### On the Argument Structures of the Transitive Verb *fan* 'annoy; be annoyed; bother to do': A study based on two comparable corpora

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Abstract: This paper investigates the transitive uses of the verb fan 'annoy; be annoved; bother to do', which exhibit both similarities and disparities between Beijing Mandarin and Taiwan Mandarin, as far as the data from Gigaword corpus, containing data from Mainland China (XIN) and Taiwan (CNA), are concerned. In terms of similarities, the causative (and agentive) use(s) of the transitive fan is/are shared by Beijing Mandarin and both Taiwan Mandarin. The disparity mainly lies in the mental use of *fan* 'be annoyed', which is not only unattested in the corpus of Taiwan Mandarin but also reported as weird by our informants. This mental use, on the other hand, is well attested in the corpus. In order to describe as well as explain the difference in uses between Beijing Mandarin and Taiwan Mandarin, we adopt the Theta System Theory (Reinhart 2002; Marelj 2004) to probe into the argument structures of the transitive verb fan and further pinpoint the fundamental syntactic difference between Beijing Mandarin and Taiwan Mandarin, that is, the absence or presence of the /+c feature in the argument structure. In particular, Taiwan Mandarin requires the obligatory presence of the /+c feature in the argument structure of fan, while Beijing Mandarin does not.

**Keywords**: transitive *fan*, corpus, Beijing Mandarin, Taiwan Mandarin, Theta System, /+c

#### 1. Introduction: The intransitive *fan*

The verb *fan* in Chinese can function as an intransitive verb, meaning 'annoyed/ bothered' as well as 'annoying/bothersome'. These two uses are attested in both Beijing Mandarin and Taiwan Mandarin, as evidenced by the examples of (1)-(4) from the XIN and CNA, sub-corpora of Gigaword corpus.<sup>1</sup>

- (1) Ta dang daxue jiaoshou de he serve as university professor DE fuqin feidan bu guowen, father not only NEG meddle kanjian ta fan'er vi jiu instead whenever see he then fan. (XIN) be annoved 'His father, as a university professor, does not meddle with his business; instead, his father seems to be annoved whenever he sees him.'
- (2) Shoufeiyuan shengyingdi shuo, "nimen cashier stiffly said you zenme zheme fan?" (XIN) how\_can so annoying 'The cashier stiffly said that "How are you so annoying?""
- (3) Zuo taitai de jide serve as wife DE remember

<sup>&</sup>lt;sup>1</sup> XIN and CNA refer to Beijing-based Xin Hua News Agency and Taiwan-based Central News Agency, respectively.

ziji	shi	taitai,	buyao	zhi
oneself	be	wife	do_not	only
tan	qian	qian	qian	l,
talk_about money money money				
zhangfu hui <b>fan</b> . (CNA)				
husband	will	be_ann	noyed	

'As a wife, one should remember your own role of being a wife and refrain from talking about money, money, money all the time. Otherwise, the husband would get annoyed.'

(4) Ni zenme name **fan**, 2SG how\_can so annoying name luosuo. (CNA) so voluble 'How can you be so annoying and voluble?'

In addition to the intransitive uses, *fan* can be used transitively, which is noted as [A *fan* B] in this paper. Unlike intransitive *fan*, transitive *fan* exhibits syntactic differences between Beijing Mandarin and Taiwan Mandarin. The data of transitive *fan* will be presented in section 2.

## 2. Data Presentation: The transitive *fan*

The transitive *fan* is found to be syntactically different between Beijing Mandarin and Taiwan Mandarin, as far as the data from XIN and CNA are concerned. In Beijing Mandarin, [A *fan* B] can mean 'A annoys B' as well as 'A is annoyed by B', depending on the context. They are exemplified in (5) and (6), respectively.

(5) Qiye genju enterprises according\_to shichang zishengzimie, buyong market run\_its\_course need\_not zai fan zhengfu. (XIN) again bother government 'Enterprises run their courses based on the market. There is no need to bother the government anymore.'

(6) Wo vixiang tong xiandaipai all along with modernist I gegeburu. wo bijiao incompatible Ι a bit tamen. (XIN) fan feel annoyed them 'I have never been able to get along well with the modernist school. I feel annoved about them.'

