tyuugoku wa daitokai wa Syanhai wa koutuu ga midarete iru. China top big city top Shanghai top traffic nom disordered is 'As for China, as for big towns, Shanghai, the traffic is chaotic.'

Disrupting the superset > subset ordering in (36)–(37) blocks the split topicalization reading and leads to unacceptability.

(38) Chinese

*Shànghǎi, Zhōngguó, dà chéngshi, jiāotōng bǐjiào luàn. Shanghai China big city traffic relatively chaotic

In contrast, the order of argument topics and adjunct topics is free in Chinese, as in Japanese and Korean. ¹⁶

(39) Chinese

 a. Liú Xiáobō, 2010 nián, wěiyuánhuì shòuyǔ-le tā Nuòbèi'ér hépíng Liu Xiaobo 2010 year committee award-prf 3sg Nobel peace jiăng.

prize

'Liu Xiaobo, in 2010, the committee awarded him the Nobel peace prize.'

b. 2010 nián, Liú Xiáobō, wěiyuánhuì shòuyǔ-le tā Nuòbèi'ĕr hépíng 2010 year Liu Xiaobo committee award-PRF 3sg Nobel peace jiǎng. prize 'In 2010, Liu Xiaobo, the committee gave him the Nobel peace prize.'

(40) Korean

- Kim Taychwung 2000 nven ev wiwenhov a. nun year Dae-jung 2000 committee Kim TOP in TOP ku eykey pyenghwa sang ul swuyehayssta. him peace.prize ACC awarded 'Kim Dae-jung, in 2000 the committee awarded him the Peace Prize.'
- 2000 nven ev nun Kim Taychwung un wiwenhov 2000 year Dae-jung committee TOP Kim TOP ku evkev pyenghwa sang ul swuyehayssta. peace.prize awarded ACC 'In 2000, Kim Dae-jung, the committee awarded him the Peace Prize.'

Chinese, Japanese, and Korean thus appear to differ from languages such as Italian, where some researchers have proposed a relatively rigid order of projections on the left periphery. Thus, Benincà and Poletto (2004) suggest that the "scene setting" subprojection hosting *nel* 1999 'in 1999' in (41) always has to occur lower than the projection reserved for the left-dislocated "hanging topic" *Mario*.

(41) Italian

- a. Mario, nel 1999, gli hanno dato il premio Nobel. Mario in.the 1999 to.him have given the prize Nobel 'Mario, in 1999, they gave him the Nobel prize.'
- ??Nel 1999, Mario, gli dato il hanno premio Nobel. in-the 1999 Mario to-him have given the prize Nobel (Benincà and Poletto 2004, 67, exs 46a-46b)

Italian with a relatively rigid order internal to the topic field proper thus contrasts with the relatively free order observed for Chinese and Korean in (39)–(40). The Italian topic field as a whole, however – whether viewed as recursive Topic Phrase projections (see Rizzi 1997; 2004) or dedicated subprojections (see Benincà and Poletto 2004, 53) – always occupies a higher position than the focus field according to Benincà and Poletto (2004).¹⁷

As we see in the following section 2.3.2, the rigid relative order 'Topic field > Focus field' carries over to Chinese, Japanese, and Korean, despite other differences between them. The left periphery in Chinese thus has the following structure:

(42) Chinese left periphery
$$\text{Comp} \quad [_{\text{topic field}} \text{ Top}^*] \quad \text{'even' Focus} \quad (\text{Fin}) > T \quad v \quad VP^{18}$$

The topic field must precede the 'even' focus projection discussed in section 2.3.2; no further topic is allowed below this projection in the complementizer domain. We leave open the question of whether or not Chinese has a Finite Phrase, but we note

again that Chinese lacks the pattern where major subjects are associated with a focus reading, as evidenced by Japanese and Korean MSCs.

2.3.2 The lián 'even' focus projection in Chinese

Recursive TopPs in the topic field comprise the leftmost portion of the extended left periphery in Chinese. What about the right edge of the periphery?

This rightmost sector contains the only type of focus acceptable in the matrix left periphery in Chinese, namely items associated with scalar *lián* 'even' focus. In this construction, the focused item must immediately follow *lián* 'even'. When the 'even' focused item is an object DP, it is fronted to preverbal position, either to the left or the right of the subject.

(43) Chinese

- a. [even-FocP] Lián bīngqílín [TP] tā dōu/yĕ bù xǐhuān]].
 even ice.cream
 3sG all/also NEG like
 'Even ice-cream he doesn't like.'
- b. $[_{TP}$ $T\bar{a}$ $[_{even\text{-}FocP}$ $li\acute{a}n$ $b\bar{n}gq\acute{n}$ $d\bar{o}u/y\check{e}$ $b\grave{u}$ $x\check{i}hu\bar{a}n]].$ $3s_G$ even ice.cream all/also NEG like 'He doesn't even like ice-cream.'

One of the two operator adverbs $y\check{e}$ 'also' or $d\bar{o}u$ 'all' must be present in the extended verbal projection in the $li\acute{a}n$ 'even' focus construction.

(44) Chinese

{Lián bīngqílín} Xiǎowáng {lián bīngqílín} zuótiān *(dōu/yě) méi chī. even ice.cream Xiaowang even ice.cream yesterday all/also NEG like 'Even ice-cream Xiaowang didn't eat yesterday.'

