

Minimization, Conversational Inference, and Grammaticalization in Taiwanese Southern Min*

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This paper investigates the extent of discourse-pragmatics working in the process of grammaticalization in contemporary Taiwanese Southern Min (i.e. TSM). Specifically, it shows that minimization as proposed in Levinson (1987) works as a powerful principle in the language, which calls for a preference for semantically more general expressions to semantically more specific ones, and shorter expressions to longer ones. This general tendency is often accompanied with a process of metonymy, where the minimized expression derives rich interpretation from conversational inference, which is in turn conventionalized. It is pointed out that grammaticalization driven by minimization characterizes the emergence of a number of particles in TSM. Since these words typically occur in certain types of sequences in discourse, minimization often applies to truncate the rest of the sequences, leaving only these elements behind as carriers of the discourse functions performed by the original full sequences. Evidence from discourse data is further provided to show that sequence truncation of this type is grounded in the process of speaker-addressee interaction and negotiation, and that its driving forces are originated from the turn-taking system and the cognitive limitation of the speaker on the one hand, and the speaker's avoidance of social impropriety, on the other. The results offer support for the extensive degree of discourse-pragmatic working in shaping the grammar, as well as the dynamic nature of human language.

Key words: grammaticalization; conversational implicature; metonymy; Taiwanese Southern Min; minimization

1. Introduction

Grammaticalization is an extensively studied topic in functional linguistics. In recent decades, a wide variety of grammaticalization phenomena from different languages have been treated both from a historical and a synchronic perspective. The historical perspective, with its tradition descended from 19th century philosophers' speculations about the origins of grammar and evolution of language, investigates

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sources of grammatical forms and their typical pathways of historical change. Thus, data from different periods in history are examined to demonstrate how a lexical word in the course of time has its meaning bleached and has assumed its grammatical function (e.g. Bybee and Pagliuca 1985, 張 & 方1996). The more recent synchronic perspective, on the other hand, sees grammaticalization as primarily a discourse pragmatic phenomenon, to be studied from the fluid patterns of language use. From this perspective, language development is forever an ongoing process; earlier forms and uses may coexist with later ones, often resulting in complicated polysemy, structural indeterminacy, and non-discreteness of categories. Accounts based on a framework of grammaticalization can often provide a reasonable explanation for such intriguing synchronic phenomena, which may otherwise be hard to characterize (e.g. Heine and Reh 1984, Chang 1998, Li and Liu 1995).

Various issues concerning grammaticalization have been vigorously addressed, including the mechanisms by which it takes place (e.g. reanalysis and analogy, metaphor and metonymy) (cf. Claudi and Heine 1986; Heine, Claudi and Hunnemeyer 1991a), its probable paths and nature of unidirectionality (cf. Bybee 1985, Bybee and Dahl 1989, Hopper 1991, Heine, Claudi and Hunnemeyer 1991b), and so on. One of the common concerns central to many of the prior discussions is the motivations; that is, the potential (but not absolute) factors that enable the process of grammaticalization to occur (Hopper and Traugott 1993:63).

Linguists working on the enabling factors of grammaticalization have particularly been concerned with the 'the role of speakers and hearers negotiating meaning in communicative situations' (Hopper and Traugott 1993:63). Such focus on the role of speaker-hearer interaction is not hard to understand. Within the framework of grammaticalization, language development is seen as an ongoing process and grammar as fossilization of uses. It then follows naturally that patterns of language uses exhibited in the process of speaker-hearer interaction will contribute substantially to the makeup of the language. Therefore, careful examination of the discourse pragmatic factors that may influence the speaker's choice of expression and interpretation in actual communicative situations is crucial to a comprehensive understanding of the motivations for grammaticalization.

The present study attempts to illuminate the extent of discourse-pragmatics

working in the process of grammaticalization in contemporary Taiwanese Southern Min (henceforth TSM). Adopting a synchronic perspective, this study aims to show that minimization as proposed in Levinson (1987) works as a powerful principle in TSM, which has long served mainly as a spoken language for daily interaction. Stated simply, the principle calls for preference of semantically more general expressions to semantically more specific ones, and shorter expressions to longer ones. This general tendency for minimization is often accompanied with a process of metonymy, where the minimized expression derives rich interpretation from conversational inference, which is later conventionalized. Specifically, we argue that such grammaticalization driven by minimization characterizes the emergence of a number of particles in TSM which are found to be elements left behind from sequence truncation. Since these words typically occur in certain types of sequences in discourse, their high frequency of use interacts with the principle of minimization, leading to (partial) truncation of the full sequences, with these elements left behind as carriers of the discourse functions performed by the original full utterances. Furthermore, we propose that sequence truncation of this type is grounded in the process of speaker-addressee interaction and negotiation, and that its driving forces originate from the turn-taking system and the cognitive-physiological limitation of the speaker on the one hand, and the speaker's avoidance of social impropriety, on the other.

The analysis here is based mainly on 18-hour recordings of daily conversations, radio call-in programs, and radio/TV interviews and talk shows, as well as examples presented in previous literature and the researcher's notes taken from observation of daily use of the language. In the following, Section 2 explicates the principle of minimization. Section 3 examines the semantic/pragmatic functions of some newly emergent particles in TSM and argues that they are undergoing the process of sequence truncation and subsequent structural reanalysis. Section 4 presents discourse evidence for the possible motivations for minimization. Section 5 considers the role of minimization in TSM. Section 6 is the conclusion.

2. Minimization and Informativeness

Linguists probing into different aspects of pragmatics working on language have come up with different views on the relations between the speaker-hearer role and

grammar and rule. Many of the proposed motivations, according to Hopper and Traugott (1993:64-66), may be reduced to a general principle of “economy”: maximization of efficiency via minimal differentiation on the one hand, and maximization of informativeness, on the other. Such a principle of economy often leads to ‘signal simplicity,’ which typically results from the routinization, or idiomatization of expressions. In fact, Langacker (1977:106) has stated that languages in their diachronic aspect may well be regarded as ‘gigantic expression-compacting machines’ (cited in Hopper and Traugott 1993:65). Yet, idiomitization of expressions is balanced by innovation, which allows introduction of new and innovative ways of saying approximately the same thing. This very process of innovation itself is also based on a principle of economy—the economy of reusing existing forms for new purposes. Thus, grammaticalization is both motivated toward and constrained by the complex balance between creativity and routinization (Hopper and Traugott 1993:65).

Levinson (1987), drawing upon Zipf’s (1949) ‘least effort principle’ and Atlas and Levinson’s (1981) I-principle, proposed a Neo-Gricean model of inference, in which the principle of minimization interacts with the principle of informativeness, leading to a seemingly paradoxical implication: *minimized forms get maximized interpretations*. He turned to the empirical tradition of Conversation Analysis for evidence of operation of the principles, and argued that motivations for minimization may arise from the socio-interactional aspects of verbal communication. First of all, there may be a general tendency toward compression that is promoted by the turn-taking system. Due to pressure from rapid turn transition in discourse, the speaker feels the need for choosing general expressions over specific ones so as to hold his turn, and this naturally leads to frequent (partial) sequence truncation. Furthermore, sequence truncation may also arise from consideration of preference organization, which opts for avoidance of such dispreferred sequences as requests and other-initiated repairs.

From a social perspective, on the other hand, motivations for minimization may arise from what Levinson called ‘social economy’. The thesis is that speaker choice of an expression may not be based solely on cognitive or rational grounds, as suggested by the Gricean maxims, but may also have its social orientation. Levinson proposed that the following constitute principles of social economy (1987:95):

- (i) If we are socially close, we don't need to be explicit.
- (ii) If there's an element of impropriety, don't say it; implicate it.