The contrast between (5) and (6) seems to indicate that [A *fan* B] is bi-directional in the sense that A can be the Causer while B the Causee (as in 5), or the other way around (as in 6). However, the latter use of *fan*, as that in (6), is unattested in Taiwan Mandarin. Rather, in Taiwan Mandarin, [A *fan* B] is predominantly causative, in which A in is almost unambiguously interpreted as the Causer, as exemplified in (7).

(7) Wo jiang bu xungiu lianren, I will reelection NEG seek nimen weihe haivao fan still why annoy you wo? (CNA) me 'I won't seek for reappointment. Why do you still annoy me?'

In addition to the above-exemplified [A *fan* B], there is another type of transitive *fan* attested in the CNA corpus, as presented in (8) and (9).

(8) Ta shuo, ..., yici zhi fan he said once only bother yi jian shi, na jiushi one CL issue that be paidianying... (CNA) make\_film 'He said that he only bothers to do one thing at a time, that is, film-making.' (9) Dui ta laishuo. liangin as for she as for play the piano vi xiaoshi ta buhui one hour she won't xingzhengshiwu. (CNA) fan administrative services bother 'As for her, when she plays the piano, she won't bother to think about any administrative services '

Albeit being transitive in (7)-(9), *fan* in (7) differs from that in (8) and (9) in that the former is causative while the latter is not. In addition, they seem to impose different restrictions of animacy on the object B. Specifically, [A *fan* B] in (7) requires B to be animate (in particular, Human) whereas [A *fan* B] in (8) and (9) features the inanimacy of B. This difference in animacy is by no means trivial. Being inanimate, the objects in (8) and (9) cannot be the ones that are annoyed. As the free translations suggest, they are the things that the subjects bother to conduct, in one way or another, depending on the context.

To complete the full picture, it should be mentioned that the transitive use of *fan* in (8) and (9) are not attested in the XIN corpus. In spite of the data gap, our Beijing Mandarin informants have no difficulty in understanding them. Therefore, they are still well-received in Beijing Mandarin.

Given the data collected above, we summarize the three attested transitive uses of *fan* in (10). Prior to our analysis in section 4, we label the two arguments of each transitive use intuitively. They will be refined in due course.

(10) [A fan B]:

a. causative:	$A \rightarrow Causer$
	$B \rightarrow Causee$
b. mental:	$A \rightarrow Experiencer$
	B→Causer
c. agentive:	$A \rightarrow Agent,$
-	$B \rightarrow$ Theme

These three types of transitive *fan* will be analyzed in detail in section 3.

# 3. Data Analysis: Tripartite use of transitive *fan*

# **3.1** Causative and mental *fan*: swap of arguments?

At first glance, the causative and the mental uses of *fan* are directionally opposite in the sense that they just swap their arguments. The evidence may come from the cases where the same transitive verb *fan* can give rise to two different interpretations at the same time. This usually occurs in the neutral context, as exemplified in (11).

(11) Zhangsan fan	Lisi.	
Zhangsan annoy/be_annoyed	Lisi	
'Zhangsan annoys Lisi.' or		
'Zhangsan feels annoyed about Lisi.'		

However, this analysis is more apparent than real. The first difference lies in the animacy condition of the Causer in these two cases. Causer in (10a) is basically [+HUMAN]. Even though the Causer *per se* does not take the animate form, it is most probably an organization and thus metonymically refers to people affiliated to that organization. This is exemplified in (12), in which *huaren shetuan* 'Chinese associations' and *huaren meiti* 'Chinese media' refer to people associated with these organizations through the mechanism of metonymy.