There are a number of previous analyses of the $li\acute{a}n$ XP ... $d\bar{o}u/y\check{e}$ construction (see among others Paris 1979; 1994; Shyu 1995; Zhang 2000; Badan 2007; Badan and Del Gobbo 2010). Given that the subject (43a) and adverbs (44) may intervene between the $li\acute{a}n$ XP and $d\bar{o}u/y\check{e}$, XP and $d\bar{o}u/y\check{e}$ cannot stand in a Spec–Head relation as claimed by Shyu (1995). Nor have previous researchers analyzed $li\acute{a}n$ 'even' itself as a functional head in the left periphery; since it precedes rather than follows the associated XP, it cannot be analyzed as attracting XP to its specifier. ¹⁹ Instead the properties of this construction seem to follow from the general requirement that the variables bound by the operator adverbs $d\bar{o}u$ 'all' and $y\check{e}$ 'also' not be spelled out at PF. ²⁰

As mentioned in the preceding section 2.3.1, the $li\acute{a}n$ 'even' Focus projection must follow the topic field:²¹

(45) Chinese

- a. [TopP Qīmò kǎoshì [FocP lián liùshí fēn [TP tā dōu méi nádào]]]. term.end exam even 60 point 3sG all NEG obtain 'In the final exam, he didn't even obtain 60 points.'
- b. $*[_{FocP}$ Lián liùshí fēn $[_{TopP}$ qīmò kǎoshì $[_{TP}$ tā dōu méi nádào]]]. even 60 point term.end exam 3sG all NEG obtain (adapted from Lu 2003, 223)

We have seen in this section that the focus field in the left periphery is impoverished in Chinese, in comparison to Japanese and Korean. Focal XPs in the left periphery of matrix clauses are limited to those associated with scalar 'even' focus; in contrast, Korean and Japanese realize narrow focus in the form of the MSC at the right edge of the left periphery. Realization of focus in the left part of the clause is thus highly diverse among the three languages. Nevertheless, the generalization that the focus field follows the topic field is consistent across all three.

2.4 Topic versus subject in Chinese

While subject and topic in Japanese and Korean are distinguished by different morphological marking, this is not the case in Chinese. Accordingly, the clear-cut distinction between subject and topic in Chinese must be demonstrated relying on other criteria.

The first piece of evidence involves prepositional and postpositional phrases, both of which exist in Chinese. PrepPs are banned from subject position, while PostPs are allowed (46a)–(46b); however, both are acceptable in topic position (47a)–(47b) (Djamouri, Paul, and Whitman 2013):

(46) Chinese

- a. $[TP \{ [PostP] w \bar{u}zi \ | i] / * [PreP] z a i w \bar{u}zi \ | i] \}$ hen ganjing].

 room in/ at room in very clean

 'It is very clean in the room.'
- b. $[_{TP} \{[_{PostP} \ Lúzi \ qián] \ /^*[_{PreP} \ zài \ lúzi \ qián] \}$ hěn nuǎnhuo. stove in.front.of/ at stove in.front.of very warm 'It is very warm in front of the stove.'
- (47) a. [CP[TopP[PostP]] Jǐ ge yuè yǐqián] [TP tā jiù qù Shànghǎi]] le]. several CLF month before 3sG then go Shanghai SFP 'Several months ago, he went to Shanghai.'
 - b. [CP[TopP[PP Zài túshūguăn] [TP wǒ kĕyǐ fùyìn]] ma]?
 in library 1sG can xerox sfp
 'Can I make photocopies in the library?'

Second, Chinese also has a morphological topic marker, *ne*, although *ne* is less frequent in discourse than its Japanese and Korean counterparts. There is a consensus in the literature that *ne* signals the topic status of the preceding XP, although its semantic contribution has yet to be made precise.²² This leads to the prediction that *ne* is incompatible with obligatorily focused items, and this prediction appears to be borne out: subject *wh*-pronouns are incompatible with *ne*:

The inability of *wh*-subjects in situ to receive *ne*-marking casts doubt on the claim that subjects in Chinese undergo string vacuous topicalization in the absence of another topic XP (Jiang 2012, 219).²³ Examples like (48b) thus call into question the hypothesis that the topic position in Chinese is obligatorily filled, a question to which we return in section 3.1. Unlike subject *wh*-pronouns, subject DPs can undergo both short- (49) and long-distance (50) topicalization:

(49) Chinese

Wŏmen xĭhuān tiyùyùndòng: ge rén dōu several CLF person all ne], [_{TP} t_i xĭhuān lángiú]]] Lǎo Mǎ]_i [_{Top'}[_{Top°} Ma like basketball Lao TOP Xiǎo Zhāng ne, xǐhuān zúgiú, wǒ ne, jiù xĭhuān dǎ

Xiǎo Zhāng ne, xǐhuān zúqiú, wǒ ne, jiù xǐhuān dǎ yǔmáoqiú. Xiao Zhang TOP like football 1sG TOP then like beat badminton 'We all like sport; as for Lao Ma, he likes basketball, Xiao Zhang, he likes football, and me, I like badminton.'