Principle (i) captures the function of minimization as an indication of social closeness, providing the speaker with an important means for manipulation of social distance. Principle (ii), on the other hand, is face-oriented, which explains the motivation for minimization for politeness' sake.

Levinson's principles thus provide a very important ground for pragmatic inferencing through operation of the I-principle as proposed in his Neo-Gricean model of implicature. Since evidence from conversation analysis all points to the preferred/unmarked nature of minimized expressions, and the unmarked form is often associated with 'the expected, the stereotypical,' it follows that rich stereotypical information will be read in; because if the stereotypical situation does not hold, a marked dispreferred full form would have been chosen.

Levinson (1995:95-96) further explained why it pays to 'say little and infer much.' He pointed out an articulation bottleneck in human communication: we think faster than we can speak. This physiological limitation in turn leads to the tendency for us to think specifically but speak generally, leaving a lot to be inferred in the speech context, since any trade-off from coded content to inferential meaning may greatly increase the speed of communication, provided that the inferential content can be recovered reliably and speedily.

While Levinson's principle of minimization covers both minimization of content (i.e. semantically general expressions preferred to semantically specific ones) and form (i.e. 'shorter' expressions preferred to 'longer' expressions), the focus in our examination of TSM particles is on the latter, although there is obviously a general correlation between minimization of speech units and that of coded information.

3. Some Emergent Particles in TSM—Cases of Sequence Truncation

While particles in general (particularly utterance-final particles) are reported to occur very often in spoken TSM discourse (cf. Chen 1989, Li 1999), certain members in this group are used only sparingly. The particles *kah*, *li*, *koh* and *kong* tagged to the

sentences below, for example, belong to this rarely occurring group.

- (1) 我笑 *kah*.
 gua chio kah
 I laugh KAH
 ‘I laughed (to an extraordinary extent).’
- (2) (When asked why *A-Meng* is not at home.)
 伊今仔日值班 *li*.
 i kin-a-jit tit-pan li
 He today on-duty LI
 ‘He is on duty today. (Don’t you know it?)’
- (3) 你欲去就去 *koh*.
 li beh khi toh khi koh
 You want go then go KOH
 ‘If you want to go, just go (and see what’ll happen).’
- (4) Lang 這伊予我的 *kong*.
 lang ce i ho gua e kong
 DM this he give me NOM KONG
 ‘He gave me this. (Why did you think otherwise?)’

The restricted distribution of these particles is strongly suggestive of their structural indeterminacy and thus provides a good source for examination of fluctuation in language use. In this section, we will examine the uses of the particles *kah* and *li*, and demonstrate that their particle use emerges as a result of (partial) sequence truncation.

3.1. *Kah*—Marker of Excessiveness

Kah is classified in 鄭 (1989:14) as a ‘structural particle’ which serves to indicate a high degree of a state, corresponding to *~de hen* (得很) ‘very much’ in Mandarin. However, while Mandarin *~de hen* (得很) qualifies only states in general, *kah* in TSM may qualify both states and actions, as in 好 *kah* ‘extremely good’, 熱 *kah* ‘extremely hot’, 飽 *kah* ‘extremely full’, 痛 *kah* ‘extremely painful’, 拚 *kah* ‘work to an extraordinary extent’, 拍 *kah* ‘beat to an extraordinary extent’.

Despite its potential to qualify both states and actions, only 3 instances of the particle *kah* are found in our data, as shown in (5)-(7) below.

- (5) ((A and M are talking about how people's tax money has been wasted.))
- 1 M: A! 逐個臺灣人好清醒矣 la!
A tak e tai-wan lang hoo cheng-chenn a la
EXCM each CL Taiwanese should wake-up LA
- 2 A: A. 僥倖 o.
a hiau-heng o
EXCM pitiful PART
- 3 M: 袂清醒就悽慘 o.
be cheng-chenn toh chi-cham o
NEG wake-up then pitiful PART
- 4 A: 這條錢若給拿來予咱臺灣囡仔去讀 <M 幼稚園 M>
cit tiau cinn na ka the-lai hoo lan tai-wan ginna khi tak
you-zhi-wuan
this money if KA bring give we Taiwanese child go study
kindergarten
- 5 就攏有夠矣嘛！對 bo?
toh long u kau a ma tioh bo
then all enough ASP PART right PART
- > 6 M: A 我實在是氣 *kah*
a gua sit-cai si khi kah
DM I really am angry KAH
- 1 M: (Sigh.) All Taiwanese should see (the fact) clearly now.
- 2 A: How pitiful!
- 3 M: It will be miserable if they don't see it clearly.
- 4-5 A: If we give this amount of money to support our Taiwanese children
to go to kindergarten, it should be enough, right?
6. M: I'm really mad!
- (6) ((Q calls in to follow up the discussion on corruption.))
- 1 Q: 張老師, 參詳一下 la!
Tiunn lau-su cham-siang cit-e la
Tiunn teacher discuss one-CL PART
- 2 Honn a, 這時間 m7 通在吃飯時間講 a!
honn a ce si-kan m-tann tih cia-png si-kan kong a
DM A this time NEG at meal time say PART
- 3 A: Ho 按呢, 是按怎?
ho an-ne si an-cuann
DM so is why
- 4 Q: 抵仔—
tu-a
a-while-ago
- 5 A: 你噎著 hioh?
lli kenn tio hioh
you choked PART
- > 6 Q: 抵仔才去便所吐 *kah*.
Tu-a chioh khi pen-so tho kah

- A- while- ago just go toilet vomit KAH
 1-2 Q: Come on, Mister Chang. Please do not talk about this during meal time.
 3 A: Oh so, why?
 4 Q: Just now—
 5 A: Are you choked?
 6 Q: I just went to the toilet to vomit (seriously!)

(7) ((A and B are talking about their friends' donation to a local temple for its festivities.))

- 1 B: He1 十斤圓仔好加在無 ka7 寫落,
 he cap kin ng-a hoo-ka-cai bo ka sia-lo
 that ten-kitty rice-dumpling fortunately NEG KA write-down
 2 寫落面子就掃落地 a7.
 sia-lo bin-cu toh sau-lo-te a
 write-down face then sweep-down-to-ground ASP

((A and B continue talking about other people's donation to the temple.))

- 3 B: 亦有, 亦有十二斤半,
 a u a u cap-ji-kin puann
 also have also have twelve-kitty half
 4 伊 he1 創一個十斤,
 i he chong cit-e cap-kin
 he that do one-CL ten-kitty
 > 5 笑 *kah*.
 chio kah
 laugh KAH
 1-2 B: Fortunately he didn't write down the ten-kitty rice dumpling. If he had, he would have lost his face.
 3-5 B: There were, there were some who donated twelve-and-a-half kitties. He donated only ten kitties. (I) laughed (to such an extraordinary extent).

In all three extracts above, *kah* serves to indicate that the action/state described in the foregoing part of the utterance has reached an extraordinary, or even excessive extent. The precise degree itself, however, has been left unsaid for the addressee to infer. Here, (5) and (6) are taken from the same call-in program in which many people called to voice their complaints about corruption in the government. Speaker A in (5) has repeatedly pointed out a lot of problems he believes to have existed in the bureaucracy, and all his complaints are seen to culminate in (5.6) *A1* 我實在是氣 *kah* 'I'm really mad', with the particle *kah* signaling the extreme extent of his anger. Speaker Q in (6), on the other hand, suggests that such a revolting topic should not be brought up during mealtime, and exaggerates his disgust over the issue in (6.6) 抵仔才

去便所吐 *kah* ‘I just went to the bathroom and threw up badly’, also using *kah* to express the extraordinary degree of his vomiting. In (7), where B is telling her friend A about a ridiculous case concerning a donation a local temple, *kah* is attached to (7.5) 笑 *kah* ‘(I) laughed (to such an extraordinary extent)’ to strengthen the force of her comment.