12) Huaren	shetuar	n	yu	
Chinese	associa	ation	and	
huawen	meiti	yi	zhaoda	10
Chinese	media	once	find	
jihui	jiu	yi	zhe	ge
chance	then	use	this	CL
wenti	qu fa	n Gu	ilianni.	(CNA)
question go annoy Guilianni				
'Once Chinese associations and				
Chinese media find a chance, they use				
this question to annoy Guilianni'				

(

Crucially, inanimate entities which cannot give rise to any metonymic interpretations fail to serve as subjects of the causative *fan*. Even though they occur, they can only be encoded as instruments, as exemplified by *zhege wenti* 'this question' in (12), as an adjunct. Similarly, the inanimate cause of the causative *fan*, i.e., *zhe zhong wuliao de wenti* 'this kind of stupid questions' in (13), occurs in the serial verb construction. On a par with that in (12), the inanimate noun phrase in (13) is also interpreted as an instrument.

(13) Xiwang meiti jizhe bie hope media journalist NEG na zhe zhong wuliaode wenti use this CL stupid auestion lai fan ta. (CNA) annov him come '(We) hope that journalists in the media not bother him with this kind of stupid question.'

It should be further noted that the above mentioned inanimate entities can never function as the subject of the causative *fan* 'annoy'. This is illustrated by the unacceptability of (14) below:

(14) \*Zhe ge wuliaode wenti the CL stupid question fan ta. annoy him Intended: 'This stupid question annoys him.'

On the other hand, in the case of the mental verb *fan* 'get annoyed', the Causer, in the form of a grammatical object, has no restrictions on its animacy. As exemplified in (15), the inanimate entity *dianhua* 'telephone', as the object, is the Causer for one's getting annoyed.

(15) Mei you dianhua pan NEG have telephone long\_for dianhua, you le dianhua telephone have PERF telephone **fan dianhua**. be\_annoyed telephone 'When there were no telephones, people long for them; when there are telephones, people get annoyed because of them.'

The data exemplified above reveal that the semantic role Causer in the causative use of *fan* and that in the mental use of *fan* are crucially different, as the former must have the [+HUMAN] feature while the latter is not subject to any animacy restrictions.

Secondly, Causee and Experiencer, as the terms already suggest, are not the same. The Causee is the target of the "annoying" action while the Experiencer is the one who experiences the mental process of "being annoved". Even though both of them are animate, they cannot be reduced to one argument, mainly because the Causee does not necessarily experience the mental process. As exemplified in (16), the noun phrase ta fumu 'his parents' is the Causee of the causative verb fan, as the target of "annoy". Crucially, this Causee might not undergo the mental process of "being annoyed", as evidenced by the continuous sentence in (16), in which the statement of "his parents' being annoyed" is negated. If Causee and Experiencer are identical, we would expect the sentence of (16) to be semantically anomalous. In actual fact, (16) is perfectly acceptable, indicating that Causee and Experiencer should be teased apart.

(16) Zhe xiaohai zai ge CL this child PROG ta fumu, dan fan ta fumu annoy heparents but he parents bingbu sihu apparently by no means fan ta. him be annoyed

'This child is annoying his parents. However, apparently, his parents are by no means annoyed by him.'

Having established the fact that the causative and the mental uses of *fan* are contrastive much beyond their opposite directionality, we proceed to the contrast between the mental and the agentive use of *fan*.

## 3.2 Mental and Agentive fan

The contrast between mental and agentive verbs can be teased apart through two tests. The first test is whether the verb can take degree adverbs. The second one is whether the verb can be embedded into volitional verbs like qu 'go; start' or hui 'will'. Prior to testing our target verb fan, let us first illustrate how these two tests work. We take the typical mental verb xihuan 'like' (as in 17a) and the typical agentive verb *yanjiu* 'study' (as in 17b) as examples. As illustrated in (18) and (19), it is the mental verb, instead of the agentive one, that can be modified by a degree adverb. On the other hand, it is the agentive verb, rather than the mental one, that can be embedded into a volitional verb

- (17) a. Wo xihuan yuyanxue. (xihuan: mental verb) I like linguistics.
  b. Wo yanjiu yuyanxue. (yanjiu: agentive verb)
  - I study linguistics.'
- (18) a. Wo hen xihuan yuyanxue. I very like linguistics 'I like linguistics very much.'
  b. \*Wo qu/hui xihuan I go/will like yuyanxue.

\*'I will go and like linguistics.'

- (19) a. \*Wo hen yanjiu yuyanxue. I very study linguistics. \*'I study linguistics very much.'
  b. Wo qu/hui yanjiu yuyanxue. I very study linguistics.
  - 'I will go and study linguistics.'

