

天主教輔仁大學

跨文化研究所語言學碩士班碩士論文

A Thesis Submitted to
the Graduate Institute of Cross-Cultural Studies
at Fu Jen Catholic University
for the Degree of Master of Arts in Linguistics

指導教授：李子瑄 博士

Supervisor: Dr. Zixuan Li

台灣華語語尾助詞「吧」的語用研究

A Pragmatic Study of
Utterance Final Particle *BA* in Taiwan Mandarin

研究生：王嘉偉 撰

by

Chiawei Wang

中華民國一〇二年七月

July 2013

私立輔仁大學跨文化研究所語言學碩士班

論文口試委員會審定書

王嘉偉先生之論文

台灣華語語尾助詞「吧」的語用研究
A Pragmatic Study of Utterance Final
Particle BA in Taiwan Mandarin

經本委員會議合格，特此證明。

論文口試委員

職稱	姓名	
副教授	李子瑄	<u>李子瑄</u>
助理教授	朱曼妮	<u>朱曼妮</u>
副教授	李佩容	<u>李佩容</u>

所長

黃南

中華民國 102 年 07 月 15 日

Abstract

An utterance final particle (UFP) is formed to correlate information from the speaker's knowledge state with an utterance to another interlocutor. Since UFP *ba* is one of the most frequently used UFPs in daily conversation and the issue of the different pitch heights of UFP *ba* has long been neglected, the central aim of this thesis is to analyse UFP *ba* and to render a detailed account of its core meaning and discourse functions in a wide variety of contexts with a systematic approach from a pragmatic perspective.

We identify the core meaning of UFP *ba* as *probability* to facilitate the explanation of its property in various contexts. The occurrence of UFP *ba* in the study is to be divided into *ba1* and *ba2* in accordance with its high and low pitch, respectively. Based on the concept of *participant orientation* from Li (1999), the discourse function for *ba1* is *addressee-oriented*; for *ba2* is *speaker-oriented*. The occurrence of *ba1* and *ba2* vary in certain contexts, associating the speaker's knowledge state with its core meaning of *probability* and pitch height simultaneously.

Keywords: utterance final particle, pitch height, pragmatic, discourse marker

摘要

在言談之中，說話者會利用語尾助詞向另一位談話者傳達自己的知識狀態。語尾助詞「吧」雖是日常對話中出現頻率較高的語尾助詞之一，但其音高問題卻遲遲未獲解決。本文從語用學的觀點將語尾助詞「吧」系統化地分析，並將其運用在廣泛的語境中，且說明「吧」的核心語意及言談功能。

我們將語尾助詞「吧」的核心語意命名為「可能性」，從研究結果中發現此核心語意有助於解釋「吧」分佈在各語境下的規律特質。在本文中，依照「吧」音高的特質，我們將其高音的「吧」歸類為「吧1」，換言之，低音的吧歸類為「吧2」。根據李櫻在西元1999年提出的概念「言談參與者定位」，我們將「吧1」的言談功能定義為「聽者導向」，「吧2」為「說者導向」。在不同的語境中，「吧1」和「吧2」的出現仰賴於說話者的知識狀態以及其核心語意「可能性」與其音高的特質。

關鍵字：語尾助詞，音高，語用，言談標記

Table of Contents

English Abstract	i
Chinese Abstract	ii
Table of Contents	iii
List of Tables	v
List of Figures	vi
Acknowledgements	vii
 Chapter 1 Introduction	 1
1.1. Rationale	1
1.2. Pose a Question	2
1.3. Overview of the Study	6
Chapter 2 Literature Review	7
2.1. Traditional Listing Description	7
2.1.1. Chao (1968)	7
2.1.2. Lu (1981)	9
2.2. Functional Grammar: Li and Thompson (1981)	11
2.3. Conversation Analysis: He et al (2006)	14
2.4. Discourse Grammar: Chu (2008)	20
2.5. Vague Language	26
2.6. Concluding Remarks	28
Chapter 3 Methodology	31
3.1. Participants	31
3.2. Materials	32
3.2.1. Design of the Questionnaire	32
3.2.2. Spectral Instrument	33
3.3. Data Collection	34
3.4. Procedure	35
Chapter 4 Analysis of <i>BA</i>	37
4.1. Core Property of <i>BA</i> : Probability	38
4.2. Pitch Heights of <i>BA</i>	43
4.3. Data Analysis of <i>BA</i>	51
4.3.1. High Pitch: <i>BA1</i>	52
4.3.1.1. Declarative	52
4.3.1.2. Imperative	54
4.3.2. Low Pitch: <i>BA2</i>	56
4.3.2.1. Declarative	56

4.3.2.2. Imperative	57
4.3.2.3. Interrogative	59
4.3.2.4. Exclamative	61
4.4. Concluding Remarks	63
Chapter 5 Conclusion	65
5.1. Review of Research Findings	65
5.2. Limitations and Recommendations for Further Research	68
References	69
Appendixes	73



List of Tables

Table 2	Definitions of UFP <i>BA</i> from Previous Researchers	29
Table 4.1	A 6-point Likert Scale of Probability	38
Table 4.2	Distribution of UFP <i>BA1</i> and <i>BA2</i>	52



List of Figures

Fig. 2	A Structure of <i>BA</i> for the Process of Deriving Meanings	25
Fig. 4.1	A Scale to indicate a vague range of parallelism between the meanings, the forms, and the use	40
Fig. 4.2	The mean of the probability of UFP <i>ba</i> scaled by the 66 participants	42
Fig. 4.3	A spectrogram for the pitch analysis of the high pitch <i>ba</i> : Kan Gangtieren <i>ba</i> [How about Iron Man 3.]	46
Fig. 4.4	A spectrogram for the pitch analysis of the low pitch <i>ba</i> : Kan Gangtieren <i>ba</i> [No, I think it should be Iron Man 3.]	47
Fig. 4.5	A spectrogram for the pitch analysis of <i>ba1</i> : Na ba deng guanqilai <i>ba1</i> [How about turn off the light.]	49
Fig. 4.6	A spectrogram for the pitch analysis of <i>ba2</i> : He de chu lai <i>ba2</i> [I think people could taste them to tell the difference.]	50



謝誌

炎炎夏日，沒有愜意微風徐徐吹來，只有屋內冷氣，屋外熱氣，台北好熱。歷經漫漫寂寞的學術旅程，徹夜與圖書館為伍，最後經過高壓測試，終於順利完成了階段性任務。接下來必須立即面對下一個未知的浩瀚沙漠，開始期待陣陣微風。

時間悄悄伴著我在輔仁過了四年，有點不可思議。首先要感謝總是指引方向又同時給予我自由揮灑空間的李子瑄博士，沒有老師的啟發，這本論文應該還在蛋殼裡，尚未孵化。沒有老師的鼓勵，我也差點要成為休學一族。感謝口試委員朱曼妮博士給予的建議，這些建議在最後的論文修改上幫助甚多。感謝口試委員同時是我的語言學啟蒙教授，李佩容博士。還記得七年前的語言學概論老師曾說：50 個學生只要有 5 個對語言學感到興趣，那麼這堂課就成功了。我很慶幸自己是那十分之一，那堂課的點點滴滴奠定了日後我的語言學根基，很感謝所有教師在這條數學推理的語言道路上對我的爆炸式教育。

接下來是妳們了，夥伴們。感謝鄭巧雯在這四年的嘻嘻鬧鬧，我們有著相似的目標，相同搞笑的個性，一起繼續加油「吧」。感謝陳白歷云總是不忘要提醒三劍客小消息。感謝吳靜儀總是提供大大小小的可靠資訊。感謝柯建哲協助完成此這本論文。感謝駱昱丞的多方面多功能支援，雖然常常會爆發。感謝姐姐星辰般地付出，這是我自己發明的副詞嗎，我要說的是：很多很多的付出。感謝媽媽總是相信我會成功，總是想把最好的留給我。感謝在天上的爸爸總是讓我能自由發揮，希望我有成為你的驕傲。

最後，再次感謝你們，我愛妳們。

Chapter 1 Introduction

Utterance final particles (hereafter UFP), such as *a*, *ba*, *la*, *le*, *ma*, *ne*, *o*, and so on, are pervasively used in colloquial speech in Mandarin Chinese. Since Mandarin Chinese is highly dependent on the use of modality particles, UFPs are utilised in the language as an aid to assist conversation participants in more effectively expressing and comprehending one another. That is to say, UFP is to correlate a current utterance conveyed with inferred information of the speaker's knowledge state to another interlocutor. While UFPs are minimal lexemes without explicit referential meaning, they do carry meaning and perform a specific function when they appear in certain contexts. On the syntactic level, UFP occurs at the end of an utterance where its occurrence is self-evident. Nonetheless, its meaning, occurrence, and function are difficult to elaborate precisely. In Taiwan Mandarin¹, UFP *ba* is one of the most frequently used UFPs in daily conversation yet one of the most difficult for which to predict meaning. The central aim of this thesis is to analyse use of the UFP *ba* and to render a detailed account of its meaning and function with a systematic approach from a pragmatic perspective.

1.1. Rationale

UFP in Mandarin Chinese has been an issue for research topics for decades. Many researchers regard a phrase or a sentence attached by an UFP as an expression of mood or attitude. The first account of UFP *ba* in modern Mandarin Chinese is Chao

¹ According to Her (2009), the language spoken by most people in Taiwan is called Taiwan Mandarin. Taiwan Mandarin has become a new indigenous language, with its considerable changes and development over a span of 60 years, from Peking Mandarin. 'Taiwan Mandarin is the second generation's first language, a new born language, thus resembling a creole, which in turn becomes the new mother tongue of the third generation.' (p. 419)

(1968), who lists isolated sentences and suggests that there should be three functions of the *ba* UFP. Lu (1980) treats UFP *ba* as serving various functions as well. However, these statements representing various functions of UFP *ba* make familiarisation with actual usage complicated, due to a variety of unlimited contexts in conversation.

Quite a few hypotheses and theories of UFP *ba* have sprung up in subsequent research from numerous approach perspectives. Li and Thompson (1981) point out a basic function named ‘solicit agreement,’ which means that UFP *ba* is formed to ‘solicit the approval or agreement of the hearer.’ They also remark on derived functions in various contexts from UFP *ba*, but offer little explanation regarding these derived functions.

He *et al* (2006) and Chu (2008) state that ‘uncertainty’ is an essential discourse function for UFP *ba*. However, some of the examples used in their analyses fall short of determining whether or not UFP *ba* is appropriate for expressing uncertainty in many cases. We cannot ascertain how those functions were derived from the discourse.

Up to the present, most of the functions mentioned above are to indicate the various meanings and functions of UFP *ba*, lacking a constant and predictable function. An issue between pitch heights of UFP *ba*, high pitch *ba* and low pitch *ba*, has yet long been neglected.

1.2. Pose a Question

Exposed inaccuracies in previous research and absence of pitch height analysis make the topic of Mandarin Chinese UFP worthy of further attempts by researchers. Lee (2004) adopted the selected presupposition triggers from Levison, a brief selection according to Karttunen’s collection, delving into UFP *a* with a pragmatic perspective.

Elaboration on this work gives us a picture of a different aspect and approach for analysis of UFP *ba*. Lee examines UFP *a* by adapting the concept of the speaker's presuppositions in conversation, postulating two variants of UFP *a*, the high pitch *a1* and low pitch *a2*.² UFP *a* is to save time from indicating explicitly the gap. Take optional and obligatory requests, for example; as a speaker is making a request, the hearer can respond to the request with an answer carrying an optional UFP *a*.

(1) Speaker 1: Ni zhongwu nengbuneng bang wo mai biandang?

你中午能不能幫我買便當？

‘Could you buy a lunch box for me?’

Speaker 2: Hao (*a*)!

好(啊)！

‘Sure!’



Otherwise, certain utterances necessitate an obligatory UFP *a* as follows:

(2) Speaker 1: Ni weisheme ba wode dongxi diudiao le?

你為什麼把我的東西丟掉了？

‘Why did you throw my stuff away?’

Speaker 2: Meiyou *a*.

沒有啊。

‘No, I didn’t’

² In brief, *a1* is formed, in the second part of one turn, to respond the first speaker's knowledge state. *A2* is formed, in the first part of one turn, to express the conflict between the existing events and his or her own knowledge state. Apart from challenging the knowledge state behind assertions, UFP *a* is utilised to indicate the gap between speakers' knowledge states expressed implicitly in non-assertion utterances. Pointing out the gap would help speakers accomplish certain speech acts, such as challenge, warning, and so on.

Lee specifies that both occurrences of the UFP *a* in (1) and (2) operate to express the assertive mood of the second speaker in response to the first speaker's request. Whether to add a UFP *a* or not relies on the hearer's interpretation from the speaker's intention. If one senses the existence of the gap between the speaker's assumption and the reality, an attached UFP *a* may be in need. Substituting UFP *a* with UFP *ba* corresponds to Lee's definition for the instances in (1) and (2). With a closer examination, we notice more possibilities for the second speaker in (2), but Lee gives no account of it. Hence, are UFPs necessarily required? The following examples highlight exceptions to Lee's specification.

- (3) Speaker 2: Wo zuotian you mei huijia.

我昨天又沒回家。

'I didn't come home yesterday.'

- (4) Speaker 2: Na you.

哪有。

'No, I didn't.'



In (3), the second speaker emphasises his or her absence to challenge the presupposition of the first speaker's intention. While the second speaker does not offer a direct answer in response to the first speaker's assumption, he or she can still successfully fill up the gap without attaching a UFP *a*. In (4), the response without an attached UFP *a* appears to be appropriate as well. In both (3) and (4), the consequence of adding a UFP or not should be the same. The issue raised in (3) and (4) challenges Lee's hypothesis that an attached UFP is obligatory in this context.

Furthermore, we notice that it is of great importance to distinguish the two pitch

heights of UFP *ba*. An issue of high and low pitch distribution exposes the misused explanation of UFP *ba* from Chang (2012) as follows.

(5) Customer: Wo juede zhejian qunzi dui wo bu heshi.

我覺得這件裙子對我不合適。

‘I don’t think this skirt suits me.’

Sales clerk: Wo bing bu tongyi, *ni yinggai chuanchuankan *ba*.

我並不同意，*你應該穿穿看吧。

‘I disagree. *I think you should try it on *ba*.’