Thus, the particle *kah* does not simply correspond to *-de hen* in Mandarin, as observed in 鄭 (1989), but serves to signal an unspecified extraordinary extent. In this way it bears close functional relatedness to the extent marker 到 *kah* ‘to’ in (8), where *kah* introduces the extent 無佢好 ‘not very good’.

- (8) 伊做 *kah* 無佢好.
 i co kah bo gua ho
 he do to NEG how good
 ‘He did not do very well.’

In fact, our conversational data show a total of 127 instances of *kah* which is followed by an explicit extent, far outnumbering the final particle *kah* use. What is worth noticing, however, is that 123 of these *kah*-introduced extents are extraordinary, or even excessive in nature, as illustrated in the reduplication 滿滿滿 ‘full-full-full’ in (9) and 血強欲 bu3 出來 ‘my blood almost spurt out’ in (10):

- (9) 人攏擠 *kah* 滿滿滿.
 lang long cinn kah buan buan buan
 people all jostle KAH full full full
 ‘(The train was) all packed up with passengers.’
- (10) 按呢氣 *kah* 血強欲 bu3 出來.
 Gua an-ne khi kah hueh kiang beh bu chut-lai
 I like-this angry KAH blood almost will spurt-out
 ‘I was so angry that my blood almost spurt out.’

Now, *kah* as an extent marker should theoretically allow extents of all degrees—mild, average, or extreme. But why should our real conversational data show *kah* to be introducing almost exclusively extraordinary/excessive extents? We argue that such excessiveness meaning is “read in” a *kah*-marked extent as conversational implicature. Li (in press) argues that all these *kah* uses are derived

from the spatial sense of the verb 到 *kau* ‘to arrive; to reach (a destination)’ through stages of metaphoric extension from space to quality, and structural reanalysis from a main verb to a coverb, a preposition, and finally a particle¹. Specifically, the verb of arrival 到 *kau* implicates a definite destination in the spatial domain. This, when mapped to the more abstract dimension of state or quality, often means **a distinctly identifiable, and often remarkable point along the imaginary line of different degrees**, so that the image of arrival can be successfully anchored. At this stage, Atlas and Levinson’s (1981) I-principle comes into play: since 到 *kau* often indicates a remarkable point, and being remarkable in extent often pragmatically invites the subjective inference of being extraordinary, the more informative stereotypical reading of excessiveness tends to be read into a *kah*-introduced extent whenever it is used. The high frequency rate for the excessive reading of *kah*-marked extents in our data suggests that it has been conventionalized, and thus has paved the way for subsequent elision of the extent sequence itself, resulting in the particle use of *kah* as seen in (5-7).

Thus, we propose that the particle use of *kah* derives from the goal/extent introducing *kah* through metonymy. In other words, it is an element left behind when the (extraordinary) extent sequence has been truncated, or, in Levinson’s (1987) term, minimized, both in form and in content. Due to contiguity in the utterance (cf. Traugott and König 1991:211-212) and high frequency of co-occurrence, the left-behind morpheme *kah* then comes to serve as a marker reminiscent of the original full sequence of excessive extent, through the associative process of metonymy.

Traces for operation of minimization in Contemporary TSM may be identified in our conversational data. First of all, the truncated extent is sometimes restored later in the discourse, when the speaker somehow feels the need to spell out the excessiveness of the extent. Thus, following the truncated sequence 笑 *kah* ‘(I) laughed (to such an extraordinary extent)’ in (7.5), repeated below as (7'.5), speaker B adds a fully specified sequence 我笑 *kah* 欲死矣 ‘I almost laughed to death.’ In (7'.7)

¹ It is shown in Li (in press) that the different phonological realization of the particle *kah* from the verb 到 *kau* is a consequence of reduction from frequent use, which often accompanies the process of grammaticalization. Our data also show that the coverb and the preposition uses of the word may be pronounced as either *kau* or *kah*, which is also suggestive of their role at some intermediate stage of *kah*’s grammaticalization.

- (7') 5 (B) 笑 *kah*.
 6 A: 實在是愛共寫落。
 sit-cai si ai ka sia-lo
 really is must KA write-down
 > 7 B: A我笑*kah*欲死矣。
 A gua chio kah beh si a
 DM I laugh kah about-to die
 5 (B) (I) laughed (to such an extraordinary extent).
 6 A: (He) really should have written it down.
 7 B: And I almost laughed to death.

Furthermore, many of the extent-introducing uses of *kah* may be characterized as half-truncated, in the sense that the extent is either vaguely specified or incompletely presented. Such half-truncated *kah*-extents typically contain deictic terms such as 按呢 *an-ne* 'like this, such/so', *cia* 呢 *cia-ni* 'this much', etc., in which the precise extent is implicated rather than explicated. (11) and (12) show typical examples of this sort.

- (11) ((O calls in to complain about his quarrel with his neighbors.))
 1 O: 伊講我無水準 la!
 i kong gua bo cui-cun la
 he say I not-have class PART
 2 Ho! 講共我一直罵,
 ho kong ka gua it-tit ma
 EXCM DM KA me continuously condemn
 3 一直 le2.
 it-tit le
 continuously curse
 4 A: 用畀的 o?
 iong le e o
 Use curse NOM PART
 > 5 O: 我實在氣*kah*按呢o。
 gua sit-cai khi kah an-ne o
 I really angry to like-this
 1-3 O: He said I had no class. Ho! He kept condemning me, cursing me.
 4 A: Cursing you?
 5 O: I was really so angry!
- (12) 1 O: Oa! o3? 穿*kah* *cia-呢sui* o?
 oa o cheng kah cia-ni sui o
 EXCM PART wear ti so beautiful
 O: 'Wow! Oh? You are so well dressed up?

Such half-truncated extents show *kah* at an intermediate stage in the process of

minimization, in which the extent-introducing preposition *kah* is gradually having its extent vaguely expressed and finally elided, leading to its structural reanalysis as a particle.

3.2 *Li*—Marker of Addressee Involvement

The use of the final particle *li* is not reported in most TSM dictionaries, and appears to be rather unfamiliar to some speakers. However, 24 instances of particle *li* are identified in our spoken data. The particle is also found to occur rather frequently in 黃元興's short story 關渡地頭真麗斗 'The Beautiful Place *Kantau*'², the language in which is considered authentic TSM and truly reflecting the essence of the art of traditional story-telling. Furthermore, speakers who claim to be unaware of its use are often found to be actually using the particle in certain discourse contexts.

Unlike the particle use of *kah*, which serves a definite semantic/pragmatic function signaling excessiveness, the function of *li* seems to be rather hard to pinpoint. A closer look at the discourse contexts for these *li* occurrences, however, reveals that the particle signals the speaker's eagerness in involving the addressee in the speech event. Such a discourse function characterizes the use of *li* in the traditional-story style as seen in 關渡地頭真麗斗 'The Beautiful Place *Kantau*', where the narrator typically mixes narration of events with his own comment on or interpretation of the events. The extracts below show how *li* is used in the work (鄭 et al. 2000:118, 120).