We apply the same tests to the verb *fan* in the XIN corpus and that in the CNA corpus. As shown in (20), the agentive verb *fan* is compatible with the degree adverb *bijiao* 'a bit'; while it cannot collocate with the volitional verb qu 'go'. That means, the verb *fan* in (20), a representative of Beijing Mandarin, behaves like a mental verb, on a par with *xihuan* 'like' in (17a).

- (20) a. Wo yixiang tong xiandaipai
  I all\_along with modernist gegeburu, wo bijiao incompatible I a\_bit
  fan tamen. (XIN) feel\_annoyed them
  'I have always been against the grain with the modernist school. I feel annoyed because of them.'
  - b. #Wo yixiang tong xiandaipai I all\_along with modernist gegeburu, wo incompatible I
    - qu fan tamen. (XIN)
      go feel\_annoyed them
      #'I have always been against the
      grain with the modernist school.
      I go and feel annoyed about
      them.'

'I have always been against the grain with the modernist school. I go and annoy them.'<sup>2</sup>

Conversely, the agentive verb *fan* in Taiwan Mandarin, as illustrated in (21) and (22), rejects degree modification. However, it goes well with the volitional verbs qu 'go'

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 $<sup>^{2}</sup>$  (20b) is possible only when it is interpreted as a causative verb.

and/or *hui* 'will'. Therefore, the transitive verb *fan* in Taiwan Mandarin should be treated as a real agentive verb.

- (21) a. #Ta shuo, ..., yici zhi hen he said once only very fan shi. na vi jian bother one CL thing that jiushi paidianying... be make film #'He said that he only bothers to do one thing at a time very much, that is, film-making.'
  - b. Ta shuo, ..., yici zhi qu he said once only go fan shi. jian vi na CL bother one issue that iiushi paidianying... be make film 'He said that he goes and bothers to do one thing at a time very much, that is, film-making.'
- (22) a. #Dui ta laishuo, liangin as for she as for play the piano vi xiaoshi ta buhui won't one hour she xingzhengshiwu. hen **fan** verybother administrative services #'As for her, when she plays the piano, she won't bother to do any administrative services very much.'
  - laishuo, liangin b. Dui ta as for she as for play the piano yi xiaoshi ta one hour she buqu/ buhui fan not go/won't bother xingzhengshiwu. administrative services 'As for her, when she plays the piano, she doesn't go or won't bother to do any administrative services.'

In what follows, we adopt the Theta System (Reinhart, 2002; Marelj 2004) to analyze the

argument structures of the three types of transitive *fan*.

### 4. Our Proposal under the Theta System

According to the Theta System Theory (Reinhart 2002), lexical entries are coded concepts with formal features defining the theta relations of verb entries. Basically, there are two features, namely, /c (cause) and /m (sentience), to describe thematic arguments, and each of the two features can have either positive or negative value. Those feature clusters are somehow equivalent to the established semantic roles, as show in (23).

- (23) a. [+c+m]: agent;
  - b. [+c-m]: instrument;
  - c. [-c+m]: experiencer;
  - d. [-c-m]: theme/patient
  - e. [+c]: cause;
  - f. [+m]: sentient;
  - g. [-m]: subject matter/source;
  - h. [-c]: goal/benefactor

In this study, we will use the feature clusters to describe the argument structures of different types of transitive *fan*, in order to work out the denominator as well as the minimal differing point of different uses of transitive *fan*.

Firstly, we analyze the causative use of *fan*. Recall that the subject of the causative fan 'annoy' obligatorily contains the semantic feature of [+HUMAN]. Moreover, an inanimate instrument can be licensed in this case, as exemplified in (11) and (12). Regarding this, the subject of the causative fan should be an Agent [+c+m], instead of a pure cause [+c], on the grounds that an Agent, instead of a Cause, can license an Instrument (Reinhart 2002). According to the analysis in Section 3, the object of the causative necessarily fan does not experience the mental process of "getting annoved". Therefore, the object should be a Recipient/Goal [-c] instead of an Experiencer [-c+m]. Although the object is, in most cases, animate, it is still [-c] in the sense that the feature /m is irrelevant. Given the analysis, the Theta grid of the causative *fan* is shown in (24) below:

(24) <u>The Theta grid of the causative *fan*:</u> ([+c+m], [-c], ([+c-m])) (the Instrument is optional)

We now move to the mental use of fan, which is proven to be exclusive to Beijing Mandarin. Like the mental verbs love and *hate*, the mental verb *fan* has a sentient [+m] as its subject. It should be noted that a sentient [+m] is different from an Experiencer [-c+m] in that the former obligatorily merges externally while the latter, as a mixed feature cluster, can merge either internally or externally (Reinhart 2000; Marelj 2004). Since we have already demonstrated that the object of the verb fan cannot be an Experiencer (rather, it is a Recipient or Goal), the subject of the mental fan should be a Sentient. In terms of its object, it is a [-m], a Subject Matter or Source, which can actually give rise to causal paraphrase (Marelj 2004: 11), as illustrated in (25).

(25) a. Max worries about his health [-m].
(subject matter) (Marelj 2004: 9, 11)
b. His health caused Max to worry.

The same alternation is applicable to the mental verb *fan* as well, as (26a) and (26b) are truth-conditionally equivalent to each other.

- (26) a. Wo bijiao **fan** tamen. I a\_bit feel\_annoyed them 'I feel fairly annoyed about them.'
  - b. Tamen **rang** wo bijiao **fan**. (causal paraphrase) they cause me a\_bit be\_annoyed 'They made me feel fairly annoyed.'

In this connection, one thing is worth noting. That is, the [-m] role, as an under-specified role, cannot bear the ACC feature. In other words, the mental *fan* is not an accusative case assigner. This is actually borne out, as mental verb *fan* can take a full-fledged sentence, without incurring any case problems. One of the examples is cited in (27), in which a whole sentence serves as the object of *fan*.

(27) Luting	fan	tamen wei		
Luting	feel_annoyed	them for		
zhe	dian shiqin	g zhenglun		
this	little thing	dispute		
lai	zhenglun	qu. (XIN)		
come	dispute	go		
'Luting got fed of their disputing over				
this little thing repeatedly.'				

Given our analysis, the argument structure of the mental *fan* is shown in (28).

(28) <u>The Theta grid of the mental *fan*:</u> ([+m], [-m])

Before we proceed, let us linger a bit on the mental *fan*. Our informants, especially Taiwan Mandarin speakers, tend to paraphrase a sentence containing the mental *fan* into a bi-clausal sentence, as shown in (29a, b).

- (29) a. Wo hen **fan** ta. I very feel\_annoyed him 'I feel annoyed about him.'
  - b. Wo juede ta hen **fan**. I think he very annoying 'I think that he is quite annoying.'

Close examination shows that (29a) and (29b) are not semantically equivalent. The most obvious difference can be detected from the degree modification therein. The degree adverb *hen* 'very' in (29a) describes the degree of the Sentient's (i.e., *wo* 'I') "feeling annoyed", while the same adverb in

(29b) indicates the degree of "his being annoying".

Lastly, we deal with the agentive verb *fan*, which is attested in Taiwan Mandarin and acceptable to Beijing Mandarin speakers as well, as exemplified in (8) and (9). We analyze this *fan* as a typical agentive verb with an Agent [+c+m] and a Theme [-c-m], as shown in (30).

(30) <u>The Theta grid of the mental *fan*:</u> ([+c+m], [-c-m])

What is particular to the verb *fan* here is that it involves a coercion process, which introduces an action to the sentences. For example, *fan* in (8) can be interpreted as "bother to do", with the action of "doing" coerced; while *fan* in (9) can be understood as "bother to think about", even though the verbs of "doing" and "thinking" are not explicitly mentioned therein. Given this, the agentive *fan* is to a certain extent similar to the verb *start* in English. As illustrated in (31), the verb *start* is able to coerce different types of actions, such as reading and writing, into the sentence.

(31) He started a book. (coercion)a. He started reading a book.b. He started writing a book.

Having established the argument structures of the three types of transitive *fan*, we put them together in (32) so as to make a better comparison.