(Lü 2000, 413)

(50) Chinese

(Huang, Li, and Li 2009, 289, ex. 11b)

Finally, Chinese has a distinct pattern of Left Dislocation, where the subject position is occupied by a pronoun (cf. (51)). In such cases the dislocated DP is usually analyzed as base-generated (cf. Huang 1982, ch. 2.5.2.2; Huang, Li, and Li 2009, ch. 6.1.1).

(51) Chinese

Lǎo $Zh\bar{a}ng_i$ (ne) [$_{TP}$ $t\bar{a}_i$ kěn $b\bar{a}ngzhù$ rén]]. 24 Lao Zhang $_{TOP}$ $_{3SG}$ be.willing help person 'Lao Zhang, he is willing to help people.'

(adapted from Lü 1986, 334)

We have demonstrated the difference between topic and subject in Chinese, ²⁵ and shown that Chinese lacks a position with the properties of major subjects in Korean and Japanese. We have shown that Chinese has a recursive TopP, rather than a semantically articulated left periphery as has been claimed to exist in Italian.

2.5 Wrap-up

Despite L&T's (1976) care to classify languages such as Japanese and Korean as both [+subject-prominent] and [+topic-prominent], the dominant pattern in the functional/typological literature has been to concentrate on the *opposition* between topic prominence and subject prominence as mutually exclusive properties. This view is implied in L&T's (1981, 15) own work where they state that in Chinese the subject can be absent, in contrast to subject-prominent languages such as English. Whereas

Chinese is simply left unspecified for the feature of subject prominence in L&T (1976), the implication in later work seems to be that Chinese is [–subject-prominent]. L&T's (1981, 16) failure to articulate a precise definition of properties for topic prominence other than the statement that in topic-prominent languages such as Chinese "the concept of subject seems to be less significant, while the concept of topic appears to be quite crucial in explaining the structure of ordinary sentences in the language" has led generative researchers to attempt more precise definitions of topic prominence. We move on to these in section 3.

3 Generative treatments of topic prominence

3.1 Topic prominence defined in terms of an obligatorily filled topic position

The idea that the notion of topic prominence can be defined in terms of an obligatorily filled topic position originates with Huang (1984, 549–550). The related hypothesis that there exist "discourse-prominent" languages, where both topic and focus position are filled by PF, is proposed by Kiss (1995) and described in section 3.2 below. Huang's and Kiss' analyses attempt to capture the notion of topic prominence by using a standard device of Principles and Parameters Theory, a pair of features specifying (i) whether a particular functional category is present and (ii) whether movement to that functional category takes place.

An important part of Huang's (1984) treatment, adapted by Huang and Yang (2013), is the observation that topics may be null. To make this argument, Huang (1984) draws German into the discussion of topic prominence. As is well known, in German main clauses the inflected verb always occupies the second position (hence V2); the position preceding the verb must be spelt out, which can be done by any XP (argument or adjunct). The traditional generative analysis of standard V2 (Den Besten 1983) is that the tensed verb moves into Comp and the "topicalized" constituent into Spec, CP (see (52a)). In more recent literature on German-style V2 (see among others Grewendorf 2002; 2012), left dislocation patterns such as (52b) have motivated a more articulated analysis of material fronted to the left, with TopP hosting left dislocated material and FinP the "topicalized" constituent in the forefield immediately preceding the inflected verb:

(52) German

a. [CP] Dieses Gerücht [C'] habe[C'] habe[C'] habe[C'] habe[C'] habe[C'] have [C'] from my secretary gehört. Heard

'I heard this rumour from my secretary.'

b. $[T_{OPP}]$ Dieses Gerücht, $[F_{inP}]$ das $[F_{in^\circ}]$ habe] $[T_{IP}]$ ich von meiner this T_{ACC} rumour the T_{ACC} have T_{ACC} from my Sekretärin gehört.]]] secretary heard 'This rumour, I heard it from my secretary.'

(Grewendorf 2002)

The V2 character of German makes a null topic easily discernible; these are the so-called *pronoun-zap* cases observed in Ross (1982):

(53) German

- a. Du musst unbedingt das neue Buch von Fred Vargas lesen.
 2sG must absolutely the ACC new book by Fred Vargas read 'You should definitely read the new book by Fred Vargas.'
- b. Das $/\emptyset$ habe ich schon laengst gelesen. the ACC have 1sG already long.ago read Past. Participle 'I read (it) long ago.'

Importantly, this type of deletion can only occur in the sentence-initial topic position:

(54) German

- a. Ich habe *(das) schon laengst gelesen.
 1sG have the_{ACC} already long.ago read_{Past.Participle}
 'I have already read *(it) a long time ago.'

Although the D-pronoun *das* occurs in the forefield (FinP) topic position in (54b), it cannot be deleted, because it does not occupy the sentence-initial position in this left dislocation structure.