- (13) 1 總是來本地走衝找老母，
 cong si lai pun-te cau-cong chue lau-mu
 after-all come here rush-about look-for old-mother
 2 真正有深情人性，
 cin-ciann u chim-ceng jin-seng
 really have deep-feeling human-nature
 3 是無論按怎著愛潦落，
 si bo-lun an-cuann tioh ai liau-lo
 is no-matter how must undertake
 4 天地無坎也愛衝，
 thinn-te bo kham ia ai cong
 sky-earth not-have ladder also must rush
 5 真偉大 *li*。

² 12 instances of *li* are identified in the excerpt of the story in 鄭 et al.'s (2000:114-120), while other final particles in the same excerpt include only 5 instances of *le* and 2 instances of *la*.

cin ui-tai li
very great LI

1-5 After all, he came here trying very hard to look for his mother. This shows his deep affection and human nature. Whatever the situation, he had to rush on. Despite the fact that there was no way for him to follow, he had to strive hard. He was really great.

(14) 1 萬裕仔頂氣沖起腦門眩倒路邊，
Ban-ju-a tieng-khi chiong khi nau-mng hin to loo pinn
Ban-ju-a top air spring up brain-door faint-down road side

2 就傷過了歡喜 *li*。
toh siunn-kue-liau huann-hih li
just too-exceedingly happy LI

1-2 *Ban-ju-a* felt a stream of air rush up to his brain and fainted on the roadside. He was just overjoyed.

As seen in (13) and (14), *li* is often found to tag the comment statement. Thus, the first four clauses in (13) describe what the hero in the story 萬裕仔 did in his attempt to find his mother, while (13.5) represents the narrator's comment that he was really great. Likewise, the first clause in (14) is a description of how 萬裕仔 fainted on the road, while the following statement 就傷過了歡喜 *li* states the narrator's own judgment, i.e. that 萬裕仔 passed out because he was overjoyed. In both examples, the attached *li* serves to signal that that story-teller has shifted from the story mode to the interaccional mode to address his audience, as if saying, 'you see?' or 'you know?'.
In our spoken data, 24 instances of particle *li* are identified. (15), (16) and (17) illustrate its typical use.

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(15) ((M and D are watching the telecast of Asian Games.))

1 M: A 這 m7 知啥物國?

a ce m cai sia-mi kok

DM this NEG know what country

2 咱也袂曉字, 也袂曉看.

lan a be-hiau ji a be-hiau khuann

We also NEG-know word also NEG-know read

> 3 D: 這就日本 *li*7.

ce toh Jit-pun li

this just Japan LI

1-2 M: What country is this? I don't know the words, nor can I read.

3 D: This is Japan (can't you see it?).

(16) ((D and B are explaining why they have to go get their shoes early.))

- 1 C: A 你就這嘛轉才去=, 提就好你嘛=
a li toh cit-ma tng ciah khi the toh hoo li ma
DM you just now return then go get then fine you also
- 2 D: [無 la3].
bo la
NEG PART
- > 3 B: [無 la3], 就驚伊講伊下晝 *li7* a3,
bo la toh kiann I kong e-tau li a
NEG PART just afraid he say he afternoon LI PART
- 4 he 若人下晝時 a7=,
he na lang e-tau si-a
that if people afternoon time
- 5 C: 人攏關門.
lang long kuainn mng
people all close door
- > 6 B: 關門, 人欲 chit-tho *li*.
Kuainn mng lang beh chit-tho li
- 1 A: You simply now when you go back=,
2 D: No.
- 3-4 B: No, we're just afraid since it's the afternoon, you see, in the
afternoon=
- 5 C: People (i.e. stores) all close doors.
6 B: (They) close doors, because they want to have some fun.

(17) ((S and F are talking about the fish S just bought.))

- 1 S: A 我就買白鯧 a.
a gua toh be peh-chiunn a
DM I just buy *peh-chiunn*-fish PART
- > 2 F: 哎=, he 買 he 也無效 a *li*.
Ai he be he a bo-hau a li
EXCM that buy that also no-use PART LI
- 3 買 he1 就按呢卡輸買馬頭。
be he toh an-ne kha su be be-thau
buy that just like-this rather inferior-to buy *be-thau*-fish
- 1 S: I just bought some *peh-chiunn*-fish.
2-3 F: Ah! That, buying that is useless. Buying that is worse than buying
be-thau-fish.

In the spoken data, on the other hand, *li* attachment is often found in answers to questions, clarifications/explanations, as well as disagreements/protests, as shown in (15), (16) and (17), respectively. In (15.3), *li* indicates that the speaker thinks the answer is simply self-evident, as it is clearly shown on TV. In (16), B tags his explanations twice with *li*, in (16.3) and (16.6), because he believes that it should be obvious to C that stores are closed in the afternoon. In (17.3), *li* is used to attach F's

comment on S's purchase of seafood, showing that the father F believes that his son S should know the obvious fact that *pe-chiunn*, which S has bought, is not even as good as *be-thau*, a less expensive fish. In all these examples, the *li*-attachment is seen to signal the speaker's intent to address the addressee's knowledge state, as if saying 'you see', 'you know', or even 'can't you see it?'

Therefore, we propose that all the *li* instances serve to signal the speaker's intention to involve the addressee as an active participant who may fully understand and appreciate the speaker's position. The phonological resemblance of the particle *li* with the second person pronoun 你 *li* further strongly suggests its possible derivation from the second person pronoun. In other words, *li* originates from full sequences such as 你知 \square bo? 'you know?' or 你kam m知? 'don't you know it?', which are employed by the speaker to overtly resort to the knowledge state of the addressee and thereby get him to pay close attention to what the speaker is trying to convey. Specifically, when such sequences are (partially) elided in the process of conversation with only the minimal form *li* left behind, the associative power of metonymy will assign *li* the function of carrier of the speech act performed by the original sequences³.

Such a truncation analysis of *li* finds support from our conversational data. First, sequences such as 你知 bo? 'you know?' or 你 kam m 知? 'don't you know it?' are found in use, particularly when the speaker is anxious to express his opinion and inform the addressee about the stand he assumes. The radio call-in extract in (18) and the mother-son talk in (19) nicely illustrate this point:

(18) ((Y calls in to comment on the environmental policy of the government.))

- 1 Y: 但是 he 今仔日哪會變此呢垃圾 le?
tan-si he kin-a-ji na e pian cia-ni la-sap le
but that today how-come will become such dirty PART
- 2 就是 XXX 爲著算講=爲著台灣的經濟,
toh si ui-tioh sng-kong ui-tioh tai-wan e kieng-ce
just is for say for Taiwan NOM economy
- 3 犧牲咱的環境。
hi-seng lan-e huan-keng
sacrifice our environment
- 4 A: Hm hm.

³ Our initial observation on dialectal data seems to confirm the proposed analysis here. Specifically, speakers who pronounce the 2nd person pronoun *li* with a mid back unrounded vowel also has a similar mid back vowel for the final particle.

- > 5 Y: a 咱等於講一寡豬你知無?
 A lan teng-I kong cit-kua ti li cai bo
 we equal say some pigs you know BO
 7 伊講 a 就有予恁吃,有予恁穿,
 i kong a toh u ho lin ciah u ho lin cheng
 he say DM just have give you eat have give you wear
 8 你閣在嫌啥物代誌?
 li koh ti hiam sa-mi tai-ci
 you still PROG complain what thing
 1-3 Y: But why has it beome so dirty? It was just because= just
 because of Taiwan's economy.
 4 A: Hm hm.
 5-7 Y: (To them,) we are just like some pigs, you know? They say that
 you have food to eat and clothes to wear, what are you still
 complaining about?

(19) ((S and M are talking about the success of a restaurant.))