Chang proposes that speakers apply ‘interrogative UFP *ba*’³ with its collocation implicative adverbs, such as *dagai* [probably], *yinggai* [maybe], *keneng* [possibly], *yexu* [perhaps], and so on, to express interrogativity. For ‘imperative *ba*’ and ‘declarative *ba*’, misuse will be made if implicative adverbs are collocated in the utterance. In (5), after taking pitch heights into consideration, we notice a response with an attached high pitch *ba* to be inappropriate in this context. Nevertheless, a low pitch *ba* functions here. As a consequence, our interest has been raised to explore the phenomenon of UFP *ba*.

As for the previous studies, some problems remain to be solved. The issues to be explored in this study are addressed as bellow.

- i. What contributes to the distribution of UFP *ba*? Does UFP *ba* possess a single function, or the other way round?

³ Chang (2012) synthesises UFP *ba* into three categories. *ba1*: to express speaker’s interrogativity. *ba2*: to be utilised in imperative. *ba3*: to express speaker’s declaration. We name them ‘uncertain *ba*’ for *ba1*, ‘imperative *ba*’ for *ba2*, and ‘declarative *ba*’ for *ba3*, so as not to produce disturbance for the classification of this study, *ba1* for high pitch, and *ba2* for low pitch.

- ii. What is the core meaning of UFP *ba*? Are there other derived meanings from UFP *ba*? Do certain contexts bring up different meanings for UFP *ba*?
- iii. What leads UFP *ba* to be obligatory and/or optional? In which specific contexts will it be either obligatory or optional?
- iv. What is the difference between the two pitch heights of UFP *ba*? Does the use of the two pitch heights vary in personal emotions or does it serve different functions in various contexts in conversation? In this study, we propose that the occurrence of UFP *ba* be divided into *ba1* and *ba2* in accordance with the high pitch and the low pitch, respectively.

1.3. Overview of the Study

The organisation of this study is provided as follows. Chapter 1 introduces the background, motivation, pending issues, research questions, and structure of the study. Chapter 2 reviews significant previous studies on UFP *ba*. Chapter 3 describes the methodology used in the study. Chapter 4 specifies the analysis of UFP *ba*: result and discussion. Chapter 5 presents the conclusion, limitations, and suggestions for further study on this topic.

Chapter 2 Literature Review

This chapter provides a significant review of relevant analysis on UFP *ba*. Previous researchers, such as Chao (1968), Li and Thompson (1981), Chu (2008), and so on, have studied the distribution of UFP *ba* particularly in discourse or in conversation, utilising a divergent aspect of approaches to conduct their investigation: traditional descriptive grammar, functional grammar, conversation analysis, and discourse grammar. With a wide variety of investigative perspectives, researchers suggest the definitions of UFP *ba* vary in certain contexts. At the rear part of this chapter, we revise essential reasons for which speakers tender an account of information in a vague fashion. In addition, we examine existing empirical literature in order to obtain a much clearer picture of UFP *ba*, and pin down the pending issues precisely.

2.1. Traditional Listing Description

2.1.1. Chao (1968)

Regarded as a precursory researcher for modal particles in modern Mandarin Chinese, Chao sheds some light on the analysis of UFPs. Chao (1968) makes a brief check on UFP *ba* with a traditional descriptive grammar approach. In particular, Chao observes isolated sentences and proposes three functions for UFP *ba*, that is, (a) advisative particle, (b) suppositions as alternatives⁴, and (c) a fusion of *bu* and *a*⁵. The following examples are excerpted from Chao.

⁴ The presence of the particle *ba* in (b), not occurring at the end of an utterance, is not the target in this study.

⁵ Chao explains that ‘if we were describing other dialects, however, the situation with respect to the descriptive etymology of such words might be different. Thus, in Cantonese the equivalent of *bu* is *mu*, which easily fuses with *ah* and forms *mah*, and therefore *mah* need not be counted separately for Cantonese. Again in the dialect of Paoting, Hopei, one can say *Nii chiuh bu?* [Are you going?] as well as *Nii chiuh ba?* [Are you going?]. Consequently *ba* for *bu a* is a simple fusion and need not be counted as a separate particle, as it has to be for Standard Mandarin.’ (pp. 807-808).

- a. Advisative particle:

Nage ni beng gei qian le *ba*!

那個你甬給錢了吧!

‘Then you won’t need to pay for that!’

- b. Suppositions as alternatives:

Bu gei qian *ba*, buhaoyisi bai na; gei qian *ba*, you gei bu qi.

不給錢吧，不好意思白拿；給錢吧，又給不起。

‘Suppose I don’t pay for it, I am ashamed to take something for nothing; and if I am to pay for it, I can’t afford it.’

- c. A fusion of *bu* and *a*: in yes-or-no questions and in doubtful posed statements⁶:

Wo gaosu guo ni le *ba*?

我告訴過你了吧?

‘Have I told you before?’ in yes-or-no questions

‘I told you before, or did I?’ in doubtful posed statements

The sentences listed by Chao methodically exemplify the meanings and functions for UFP *ba*. Chao points out different uses of UFP *ba* by contemplating its presence in sentences, and he provides a brief explanation for each example with an ‘introspective approach’⁷. After careful consideration, we noted that, from Chao’s

⁶ Chao (1968) elucidates that the presence of the UFP *ba* both in yes-or-no questions and in doubtful posed statements is in the same sentential construction. But the latter is shorter and the sentence intonation is slightly lower.

⁷ Introspective approach based on investigation of researchers’ own conscious thoughts and/or individual experience has been a dominant methodology of collecting data. The limitation of introspection is that researchers often neglect the issues in contexts. Some introspective data would be thought of intentional as well.

examples of UFP *ba*, most of the meanings offered by Chao are derived from the sentential level rather than from UFP *ba* itself. With this method of examining data, functions would be unpredictable and superfluous functions would be produced in the context of unlimited conversation. An accurate investigation may be difficult to execute, as different interlocutors may possess their own personal interpretations. Therefore, Chao's analysis is deficient in giving consideration to the unique contexts of his examples.

2.1.2. Lu (1980)

The approach to the data on UFP *ba* in Lu's treatment of the topic is similar to that of Chao. Both Lu and Chao investigate the presence of UFPs by listing isolated sample sentences without exploring their relevant contexts. Lu (1980) identifies UFP *ba* as having five functions: (a) in imperative to command, request, urge, and suggest; (b) to interrogate; (c) to agree; (d) as a pause function; and (e) to express 'it's okay'.

- a. In imperative to command, request, urge, and suggest:

Kuai gaosu wo ta shang naerqu le *ba*.

快告訴我他上哪兒去了吧。

'Hey, just tell me where he is?'

- b. Interrogative:

Zhezuo fangzi shi xingaide *ba*?

這座房子是新蓋的吧？

'Don't you think the building has just been built for a while?'

c. Agreement:

Keyi *ba*, jiu zhao yuan jihua zhixing.

可以吧，就照原計劃執行。

‘Okay, we will stick to the original plan and to execute it,’

d. Pause function:

Jiu shuo feijiuwuzi huishou zhe yixiang *ba*, shangge yue jiu lei ji le shang wan yuan.

就說廢舊物資回收這一項吧，上個月就累積了上萬元。

‘Take the event of recycling, for example. It has been accumulated over ten thousand dollars last month.’

e. To express ‘it’s okay’:

Bu qu jiu bu qu *ba*, fanzheng yihou hai you jihui.

不去就不去吧，反正以後還有機會。

‘It’s okay not to go there. You will always get a chance to go.’

The explanation for the usage of UFP *ba* in each example and the account of distribution are a little bit more specific than in Chao, even though Lu and Chao share a similar analytical approach. Lu detects two more functions for UFP *ba*: to agree and to express ‘it’s okay.’ We confine our research for the particle occurring at the end of an utterance in this study and so omit (d) from further analysis. In (a), Lu points out that the sentence with an attached UFP *ba* carrying a function is to urge the hearer. In (e), a UFP *ba* appears to express ‘it’s okay’ for the speaker or the hearer. We noted that without forming a UFP *ba* in (a) and (b), even so, the function to urge the hearer

works. It is apparent that UFP *ba* itself in these few examples does not serve all Lu's listed functions. However, a great deal of impertinent functions would be revealed with this analytical approach as we have noted above. Explanations from Lu are vague, and he does not offer further details to deal with UFP *ba*.

Neglecting various contexts in conversation has been a major deficiency for the methodology of listing analysis in research of Chao and Lu. We noted a circumstance in UFP *ba* identical to what Lee found to be true in UFP *a*:

*Hence, here comes the puzzle: if a sentence considered an order in one context can also be realized as an investigation in another context, how is it possible to decide for sure whether the function of UFP *a* is to give the hearer an order or to invite the hearer? (Lee 2004: 21)*

The traditional descriptive analytical approach is prone to confuse the interpretation derived from a particle's sentential level in certain contexts with that of the function of the particle itself.

2.2. Functional Grammar: Li and Thompson (1981)

Apart from the investigation in Chao and Lu, the analysis in Li and Thompson centres on the particle *ba* occurring at the end of an utterance. They state, 'The semantic function of *ba* can best be described as equivalent to that of a "Don't you think so?" or "Wouldn't you agree?" type of question that is tagged onto a statement in English' (Li and Thompson 1981: 307). Consequently, a basic function is offered, that is, a UFP *ba* is attached to 'solicit the approval or agreement of the hearer':

(1) Women zou *ba*!

我們走吧！

‘Let’s go!’

UFP *ba* of the function in solicit agreement often appears to command the hearer when the subject of a sentence is first person plural.

To ward off the weakness in traditional approach, Li and Thompson examine the data by contrasting a sentence with the presence of UFP *ba* and with its absence.

Furthermore, a given context has been taken into consideration, as in (2) and (3):

(2) Ta bu hui zuo zheyangde shi.

他不會做這樣的事。

He wouldn’t do such things.

(3) Ta buhui zuo zheyangde shi *ba*.

他不會做這樣的事吧。

He wouldn’t do such things, don’t you agree?



Li and Thompson presuppose a context for (2) and (3) that there is a man named Zhangsan who did something wrong. Two men were discussing Zhangsan’s behaviour. If one conversation participant is trying to safeguard Zhangsan from another interlocutor’s attack, this defender might be irritated and (2) would be an appropriate utterance to help with. A sentence attached a UFP *ba* in (3) would be unsuitable, for its ‘accommodating’ and ‘conciliatory’ tone would not be compatible with the anger of the defence.

Another function of UFP *ba*, ‘advisative’, is derived from the basic function of ‘solicit agreement’, when the subject of a sentence is second person.

- (4) Ni he shui *ba*.

你喝水吧。

‘Why don’t you drink some water?’

As in (4), an attached UFP *ba* often follows a sentence with a second person subject to facilitate the utterance to the effect of suggestion to the hearer. Yet one more function is produced, and another explanation for its limitation is offered, as follows:

- (5) Ta hen hao kan *ba*?

他很好看吧？

‘He is very good looking, don’t you agree?’

- (6) Ta hen hao kan, dui bu dui?

他很好看，對不對？

‘He is very good looking, isn’t he?’

- (7) *Ta hao kan bu hao kan *ba*?

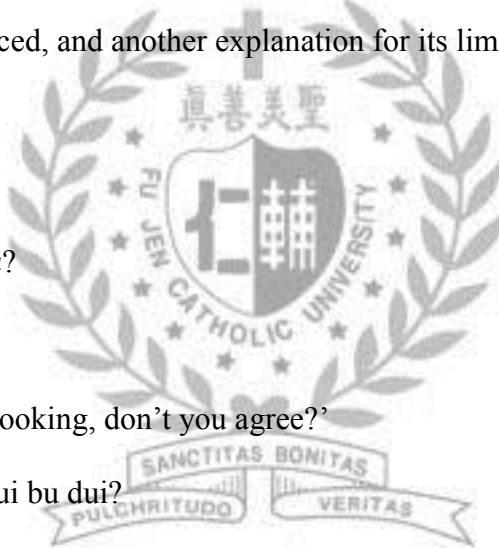
*他好看不好看吧？

‘*Is he good looking *ba*?’

- (8) *Shei he jiu *ba*?

*誰喝酒吧？

‘*Who drank wine *ba*?’



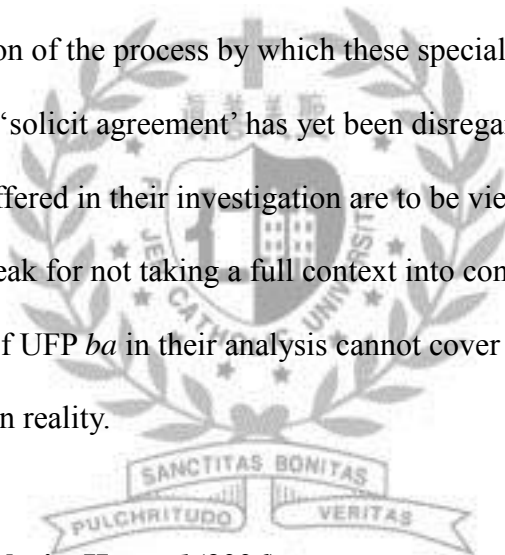
(9) *Ni hao ma *ba*?

*你好嗎吧？

‘*How are you *ba*?’

A UFP *ba* attached to form an interrogative in (5) is similar to the function of a tag question in (6). An attached UFP *ba* cannot occur in an explicit interrogative sentence that is demanding certain information such as in example (7), (8), and (9), for UFP *ba* is to solicit agreement of the hearer.

Li and Thompsons point out a key function and other derived ones for UFP *ba*. However, an explanation of the process by which these special functions are derived from the core function ‘solicit agreement’ has yet been disregarded in their study. Since given contexts offered in their investigation are to be viewed as limited, interpretation is still weak for not taking a full context into consideration. It is clear that the ascribed uses of UFP *ba* in their analysis cannot cover all its distribution in various conversations in reality.



2.3. Conversation Analysis: He *et al* (2006)

He *et al* (2006) incorporate a great deal of complete contexts into their investigation on UFP *ba* to avoid major shortcomings in analysing too few appropriate contexts in conversation. They categorise UFP *ba* into 10 major functions from 3 types of functions, specifically, first type: from its sentential function: (a) as an imperative and request, (b) to be euphemistic, (c) to solicit agreement⁸; second type: from its contextual function: (d) to obscure, (e) to switch behaviour, (f) to seek for emotional

⁸ For the function (c) ‘solicit agreement,’ the original term in Mandarin Chinese from He *et al* is *qiu tong gong neng* [求同功能]. In this study, we name it ‘solicit agreement’ in accordance with its similar function in the analysis of Li and Thompson (1981).

acknowledgement; third type: for certain emotional functions: (g) to refuse, (h) to mock, (i) to interpose, and (j) to ironise.