(32) [<u>A fan B]</u>:
a. causative: ([+c+m], [-c], [+c-m])
b. mental: ([+m], [-m]) → (missing in Taiwan Mandarin)
c. agentive: ([+c+m], [-c-m])

The argument structures in (32) reveal that Beijing Mandarin and Taiwan Mandarin differ in the presence or absence of the [/+c] feature. Specifically, Taiwan Mandarin treats /+c as an indispensable feature of the transitive verb *fan*. Once this feature is missing, as in the case of (32b), the transitve *fan* will be filtered out. However, this condition does not apply to Beijing Mandarin. To sum up, the difference of transitive *fan* between Beijing Mandarin and Taiwan Mandarin is reduced to the /+c feature.

## 5. The Residue

Due to the required presence of the /+c feature in Taiwan Mandarin, the mental use of transitive *fan* is not attested, given that the subject of the mental *fan* is [+m]. There are, however, other attested transitive verbs to express the mental use of *fan*. As far as the corpus data are concerned, we find two general ways to express the equivalent meanings of the mental *fan*. Firstly, the verb takes the disyllabic form. The disyllabic verb may contain two synonymous components, such as *yanfan* 'get fed up with' in (33); alternatively, the disyllabic verb can be a resultative compound, such as *fantou* 'be deeply annoyed' in (34).

- (33) Renmin yijing yanfan people already get\_fed\_up\_with ta. (CNA) him
  'People have already been fed of him.'
- (34) Yi ming bashiba sui de one CL eighty\_eight year DE yeye, fan-tou le grandpa annoyed\_thoroughly PERF shehuxian tengtong. (CNA) prostate pain 'An eighty-eight-year-old grandpa was browned off by his prostate pain.'

Secondly, there are three occurrences of *fan-buguo* 'get annoyed so much that one cannot tolerate' in the CNA corpus. Crucially, *fan-buguo* is transitive, as evidenced by its occurrence in the *bei*-passive as in (35) and

the presence of an object (i.e., *ta* 'he') between *fan* and *buguo* as in (36).

- (35) You bushao muqin fanying mother report have many shi vinwei zhangfu bu because husband NEG be bangmang, iiashang bei help plus BEI xiaohai fan-buguo, get annoyed NEG beyond child dongshouda renbuzhu jiu cannot help then lift one's hand on xiaohai. (CNA) child 'Many mothers reported that they cannot help spanking children because their husbands do not help.'
- (36) Maidanglao sihu fan MacDonald seem get\_annoyed
  ta buguo... (CNA) he NEG\_beyond
  'It seems that MacDonald cannot stand his consistent pestering ...'

As a matter of fact, the disyllabic uses of *yanfan* 'get fed up with' and *fantou* 'be deeply annoyed' are also attested in the XIN corpus. Therefore, they are not exclusive to Taiwan Mandarin. In other words, monosyllabic and disyllabic mental verbs are not in complementary distribution between Beijing Mandarin and Taiwan Mandarin.

What is consistently true is that the mental use of the monosyllabic transitive verb *fan* 'feel annoyed about' is commonly used in Beijing Mandarin whereas it is completely missing in Taiwan Mandarin, due to the required presence of /+c feature in the Theta grid of the transitive *fan* in Taiwan Mandarin.

#### Selected References:

Fillmore, C. J. and B. T. Atkins. 1992. Towards a frame-based lexicion: the case of RISK. In: A. Lehrer and E. Kittay (Hgg.): Frames, Fields, and Contrasts. Erlbaum, 75-102.

Marelj, M. 2004. *Middles and Argument Structure across Languages*. Utrecht: LOT.

Reinhart, T. 2000. The Theta System: Syntactic Realization of Verbal Concepts. *UiL-OT working Papers*. Utrecht: University of Utrecht.

Reinhart, T. 2002. The Theta System – An Overview. In W. Sternefeld (ed.), Theoretical Linguistics 28: 229-290 Berlin: Mouton.

Reinhart, T., E. Reuland and T. Siloni. 2004. The Acc Case Parameter. Ms. UiL-OTS. University of Utrecht.