- 1 S: A 人 he 攏嘛有去做廣告
 a lang he long ma u khi coo kong-ko
 DM DM that all also have go do advertisement
 > 2 M: A he 愛真濟錢你知無。
 A he ai cin ce cng li cai bo
 DM that really need really much money you know BO
 3 S: 對 a。我才 ti le 講, 講--
 tiu a gua ciah ti-le kong kong
 right PART I just PROG say say
 4 咱按怎會有才調?
 Lan an-cuann e u cai-tiau
 We how can have ability
 1 S: All those (restaurants) have put on advertisement.
 2 M: That needs really a lot of money, you know.
 3-4 S: Right. I was just saying, saying—how are we going to have the
 ability (to afford it)?

Extract (18) shows that caller Y is obviously dissatisfied with the government's environmental policy, and is thus rather emotionally charged in his criticism. In (18.5), where he comments that the people have been treated like pigs, 你知 *bo?* 'you know?' is used at the end. This tag here is obviously not intended as a real question, as the addressee A does not attempt provide an answer to it, but rather serves to explicitly address the hearer by asking him to check his knowledge state, and thus involve him in what the speaker says. Similarly, speaker M in (19.2) tags her comment 'that costs a lot of money' with 你知 *bo?* 'do you know it?', obviously intended as a rhetorical

question to emphasize her point that the advertisement really costs a lot money. In other words, the same strategy of resorting to the hearer's knowledge state is employed.

Aside from such tags as 你知 bo?, tags which are incomplete in form or vague in content are also found. (20) and (21) below show examples of this type.

(20) ((S and M are talking about the beef noodles they just had.))

- 1 S: He 咱, 咱 he 若在台北賣,
he lan lan he na ti Tai-pak be
that we we that if in Taipei sell
- 2 差不多是柒拾箍 [按呢爾]。
Cha-put-to si chit-cap kho an-ne nia
About is seventy dollars like this only
- 3 M: [HeN aN]。
right PART
- 4 A 人伊賣一佰,
a lang i be cit pah
DM DM he sell one hundred
- > 5 A 伊 he1 肉嘛 及咱 he1 全的 你旦,
a I he bah ma ka lan he kang-e li tann
DM he that meat also with we that same you now
- > 6 就攏全全 你旦按呢
toh long kang kang li tann an-ne
just all same you now like-this
- 1-2 S: We, if we sell that in Taipei, it would be only about 70 dollars.
3-6 M: Right. And he sells it for 100. The meat he uses is the same as ours you see, just all the same you see.

- (21) 1 F: 軟絲仔 m7 才卡好呷。
nng-si-a m ciah kha hoo-ciah
squid NEG only more good-eat
- 2 S: A he 就軟絲仔 你旦你是。
a he toh nng-si-a li tann ni si
DM that just squid you now you are
- 3 F: Hann?
DM
- 4 S: He 軟絲仔 la。
he nng-si-a la
that squid PART
- 1 F: Only squid would be more delicious
2 S: But that is exactly squid, now are you ...?
3 F: OH?
4 S: That IS squid.

(20) shows part of a mother-son conversation about the price of the beef noodles they have just had. While the son comments that the kind of beef noodles served in Taipei costs only 70 dollars, his mother continues to argue that the noodles, which have cost them 100 dollar each, are just the same, with the same material and ingredients. In (20.5) and (20.6), the mother tags her arguments twice with incomplete sequences 你旦 ‘now you’ and 你旦按呢 ‘now you like this’. Similarly, in the father-son dialog in (21), when trying to point out the fact that his father has mistaken the 軟絲仔 ‘squid’ he bought for the less delicious 透抽, the son S also ends his utterance in (21.2) with an incomplete sequence 你旦你是 ‘now are you...?’. The precise meaning of these incomplete sequences may not be fully recoverable; however, the intended speech act function can often be pragmatically inferred. In all these cases, the speaker attempts to involve the addressee, demanding that he play an active role in the process of interaction, either to see the fact clearly, as in the case of (20), or to discern his own mistake, as in (21). In other words, these incomplete tags can be seen as half-truncated, representing an intermediate stage in the process of minimization. When the principle of minimization is further applied to elide the whole sequence except the second person singular pronoun *li*, the morpheme left behind is reanalyzed as tagged to the preceding statement, serving as a particle that signals the speech act function originally performed by the full sequence.

Our analysis of *li* thus offers a reasonable account for why the discourse function of the particle sometimes appears hard to define, occurring in a variety of contexts ranging from answers to questions, clarifications, explanations, to disagreements, refutations and protests. Since the original full sequences may vary from 你知bo? ‘you know?’, 你敢知? ‘don’t you know it?’, 你哪會按呢 ‘how come you are like this?’, etc., and their uses may be motivated by different discourse factors, their truncated form *li* may thus inherit the different conversational inferences when situated in different contexts. The basic function, however, remains quite unified. That is, the speaker intends to involve the addressee as an active participant in the interaction, though the degree of the force may differ from case to case, depending on the relevant contextual features.

4. Why Minimize?—Motivations from Discourse Progression and Interaction

Given our analysis for the particles *kah* and *li* so far, the next question seems naturally whether there are any motivations for their grammaticalization. The process of sequence truncation as sketched in Section 3 obviously accords with the general tendency for a language to economize. But why economize? What driving forces could there be that lead to such a process of sequence truncation? Our conversation data offer a very good source for a reasonable account.

As pointed out in Section 3, both *kah* and *li* show half-truncated cases that display the process of truncation at its intermediate stage. In fact, among the total of 127 extent-introducing *kah*'s, 46 are seen to fall into this group, accounting for 38.11% of all the occurrences. These half-truncated instances reveal that the process of truncation is grounded in the turn progression and negotiation in speaker-hearer interaction. First of all, they are often accompanied with overlaps, interruptions, repairs and hesitation markers. In (22) below, the extent sequence 在 *hial chhiak*, *chhiak kah*—in (22.2) is cut short because of overlap with (22.3).

- (22) ((A, B and C are talking about their experience in playing with a toy.))
- 1 B: 我抵仔嘛差一粒。
gua tu-a ma cha cit-liap
I just-now also miss one-CL
- > 2 A: [ti hia chhiak, chhiak *kah*--]
at there shake shake KAH
- 3 B: 旦才 hit 粒 [抵欲入去的時,
tann ciah hit-liap tu beh jip-khi e si
now only that-CL just about enter-go NOM time
- 4 就閣攏, 攏軋出來]
toh ko long long ka chut-lai
just again all all roll exit-come
- 1 B: I all missed one just now.
- 2 A: Over there shaking and shaking—
- 3-4 B: Right at the time when that one was about to get in, the rest again
all, all rolled out.

In (23), speaker L's vaguely presented extent 打 *kah* 按呢 'fight to such an extent' in (23.3) partially repeats the preceding onomatopoeic description 按呢 *peng peng* 'like this bang bang'.