First: from its sentential function,

- a. Imperative and request: a conception for a fusion of imperative and request to express the speaker's respect.

(10) Women zou *ba*.

我們走吧。

‘Hey, let’s go.’

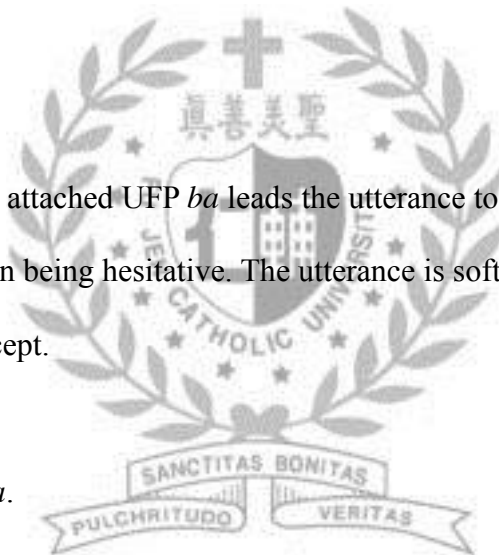
- b. Euphemism: An attached UFP *ba* leads the utterance to be euphemistic rather than being hesitant. The utterance is softened and much easier to accept.

(11) Zheyang buhao *ba*.

這樣不好吧。

‘I don’t think it is good in this way.’

- c. Solicit agreement: No matter what the utterance is with the presence of UFP *ba* or with its absence, the speaker has already made a decision. The emphasis of UFP *ba* is to solicit agreement of the hearer, rather than determining his/her stance.



(12) Meiyou chongzude zhengju, jueuide bawo, women shi buhui ba ni zheyangde
darenwu qing dao jianchayuan lai de. Shihua gaosu ni, ju bu jiaodai, bisi wuyi,
jiaoaide hao, shuobuding hai neng baozhu naodai. Jiuqing zenmeban, ni ziji nage
zhuyi *ba*.

沒有充足的證據、絕對的把握，我們是不會把你這樣的大人物請到檢察院來的。實話告訴你，拒不交代，必死無疑，交代得好，說不定還能保住腦袋。究竟怎麼辦，你自己拿個主意吧。

‘We wouldn’t bring such a celebrity as you to Procuratorate if we didn’t have sufficient evidence and complete assurance. Honestly, there is no hope that you can get away from it if you refuse to account for the details. If you collaborate with us, you’ll get a chance to survive. It is time you should decide what to do.’

Second: from its contextual function,

- d. Obscure: Conversation participants play specific roles and they are put bounds to their address in interlocution. If one speaker is embarrassed to declare a position clearly in certain contexts, he or she utilises an attached UFP *ba* to indicate his/her obscure stance. Its usage is to prevent any factors from violating the continuation of communication.

(13) Wangwu: Nimen zuotian zai tan sheme?

你們昨天在談什麼？

‘What did you talk yesterday?’

Zhangsan: Women meishuo ni sheme huaihua *ba*?

我們沒說你什麼壞話吧？

‘Did we speak ill behind your back?’

- e. Switch behaviour: a UFP *ba* here is to make the hearer be active in his/her action rather than being inactive.

(14) Teacher: Qu *ba*!

去吧！

‘Hey, go!’

- f. Seek for emotional acknowledgement: Conversation participants stick to their own stance when the different stance is key to the success of communication. A UFP *ba* is to avoid confrontation and to impose emotional perspective on the hearer.

(15) Mother: Haizi, niang ye zhidao wei qu ni le, keshi jiali jiushi zhege

Yangzi, zenme ban ne? Ni jiu ying le *ba*!

孩子，娘也知道為屈妳了，可是家裡就是這個樣子，怎麼辦呢？妳就應了吧！

‘My girl, I know you deserve more than that, but this is how it is. What else can we do? You should just accept it!’

Third: for certain emotional functions,

- g. Refuse:

(16) Chairperson: Zai shuo ne, ta jiali shangyou laocan, xiayou bingruo...

再說呢，他家裡上有老殘，下有病弱.....。

‘Besides, he got disabled and weak members in his family...’

Chief leader: Zhe shi, zai shuo *ba*...

這事，再說吧.....。

‘We’ll talk about this later...’

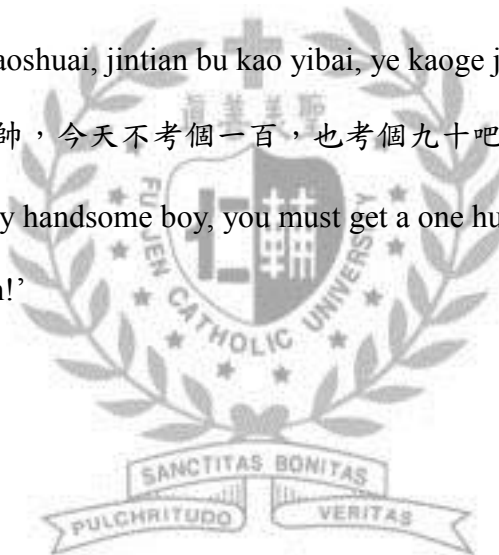
h. Mockery:

(17) Father: You, shaoshuai, jintian bu kao yibai, ye kaoge jiushi *ba*!

喲，少帥，今天不考個一百，也考個九十吧！

‘Hey, my handsome boy, you must get a one hundred or ninety for the test, huh!’

i. Interposition:



(18) Zhangsan: Zhepan suan ni ying, xing le *ba*!

這盤算你贏，行了吧！

‘Okay, you won this!’

j. Irony:

(19) Girl 1: Dui nansheng, jiushi yao ao, keshi you buneng tai ao, ye jiushi yao zai
ao yu bu ao zhijian. Yao ao de rangta dishengxiaqi, dan you buneng
aode rang ta shiqu xiwang...

對男生，就是要傲，可是又不能太傲，也就是要在傲與不傲之間。

要傲得讓他低聲下氣，但又不能傲得讓他失去希望.....。

‘For men, there is a need to be proud, but not too proud; you have to be somewhere in the middle. You need to be proud enough command others, but not too proud that they lose hope.’

Girl 2: You, zhe jiu shi ni qingchang changshengde chuanshi miji *ba*!

哟，這就是妳情場常勝的傳世秘笈吧！

‘Wow, this is your almighty secret in the arena of love to be handed down for generations.’

For function (g), (h), (i), and (j), He *et al* explain that an attached UFP *ba* plays a specific role in conversation for the speaker to express his/her own emotions. Specific emotions are an open concept with numerous entailments. The interpretation of UFP *ba* entails plentiful sorts of emotions and feelings in various contexts in conversation.

He *et al* apply an abundant involvement of contexts to their investigation so as to offer a detailed interpretation on UFP *ba*. For determining its meaning in different distributions, they examine data both with the presence of UFP *ba* and in its absence as well. They offer a wide variety of descriptions, but are less than comprehensive. Although they offer detailed explanations for UFP *ba*, some of these are redundant. For example, (c) verses (f), and (h) verses (j), the function for each pair appears to be similar from its contextual meaning. We consider it necessary for UFP *ba* to have a core property rather than various functions in particular contexts. An explanation of UFP *ba* should not be complicated, but plain and simple.

2.4. Discourse Grammar: Chu (2008)

Chu (1998, 2004, 2008) has done a number of investigations on UFP *ba* for over a decade. We focus our review on Chu's revision of his previous efforts in his 2008 analysis. Chu states that UFP *ba* is a discourse marker and a modality particle as well, via an inspection of the theories of relevance and discourse marker. Chu points out a core property for UFP *ba* by contrasting the two theories, identifying the discourse functions of UFP *ba* as 'seeking audience' and 'relevance increase,' and its modality meaning as 'speaker's uncertainty.' Derived meanings would be accounted for as well as its occurrence would be predicted clearly through applying the core property 'uncertainty' in various contexts.

To start, we recall the analysis of Chu, which treats UFP *ba* as a discourse marker. Chu cites four main properties to examine the fitness of UFP *ba* in the theory of discourse marker from Jucker (1983: 3): '(a) they do not affect the truth conditions of an utterance; (b) they do not add anything to the propositional content of an utterance; (c) they are related to the speech situation and not to the situation talked about; and (d) they have an emotive, expressive function rather than referential, denotative, or cognitive function' (Chu and Li 2004: 5). Chu and Li conclude that UFP *ba* is a discourse marker, its modality function is to hold an uncertainty mood for a speaker, and its discourse function is to correlate the utterance and the context.

As for Chu's concept of Relevance Theory, it is based on Sperber and Wilson's definition (1986: 118-26): 'an assumption is relevant in a context if and only if it has some contextual effect in that context.' Sperber and Wilson utilise three criteria to determine whether the assumption is relevant in a context or not: (a) contextual implication, (b) contradiction, and (c) strengthening. Chu (2008) translates the examples into Mandarin Chinese, and makes a slight alteration, as follows:

(20) If you are reading a book, in the meantime, someone says any of the following :

- a. Wo xie zheben shu huale bushao shijian.

我寫這本書花了不少時間。

‘It took me a long time to write this book.’

- b. Ni buzai kanshu.

你不在看書。

‘You are not reading a book.’

- c. Ni zhen zai kanshu le a.

你真在看書啊。

‘You certainly are reading a book.’

- d. Ni xianzai zai kanshu.

你現在在看書。

‘You are now reading a book.’

- e. Ni zhengzai shuijiao.

你正在睡覺。

‘You are fast asleep.’

- f. 1976 nian 7 yue 28 ri Tangshan da dizhen.

1976 年 7 月 28 日唐山大地震。

‘The Great Tangshan Earthquake on 28th July, 1976.’

Example (a), (b), and (c) in (20) are relevant to current context for their implication, contradiction, and strengthening, respectively. Example (d), (e), (f) are irrelevant. Relevance is a sort of continuum than discretion (Sperber and Wilson 1986: 125). The following are the two conditions to account for the degree of relevance:

(21) Extent Condition 1: An assumption is relevant in a context to the extent that its contextual effect in this context is large.

Extent Conditions 2: An assumption is relevant in a context to the extent that the effort required to process it in this context is small.

Chu offers another instance to support the extent conditions, as follows:

(22) One person is asking for the time, and the other answers any of the following to show the degree of relevance:

a. Ba dian zhong.

八點鐘。

‘Eight o’clock.’

b. Ni ziji you biao *a*!

你自己有錶啊！

‘You yourself got a watch *a*!’

c. Ni ziji you biao.

你自己有錶。

‘You yourself got a watch.’

d. Chifan *ba*!

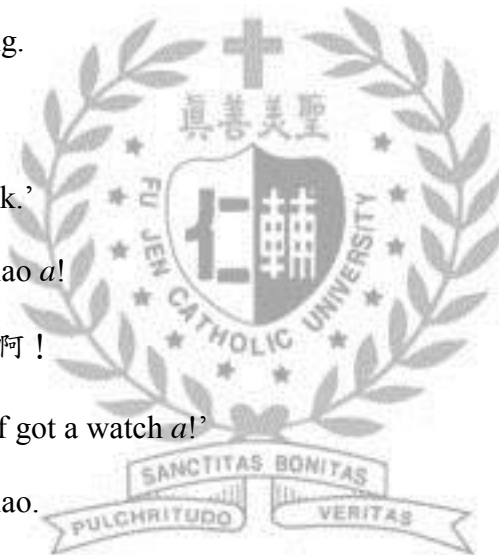
吃飯吧！

‘Hey, eat *ba*!’

e. Ni zai chifan *ba*!

你在吃飯吧！

‘You are eating, aren’t you?’



f. Ni zai chifan.

你在吃飯。

‘You are eating.’

g. Zuotian wanshang xiayu le.

昨天晚上下雨了。

‘It was raining again last night.’

As in example (22), the relevance from (a) to (g) is from strong to weak. Due to the smaller scope to the current context, the hearer needs to try harder to interpret the utterance of the speaker.

Each of the following instances is to exemplify the functions of UFP *ba* by Chu:

(23) Nimen jintian wanshang chuqu *ba*? (to be euphemistic)

你們今天晚上出去吧？

‘You’re going out tonight, aren’t you?’

(24) Women zou *ba*! (to request)

我們走吧！

‘Let’s go!’

(25) Jia: Women wanshang qu kan dianying, ni qubuqu?

我們晚上去看電影，你去不去？

‘We are going for a film. Are you coming with us?’

Yi: Hao *ba*! [a rising tone] (to be uncertain)

好吧！

‘Okay!’

(26) Jia: Wo juan yibai kuai.

我捐一百塊。

‘I’ll donate \$100.’

Yi: Zheshi zuo haoshi *a*, ni yinggai duo juan yidian.

這是做好事啊，你應該多捐一點。

‘Donation is great, you should donate more.’

Jia: Na wojiujuan liangbai *ba*. (to agree unwillingly)

那我就捐兩百吧。

‘Well, in that case, I’ll donate \$200.’

(27) [While Jia was warning her flatmate to be careful for taking a gallon of milk out of the fridge, she heard a sound ‘bang’. The milk was spilt all over the floor.]

Jia: Zhexia wanle *ba*! (not to listen to the warning)

這下完了吧！

‘You screw it’

(28) [A son was going to see a ball game, and his mum asked him for wearing more clothes, but he didn’t. When the game finished, he came back with coughs...]

Mum: Ganmao le *ba*! (not to listen to the advice)

感冒了吧！

‘Look, you got a cold!’

(29) [Jia thought he could fix the PC without effort. But, he ended up screwing up whole functions of the PC.]

Yi: Ni kan ni, chuiniu chui dale *ba*! (to mock)

你看你，吹牛吹大了吧！

‘Look, you’re boastful!’

(30) [After a courteous decline to receive a gift from his friend, he finally took it.]

Hao *ba*, najiu xiexie le. (to be polite)

好吧，那就謝謝了。

‘Okay, thanks.’