Huang (1984) analyzes pronoun zap in German on a par with cases in Chinese where a null topic binds a variable in object position (55a), as does an overt topic (55b):

(55) Chinese

- a. $[T_{opP} [e_i] \ Zhangsan_j \ shuō \ [Lǐsì_k bù rènshi t_{i/*j/*k}]].$ $Zhangsan \ say \ Lisi \ NEG \ know$ $'[\emptyset_i] \ Zhangsan_i \ said \ Lisi_k \ didn't \ know \ [him_{i/*j/*k}].'$
- b. $[T_{OPP}]_{DP}$ Nèi ge rén], $[Zh\bar{a}ngs\bar{a}n_j$ shuō $[Lisi_k$ bù rènshi $t_{i/*j/*k}]]$. that clf person Zhangsan say Lisi NEG know 'That man_i , $Zhangsan_j$ said $Lisi_k$ didn't know $[him_{i/*j/*k}]$.' (C.-T. J. Huang 1984, 542, exs 31, 34)

On this view "what appears to be a zero object pronoun turns out to be a variable bound by a zero topic – it must first be topicalized before it is deleted from the topic position. ... The two languages [Chinese and German; WP & JBW] share the property of allowing a variable bound by a zero topic, although the evidence for this property is directly 'visible' only in German" (Huang 1984, 548). This also explains why German is described as [–pro drop], because pronoun zap involves an empty topic, not an empty pronoun.

This approach makes it possible to hypothesize that there is a class of languages where the topic position is obligatorily filled, either by an overt or null topic. Obligatory presence of an overt or null topic then becomes the formal definition of topic prominence (Huang 1984, 550, 557; Huang and Yang 2013).

The identity of the null topic is clear in sentences with a null object in embedded contexts, which cannot take a matrix argument as its antecedent (55a). In such cases, the null topic is assigned content from prior discourse, and binds the empty category in object position. However, in gapless sentences, it is unclear what might occupy the topic position. In sentences with referential subjects one might claim that the subject is string-vacuously topicalized. But we showed in (48) (repeated in (56)) that non-D-linked subject *wh*-pronouns cannot be topicalized. This fact holds for non-D-linked *wh*-pronouns in general (57b):

```
(56) Chinese
Shéi (*ne) yào lái]? (= (48))
who TOP want come
'Who wants to come?'
```

- (57) Chinese
 - Zhāngsān shuō shénme?Zhangsan say what 'What did Zhangsan say?'

In sentences such as (56), there is no candidate, null or overt, to occupy the topic position. Positing a null "expletive" topic in such contexts would be completely unmotivated. Such a move would destroy the parallel with German, where impersonal passives show that exactly in topic position expletives must be overt, if no other XP occurs there:

```
(58) a.
                *(Es)
                       wurde
                                   [<sub>TP</sub> gestern
                                                    getanzt]].
                                                    danced.
                        became
                                       yesterday
           'There was dancing yesterday.'
                                                   getanzt]].
          CP Gestern
                             wurde
                                        [<sub>TP</sub> (*es)
                 vesterday became
                                             it
                                                   danced
           'Yesterday there was dancing.'
```

It may be possible to maintain the hypothesis that the possibility of null topics is a property grouping together a class of topic-prominent languages. The widespread occurrence of null non-subject arguments in East and Southeast Asian languages is sometimes accounted for this way, although few languages appear to show as clearly as Chinese the binding theoretic properties that argue for analyzing these null arguments as variables bound by a null topic rather than simply empty pronouns. But it appears to be more difficult to support the claim that there is a class of topic-prominent languages where the topic position is obligatorily filled, in the absence of a null topic account of sentences like (56).

3.2 Discourse configurationality (Kiss 1995)

Kiss (1995) defines languages where both topic and focus position are structurally realized as *discourse configurational* (DC). Kiss claims that in topic-prominent languages the predication relation between the topic and the predicate phrase (whose syntactic category may vary) is realized in the syntax, whereas in subject-prominent languages this relationship is realized in Logical Form. This might be seen as a generalized version of Huang's (1984) view that the topic position is structurally realized in topic-prominent languages. But Kiss does not assume that the topic position is obligatorily filled in the syntax. She claims instead that there is a structural position where topic and focus material is interpreted (a claim shared with subsequent cartographic approaches) and that material with topic or focus properties must be pronounced in these positions.

Kiss proposes as a diagnostic for the parametric difference between topic-prominent and non-topic-prominent languages the existence of different structures for *categorical* versus *thetic propositions* (Kuroda 1971 in the former, and the lack of such an overt structural option in the latter. According to Kuroda (1971), a thetic proposition implies a single act – that is, recognizing the material of a judgment – as is typically the case in impersonal and existential, presentational sentences (see (61)). A categorical proposition, by contrast, implies two acts, the recognition of the notional subject and the act of affirming or negating the predication on that subject. Sentences with a generic subject express categorical propositions; accordingly, a generic subject must be topicalized, as illustrated in Japanese (59). A definite DP (see (60)), by contrast, can be associated with a thetic proposition (nominative *ga*) or with a categorical proposition (topic head *wa*). Accordingly, Japanese is considered a topic-prominent language by Kiss (1995).

- (59) Inu wa [$_{\mathrm{VP}}$ honyuu doobutu da]. dog $_{\mathrm{TOP}}$ mammal is 'The dog is a mammal.'
- (60) Poti wa/ga [VP hone o kazitte iru]. Pochi TOP/NOM bone ACC chewing is 'Pochi is chewing a bone.'27
- hutte (61)a. [_{VP} Ame ga iru]. rain NOM falling 'It is raining.' $[_{VP}]$ Heya ni inu ga iru]. room in dog is NOM 'There is a dog in the room.'