- (23) 1 L: he 有的真....
 he u-e cin
 That some really
- 2 往過咱對面 he, 有 o? 給阿草仔 in 租 he a,
 eng-kue lan tui-min he u o ka A-chau-a in coo he a
 past we opposite that have PART KAA-chau-a them rent that PART
- > 3 兄弟仔嘛按呢 peng2 peng2 打**kah**按呢,
 hiann-ti-a ma an-ne peng peng pak kah an-ne
 brothers also like-this bang bang beat KAH like-this
- 4 in 老母仔管無法 le.
 in lau-bu-a kuan bo huat le
 their mother control NEG way PART
- 5 M: HeN a.
 right PART
- 6 L: 講有人按呢.
 kong u lang an-ne
 DM have people like-this
- ((D goes on with a similar case of fight between young brothers.))
- > 7 L: 打**kah**按呢 o,
 phah kah an-ne o
 hit KAH like-this
- 8 in 老母仔攏--
 in lau-mu-a long
 their mother all
- > 9 D: 打**kah** in老母攏緩仔來叫阮大家仔<M 婆婆 M>去給in鬥講.
 phah kah in lau-mu long uan-a kio goan tak-e-a po po khi ka in
 tau kong hit KAH
 their mother then ask our mother-in-law mother-in-law go give
 them help talk
- 1-4 L: Some really.... That one who used to live across us, remember
 him? The ones that rented house from A-chau-a. The brothers
 also fought each other bang bang hit to such an extent.
- 5 M: Right.
- 6 L: (It's incredible) there should be someone like this.
- 7-8 L: They fought like this. Their mother had to—
- 9 D: They fought to the extent that their mother had to ask my
 mother-in-law to help her discipline the boys.

Notice that as the conversation progresses, L repeats the same vague extent utterance 打 *kah* 按呢 o ‘fight to such an extent’ in (23.7), and attempts to further elaborate on the specific extent in (23.8) in 7 老母仔攏—‘their mother completely--’. Her elaboration, however, is interrupted by D in (9), who cuts in with a refinement of the precise nature of the extent, i.e., the mother of the brothers had to ask for help from her mother-in-law.

In (24), speaker C's general description in (24.1) 腫~~kah~~按呢= 'swell to such an extent=' is accompanied with lengthening of按呢= in (24.1) and攏= 'completely' in (24.3), restarts with code-switching in (24.1-2), and repetition of the general expression按呢 'like this' in (24.3). All these show that the speaker is trying to explain the extent of the pain and yet is not able to come up with the precise extent right on the spot. Her intent for a more precise description is further evidenced in the extensive use of *honnh*, which signals this process of meaning negotiation⁴.

- (24) 1 C: A 腫~~kah~~按呢=家己~~honnh~~,
 A ceng kah an-ne ka-ki honnh
 swollen KAH like-this self PART
 2 手園落去 ~~honnh~~, <M放下M> ~~honnh~~,
 chiu khng lok-khi honnh fang xia-qu honnh
 handput down PART put down PART
 3 攏=無法度通忍受, 按呢~~honnh~~ —
 long bo-huat-tou thang jim-siu an-ne honnh
 all NEG-way can endure like-this
 1-3 C: It was swollen like this= I myself, even putting down my hand,
 putting down my hand, was unbearable for me, like this.

All the discourse phenomena observed above, therefore, point to the possibility that the elision of the precise extent may have resulted from the nature of the turn-taking system, as proposed by Levinson (1987). Under the pressure of successive turn transition, the speaker may find it difficult to instantly come up with a precise description of the extent, and may just fill in the gap with a vague deictic expression such as 按呢 'like this; to this extent', and have it elaborated later. Since deictic terms such as 按呢 'like this; to this extent' and *hiah* 呢 'like that; to that extent' do not themselves carry any substantial meaning, the elision of the half-truncated terms is only a natural step to take next.

Another factor which should also be considered is the social aspect of the interaction. Our data show that 124 out of the 127 explicitly specified extents are extraordinary or excessive in nature. In fact, many of these extraordinary extents include exaggerations such as 欲死 'about to die', 欲昏去 'about to pass out', or 血強欲bu出來 'blood almost spurt out', etc., which often involve socially negative

⁴ For use of *honnh* as a marker of negotiation invitation, see Chapter 4 in Li (1999).

elements such as death, stupidity, or extreme sickness. Since such strongly emotive expressions may become taboo in contexts where social distance needs to be maintained between interlocutors, avoidance of social impropriety may call for their elision⁵.

Cases of half-truncated *li*-sequences offer further support for minimization due to social consideration. An example in point is (21), partly repeated as (21') below. Here, speaker S in refuting his father's statement that only 軟絲仔 'squid' is good to eat', refutes that what he bought is exactly 軟絲仔. Notice that he uses a half-truncated expression 你旦你是 'now are you...?', leaving the rest of the sequence unsaid.

- (21') 1 F: 軟絲仔 m7 才卡好呷。
 2 S: A he 就軟絲仔 你旦你是。
 1 F: Only squid would be more delicious
 2 S: But that is exactly squid, now are you ...?

We may speculate that the full form, if not elided, would most likely have been a rather impolite sequence, such as 你旦你是袂曉看 *hioh?* 'Can't you see it or not?'. Sequences expressing such a strong and provocative demand for addressee involvement are obviously face-threatening and constitute an element of social impropriety, and are thus to be truncated under normal circumstances given that the intended speech act function can be inferred from the context.

Our conversation data have thus shown the grammaticalization of particles *kah* and *li* to be grounded in the process of speaker-hearer interaction and negotiation. The driving forces have originated from the turn-taking system, the physiological limitation of the speaker, as well as avoidance of social impropriety.

⁵ As one of the reviewers pointed out, truncation of the precise degree after *kah* may partly due to its lack of relevance to the communication.

5. The Role of Minimization in TSM

Sequence truncation as discussed in this paper is by no means restricted to the grammaticalization of *kah* and *li*. Rather, minimization works as a very general principle, and is seen to be responsible for the grammaticalization of some newly emergent final particles in TSM. Chang (1998), for example, reported the grammaticalization of the final particle *kong* from the utterance-initial marker *kong*, both signaling counter-expectation, as illustrated in (25) and (26), respectively.

> (25) 轉來 **kong** 給我拍 kah 欲死. (Chang 1998:118)
 tng-lai kong ka gua phah kah beh si
 return KONG KA me hit KAH about die
 ‘He almost hit me to death when he came back.’

(26) CM: 你欲愛<M 巧克力 M>bo? (Chang 1998:120)
 li beh ai qiao-ke-li bo
 you want like chocolate PART
 > A: 沒 teh 瘋 **kong**.
 Bo teh siau kong
 NEG PROG crazy KONG
 CM: Would you like some chocolate?
 A: I’m not crazy .

Specifically, Chang showed the link between the initial and final *kong* by reconstructing the implied content that follows the final *kong*, as in (26’).

(26’) 沒在瘋 **kong**(吃巧克力).
 ‘I’m not crazy (to eat chocolate).’

The implied content is left unsaid when shared by the speaker and the hearer, leaving *kong* at the final position to signal that what might follow counters the speaker’s expectation.

The grammaticalization of *kong* from an utterance-initial marker of counter-expectation to an utterance-final particle represents a typical case of the principle of minimization at work. Chang (1998:120) attributes the process to the Gricean conversational maxim of quantity, arguing that the implied content following *kong* if made explicit would seem “a little pleonastic.” However, avoidance of redundancy may not be the whole reason for sequence truncation. In fact, in some of her examples given to demonstrate the link between initial and final *kong*, the precise

nature of the implied content is often hard to reconstruct. Such difficulty for specific description seems to have motivated the frequent use of expressions like *kong* 按呢, as in (27), where 按呢 serves as a slot filler. The vague specification rids the speaker of the task of spelling out exactly what counters his expectation, and leaves it for the addressee's inference.

- (27) 你 m 就試看覓 *kong* 按呢.
 li m-toh chi kuann-mainn kong an-ne
 you NEG-just try-ASP KONG like-this
 'Why don't you just try and see if it works?'

Moreover, truncation of counter-expectation may also be due to avoidance of direct confrontation with the addressee. Consider the examples in (28) and (29).