Chu (2008) proposes a criterion for how meanings are to be derived from UFP *ba* in contexts, in accordance with the investigation above and the theories of discourse marker and relevance, as in figure 2:

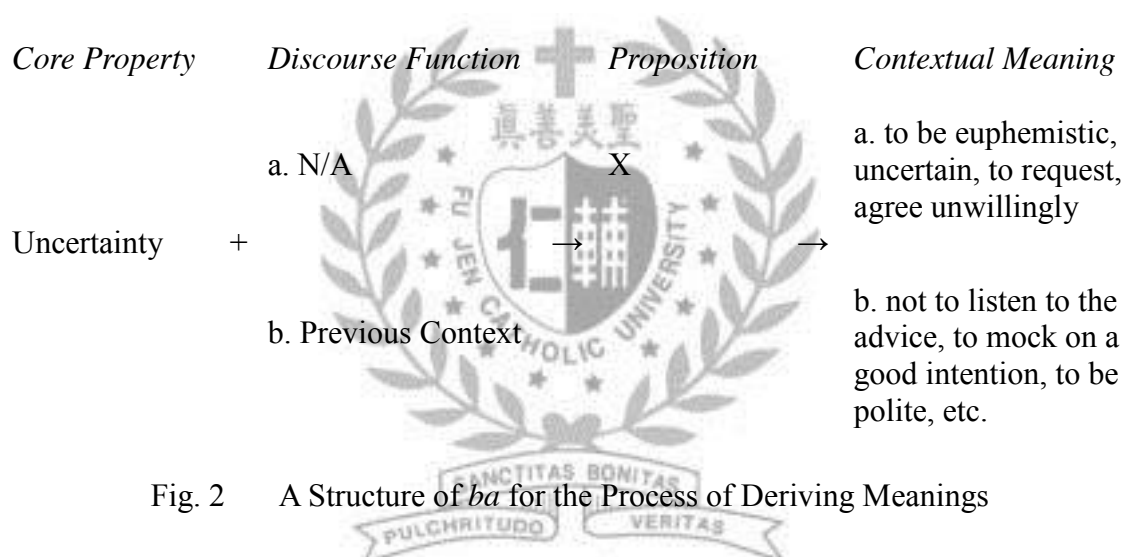


Fig. 2 A Structure of *ba* for the Process of Deriving Meanings

While Chu delved into the core property of UFP *ba*, some issues still remain to be solved. Through this method, extra meanings would be generated in unlimited conversations as well. We are constantly suffering from a selection of derived meanings. In addition, it is obvious that viewing ‘uncertainty’ as a core property has to be incomprehensive for UFP *ba*. Some meanings of examples offered by Chu are irrelevant to ‘uncertainty.’ The major deficiency in Chu’s analysis, as in previous researchers, is the failure to realize an appropriate core property for UFP *ba* itself. Then again, little work has been done for the issue of two pitch heights of UFP *ba*.

2.5. Vague Language

For the further analysis of the core property of UFP *ba*, we propose ‘probability’ in the following chapter. First, we attempt to account for why speakers convey their information with a probable attitude, that is to say, with ambiguity. People generate vague expressions as an appropriate communicative strategy for certain reasons in both spoken and written communication. The term ‘hedge’, in reference to vague expressions, was first introduced by Lakoff (1973). A phrase or utterance which is strictly stated or well defined is called ‘precise’; on the contrary, it is ‘vague’ if its meaning is less precise. Hedges, such as *probably, possibly, perhaps, maybe, might, almost, about, very, slightly, essentially, practically, sort of, kind of, I think, it is said that*, and so on, are important pragmatic markers and frequently occur in daily conversations, even in academic, technological, political or medical reports. Hedges play an essential part in various communications, performing a great number of functions. The functions are to avoid contradiction when contrary opinions occur, to protect speakers for holding a neutral stance for their statement, to be polite to a certain extent, or to indicate possibility or probability when the speaker is not 100% sure for an event. Speakers may often choose to express messages vaguely even though they could have done so precisely. To reach the goal of successful communication, hedges occur to help hearers facilitate the interpretation of speakers’ intention more efficiently. Hedges are thought of as natural expressions and useful devices for speakers to convey information.

As a pioneer of researches of hedges, Zadeh (1965) utilises mathematical terms such as fuzzy set, continuum of grade of membership, etc. Zadeh describes the theory of *Fuzzy Sets* with a mathematical approach:

A fuzzy set is a class of objects with a continuum of grades of membership. Such a set is characterized by a membership (characteristic) function which assigns to each object a grade of membership ranging between zero and one. The notions of inclusion, union, intersection, complement, relation, convexity, etc., are extended to such sets, and various properties of these notions in the context of fuzzy sets are established. In particular, a separation theorem for convex fuzzy sets is proved without requiring that the fuzzy sets be disjoint. (Zadeh 1965: 338)

Zadeh explains that these classes of objects do not have precisely clarified criteria of membership when coming across in the real physical world. The class of animals clearly includes dogs, while the other way round clearly excludes rocks. Nonetheless, such objects as starfish or bacteria have an ambiguous status in terms of the class of animals. ‘The same kind of ambiguity arises in the case of a number such as 10 in relation to the “class” of all real numbers which are much greater than 1.’ (Zadeh 1965: 338) Afterwards, Zadeh (1972) suggests that a linguistic hedge, such as *very*, *much*, *essentially*, *slightly*, and so on, may be seen as an operator indicating the meaning of its operand on the fuzzy set. For the phrase *very tall man*, the operator *very* takes effect on the fuzzy meaning of the phrase *tall man*. You do not realise that expressions are vague to a degree until you have tried to make them precise.

Hyland (1998) points out meanings of hedging represent either a lack of complete commitment to the truth value of an accompanying proposition, or a desire not to exhibit that commitment categorically. The form of a hedge is productive and unpredictable. Hyland explains that a hedge is a category of interpersonal metadiscourse⁹, as follows:

⁹ Metadiscourse is a word or a phrase that used as a comment in an utterance. It is often to examine the purpose of an utterance or a response from the speaker, inclusive of *honestly*, *frankly speaking*, *probably*, *I think*, etc.

Hedges are devices which indicate the writer's decision to recognize alternative voices and viewpoints and so withhold complete commitment to a proposition. (Hyland, 2005: 52)

Hyland elucidates that writers [or speakers] apply hedges to express a sort of opinion rather than a fact. Therefore, readers [or hearers] are entitled to represent their personal points of view. That speakers generate utterances with a variety of hedges is to make an attempt to produce a sort of vague expression to reach their goal of successful communication.

As we mentioned in section 2.3, function (c) indicated by He *et al*, one of its pragmatic function for UFP *ba*, is to be euphemistic. Given the fact that an attached UFP *ba* leads its utterance to be in a vague fashion, we propose that UFP *ba* be a member of hedge.

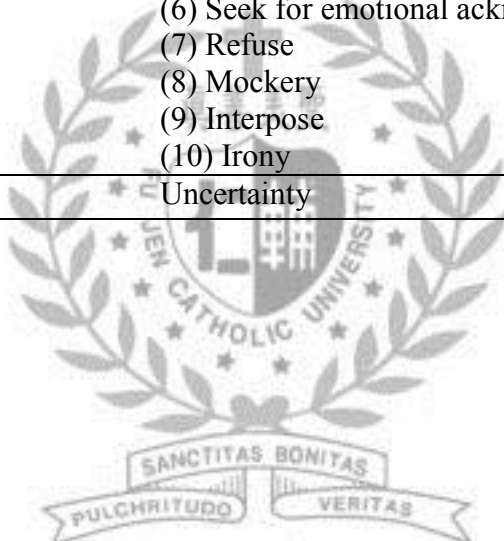
2.6. Concluding Remarks

We have revised empirical works for UFP *ba* in this chapter. Chao and Lu observe isolated sentences, pointing out various functions for UFP *ba*. Li and Thompson attempt to contrast the presence of UFP *ba* and propose a basic function 'solicit agreement' for it. He *et al* take various contexts into account for stating a core meaning of UFP *ba* as ranging from belief to hesitation, or belief occupying a bigger part. Chu defines UFP *ba* as 'uncertainty.' However, most of the researchers fail to give a detailed and clear account of the derivations of UFP *ba*. At the rear part of this chapter, we revise the reasons in which vague expressions occur, and indicate UFP *ba* as a member of linguistic hedge.

The following Table 2 summarises different definitions of UFP *ba* from previous researchers.

Table 2 Definitions of UFP *ba* from Previous Researchers

Researchers	Definitions
Chao (1968)	(1) Advisative particles (2) Suppositions alternatives (3) A fusion of <i>bu</i> and <i>a</i>
Lu (1980)	(1) Imperative: command, request, urge, suggest (2) Interrogative (3) Agreement (4) Pause (5) To express 'it's okay'
Li and Thompson (1981)	Solicit agreement
He <i>et al</i> (2006)	(1) Imperative and request (2) Euphemism (3) Solicit agreement (4) Obscure (5) Switch behaviour (6) Seek for emotional acknowledgement (7) Refuse (8) Mockery (9) Interpose (10) Irony
Chu (2008)	Uncertainty





Chapter 3 Methodology

In the preceding chapter, we revised a wide variety of investigative perspectives on UFP *ba* of previous researchers, attempting to pinpoint pending issues still needing resolution. This chapter describes the method applied to the analysis in the study. We provide background information of the participants in section 3.1. Materials are introduced in section 3.2, inclusive of two parts: one is a questionnaire for the core property of UFP *ba* and the other is a spectral analysis for the issues of the pitch heights, high *ba* and low *ba*. The source of data selection is explained in section 3.3. At the rear part of this chapter, section 3.4, we explicate the procedure used to conduct the research in the study.

3.1. Participants

There are two major parts in the study: one is a questionnaire to distinguish the ‘probability’ of UFP *ba*, the other is a spectral analysis to examine the difference between high pitch *ba* and low pitch *ba*. Participants were separated into group questionnaire and group spectrogram.

For the questionnaire, there were 66 participants¹⁰. Given the fact that gender, age, and education are not a chief variable in the study, they are not discussed in detail. Furthermore, Taiwan Mandarin is the native language of all participants.

For the spectral analysis, we analysed the spectrograph of 4 participants, whose voices were recorded for a reference of further analysis: 2 males and 2 females. They were all randomly chosen.

¹⁰ Background information for 66 participants, see Appendix I.

3.2. Materials

A questionnaire¹¹ and Praat are two essential tools used in the study. The design of the questionnaire is based on the data of our pilot study. Praat is a scientific software package designed to analyse speech in phonetics research. These two materials are introduced in the subsequent two sections.

3.2.1. Design of the Questionnaire

To study the probability of UFP *ba* in every-day speech, one of frequently used UFPs, we utilised a questionnaire to estimate the probable scale of respondents. The questionnaire consisted of two parts: the first part asked personal background information of participants, and the second part to scale the probability of UFP *ba*. The questionnaire is one page total.

For the first part of the questionnaire, an introduction was followed by five questions for participants regarding gender, age, educational background, mother tongue, and the meaning they interpret for the UFP *ba*. Except for the fourth question of mother tongue, we considered other questions in the first part were not as chief variables in the study.

For the second part of the questionnaire, there were ten questions for participants to scale the probability of UFP *ba* from 0 to 5, with 0 as the lowest assigned probability, and 5 the highest ($0 < 1 < 2 < 3 < 4 < 5$). Each question formed a part of a dialogue. Sentences incorporating the UFP *ba* fell into four discourse functions of utterances, each associated with one typical speech act: (a) declarative, (b) imperative, (c) interrogative, and (d) exclamative.

¹¹ See Appendix II.

- a. Declarative: Kalao buhui youyao chidao le *ba*.
卡老不會又要遲到了吧。
‘Old Castor is going to be late, isn’t he?’
- b. Imperative: Zou *ba*, jin jiao shi.
走吧，進教室。
‘Go into the classroom.’
- c. Interrogative: Jintian hui xiayu *ba*.
今天會下雨吧。
‘Is it going to rain?’
- d. Exclamative: Wa, ye tai mei le *ba*.
哇，也太美了吧。
‘Wow, it is so pretty.’

In addition, we attempted to avoid the possibility of the non-linguistic disturbance from punctuation marks, such as question and exclamation marks, by modifying all punctuation following UFP *ba* into a period. The data used in the questionnaire will be described in detail in section 3.3.

3.2.2. Spectral Instrument

A spectral analysis was utilised to differentiate between high pitch *ba* and low pitch *ba*. We used the software *Praat: doing phonetics by computer* to conduct the pitch analysis in this study. Praat¹² is a scientific computer software package for the analysis of speech in phonetics, written and maintained by Professor Paul Boersma and Dr. David Weenink of graduate Institute of Phonetic Sciences at the University of

¹² Praat is a Dutch word for talk.

Amsterdam. Praat functional analysis is inclusive of spectral, pitch, format, and intensity analyses, and voice breaks, excitation patterns, speech synthesis, articulatory synthesis, Klatt acoustic synthesis, and so on.

3.3. Data Collection

The data used in the study comes from daily conversations, trendy dramas, soap operas, documentary films, entertaining television programs, informal television talk shows, radio programs, and impromptu speeches. Taiwan Mandarin was required to be the native language among all participants, so as to avoid possible misuses from non-native speakers. The data have been recorded and used as reference for further analysis. Some external or non-linguistic factors may prevent the data from reaching the qualification of ‘naturally occurring conversations’, which is a criterion of conversation analysis for screening the appropriate linguistic corpus. These data would be thought of as intentional sometimes. In order to avoid unnatural results, we tried to relax and chat with the interlocutors prior to beginning data collection to help them forget the presence of the recorder.

The analysis in the study is principally grounded in conversational data. The scope of the data is limited to the UFP *ba* occurring at the end of an utterance. Those occurring in the middle of an utterance may serve a different meaning and/or function in various contexts in conversation. Therefore, the following examples are not the targets of our research in the study.¹³

¹³ Examples from (1) to (4) are excerpted from Liu et al (2001). Their postulation on the particle *ba* occurring in the middle of an utterance is the particle *ba* serves a ‘pause’ function with a high pitch, and it possesses various meanings in certain contexts, such as expressing instances, alternative subjunctive, dilemma, and carelessness.

- (1) Jiu na yingyu lai shuo *ba*, bu xia ku gongfu shi xue buhao de.

就拿英語來說吧，不下苦功夫是學不好的。

‘Take the English language, for example. You cannot learn it well until you put an effort into it.’

- (2) Piru hecha *ba*, women zhewei neixiong zui dongde hecha, zui jiangjiu hecha.

譬如喝茶吧，我們這位內兄最懂得喝茶，最講究喝茶。

‘Take drinking tea, for example. Our brother-in-law masters and is particular about the skills of tea ceremony.’

- (3) Qu *ba*, dei hua henduo shijian; bu qu *ba*, you butai limao.