Kiss (1995, 8, exs 4a–4b, 5a–5b) shows that Hungarian likewise encodes this distinction by different structures (see (62a)–(62b) versus (63a)–(63b)), whereas, for example, English does not.

(62) a. $[T_{op}]$ Fido $[V_{P}]$ rág egy csontot]. Fido chews a bone 'Fido chews a bone.'

- b. $[_{Top}$ A kutya] $[_{VP}$ háziállát]. the dog domestic.animal 'The dog is a domestic animal.'
- (63) a. [VP Esik az eső].
 falls the rain
 'It is raining.'
 b. [VP Van egy kutya a szobában].
 is a dog the room.in
 'There is a dog in the room.'

This argument does, however, not go through for the entire class of languages that linguists, including Kiss, have classified as topic-prominent. Thus in Chinese (64), we see that generic objects need not be topicalized, but may remain in situ as in (64a). Chinese thus does not systematically encode categorial propositions and thetic propositions in different structures, as required in Kiss' definition of topic prominence.

(64) a. Māo xǐhuān chī yú.
cat like eat fish
'Cats like to eat fish.'
b. Yú (ne), māo xǐhuān chī.
fish top cat like eat
'Fish, cats like to eat.

Just a subset of thetic propositions are realized as existential constructions with a VP-internal subject as in (65) in Chinese.

(65) $[_{TP}$ Wàimiàn $[_{VP}$ yǒu yī tiáo gǒu]]. outside have one CLF dog 'There is a dog outside.'

Since a similar subject (in *there*-insertion existential sentences) is realized the same way in English, this would hardly seem to be a sufficient criterion for deeming a language topic-prominent. Nevertheless, Kiss (1995, 5) assigns Chinese topic-prominent status.

The second defining characteristic of DC languages is *focus prominence*, with focus to be understood as *narrow* focus, inducing an exhaustivity effect. Thus in Hungarian a narrow focused XP must overtly move to preverbal position.

(66) Nem <u>János</u> kapott jelest, hanem <u>János és Mari</u> (kapott jelest).

not John got A+ but John and Mary got A+

'It was not John who got A+, but it was John and Mary (who got A+).'

(Kiss 1995, 16)

Like topic prominence, focus prominence also results from a particular parameter setting: the focalized XP must undergo overt movement to a designated structural

focus position. In non-focus-prominent languages such as English, however, the focalized phrase can remain in situ, receiving phonological stress there.

As we saw in section 2.1.1, the conditions on focus prominence are more complex than this account suggests. Japanese narrow focus (major) subjects are marked by nominative ga, a fact that we accounted for by positing a fused FocusP/FinitePhrase projection. This position shows A-properties, and cannot freely be occupied by non-subjects. Japanese thus shares with Hungarian the focus-prominent property that a focus position is structurally realized in simplex clauses, but not all narrowly focused material occupies, or is able to occupy, that position. Meanwhile Chinese lacks a corresponding focus position with A-properties in the matrix left periphery. The precise cross-linguistic extension of discourse prominence is thus as yet unclear.

3.3 Earlier generative treatment of topic prominence: conclusions

Our review of generative treatments of topic prominence prior to the advent of a more fine-grained theory of the left periphery (Rizzi 1997) has shown that some claims made in these treatments are too strong. It seems difficult to maintain that the topic position is obligatorily filled and that a specific set of features, including [generic], are referenced by the operations that place material into the structural topic position. What does seem to be maintainable from this earlier research are the conclusions in (67).

- (67) Shared assumptions in structural (generative) approaches to topic prominence
 - a. There are structural topic and focus positions (assumption shared with Rizzi 1997)
 - b. Topic > Focus
 - c. In some languages, Spec, TopicP may be occupied by null material.
 - d. In some languages, overt movement to Spec, TopicP is obligatory for some feature specifications, such as [generic].

Properties (a) and (b) are the subject of wide consensus, but they do not distinguish topic-prominent from non-topic-prominent languages. For example, (c) is criterial only if German and similar V2 languages are deemed topic-prominent. (d) seems to be widespread, although not criterial: Chinese, unlike Hungarian and Japanese, seems to have no DP type that is obligatorily topicalized.

4 Topic prominence: a single parameter?

While generative treatments try to give a more precise content to the notion of topic prominence, they share with functional approaches such as L&T the objective of assigning a single topic prominence parameter to account for the range of language variation. This, and L&T's original approach, can be included in what Hale, Jeanne, and Platero (1977) called a "whole language typology." Like traditional typological features such as "agglutinating" or "tonal," the feature [topic prominent] is taken to classify whole languages rather than specific subsystems or constructions.

As we have seen, languages labeled as topic-prominent in the literature such as Chinese, Hungarian, Japanese, or Korean display important differences in the fine architecture of the left periphery which not only hosts the topic, but also focus-related projections. They also show differences as to what DP properties are associated with material overtly realized in topic position. This leads us to conclude that no single property or parameter captures all of the properties that generative and non-generative researchers have associated with the term "topic prominence."

We give a list of specific features that have been related to topic prominence in Table 1. While Chinese and Japanese have been considered to be typical representatives of topic-prominent languages in the literature since L&T, we bring German into the picture following Huang's (1984) analysis. English is added as a typical non-topic-prominent language.