- (28) ((A asks B if she should buy the sweater.))
 B: 你看好看才買 *kong*. (Chang 1998:122)
 li kuann ho-kuann ciah be kong
 you see good-looking then buy KONG
 'Buy it only if you think it's good-looking.'
- (29) A: ((curiously asking B what he is looking for in the finance and economy page of a newspaper))
 你欲看啥?
 li beh kuann siann
 you want see what
 B: 欲看我的基金 *kong*
 beh kuann gua-e ki-kim kong
 want see my fund KONG
 A: What are you trying to see?
 B: (I'm) trying to see my co-fund.

The left out part in (28) and (29), if restored, may have been *kong* 問我 and *kong* 問我看啥, both posing direct challenge to the addressee's inquiry. Here, the principle of minimization works to tone down the speaker's expression of counter-expectation, and thus saves the face of the addressee and smoothes the progression of the conversation in turn.

A similar case in which minimization is seen to be at work is the particle use of *koh*, reported in Chen (1989:48-50) as an epistemic attitudinal particle that "externalizes sharp disagreement" and a speech act particle serving to urge or provoke.

(30)-(32) are Chen's examples (1989:49).

- (30) 就無在燒腳尾飯 *koh*.
 toh bo teh sio ka-bue-punn koh
 just NEG PROG burn foot-end-rice KOH
 '(You're) not burning the death-bed rice (to behave like this)!'
- (31) 就無在漏氣 *koh*.
 toh bo teh lau-khui koh
 just NEG PROG leak-gas KOF
 '(I'm) not showing my own weakness (to behave like this).'
- (32) 真正無拚袂用 le? 來 *koh*.
 Cin-ciann bo piann be-iong le lai koh
 really NEG fight NEG-work PART come KOH
 'You really want a fight? Come on. (Don't just stand there.)'

As with the case of *kong*, what the speaker strongly disagrees with here seems to be reconstructable, most likely as *koh* 按呢 'still like this' in (30) and (31), and *koh khia the hia* 創啥? 'why are you still standing there?' in (32). Such *koh* uses thus show close relatedness with the adverb of addition/repetition 閣, whose meaning is reported in Ni (1996) to have extended from objective addition/repetition, as in (33), to subjective expression of the speaker's surprise or disagreement, as in (34).

- (33) a. 伊閣忠厚閣老實.
 i koh tiong-ho koh lau-sit
 he also sincere KOH honest
 'He is both sincere and honest.'
- b. 伊昨昏閣來矣.
 i ca-hng koh lai a
 he yesterday KOH come ASP
 'He came again yesterday.'
- (34) 1 A: 生嘴齒矣 hioh? ((asking if B's son is teething))
 senn chui-khi a hioh
 bear tooth ASP PART
- 2 B: 猶未 la.
 iau bue la
 still NEG PART
- > 3 無嘴齒, 閣足賢的 o3. He <M 蘋果 M> 閣咬會斷.
 bo chui-khi koh ciok gau-e o he ping-guo koh ka e tng
 no tooth still really good PART that apple still bite-cane-broken

- 1 A: Teething?
 2-3 B: Not yet. He has no tooth, but he is good. He can bite off
 (pieces from) apples.

It is thus reasonable to infer that the strong disagreement in (35.2) below, the speaker has left out what he is opposing to, i.e. 予讀高中 *hoo thak k- tiong* ‘for (him) to study in senior-high’. In other words, the particle use of *koh* is derived from the adverbial connective 閣 through partial sequence truncation of information that may easily be restored from the speech context.

- (35) 1 伊也袂曉讀 a 閣予讀高中,
 I a be-hiau thak a koh hothak ko-tiong
 He also NEG-know study PART still give study senior-high
 2 就無欲予艱苦死 *koh*.
 toh bo beh hoo kan-khoo-se koh
 just NEG want give hard-death KOH
 ‘He is not good at study and (you) still want him to study in senior high. Are you trying to torture him to death (to want him to go to senior high)?’

This tendency to economize also seems to be the underlying force for such phenomena as shown in (36) and (37), in which the element tagged at the end is often structurally opaque:

- (36) (He)溪水足清的 *he*.
 he khe-cui ciok cheng e he
 that river-water really clear NOM that
 ‘The river water was really clear.’
 (37) 我氣一個.
 gua khi cit-e
 I angry one-CL
 ‘I was so angry.’

He tagged at the end of (36) gives an emphatic force to the utterance; while 一個 in (37) signals an extraordinary extent, rather than a diminutive extent as suggested by its lexical components ‘one-classifier.’ The prevalence of such patterns finds a possible explanation from minimization. Specifically, it is possible that *he* in (36) represents repetition of the sequence *he* 溪水足清的 ‘that river was really clear’ for emphasis, with its following part left unsaid for economy while the force of the emphasis is still

signaled by the remaining *he*. Likewise, 一個 ‘one’ in (37) may have resulted from truncation of a following extent sequence, often extraordinary in nature, such as 強欲昏去 ‘(I) almost passed out’. As the extraordinary extent may readily be inferred with such 一個 sequences in TSM, the extent itself may be left unsaid, leaving 一個 at the end as a particle (cf. Li 2002).

Therefore, we conclude that minimization works as an important factor which accounts for the emergence of final particles in contemporary TSM. Additional support for such a hypothesis comes from the tonal manifestation of these final particles. Particles *kong* and *li* often carry a high-level 1st tone, suggesting their high-falling 2nd tone origin in 講 and 你, respectively. Particle *kah*, likewise, shows a 2nd tone value (though a 4th tone value is possible when accompanied with the glottal stop), corresponding to the 3rd-tone of 到 in its citation form. *Koh*, often pronounced with a high-level 1st tone when not accompanied with the glottal stop, also agrees with the tone sandhi of 閣 in a non-final position. Finally, 一個 signaling an extraordinary extent, unlike its tonal realization as a delimitative marker, is never accompanied with neutralization; and the full tones also demonstrate application of tone sandhi rules, which suggest their derivation from truncation of a following sequence.

Finally, analyses of these particles as results of sequence truncation also provide us with a better source for their interpretation. The discourse functions of these particles are sometimes very hard to spell out precisely, and the fine distinctions among them even harder to define. This is seen from the fact that the sentences in (2)-(4), repeated below as (2’)-(4’), may be attached with more than one particle, each carrying some different attitude intended by the speaker.

(2’) 伊今仔日值班 *li/ kong/ koh*.

(3’) 你欲去就去 *koh/ kong*.

(4’) Lang 這伊予我的 *kong/ li*.

However, from the perspective of grammaticalization, we are able to perceive that *kong* somehow carries a more detached attitude of the speaker, which is structurally inherited from its hear-say origin of the verb 講 ‘say’. *Li*, on the other hand, often signals the

speaker's strong intention to involve the addressee, which is indicative of its origin as the 2nd person singular pronoun 你 used for addressing the hearer. *Koh*, reported in Chen (1989:50) as serving to urge or provoke, often carries the speaker's overtone of '(let's) wait and see,' suggesting its derivation from the connective denoting addition. The fine differences in their function may also explain why *Li* is used mostly among family members or close friends, when the speaker's intention for addressee involvement may not appear too demanding; while *koh* is often used only when a provocative force is intended.

5. Conclusion

In this paper, we have examined some emergent final particles in TSM and have shown that their grammaticalization is driven by the principle of minimization as proposed by Levinson (1987). We have further argued that the tendency to minimize works as a powerful principle in TSM, calling for preference of semantically more general expressions to semantically more specific ones, and shorter expressions to longer ones. We have also demonstrated that what facilitates the grammaticalization of the minimized element, is the process of metonymy, in which the minimized expression derives a rich interpretation from conversational inference, with the inference later conventionalized through metonymic association. Thus, morphemes such as *kah*, *li*, *kong*, and *koh*, etc., which typically occur in certain types of sequences in discourse, have come to acquire their particle function when the sequences themselves have been elided in the process of discourse interaction, leaving the morphemes at the end of the preceding utterance and thus reanalyzed as a final particle reminiscent of the discourse functions performed by the un-truncated sequences.