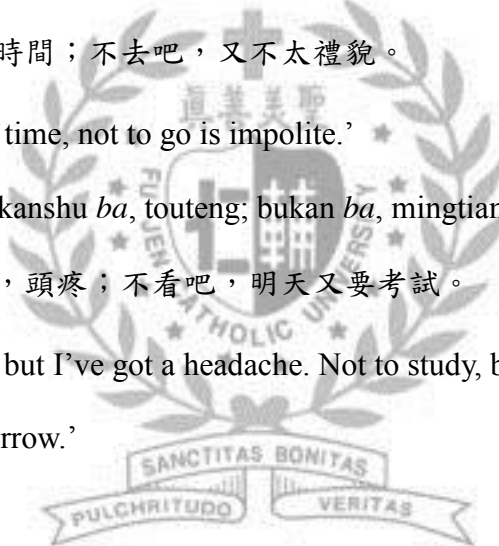
去吧，得花很多時間；不去吧，又不太禮貌。

‘To go is waste of time, not to go is impolite.’

- (4) Jintian wanshang kanshu *ba*, touteng; bukan *ba*, mingtian you yao kaoshi.

今天晚上看書吧，頭疼；不看吧，明天又要考試。

‘To study tonight, but I’ve got a headache. Not to study, but there will be an examination tomorrow.’



3.4. Procedure

Procedurally, the questionnaire was offered in both hard copy and electronically. We randomly distributed the hard copy questionnaire. The questionnaire was designed for response without the presence of a researcher, but we a few reminders regarding the process were given to participants immediately prior to filling out the survey. The duration of the questionnaire was limited to 3 minutes. We did not offer any live demonstration for the electronic version, as completion of the survey on took place using Internet.

For the sound recording, we randomly selected 4 participants to conduct the pitch analysis: 2 males and 2 females. We recorded the high *ba* and low *ba* from each participant, so we could analyse existing differences in the pitch heights of *ba*. Finally, the program Praat was used to analyse phonetics for the varying pitch heights. The observed frequency range was from 50 to 350 Hz for males, 70 to 420 Hz for females.



Chapter 4 Analysis of *BA*

The main purpose of this chapter lies in distinguishing the core property of UFP *ba* by assessing the different functions of the particle inherent to the usage of high and low pitch. In so doing, we attempt to give a valid and brand new definition for the UFP *ba*, which is contrary to the concept of ‘uncertainty’ offered by most prevailing researchers, He *et al* (2006), Chu (2008), etc. We redefine the core property with a different point of view, ‘probability,’ to cope with the pending issues of its previous definition, making an attempt to pin down the pending issues precisely. At the rear part of this chapter, we separate UFP *ba* into four categories of clause type: declaratives, directives, interrogatives, and exclamatives, and discuss the effect of the two pitch heights for, *ba1* and *ba2*, high pitch and low pitch, respectively.

A total of 82 questionnaires were retrieved, among which, 16 were deemed invalid, leaving 66 participant responses used in the examination of UFP *ba* probability in the present research. Selection of the participants was chosen randomly. There were ten questions formed as a pattern of dialogue in the questionnaire. Participants were asked to scale each of the ten questions from 0 to 5 in terms of usage of the UFP *ba* as it related to the probability of the event or scenario described in the dialogue, where 0 was the least probably, and 5 the most probable ($0 < 1 < 2 < 3 < 4 < 5$). We employed a 6-point Likert scale format to measure probability of UFP *ba* in the survey, as in Table 4.1:

Table 4.1 6-point Likert Scale of Probability

Scale	Definition
0	Extremely Improbable
1	Very Improbable
2	Somewhat Improbable
3	Somewhat Probable
4	Very Probable
5	Extremely Probable

4.1. Core Property of BA: Probability

In this study, we propose that the UFP *ba* is formed to imbue the core property of ‘probability’ to its preceding utterance. It is of importance that we account for our selection of the term ‘probability.’ Among most of the dictionaries in modern English, we cannot differentiate between the word ‘probability’ and ‘possibility’ in their entries. A definition of ‘probability’ and ‘possibility’ in *The Oxford English Dictionary* is presented, as follows:

Probability: the quality or state of being probable; the extent to which something is likely to happen or be the case.
e.g.: the rain will make the probability of postponement even greater.

a probable or the most probable event.
e.g.: for a time revolution was a strong probability.

mathematics, the extent to which n event is like to occur, measured by the ratio of the favourable cases to the whole number of cases possible.
e.g.: the area under the curve represents probability.

Possibility: a thing that may happen or be the case.
e.g.: relegation remains a distinct possibility.

the state or fact of being possible; likelihood.

e.g.: there is no possibility of any government achieving this level of expenditure.

a thing that may be chosen or done out of several possible alternatives.

e.g.: one possibility is to allow all firms participate.

possibilities unspecified qualities of a promising nature; potential.

e.g.: the house was old but it had possibilities.

However, we noted a delicate shade of meaning in mathematics. The concept of ‘probability’ in mathematical theory is to indicate an estimation of the certainty or likelihood that an event or truth of a given statement. Probability is given a value between 0 and 1, with 0 representing mathematical impossibility, and 1 mathematical certainty. The other term, ‘possibility’, in mathematical theory, is to specify certain types of uncertainty and is an alternative to probability, but usually not a calculated estimation of that which is probable. Based on an explanation of a ranking of strong to weak commitment as ‘certain > probable > likely > possible’ from Saeed (1997: 125), Lee (2007: 234) formulated a scale to indicate a vague range, as illustrated in Fig. 4.1. It is self-evident that ‘probability’ is more likely than ‘possibility.’

Semantic range	-----probability-----possibility-----
Syntactic form	-----be likely to-----can-----may-----
Pragmatic use	-----Objective----- -----Subjective----- (it-is-so component) (I-say-so component)

Fig. 4.1 A Scale to indicate a vague range of parallelism between the meanings, the forms, and the use

An example from the data we collected is given for which we chose the term *probability*:

- (1) Zhangsan: Ta zenme sancan dou zhi chi qiaokeli, hao bu jiankang.
 她怎麼三餐都只吃巧克力，好不健康。
 ‘Why does she only eat chocolate for meals? It’s unhealthy.’
- Lisi: Ta shuo ta tai pang a, zai jianfei.
 她說她太胖啊，在減肥。
 ‘She said that she is losing weight because she is too fat.’
- Zhangsan: Ta chi nage cai pang *ba*.
 她吃那個才胖吧。
 ‘Come on. I think she is getting fatter while eating that for meals.’
- Lisi: Dui a, jiu gaobudong ta zai xiang sheme.
 對啊，就搞不懂她在想什麼。
 ‘That’s true. I can’t figure out what she is thinking.’

In example (1), Zhangsan was inquiring why a girl ate nothing more than chocolate for her daily meals. Lisi recounted the fitness plan she made in response to Zhangsan's assumption. Therefore, Zhangsan utilised a UFP *ba* to express that eating chocolate would lead to obesity. Instead of an uncertain mood, UFP *ba* here is formed to exhibit a higher probability to the utterance the speaker provided in the event, which interprets that it was probable that she would gain weight after eating that kind of food. In the pilot study, we find out that an attached UFP *ba* releases a constant core property, which is to assign *probability* to its preceding utterance rather than *uncertainty*.

Another example is given, as follows:

- (2) [Vicky and Lily were studying at the library. The weather outdoors was getting cold and drizzling. Vicky was looking out through the window and started to talk to Lily...]

Vicky: Jintian hui xiayu *ba*?

今天會下雨吧？

‘Don’t you think it is going to rain, today?’

Lily: Haoxiang hui. Zenme, ni yaoqu yuehui o?

好像會。怎麼，妳要去約會喔？

‘It appears so. Hey, why did you mention it? Are you going for a date later?’

In (2), Vicky noticed the drizzling rain outdoors while she and Lily were studying at the library. It is clear that Vicky utilised UFP *ba* to express that raining

was a probable event that day, rather than to express uncertainty as to whether or not it was going to rain. An attached UFP *ba* here generates a higher probability to its utterance as well.

According to the following figure (Fig. 4.2), the result of our finding reveals a higher probability of UFP *ba*. As a consequence, we redefine and propose the core property of UFP *ba* be that of expressing ‘probability.’

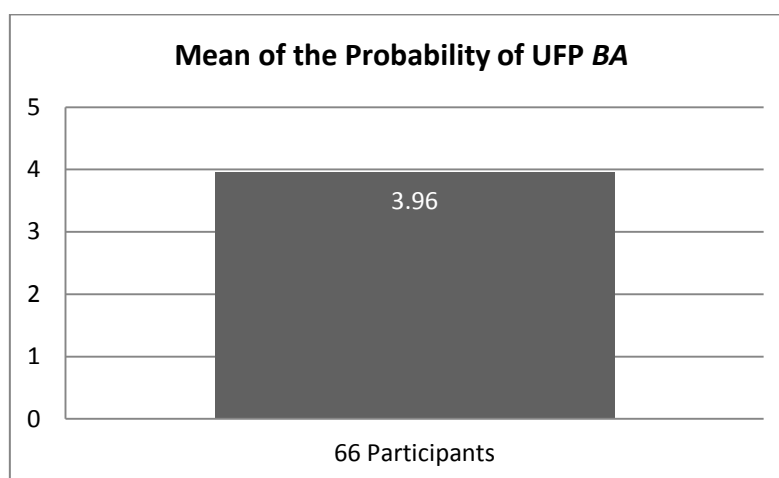


Fig. 4.2 The mean of the probability of UFP *ba* scaled by the 66 participants

Participants were asked to measure the probability of UFP *ba* from 0 to 5 based on the ten dialogue questions in the questionnaire. As illustrated in Fig. 4.2, the mean of the ten questions scaled by the 66 participants is 3.96, which represents a phenomenon in general that participants highly considered UFP *ba* as a *probable* discourse marker related to an applicable event in dialogue. The standard deviation of the probability of UFP *ba* for the general average of the 66 participants is 0.502.

As mentioned in chapter three, gender, age, and education are not a chief variable in this research. The mean of the probability of UFP *ba* for gender are 3.88 for male participants and 4.06 for female participants. The mean of the probability of

UFP *ba* for age is 4.26 for participants under age 20, 3.93 for participants from 21 to 30, 3.89 for participants from 31 to 40, and 4.10 for participants over 40. The means of the probability of UFP *ba* for education is 3.88 for participants graduated from high school and/or seeking a degree, 3.96 for undergraduate participants, 3.87 for participants with a master's degree, and 4.38 for participants with a PhD degree.

The three factors of gender, age, and education appeared to have little impact on participant responses and do not seem to account for any significant difference. Given that these three are not major variables for the analysis in the study, we propose a probability is a universal core property for the UFP *ba*.

4.2. Pitch Heights of BA

The difference of the high pitch *ba* and the low pitch *ba* has yet long been neglected. Shie (1991), Li (1999), Chu (2002), Lin (2003), Lee (2004) have done some empirical work for the different functions of the pitch variants for UFP *a*, and Liang (2004) has worked for UFP *ne*. Shie (1991) classifies UFP *a* into *a1* and *a2* in accordance with that the tone of *a1* is phonologically much higher than *a2*. *a1* completes an adjacency pair, and *a2* begins a question-answer pair. Li (1999) highlights a tendency for high pitch UFPs that are *addressee-oriented*, and low pitch UFPs that are *speaker-oriented*. Addressee orientation tends to express the speaker's intention to involve the hearer. Speaker orientation performs to mark the speaker's own organization of speech. Li explains an iconic relation related to the different functions of the pitch variants:

Since a higher pitch is more audible, it is perfectly reasonable for it to be employed when one wants to warn his interlocutor, who is farther away from the speaker's point of view, that his knowledge state need to be updated. On the other hand, a lower pitch is often less distinct and not as

audible, and is thus reserved for cases where only the adjustment of the speaker's own knowledge is involved. (Li 1999: 139)

Moreover, Li states that pitch variation are to indicate degrees of speaker involvement and to signal participant orientation, especially on the condition that the speech act involves change of the participants' information state.

According to Li's analysis, Chu (2002) views UFP *a* as a discourse marker with a core meaning named 'speaker involvement'. An attached UFP *ba* is formed to reduce an emotional distance between speakers and hearers. Lin (2003) indicates an attached high pitch *a* is to ask for the hearer to accept the information the speaker offered with an active attitude. An attached low pitch *a* is to generate a passive attitude by the speaker and to accept the information the hearer offered. As mentioned in chapter one, Lee (2004) articulates the high pitch *a* is formed in the second part of one turn, to respond to the first speaker's knowledge state. The low pitch *a* is formed, in the first part of one turn, to express the conflict between the existing events and his/her own knowledge state. Liang (2004) explains a function to convey interrogative information in interrogatives for the high pitch *ne*, and a function to reduce as well as contrast declaratives and rhetorical questions.

Referring to the researches above, we synthesise a core property *probability* to UFP *ba*. Furthermore, the discourse function for the high pitch *ba* is *addressee-oriented*, which tends to *express the speaker's intention to involve the hearer*. The low pitch *ba* is *speaker-oriented*, which tends to *mark the speaker's own knowledge state*. The following example illustrates the pitch variants of UFP *ba*:

- (3) Zhangsan: Dengdeng wo hui xian qu maipiao, suoyi yao kan sheme?
等等我會先去買票，所以要什麼呢？
‘I’ll buy the tickets in advance later. Which film are we going to see?’
- Lisi: Kan Gangtieren *ba*.
看鋼鐵人吧。
‘How about Iron Man 3.’
- [An hour later, Wangwu was talking to Lisi...]
- Wangwu: Jintian wanshang shibushi yaokan Diqiuguohou?
明天晚上是不是要去看地球過後？
‘Are we going to see After Earth tomorrow tonight?’
- Lisi: Kan Gangtieren *ba*.
看鋼鐵人吧。
‘No, I think it should be Iron Man 3.’

In (3), Lisi said twice *Kan Gangtianren ba* [看鋼鐵人吧] for the two distinct contextual situations; there is no difference in the written characters of Mandarin Chinese used in these two responses. To examine the contextual difference, we used the Praat program to analyse the pitch variants of UFP *ba*, as in Fig. 4.3 and Fig. 4.4. The frequency range for the spectrogram, measured in Hertz, was set from 50 to 350 Hz for male participants.