Table 1 (valid for matrix clauses)²⁸

		Chinese	Japanese	German	English
(i)	Obligatory topics	no	yes	yes	no
(ii)	Null topic	yes	yes	yes	no
(iii)	Overt spellout of Top°	optional	yes	yes	no
(iv)	<i>Wh-</i> in-situ	yes	yes	no	no
(v)	Generics obligatorily topicalized	no	yes	no	no
(vi)	Multiple topics	yes	yes	yes(?) ²⁹	$yes(?)^{30}$
(vii)	Adjunct/argument topic order free	yes	yes	no?	no?
(viii)	Top° filled by Internal Merge	no	no	yes	yes ³¹

Is this simply a contingent assortment of features, or is there some meaningful clustering of parameters here? As we remarked in the preceding section 3.3, the availability of null topics is potentially a feature shared by Chinese, Japanese, and German. The option of spelling out the head of the topic projection is potentially another; this option is much more restricted in residual V2 languages such as English. The spell-out of Top° is realized in different ways: in German the head of the projection (FinP) is filled by the tensed verb, in Japanese by a topic particle (which may be dropped in colloquial speech), and in Chinese optionally by a topic particle. In the latter two cases, the head is an enclitic, which must therefore be absent if the topic is null. This phonological constraint on enclitics somewhat obscures the familiar relationship between existence of an overt head and licensing of an unpronounced category suggested by the coincidence of features (ii) and (iii).

Pursuing the correlation between null topics and the possibility of pronouncing the head of TopicP, we might observe that in generative treatments of topic positions prior to the advent of syntactic cartography, German-style V2 topics were treated as occupying the specifier of an endocentric functional projection, whereas topicalized constituents in languages such as English and Italian were analyzed as adjuncts. Various attempts have been made to restore the structural distinction between adjuncts and specifiers since Chomsky (1995), but the issue remains controversial.

We suggest that our examination of languages labeled so far as topicprominent motivates maintaining the distinction. The existence of a structural head Top° – correlating with Spec,TopP as host for a topic rather than an adjoined position – makes it possible for the Topic projection to license null topics. Top° can also serve as locus for specific features, like the feature [generic] in Hungarian and Japanese, even though a specific (semantic) feature make-up is not a necessary consequence, as evidenced by Chinese and German.

The feature in Table 1 that corresponds most accurately to the way in which the label topic-prominent has been used in the descriptive literature since L&T is (viii), referring to the overt realization of Top°. Descriptive studies have tended to label as topic-prominent languages that have designated topic particles on the left periphery - that is, elements introduced by external merge (hence the negative value for feature (viii)). Our highlighting this property may seem paradoxical, since Chinese, L&T's flagship topic-prominent language, uses its topic particle ne more sparingly than Japanese wa or Korean (n)un. But Chinese groups with the other two languages, not just in having a topic particle, but in not filling the head of Topic Phrase by internal merge – that is, by head movement. This feature draws a clear line between full (e.g., German or Kashmiri) and residual (e.g., Italian or English) V2 languages, on the one hand, and languages such as Chinese, Japanese, or Korean, on the other. The features (i)-(vi) distribute across both groups of languages. Feature (vii), free order of adjunct and argument topics, appears to be restricted to languages with a minus value for feature (viii). We leave investigation of this correlation to future research.

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SEE ALSO: Case, Primarily in Japanese; Chinese *Ba*; Conditionals; Double Nominatives in Japanese; Focus Movement; Left Dislocation; Left Periphery of the Clause; Long NP-Movement; *Mittelfeld* Phenomena: Scrambling in Germanic; Resumption; Split Topicalization; Topicalization in Asian Languages

Notes

- 1. Li and Thompson (1976, 461) classify languages with respect to the features [topic prominent] and [subject prominent] as belonging to one of the four classes below:
 - (a) [+sp]: Indo-European, Niger-Congo, Finno-Ugric, Semitic, Dyirbal, Indonesian, Malagasy
 - (b) [+tp]: Chinese, Lahu, Lisu

- (c) [+sp], [+tp]: Japanese, Korean
- (d) [-sp], [-tp]: Tagalog, Ilokano.
- 2. The following abbreviations are used in glossing examples: ACC accusative; CLF classifier; DE functional head in a complex predicate 'verb de AdjectiveP'; DUR durative aspect; EXP experiential aspect; GEN genitive; NEG negation; NOM nominative; PRF perfective aspect suffix -le; PL plural (e.g., 3PL = third-person plural); SFP sentence-final particle (e.g., le); SG singular; SUB subordinator; TOP topic marker.
- 3. L&T acknowledge that the grammatical relation of subject plays a role in the grammar of Chinese and other topic-prominent languages (1976, 458).
- 4. Mullie (1933) is the first linguist of whom we are aware to apply the term "double nominative" to Chinese. Subsequently, Dragunov (1952/1960, sect. 37) and Teng (1974) added the existence of a "part–whole" relation or inalienable possession relation between topic and subject as a defining characteristic of that construction. The term "major subject" has been applied to Japanese at least as early as Matsushita (1928).
- 5. This question has often been neglected in the previous literature, giving the false impression that Japanese and Chinese pattern alike (e.g., Shyu 1995; Xu 2006).
- 6. The cleft construction with sentence-initial "bare" *shi* 'be' is bi-clausal (see Paul and Whitman 2008), in contrast to the monoclausal MSC in Japanese. Accordingly, the structure of (10) is as follows:
 - (i) $[_{TP}$ Shì $[_{FP}$ $[_{DP}$ făguó de dà chéngshì] $[_{TP}$ jiāotōng bǐjiào luàn]]] be France $_{SUB}$ big city traffic relatively chaotic

Importantly, the clefted constituent is located in the periphery of the complement clause (labeled FP) embedded under the matrix verb *shì* 'be', not in the periphery of the matrix clause.