Evidence from discourse progression and interaction has been offered to support the analyses. Cases of half-truncated sequences, both in form and in content, are identified to show an intermediate stage of minimization. Examples from discourse also indicate that these cases of half-truncation are accompanied with speech overlaps, repairs, restarts and hesitation markers, pointing to the nature of minimization as grounded in the process of speaker-hearer interaction and negotiation. Specifically, we have shown that the driving forces originate partly from the turn-taking system and the cognitive-physiological limitation of the speaker, and partly from his social

consideration of avoiding social impropriety. Furthermore, our sequence truncation analyses find support from phonological evidence of tone sandhi effect; they are also shown to provide a better source for differentiating the functions of these particles.

Finally, the analyses in this paper offer support for the emergent grammar hypothesis (Hopper 1987, 1998), which sees language as ever evolving, and suggests that 'structure comes out of discourse and is shaped by discourse in an ongoing process' and grammar is 'not fixed templates but emerge[s] out of face-to-face interaction' (Hopper 1998:156). The process of sequence truncation and metonymic association through which the final particles are seen to have derived from a different category (may it be an utterance-initial marker, a pronoun, a connective), demonstrates not only the extensive degree of discourse-pragmatics working in shaping the grammar, but also the dynamic nature of language.

Appendix : Transcription Conventions

:	speaker identity
[]	speaker overlap
--	truncated intonation unit
.	final intonation
,	continuing intonation
?	appeal intonation
_(N)	long pause
...	medium pause
..	short pause
=	vowel lengthening
<M M>	code switching to Mandarin
(())	researcher's comment
>	utterance where the capitalized part is under discussion

References

- Atlas, Jay D. and Stephen C. Levenson. 1981. *It*-clefts, informativeness, and logical form. *Radical Pragmatics*, ed. by P. Cole, 1-61. New York: Academic Press.
- Bybee, Joan L. 1985. *Morphology: A Study of the Relation between Meaning and Form*. Amsterdam: Benjamins.
- Bybee, Joan L., and William Pagliuca. 1985. Cross-linguistic comparison and the development of grammatical meaning. *Historical Semantics and Historical Word Formation*, ed. by Jacek Fisiak, 59-83. Berlin: de Gruyter.
- Bybee, Joan L. and Östen Dahl. 1989. The creation of tense and aspect systems in the languages of the world. *Studies in Language* 13:51-103.
- Chang, Miao-Hsia. 1998. The discourse functions of Taiwanese *kong* in relation to

- its grammaticalization. *Selected Papers from the Second International Symposium on Languages in Taiwan*, ed. by Shuan-fan Huang, 111-127. Taipei: The Crane Publishing Co.
- Chen, Chiou-mei. 1989. *A Study on Taiwanese Sentence-final Particles*. M.A. thesis. National Taiwan Normal University.
- Claudi, Ulrike, and Bernd Heine. 1986. On the metaphorical base of grammar. *Studies in Language* 10:297-335.
- Heine, Bernd and Mechthild Reh. 1984. *Grammaticalization and Reanalysis in African Languages*. Hamburg: Helmut Buske.
- Heine, Bernd, Ulrike Claude and Friederikke Hunnemeyer. 1991a. *Grammaticalization: A Conceptual Framework*. Chicago: Chicago University Press.
- , 1991b. From cognition to grammar—evidence from African languages. *Approaches to Grammaticalization*, ed. by E. C. Traugott & B. Heine, 149-187. Amsterdam: Benjamins.
- Heine, Bernd, and Mechthild Reh. 1984. *Grammaticalization and Reanalysis in African Languages*. Hamburg: Helmut Buske.
- Hopper, Paul J. 1991. On some principles of grammaticization. *Approaches to Grammaticalization*, ed. by E. C. Traugott & B. Heine, 17-35. Amsterdam: Benjamins.
- Hopper, Paul J. and E. C. Traugott. 1993. *Grammaticalization*. Cambridge: Cambridge University Press.
- Langacker, Ronald W. 1977. Syntactic Reanalysis. *Mechanisms of Syntactic Change*, ed. by Charles N. Li, 57-139. Austin: University of Texas Press.
- Levinson, Stephen C. 1987. Minimization and conversation inference. *The Pragmatic Perspective*, ed. by M. Papi and J. Verschueren, 61-129. Amsterdam: Benjamins.
- , 1995. Three levels of meaning. *Grammar and Meaning*, ed. by F. R. Palmer, 90-115. Cambridge: Cambridge University Press.
- , 2000. *Presumptive Meanings*. Cambridge, Mass: The MIT Press.
- Li, Ing Cherry. 1999. *Utterance-final Particles in Taiwanese: A Discourse-Pragmatic Analysis*. Taipei: The Crane Publishing Co.
- , (in press). Pragmatic inferencing, sequence truncation, and the grammaticalization of Taiwanese *ㄟ*.
- , 2002. Conceptual mapping and functional shift: The case of Taiwan Min *cit-e*. *Language and Cognition: Proceedings of the First Cognitive Linguistic Conference*, ed. by Yuchau E. Hsiao, 40-65. Taipei: National Cheng-chi University.
- Li, Ing Cherry and S. Ivy Liu. 1995. *Lang* in Taiwanese spoken discourse. *Papers from the 1994 Conference on Language Teaching and Linguistics in Taiwan, VOL I: Southern Min*, ed. by Tsao, Feng-fu and Mei-hu Tsai, 167-202. Taipei: The Crane Publishing Co.
- Ni, Diana Fu-yeh. 1996. *Discourse Functions of Taiwanese Adverbs Ma, A and Koh*. M.A. thesis. National Taiwan Normal University.
- Traugott, E. C. & E. König. 1991. The semantics-pragmatics of grammaticalization revisited. *Approaches to Grammaticalization*, ed. by E. C. Traugott and B. Heine, 189-218. Amsterdam: Benjamins.

- 張伯江, 方梅. 1996. 《漢語功能語法研究》, 江西教育出版社。
- 鄭良偉. 1989. 《國語常用虛詞及其台語對應詞》, 台北: 文鶴出版社。
- 鄭良偉, 曾金金, 李櫻, 盧廣誠. 2000. 《大學台語文選》, 台北: 遠流出版社。
- 胡鑫麟. 1994. 《實用台語小字典》, 台北: 自立晚報文化出版部。

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簡約化、會話隱涵與台灣閩南語的語法化

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本文探討言談語用因素在當代台灣閩南語語法化過程中的運作，指出 Levinson (1987) 的簡約化為極有力的運作原則，它常驅使交談者選用較為簡短的、語意廣泛的語言形式，再經由換喻(metonymy)推衍而產生語用隱涵，而後並俗成化、語法化而為結構部門中新的語意、語法性質。根據實際語料的分析，台閩語中新近出現的語尾助詞用法，如 *kah*、*li*、*koh*、*kong* 等，均基於簡約原則的運作，分別由 *到*、*你*、*閣*、*講* 等詞的典型出現語句之刪略而來。交談語料同時顯示，這種簡約化的語句刪略之動因，乃是基於話輪快速轉換中交談者認知能力的限制，以及社會互動中禮貌原則的運作。

關鍵詞：語法化、會話隱涵、換喻、台灣閩南語、簡約化