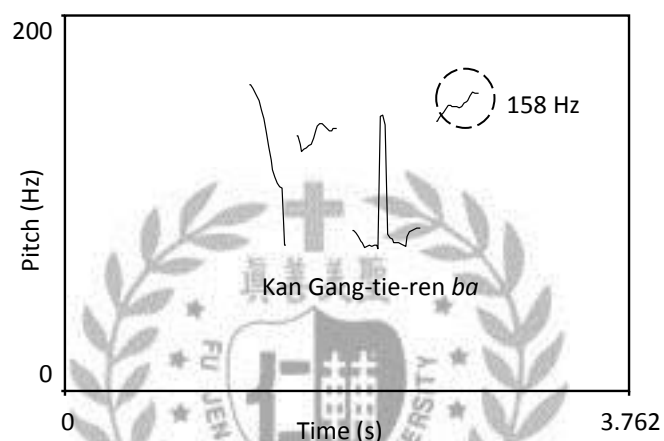
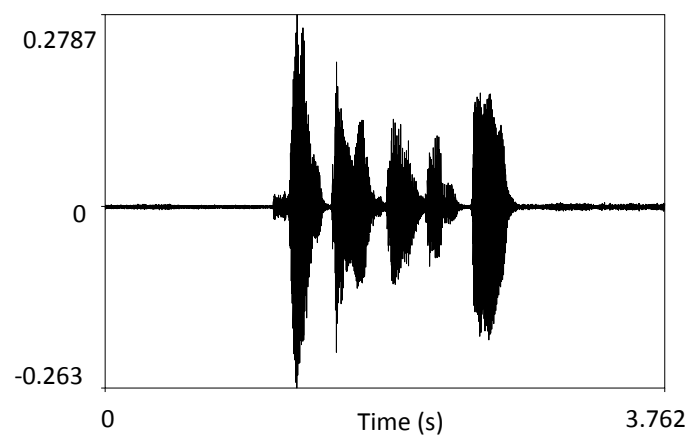


Fig. 4.3 A spectrogram for the pitch analysis of the high pitch *ba*: Kan Gangtieren *ba* [How about Iron Man 3.]

As illustrated in Fig. 4.4, a graph at the end of the utterance in the spectrogram indicates a 158 Hz *ba*.

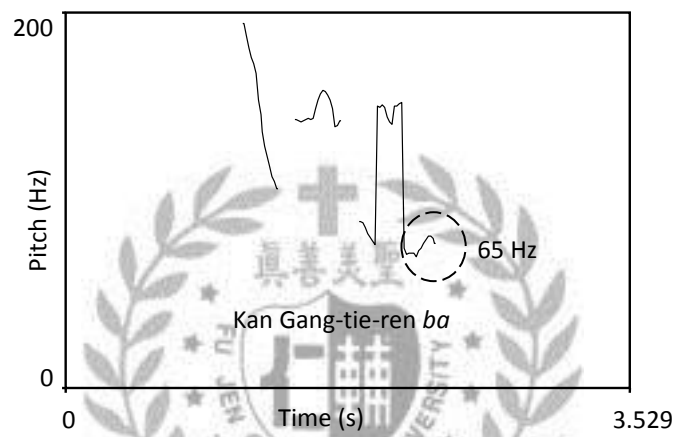
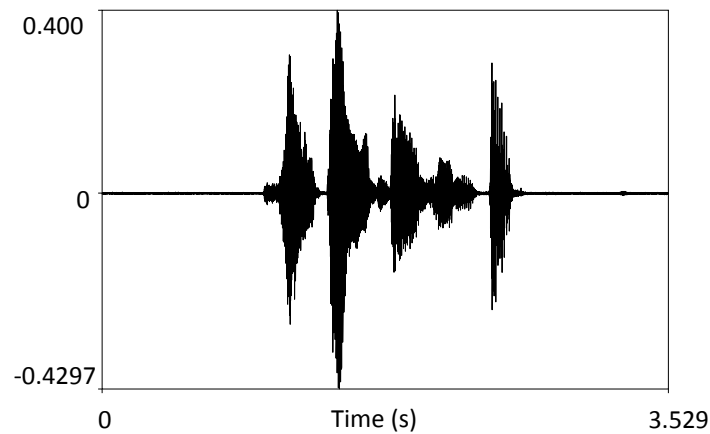


Fig. 4.4 A spectrogram for the pitch analysis of the low pitch *ba*: Kan Gangtieren *ba*
[No, I think it should be Iron Man 3.]

As illustrated in Fig. 4.4, a graph at the end of the utterance in the spectrogram indicates a 65 Hz *ba*. The reading of Lisi's second utterance generated a significantly lower phonological pitch UFP *ba*.

We noted that the pitch variants of UFP *ba* as in Fig. 4.3 and Fig. 4.4, and they serve a different function as well. The first *ba* is phonologically much higher than the second utterance in the dialogue. Usage of the UFP *ba* in each utterance holds a different interpretation and in each, the variant UFP *ba* serves a different function. Therefore, UFP *ba* is classified into *ba1* and *ba2* in accordance with its high pitch and low pitch, respectively. Taking pitch into account, we again attempt to interpret *Kan*

Gangtieren ba, for the first utterance, *ba1*: it is probable to see Iron Man 3 [express the speaker's intention to involve the hearer] → how about Iron Man 3; for the second utterance, *ba2*: it is probable to see Iron Man 3 [marks the speaker's own knowledge state] → no, I think it should be Iron Man 3.

Another instance is given in the following:

(4) Lily: Yao kange yingpian ma?

要看個影片嗎？

‘How about seeing a film?’

Vicky: Hao a. Na ba deng guanqilai *ba1*.

好啊。那把燈關起來吧 1。

‘Sure. How about turning off the light.’

(5) Lily: Guide hongjiu han pianyide hongjiu he de chu lai ma?

貴的紅酒和便宜的紅酒喝得出來嗎？

‘Is it possible to tell the price of wine by tasting wine it?’

Vicky: He de chu lai *ba2*.

喝得出來吧 2。

‘I think people could taste them to tell the difference.’

In (4) and (5) the *ba* are generated from the same participant, as in Fig. 4.5 and Fig. 4.6. The frequency, measured in Hertz, in the spectrogram was set to a range of 70 to 420 Hz for female participants.

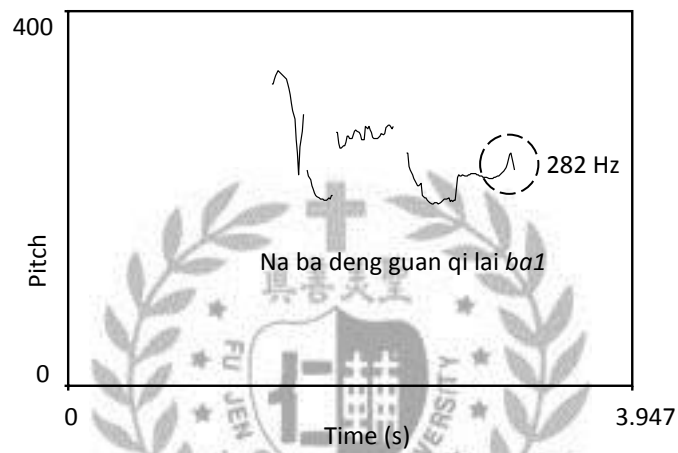
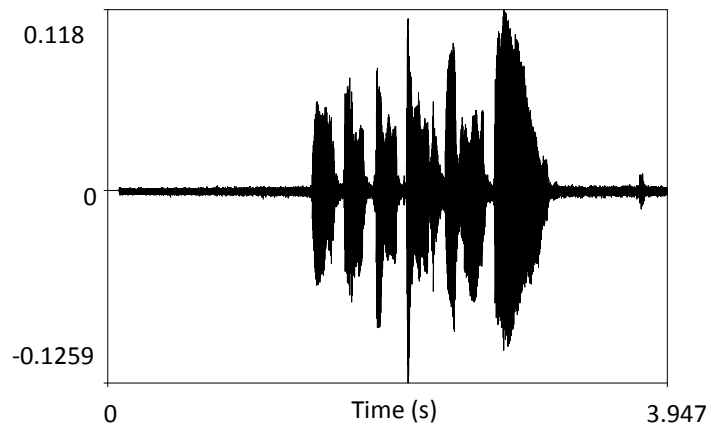


Fig. 4.5 A spectrogram for the pitch analysis of *ba1*: Na ba deng guanqilai *ba1*

[How about turning off the light.]

As illustrated in Fig. 4.5, a graph at the end of the utterance in the spectrogram indicates a 282 Hz *ba*.

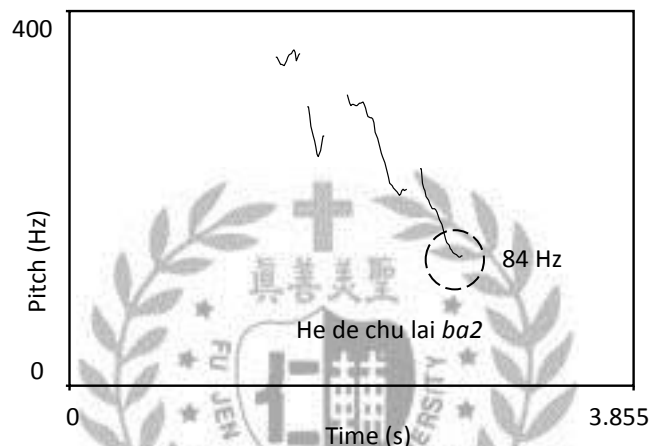
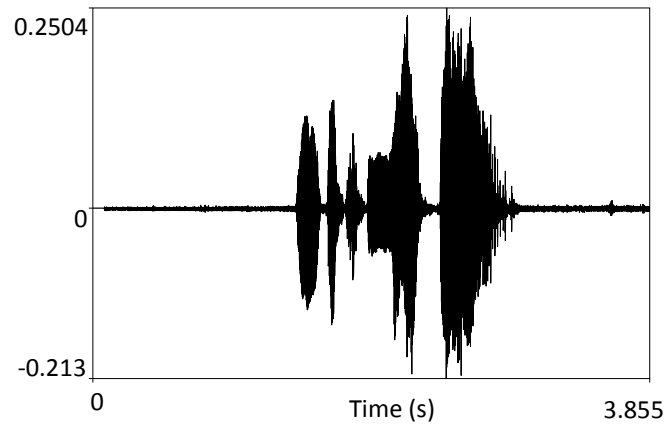


Fig. 4.6 A spectrogram for the pitch analysis of *ba2*: He de chu lai *ba2* [I think people could taste them to tell the difference.]

As illustrated in Fig. 4.6, a graph at the end of the utterance in the spectrogram indicates an 84 Hz *ba*. It is obvious that Vicky generated a phonologically lower pitch UFP *ba* in this utterance.

Once again, the spectrograms prove that the high pitch *ba1* and the low pitch *ba2* serve different functions, as shown in Fig. 4.5 and Fig. 4.6. The interpretation of *ba1* in (4) is, it is probable to turn off the light [expresses the speaker's intention to involve the hearer] → how about turning off the light. For *ba2* in (5), it is probable to tell the difference in wine price by taste [marks the speaker's own knowledge state] → I think people could taste them to tell the difference.

4.3. Data Analysis of *BA*

In this section, we provide a discussion for the distribution of UFP *ba* by virtue of its pitch heights, *ba1* and *ba2*. In so doing, we retain the importance of a constant and universal core property to be concrete and simple. Derived functions of UFP *ba* such as advice, command, request, urge, agree, refuse, interpose, hesitate, mock, to be euphemistic, to be obscure, and to be ironic, etc., stem from the various contexts in which communication occurs, rather than from the particle *ba* itself. Otherwise, unpredictable functions could be generated in the unlimited contexts of conversation. The UFP *ba* only infuses *probability* to an utterance. Based on the core property of *probability*, we investigate utterances in which an attached UFP *ba* collocates with four discourse functions: (a) declarative, (b) imperative, (c) interrogative, and (d) exclamative. The purpose of the four functions is defined according to Radford (1997) in the following as well as the distribution of UFP *ba* is presented in Table 4.2:

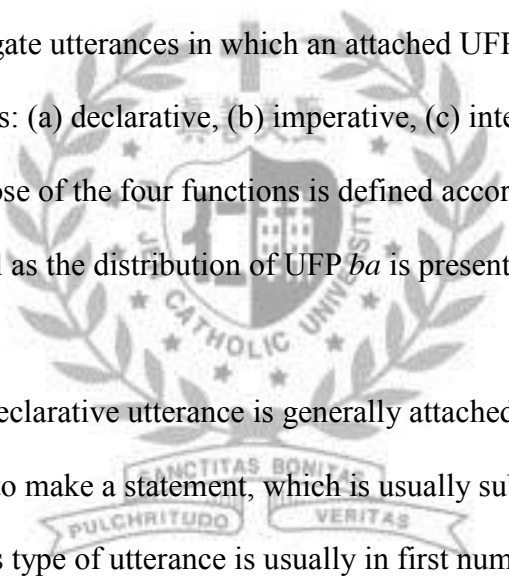
- 
- a. Declarative: a declarative utterance is generally attached to convey information or to make a statement, which is usually subjective. The subject in this type of utterance is usually in first number.
 - b. Imperative: an imperative utterance is generally attached to command someone to do something or to issue directives. The subject in this utterance is usually in second number or in first number with a condition that it is inclusive of both the speaker and the hearer.
 - c. Interrogative: an interrogative utterance is generally attached to request information. UFP *ba* only occurs in a yes/no question.
 - d. Exclamative: an exclamative utterance is generally attached to exclaim emotion, such as surprise, delight, annoyance, etc.

Table 4.2 Distribution of UFP *ba1* and *ba2*

<i>BA1</i>	<i>BA2</i>
Declarative	Declarative
Imperative	Imperative
	Interrogative
	Exclamative

4.3.1. High Pitch: *BA1*

4.3.1.1. Declarative

(6) Zhangsan: Zhe ti hao nan o, bu zhidao zenme xie. Kuai jiao wo la.

這題好難喔，不知道怎麼寫。快教我啦。

‘This one is so difficult. I can’t figure it out. Just teach me.’

Lisi: Tian a, zheme jiandan ye bu hui. ni qu si yi si hao le la!

天啊，這麼簡單也不會。你去死一死好了啦！

‘Oh my goodness, you can’t figure out such an easy one. You can just go to die!’

Zhangsan: Hao a, wo jiu qu si *ba1*. Fanzheng wo sheme dou bu hui.