- 7. Shyu (1995, 168) does not test the acceptability of corresponding relative clauses in her analysis of base-generated topics in Chinese as major subjects in an IP-adjoined position.
- 8. As Tateishi explains, these are in addition to the class of "pure topics" introduced by Kuroda (1988). See the discussion in Tateishi (2006, 64–65). Note that the Chinese equivalent with 'perpetrator' as topic is unacceptable, which again highlights the differences between Chinese and Japanese topic structures.
- 9. Thanks to a reviewer for pointing out this type of data to us.
- 10. Accordingly, those speakers who marginally accept (i) (marked as ungrammatical in Ning (1993, 167)) construe *xuéxião* 'school' as a relational noun. This ties in with the observation that nouns referring both to an institution and the corresponding building such as 'school' allow for juxtaposition of possessive pronouns without *de* on a par with relational nouns such as kinship terms: *wŏmen* (*de*) *xuéxião* 'our school'; *tā* (*de*) *māma* 'his mother'.
 - (i) *Nà ge gūniang, xuéxiào hěn yuǎn. that CL girl school very far 'That girl, (her) school is far way.'

Ning (1993, 178–179) observes the acceptability contrasts between (17a) and (19b), but does not see that the (non-)relational nature of the NPs ($y\check{a}nj\bar{t}ng$ 'eye' vs. $sh\bar{t}g\bar{e}$ 'poetry') is at stake.

- 11. This includes moved argument topics:
 - (i) [Nà ge gūniang]_i, wǒ tèbié xǐhuānt_i. that CL girl 1sG particularly like 'That girl, I like her a lot.'
 - (ii) wŏ tèbié xǐhuān de nà ge gūniang. 1sG particularly like SUB that CL girl 'the girl I like a lot'

Huang, Li, and Li (2009, 214) likewise state that "the well-formedness of a topic structure is neither necessary nor sufficient for the acceptability of a corresponding relative structure"; they do not, however, examine the well-formedness conditions for the topic structures themselves.

- 12. Haegeman's (2004) specific proposal is that English conflates CP (Haegeman's SubP), ForceP, and TopP.
- 13. A perceptive reviewer points out that (24) allows only two instances of *ga*, while the literature reports up to four, as in the following example from Tateishi (1991, 29, ex. 3b):
 - (i) Tookyoo ga resutoran ga weetoresu ga taido ga warui.

 Tokyo NOM restaurant NOM waitress NOM attitude NOM bad

 'It is Tokyo that it is restaurants that waitresses have a bad attitude.'

Any of the first three DPs may receive narrow focus; if one does, the DPs to its left must be focused too. In speech, a declination in pitch follows the focused DPs. Acceptability of such examples with multiple focused DPs depends on speakers' tolerance for nested focus. We suggest that such examples require iteration of the relevant functional projection. The nested focus interpretation given for (i), requires an iteration of Foc/FinP and of TP.

- 14. A reviewer points out that examples like (i), cited from Endo (1994), may seem to cast doubt on Takezawa's claim that nominative *ga* is licensed only in tensed clauses.
 - (i) John ga akuyaku no monogatari John NOM villain COP story 'a story where John is the villain'

But in (i) *no* is the adnominal allomorph of the present tense copula, following the analysis standard since Bloch (1946, 206).

- 15. According to a reviewer, (i) illustrates PP-extraction from the complex NP headed by fāngfā 'method'. However, the dui-PP in (i) can originate from the topic position in the complement clause of yǐwèi 'think' (cf. (ii)):
 - (i) [PP Duì nà zhŏng bìng]_i wŏ vĭwèi $[_{TP}[_{DP}][t_i]$ to that kind illness 1sg think jìnxíng zhìliáo] de fāngfǎ] vŏu hěn duō zhŏng]. treatment SUB method have very much 'As for that kind of illness, there are many ways to treat it.'
 - (ii) Wŏ $[_{TopP}$ [duì nà zhŏng bìng] yĭwèi kind 1s_G think to that illness [TP[DP[pro jinxing zhìliáo] de fāngfǎ] yŏu hěn duō zhŏng]]. conduct treatment SUB method have very much kind 'I think that concerning this kind of illness, there are many ways to conduct the treatment.'