好啊，我就去死吧 *1*。反正我什麼都不會。

‘Fine, you’ll see that I would just go to die. Anyway, I cannot do anything well.’

Lisi: Aiyou, kaiwanxiao de la.

唉哟，開玩笑的啦。

‘Come on, I’m just kidding.’

In (6), Zhangsan expressed a difficulty he faced while doing a drill. Lisi presupposed that Zhangsan was useless by jokingly inviting him to go to die. In

response to Lisi's assumption, Zhangsan made an expression with an attached *ba1* to instill *probability* to his utterance. An initial explanation for the utterance might be that it is probable to just go to die. In addition, *ba1* is addressee-oriented, as mentioned earlier. Further interpretation of the utterance might be, it is probable that I would just go to die [expresses the speaker's intention to involve the hearer] → you'll see that I would just go to die.

Another example is given in the following:

(7) Zhangsan: Zhe guan yao zenme guo a?

這關要怎麼過啊？

'Do you know how to pass this level?'

Lisi: Hen jiandan a, ba di tu gei shouwei jiu keyi le.

很簡單啊，把地圖給守衛就可以了。

'Just give the map to the door guard.'

Zhangsan: Zhende ye!

真的耶！

'Yeah, you're right!'

Lisi: Wo jiu shuo hen jiandan *ba1*.

我就說很簡單吧！

'Look, I've said that it's an easy way.'

In (7), Zhangsan was asking a favor from Lisi to help him advance to the next level of the game. Lisi told Zhangsan an easy way to pass the level of the game. After Zhangsan's surprise, Lisi utilised a *ba1* in the second part of one turn to indicate that, it is probable that it's an easy way to pass the level [expresses the speaker's

intention to involve the hearer] → look, I've said that it's an easy way. As we can see, the criteria of *ba* correspond to what we know about language, which is concrete and simple rather than deriving a wide variety of unlimited meanings.

4.3.1.2. Imperative

(8) Zhangsan: Ni jintian kanqilai hen youxian ye.

妳今天看起來很悠閒耶。

‘You look carefree today,’

Lisi: Dui a. Zuotian nong yi ge qihuaan nong le wo laobantian,
zhongyu wancheng le. Xianzai wushi yishenqing, hao kaixin o.

對啊。昨天弄一個企畫案弄了我老半天，終於完成了。現在無
事一身輕，好開心喔。

‘That's true. It took me hours to finish a project plan yesterday. I
feel free and happy now.’

Zhangsan: Na ni jintian wanshang you kong ma?

那妳今天晚上有空嗎？

‘Do you have time tonight?’

Lisi: You a, zen me le ma?

有啊，怎麼了嗎？

‘Sure, why for?’

Zhangsan: Yi qi qu chi fan ba¹, haojiu mei yiqi juju le.

一起吃飯吧¹，好久沒一起聚聚了。

‘We should have dinner together. We haven't spent time together
for quite a long while’

In (8), two friends were having a conversation in a flat. Lisi said that she was free for the night in response to Zhangsan's question about whether or not Lisi was available. Zhangsan generated an utterance with an attached *ba* to invite Lisi for a dinner. The interpretation for the utterance *yiqi chifan ba1* is interpreted as, it is probable to have dinner together [expresses the speaker's intention to involve the hearer] → we should have dinner together.

(9) [After school, Zhangsan was inattentive to do his assignment. Lisi noticed that it's getting late...]

Lisi: Qu ba fan chi yi chi *ba1*, Ran hou qu xi zao.

去把作業寫一寫吧 1，然後去洗澡。

‘You need to finish your assignment and then take a shower.’

Zhangsan: Zhidao le, zhidao le.

知道了，知道了。

‘Okay, okay.’

Lisi: Kuaidian qu, buran mingtian shangxue youyao chidao le.

快點去，不然明天上學又要遲到了。

‘Then, just go. Otherwise, you'll be late for school once again tomorrow.’

In (9), Lisi presupposed that Zhangsan would be late for school the other day, forming a UFP *ba1* to issue an order to Zhangsan. The interpretation of *qu ba fan chi yi chi ba1* is, it is probable to finish your assignment [expresses the speaker's intention to involve the hearer] → you need to finish your assignment.

4.3.2. Low Pitch: *BA2*

4.3.2.1. Declarative

(10) Zhangsan: Duzi hao e o, wancan yao chi shenme a?

肚子好餓喔，晚餐要吃什么啊？

‘I’m starving. What should we eat for dinner?’

Lisi: Chi Maidanglao hao le.

吃麥當勞好了。

‘How about eat McDonald’s for dinner.’

Zhangsan: Maidanglao chi bu bao *ba2*.

麥當勞吃不飽吧2。

‘I don’t think McDonald’s is enough.’

Lisi: Buran yao chi shenme?

不然要吃什么？

‘What else do you want to eat?’

In (10), Zhangsan and Lisi were discussing about what to have for dinner.

Zhangsan generated an utterance with a *ba2* in response to Lisi’s assumption that eating McDonald’s would not be enough. Since *ba2* is speaker-oriented, the interpretation of Zhangsan’s assumption for *maidanglao chi bu bao ba2* would read as, it is probable that McDonald’s is not enough [marks the speaker’s own knowledge state] → I don’t think McDonald’s is enough. The utterance with a *ba2* is to mark Zhangsan’s own knowledge state rather than involving Lisi into Zhangsan’s assumption.

(11) Wangwu: Wo xiang yao mei ge yue juan ge yi qian gei Shijianzhanwanghui, keyi bangzhu xuyao bangzhu de ren, nazhong ganjue zhende hen hao.

我想要每個月捐個一千給事件展望會，可以幫助需要幫助的人，那種感覺真的很好。

‘I want to donate NTD 1,000 per month to World Vision. The feeling is so great that you can help people who are in need.’

Zhaoliu: Hao duo o, ni ren zhen hao.

好多喔，妳人真好。

‘That’s much. It’s very nice of you.’

Wangwu: Yiqian busuan duo *ba2*.

一千不算多吧2。

‘I don’t think that 1,000 dollars is much.’

In (11), by forming an attached *ba2* to his utterance, Wangwu indicates that 1,000 dollars is not a big issue for him to donate to the needy. The interpretation of *yiqian busuan duo ba2* would be, it is probable that 1,000 dollars is not much [mark the speaker’s own knowledge state] → I don’t think that 1,000 dollars is much.

4.3.2.2. Imperative

(12) Danny: Chi *ba2*, he *ba2*, xunhuanzuole *ba2*.

吃吧2，喝吧2，尋歡作樂吧2。

‘I think we should eat, drink, and be merry.’

Eileen: Ni zenme le?

你怎麼了？

‘What happened?’

Danny: Wo ba shiqing gaoza le, mingtian si ding le.

我把事情搞砸了，明天死定了。

‘I messed things up. I’m screwed tomorrow.’

In (12), Danny and Eileen were at a party. Danny was in a blue mood for messing up what he should have done well. He was upset and his utterances indicate that he felt there was probably no hope for him. *Chi ba2, he ba2, xunhuanzuole ba2* may be interpreted to mean, it is probable to eat, drink and to be merry [marks the speaker’s own knowledge state] → I think we should eat, drink and be merry. The utterance with *ba2* here is to convey information rather than issue a directive. That is to say, Danny insisted on doing so, without considering Eileen’s feelings.

(13) Vicky: Taiyang a taiyang, baituo nin jintian chulai *ba2*.

太陽啊太陽，拜託您今天出來吧2。

‘Oh Sun, I beg you to shine today.’

Lily: Ni zai ganma?

妳在幹嘛？

‘What are you doing?’

Vicky: Qiqiu buyao xiayu a.

祈求不要下雨啊。

‘I was praying for a sunny day.’

Lily: Ni zhende hen xiang qu yuehui hou.

妳真的很想去約會吼。

‘You really want to go out for a date, huh.’

In (13), Vicky was eager to go out for a date. Once Vicky noted that the weather outdoors was getting colder and that it was drizzling, she looked out through the window and started to talk to the Sun. The interpretation of *Taiyang a Taiyang, baituo nin jintian chulai ba2* might be, it is probable for the sun to shine today [marks the speaker’s own knowledge state] → oh sun, I beg you to shine today. As we mentioned in (12), an utterance with a speaker-oriented *ba2* here is to convey information about what the wishes of the speaker; Vicky desired the sun to shine, but her utterance was not a direct an invitation for the Sun to shine.

4.3.2.3. Interrogative

(14) Zhangsan: Na jiu zheme jue ding, mingtian qu women jia wan.

那就這麼決定，明天去我們家玩。

‘We’ve made a decision. We will play at my house tomorrow’

Lisi: Wo jide nijia li jieyun henjin, zoulu keyi dida *ba2*?

我記得你家離捷運站很近，走路可以抵達吧？

‘I remember that the distance between the MRT station and your house is not far. I think we could walk there, right?’

Zhangsan: Keyi a, hen jin.

可以啊，很近。

‘Sure, it is not far.’

Lisi: Na jiu ming tian jian le.

那就明天見了。

‘See you tomorrow.’

In (14), Lisi made an utterance to request information from Zhangsan. As explained in our definition of the interrogative function, the distribution of *ba2* only appears in yes-no questions. In addition, the *ba2* was not to turn what Lisi said into an interrogative, since the utterance was already an interrogative even without a *ba2*. The attached *ba2* only adds *probability* to its utterance. The interpretation of *zoulu keyi dida ba2*, then, would be, it probable to walk to there? [marks the speaker’s own knowledge state] → I think we could walk there, right?

(15) Zhangsan: Xinjiapo ren chi Niuroumian *ba2*?

新加坡人吃牛肉麵吧2?

‘I think Singaporeans eat beef noodles, right?’

Lisi: Chi a. Dui, dui.

吃啊。對，對。

‘Sure, we eat beef noodles.’

Zhangsan: Suoyi ni xihuan chi qing de hai shi hongshao de?

所以妳喜歡吃清的還是紅燒的?

‘Which one do you prefer, plain or braised?’

Lisi: En, wo liangge dou hui chi.

嗯，我兩個都會吃。

‘Mm, I will eat both of them.’

In (15), Zhangsan included a *ba2* in his utterance, which he followed with an interrogative to help him convey his notion of expression. The interpretation of *Xinjiapo ren chi Niuroumian ba2?* would be, is it probable for Singaporeans to eat beef noodles? [mark the speaker's own knowledge state] → I think Singaporeans eat beef noodles, right?

4.3.2.4. Exclamative

(16) Zhangsan: Mingtian jide bang wo mai Xueye Yushou.

明天記得幫我買學業御守喔。

‘Remember to buy me a Gakugyou Omamori.

Lisi: Hao. Suoyi cong Nanpo dao Jingsi yao zenme qu?

好。所以從難波到金閣寺要怎麼去？

‘Sure. So, how can I get to Kinkakuji Temple from Namba?’

Zhangsan: Xian da dixiatie dao Meitian, zai huan dianche dao Jingdu, zuihou zuo gongche jiuhui daole.

先搭地下鐵到梅田，再換電車到京都，最後坐公車就會到了。

‘First, you need to take the underground to Umeda. Then, take the train to Kyoto. Finally, you can take the bus to there.’

Lisi: Zhe ye tai fuza le *ba2*!

這也太複雜了吧2！

‘I think it is way too complicated to get to the place.’

In (16), Lisi engaged in interrogativity to request information from Zhangsan. Zhangsan is a friend of Lisi's who is local and lives in Osaka, Japan. While Zhangsan was responding how Lisi could get into Kinkakuji Temple, Lisi used an exclamative

to express his emotion. An attached UFP *ba2* here is to assign the core property of *probability* to its utterance; Lisi's knowledge state is exhibited in the attached utterance. The interpretation of *zhe ye tai fuza le ba2* is, it is probably too complicated [mark the speaker's own knowledge state] → I think it is way too complicated to get to the place.

(17) Zhangsan: Ni jintian de geji hai keyie ma?

妳今天的個績還可以嗎？

‘How's your individual sales performance today?’

Lisi: Hai bu cuo, yijing kuai 20 wan le.

還不錯，已經快 20 萬了。

‘Not *bad*, it's almost 200,000 dollars.’

Wangwu: Ni chuiniu chui guotou le *ba2*, mingming cai 8 wan eryi.

你吹牛吹過頭了吧？，明明才 8 萬而已。

‘I think you are way too boastful. It's only 80,000 dollars.’

Lisi: Ni ganma chaichuan wo la.

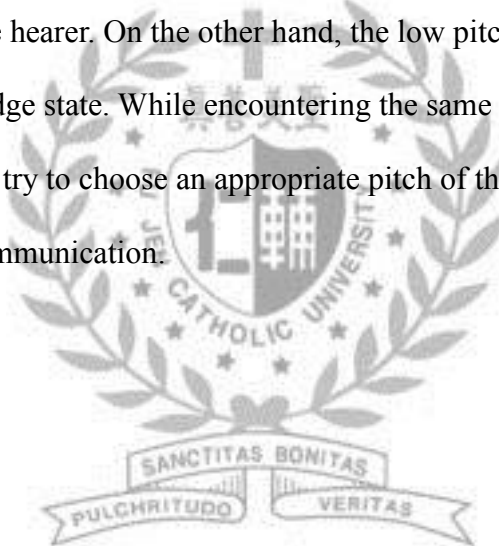
妳幹嘛拆穿我啦。

‘Come on, do not reveal my secret.’

In (17), since Wangwu realised that Lisi exaggerated her individual sales performance, Wangwu used an exclamation with an attached UFP *ba2* to indicate Lisi's exaggeration. The interpretation of *ni chuiniu chui guo tou le ba2* would be, it is probably too boastful [mark the speaker's own knowledge state] → I think you are way too boastful.

4.4. Concluding Remarks

We have chosen *probability* as a core property for UFP *ba* in this chapter. Given the fact that the mean of scaled probability to the UFP *ba* by questionnaire participants is 3.96, which represents a consistent phenomenon, we propose that the core property UFP *ba* is to signify an increased probability. Furthermore, utilising the Praat program to analyse the pitch variants of UFP *ba*, we gathered empirical data evidencing the phonological pitch differences between *ba1* and *ba2*, where *ba1* occurs at a much higher pitch than *ba2*. The discourse functions for *ba1* and *ba2* are *addressee-oriented* and *speaker-oriented*, respectively. The high pitch *ba1* tends to express the speaker's intention to involve the hearer. On the other hand, the low pitch *ba2* tends to mark the speaker's own knowledge state. While encountering the same utterance in different contexts, speakers will try to choose an appropriate pitch of the particle *ba* for his/her own purpose of the communication.





Chapter 5 Conclusion

This chapter presents an overview of the study. To begin with, we review our research findings of the study. An empirical work of the study will be revised in brief. At the end of this chapter, we provide a discussion of limitations and recommendations for UFP *ba* for further research.

5.1. Review of Research Findings

As we mentioned in the beginning of the study, an utterance final particle is formed to correlate current utterances that is conveyed information of the speaker's knowledge state to another conversation participant. UFPs do not possess explicit referential meanings, but they do carry meaning and perform a specific function. For UFP *ba* is one most frequently used UFPs in everyday-speech in Taiwan Mandarin, we were highly interested in investigating its meaning and function. We make an attempt to differentiate the two pitch heights of UFP *ba*, and focus on examining its core function as well. In addition, the data used in the study is limited to the UFP *ba* appearing at the end of utterances.

Instead of naming possibility and or uncertainty, we tender the core property of UFP *ba* as *probability*, according to the results of our findings. Derived functions of UFP *ba* such as, to make a statement, to issue orders, to ask information, to express emotion, to solicit agreement, to request information, to be euphemistic, etc., originate from sentential level utterances or at the contextual level of communication, rather than from the particle *ba* itself. The UFP *ba* appears when the speaker tries to incorporate *probability* into an utterance. The occurrence of UFP *ba* relies on the speaker's assumptions and should not be obligatory in certain utterances. Certain

utterances and UFPs are conditional to various contexts, and are chosen optionally. Speakers need to be mindful to avoid contradiction if an utterance is counter to the speaker's own knowledge state. That is to say, if speakers are 100% sure for certain events, they would not generate utterances with an attached UFP *ba* to produce a kind of irrelevant expressions.

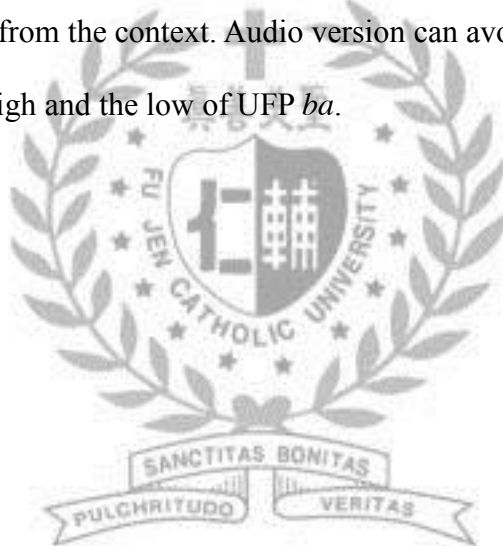
The UFP *ba* is utilised when a speaker attempts to produce a probable utterance with a degree of uncertainty. The speaker's knowledge state triggers whether the speaker uses a UFP *ba1* or a UFP *ba2*. The discourse function for the high pitch *ba1* is *addressee-oriented*: to [*express the speaker's intention to involve the hearer*]. For the low pitch *ba2* is *speaker-oriented*: to [*mark the speaker's own knowledge state*]. The occurrence of *ba1* and *ba2*: associating the speaker's knowledge state with its core meaning probability and pitch height simultaneously.

A concrete and simple function of constant universal core property for UFP *ba* is to facilitate the explanation of its property in unlimited conversation. In the study, UFP *ba* is employed in four major discourse functions to examine its meaning and function—(a) declarative: to convey information or to make a statement, which is usually subjective; (b) imperative: to command someone to do something or to issue directives; (c) interrogative: to request information; and (d) exclamative: to exclaim emotions. Distribution of *ba1* is in declarative, and imperative; for *ba2* is in declarative, imperative, interrogative, and exclamative.

5.2. Limitation and Recommendation for Further Research

1. This study focuses solely on analysing the UFP *ba*. There remain other UFPs requiring further research, such as *a*, *la*, *le*, *ma*, *ne*, *o*, and so on. What is the relationship between different UFPs?

2. For other languages, speakers generate assumptions in vague communicative fashion as well. Do the discourse markers in other languages serve the same function as the Utterance Final Particle *ba* in Taiwan Mandarin?
3. While Taiwan Mandarin was required to be the native language among all participants in the study, is UFP *ba* in Taiwan Mandarin different from UFP *ba* in Peking Mandarin?
4. The questionnaire was offered in written form. Participants interpreted the dialogues mainly from the context. Audio version can avoid the subjective of determining the high and the low of UFP *ba*.





References

- Alleton, Viviane. 1981. 'Final Particles and Expression of Modality in Modern Chinese.' *Journal of Chinese Linguistics* 9(1): 91-115.
- Chang, Lingying. 2009. 'A Pedagogical Grammar of Mandarin Utterance-final Particles *MA*, *A*, *BA*, *NE*.' *Journal of Chinese Language Teaching* 6(2): 99-127.
- Chang, Lingying. 2012. 'Applying Collocation Analysis on the Interpretation and Pedagogical Grammar of the Mandarin Polysemic Final Particles *BA* and *NE*.' Doctoral Dissertation. National Taiwan Normal University.
- Chao, Yuanren. 1968. *A Grammar of Spoken Chinese*. University of California Press.
- Chu, Chauncey Chenghsi. 1998. *A Discourse Grammar of Mandarin Chinese*. New York and Bonn: Peter Lang Publishing.
- Chu, Chauncey Chenghsi. 2002. 'Relevance Theory, Discourse Markers and the Mandarin Utterance-Final Particle *A/Ya*.' *Journal of the Chinese Language Teachers Association* 37(1): 1-42.
- Chu, Chauncey Chenghsi. 2005. 'A Contrastive Approach to Discourse Particles---A Case Study of the Mandarin UFP *NE*.' *Russian Language and Literature Studies* 4:1-24.
- Chu, Chauncey Chenghsi. 2006. 'Discourse Grammar of Mandarin Chinese: Theory and Methodology.' *Russian Language and Literature Studies* 3: 1-15.
- Chu, Chauncey Chenghsi. 2008. 'Relevance Theory and the Pragmatic Functions of the Utterance-Final Particles in Mandarin Chinese.' *Journal of the East Chinese Normal University* 3:12-18.
- Chu, Chauncey Chenghsi. 2010. *A Functional-Discourse Grammar in Mandarin*

- Chinese*. Taipei: The Crane Publishing Company.
- Chu, Chauncey Chenghsi and Bin Li. 2004. 'Translating Modern Chinese Utterance-Final Particles into English: A Case Study of the Discourse Function of BA.' *Foreign Language Research* 6:1-10.
- Han, Ynag Saxena. 1995. 'A Pragmatic Analysis of the BA Particle in Mandarin Chinese.' *Journal of Chinese Linguistics* 23(2): 99-127.
- He, Ziran. 2006. *Cognitive Pragmatics: Congnition in Verbal Communication*. In: Yongping Ran, Aiping Mo and Yin Wang (eds). Shanghai: Shanghai Foreign Language Education Press.
- Her, Onesoon. 2009. 'Language and Group Identity: On Taiwan Mainlanders' Mother Tongues and Taiwan Mandarin. *Language and Linguistics* 10(2): 315-419.
- Hsieh, Hsinyun. 2001. 'The Discourse-Pragmatic Functions of Final Particles in Taiwanese.' Master's Thesis. National Taiwan University.
- Hyland, Ken. 1998. *Hedging in Scientific Research Articles*. John Benjamins Publishing Company.
- Hyland, Ken. 2005. *Metadiscourse*. London: Continuum.
- Jucker, Andreas H. 1993. 'A Discourse Marker *Well*: A Relevance-Theoretical Account. *Journal of Pragmatics* 19: 435-452.
- Jucker, Andreas H. 1983. *Discourse Markers*. In: Yael Ziv (ed). John Benjaming Publishing Company. p. 3.
- Lakoff, George. 1973. 'Hedges: A Study in Meaning Criteria and the Logic of Fuzzy Concepts.' *Journal of Philosophical Logic* 2(4): 458-508.
- Lakoff, George and Mark Johnson. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.
- Lee, Amy Peijung. 2007. 'Semantic Differences between English Modal Auxiliaries

- and Semi-Modals.’ *Hsuan Chuang Journal of Humanities* 7: 229-244.
- Lee, Poyee. 2004. ‘Utterance Final Particle A in Mandarin---A Pragmatic Perspective.’
Master’s Thesis. National Tsinghua University.
- Leewong, Songmei. 1998. ‘Face Support---Chinese Particles as Mitigators A Study of
BA, A/YA, and NE.’ *Pragmatics* 8(3): 387-404.
- Levinson, Stephen C. 1983. *Pragmatics*. Cambridge: Cambridge University Press.
- Li, Boya. 2006. ‘Chinese Final Particles and the Syntax of the Periphery.’ Dotoral
Dissertaion. Universiteit Leiden.
- Li, Charles N. and Sandra A. Thompson. 1981. *Mandarin Chinese: A Functional
Reference Grammar*. Berkeley and Los Angeles: University of California
Press.
- Li, Ing Cherry. 1999. *Utterance-Final Particles in Taiwanese: A Discourse-Pragmatic
Analysis*. Taipei: The Crane Publishing Company.
- Li, Ing Cherry. 2000. ‘Pragmatics: The Chinese Connection.’ *Chinese Studies* 18:
323-356.
- Liang, Hsiaoyun. 2004. ‘Hanyu Jumo Zhuci *NE* Zhi Jiaoxue Yufa Chutan [A
Preliminary Study of Utterance Final Particle *NE* in Mandarin Chinese].’
Master’s Thesis. National Taiwan Normal University.
- Lin, Chinhui. 2003. ‘Hanyu Jumo Zhuci A Zhi Jiaoxue Yufa Chutan [A Preliminary
Study of Utterance Final Particle A in Mandarin Chinese].’ Master’s Thesis.
National Taiwan Normal University.
- Liu, Yuehua, Wenyu Pan and Hua Gu. 2001. *Modern Chinese Grammar*. Beijing:
Shida Shuyuan.
- Lu, Shuxiang. 1980. *Xiandai Hanyu Babai Ci* [800 Words in Modern Chinese].
Beijing: The Commercial Press.

- Mey, Jacob L. 1999. *Pragmatics: An Introduction*. Oxford: Blackwell Publishers.
- Radford, Andrew. 1997. *Syntactic Theory and the Structure of English: A Minimalist Approach*. Cambridge: Cambridge University Press.
- Saeed, John I. 1997. *Semantics*. Oxford: Blackwell Publishers.
- Shie, Chichiang. 1991. 'A Discourse-Functional Analysis of Mandarin Sentence-Final Particles.' Master's Thesis. National Chengchi University.
- Sperber, Dan and Deirdre Wilson. 1986. *Relevance: Communication and Cognition*. Oxford: Blackwell Publishers.
- Xu, Jingning. 2003. 'Modality Interpretation for the Tone Particle *BA*' *Journal of Peking University* 4:143-148.
- Zadeh, Lotfali Askar. 1965. 'Fuzzy Sets.' *Information and Control* 8(3): 338-353.
- Zadeh, Lotfali Askar. 1972. 'A Fuzzy Set-Theoretic Interpretation of Linguistic Hedges.' *Journal of Cybernetics* 2: 4-34.
- Zhou, Shihong. 2009. 'Grammatical Meaning and Discourse Functions of *BA* Revisited.' *Language Teaching and Linguistic Studies* 2: 16-22.
- Zhu, Dexi. 1982. *Yufa Jiangyi* [Chinese Syntax]. Beijing: The Commercial Press.

Appendix I: Background Information for 66 Participants

Gender	
Male	37
Female	29

Age	
Under age 20	7
From 21 to 30	44
From 31 to 40	13
Over 40	2

Education	
High school	6
Undergraduate	45
Postgraduate	11
PhD	4

Appendix II: 台灣華語語尾助詞「吧」的可能性高低之評分問卷

您好，

這是一份研究調查關於台灣華語語尾助詞「吧」的可能性高低之評分問卷，由衷感謝您撥冗填寫。此份問卷僅提供學術論文研究之用途，請您安心填寫。再次感謝您的協助！

天主教輔仁大學跨文化研究所

研究生 王嘉偉 謹啟

中華民國一〇二年五月

A. 背景資料

1. 性別：☐ 男 ☐ 女
2. 年齡：☐ ~20 ☐ 21-30 ☒ 31-40 ☐ 41~
3. 教育：☐ 高中 ☐ 大學 ☐ 碩士 ☐ 博士
4. 母語：☐ 華語 ☐ 其他：
5. 請寫出「吧」的語意： (不清楚答案可留白)

B. 「吧」的可能性高或低之判斷

請閱讀下列 10 組對話內容，並依照對話內容由 0 到 5 給予評分，
在事件中，發生的可能性最低為 0 分，最高為 5 分 (0<1<2<3<4<5)

1. 鬍子：卡老不會又要遲到了吧。
小白：應該是為了等全全。
鬍子：全全昨天晚上一定又加班了，然後又睡過頭。
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
2. [上課鈴聲剛剛響起，老師催促學生趕快進教室]
阿賢：走吧，走吧，進教室，進教室。
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
3. 大雄：在半小時就要上課了，要走了嗎？
靜香：好啦，再等一下啦。
大雄：快點走吧，不然要遲到。
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

4. 小夫：我們晚上要去吃剉冰，你要一起去嗎？
胖虎：嗯，好吧。
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
5. 小白：你又睡過頭了喔？
全全：對啊。
鬍子：我就說吧。
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
6. 馬各：隔壁的小孩今天怎麼沒哭啊？
日立：被送去奶奶家了吧。
馬各：總算安靜許多。
日立：搞不好明天又被送回來。
馬各：吼！
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
7. [土巧和歷歷在圖書館念書，土巧正望著窗外烏雲密佈]
土巧：今天會下雨吧。
歷歷：好像會。怎麼，妳要去約會喔？
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
8. 馬各：人手不夠要怎麼搬家啦，是要整死誰啊！
日立：還是我們先搬吧，能搬一點算一點。
馬各：也只能這樣了。
日立：那從書櫃先開始。
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
9. 靜香：這就是你把妹的絕招吧。
大雄：才沒有呢。
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
10. 歷歷：這件看起來還不錯說。
靜靜：不錯看喔。
土巧：哇，也太美了吧。買下來，買下來。
歷歷：我再考慮一下啦。
土巧：不用考慮了啦。
☐ 0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5