- 16. The preference in Chinese for the order 'temporal adjunct XP > locative adjunct XP' in the TP observed by C.-C. Jane Tang (2001, 228) also holds in the topic field. In (39b), e.g., an additional locative PP zài aòsīlù 'in Oslo' would need to follow rather than precede 2010 nián '(in) 2010'.
- 17. Haegeman (2012, ch. 1) likewise points out the existence of a ban on "lower" topics in English i.e., on topic projections dominated by the focus projection. The scenario with a contiguous topic field preceding a contiguous focus field thus contrasts with Rizzi's (1997; 2004) hierarchy where the recursive topic projections are interspersed with other projections in the left periphery such as InterrogationP (reserved for higher *wh*-elements such as *perche* 'why'), FocusP and ModP (hosting raised adverbs):
 - (i) Force > Top* > Interrogation > Top* > Focus > Mod* > Top* > Fin > IP (Rizzi 2004, 242, ex. 60)

See Badan (2007) and Badan and Del Gobbo (2010) for attempts to apply a relatively rigid Italian-style left periphery to Chinese, and Paul (2015, ch. 6) for a critique of these approaches.

- 18. We omit here discussion of the split of CP into Low CP, ForceP, and AttitudeP (see Paul 2014; 2015, ch. 7).
- 19. The categorial status of *lián* 'even' is still controversial and *lián* is in general left unanalyzed and presented as forming a constituent with the focused XP.
- 20. This requirement can be seen in, e.g., NPI constructions, where the indeterminate pronoun *shénme* 'what' associated with the variable bound by *dou* 'all' must precede it:
 - (i) a. Xiǎowáng shénme dōu méi chī. Xiaowang what all NEG eat 'Xiaowang didn't eat anything.'
 - b. *Xiǎowáng dōu méi chī shénme. Xiaowang all NEG eat what
- 21. This might be too absolute a claim, insofar as some speakers, among them a reviewer, sometimes accept a topic *below* the *lián* 'even' FocusP:
 - (i) [#][Lián xiāofángduì] [nà chẳng dà huǒ] tāmen jiù- bù- liǎo even fire.brigade that CL big fire 3PL save-NEG-accomplish 'Even the fire brigade, that big fire, they couldn't extinguish.'
- 22. *Ne* is broadly comparable to English 'as for', 'concerning'; like the latter it can, but need not, indicate the turn to a new topic. We analyze *ne* as occupying the head of TopP, following Gasde and Paul (1996) and Paul (2005). Whether other so-called *pause particles* which can follow the topic, such as *a*, *ba*, *le*, and *me* (all labeled *topic markers* by Li and Thompson 1981, 86), instantiate the head of TopP or simply mark a pause is still a matter of debate (see Pan 2011b; Badan 2007). We confine our discussion to *ne*, as its status as Top° is relatively uncontroversial.
- 23. Only D-linked *wh*-phrases are allowed in TopP, in addition to their in situ position (see Wu 1999; Pan, 2011a; 2011b; 2014):
 - (i) [TopP [Nǎ jiàn [TP yīfu], nǐ yǐjīng shì -guo le]]? which CL dress 2sG already try.on-exp sfp 'Which (of the) dress(es) have you already tried on?'

Complex wh-phrases of the form 'nă CL NP' = 'which Cl NP' are identified as D-linked by all speakers, on a par with English 'which N'. Native speakers' judgments vary for wh-phrases of the form shénme NP 'what NP', and practically all speakers lack a D-linked interpretation for simple wh-phrases (shénme 'what', shéi 'who(m)') and therefore reject them elsewhere than in situ (also see Yuan and Dugarova 2012). While the extraction (from postverbal position) is easily discernible for D-linked object wh-phrases (cf. (i)), the precise position (TP-internal or TP-external) is more difficult to determine for D-linked subject wh-phrases, given that only very few speakers allow Top° ne with D-linked wh-phrases (irrespective of whether the subject or object is questioned).

- (ii) Nă ge xuésheng (*ne) kǎo-de-shàng? which CL student Top° exam-can-succeed 'Which student succeeded in the exam?'
- 24. When *ne* is present, it implies prior mentioning of other people (un)willing to help.
- 25. Bartos (2003) likewise argues for the distinctness of topic and subject in Chinese, though with arguments and concerns different from ours. He concludes that Chinese is both topic-prominent and subject-prominent, unlike Hungarian, which is topic-prominent, but not subject-prominent (see section 3.2 below for discussion of Hungarian).
- 26. The pause (indicated by a comma) after the DP 'the book by Fred Vargas' shows that (54b) involves a left dislocation structure with an additional TopP above FinP. There is no *das* in a "normal" sentence i.e., FinP:
 - (i) [FinP [Das Buch von Fred Vargas] [TP hab' ich schon laengst gelesen] the ACC book by Fred Vargas have 1sG already long.ago read 'I have already read the book by Fred Vargas a long time ago.'
- 27. (60) with *Poti ga* in fact is ambiguous between the broad focus or presentational/neutral description (Kuno 1973) reading in (60) and the narrow focus reading 'It is Poti that is chewing a bone.'
- 28. The restriction to matrix contexts is made necessary by the inclusion of German, which shows V2 for matrix clauses only. Likewise, the obligatory topicalization (with *wa*) of the subject in the absence of any other topicalized phrase holds for Japanese matrix clauses only.
- 29. The answer here depends on how we treat LD structures in German (see (54b)). Also see Müller (2005).
- 30. Haegeman (2012, ch.1) provides quite a few examples of multiple topics in English.
- 31. We refer here to the "residual V2" properties of English (Rizzi 1996).

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