

A Proposal for the Meaning of the Mandarin Sentence Final Particle *A*

Karen Li

Kristen Syrett

Rutgers University

**A is for Acknowledgements**

First and foremost I must thank Dr. Kristen Syrett, without whose brilliance and dedicated advising this project would not have been possible. As a mentor and as a teacher, she consistently goes above and beyond, and I am truly grateful to have worked so closely with her for the past year. Thanks as well to Ziling Zhu and Jess Law for their comments and questions at various stages of the research process, and to the many friends who generously assisted me with their linguistic judgements.

The linguistics department at Rutgers University has become my home in the past several years, and it is with the greatest affection that I thank the faculty for the opportunities and support that have allowed me to reach this point. It has been an honor to work among those at the Laboratory for Developmental Language Studies, in particular my fellow thesis-writers Joy Lu and Nate Serio. I have cherished our time together, and cannot wait to see the incredible heights they will achieve.

I must also extend thanks to the friends who have supported me in this unusual year, allowing me to talk their ears off about linguistics on video calls, over text, and on socially distanced walks. Thanks to my family, who allowed me to hijack the dinner conversation time and time again. And finally, I give infinite thanks to my mother, who has supported me through this process in every way, from round-the-clock linguistic judgements to never-ending advice and encouragement.

## Abstract

Recent research in semantics, pragmatics, and discourse analysis has generated interest in discourse particles because of their complex role at the intersection of these levels. In light of previously conflicting analyses, this paper focuses on the Mandarin particle *a*, and the integral role that it plays in colloquial speech. Native speakers report that *a* has an effect of “friendliness” or “emphasis”, but how can these impressions be understood in a compositional theory of linguistics? Using conversational paradigms such as the To Do List (Portner 2004) and common ground, and build upon the semantic structure of exclamatives and questions, we argue that *a* composes with all types of speech acts to reorder various aspects of the conversational context, from propositions in the common ground, to items on the To Do List. These analyses capture the impressions that are so difficult for native speakers to pinpoint, and give rise to a unified definition of *a* as a speech act operator.

## 1 Introduction

As perpetual narrators of our own worlds, speakers of any language spend their days trading propositions and questions, both drawing from and contributing to the contexts surrounding them. We speak to share information with each other, and even the notoriously dull act of small talk serves as the mutual acknowledgement of a shared context. As such, utterances are never spoken into a vacuum, utterances will often take the time to situate themselves within the greater context-- in fact, there is an entire class of conjunctions that serves this very purpose. When a sentence begins with “furthermore”, one may reasonably expect its contents to align with the common ground. But when a sentence begins with “however”, it is likely to be posing a contradiction to the common ground. This type of contextual signposting constructs a narrative

that is easier for the listener to follow, and eases the mental load of processing new information. Although it has no bearing on the truth value of the sentence, it offers the listener valuable insight into how they should regard the utterance, or how it relates to what they already know. The question is, what exactly is the nature of that insight?

The answer to this must of course vary from utterance to utterance. Phrases such as “In my opinion”, “Annoyingly”, and “unbeknownst to her” offer a variety of meta-information about the rest of the utterance, and because they are often separate from the propositional content of a sentence these discourse markers often take the form of particles. These particles inhabit a unique space between lexical items that have consistent meaning and pragmatic items that interact with context. They span a number of languages, from Japanese to German, and license their speaker with a greater range of expression in colloquial speech. Investigations into Italian and German find polarity particles that express speaker agreement or disagreement, or bias towards a proposition’s truth value (Frana & Rawlins 2019, Farkas & Roelofsen 2019, Döring 2013, Egg 2013, Repp 2013), as in (1) This usage allows the speaker to emphasize the truth value of their utterance, resulting in a statement that Max does unequivocally have a new girlfriend.

(1) *Max hat **ja** eine neue Freundin*

“Max **does** have a new girlfriend”

(Döring 2013:99:2)

In Japanese, particles can communicate speaker sentiment or commitment regarding the rest of the utterance (Davis 2010, Northrup 2014), as seen in (2). In (2a), the Japanese particle *yo* marks the speaker’s utterance as new information that the speaker has stated declaratively. In (2b), however, the use of *ne* is a more tentative declaration, touching upon something that the speakers already know without such confident assertion.

- (a) *Waffuru-ga daisuki da yo.*  
 “She loves waffles, **man.**” (Northrup 2014: 2)
- (b) *Waffuru-ga daisuki da ne.*  
 “She loves waffles, **huh?**”

Finally, the Cantonese particle *ho* acts as a speech act operator, taking in different types of speech acts and composing them with the speaker’s expectations (Law et al, 2018), for example in (3). This particle adds a sense of inquisitiveness to the speech act it composes with, suggesting that the initial speech act might possibly not be appropriate in the context.

- (a) *Bingo sik haa ne ho?*  
 “Who eats shrimp? **Do you share the same question?**” (Law et al 2018:56:9)
- (b) *Aaman sik haa gaa ho?*  
 “Aaman eats shrimp. **Right?**” (Law et al 2018:64:26)

Consider a familiar particle to speakers of English, the Candaian *eh*. Aside from mocking Canadians, what is its purpose? Without any particle, the statement “It’s cold outside” is just a declaration about the weather. But when the particle is added, “It’s cold outside, eh?” becomes a question that acknowledges the perspective of the addressee, and even communicates an expectation that they will agree.

In Mandarin, sentence final particles are also used to convey information about the speaker, from surprise to confusion, to caution. Over the years, many attempts (Han 1988; Li & Thompson 1989; Lu 2005; Jin 2011) have been made to accurately characterize the meaning of these particles, but each of these only tells part of the story. As Zhou (2018:22) notes, conclusions have often been drawn by examining only a limited number of cases. As such, there are several cases that are yet unaccounted for. This paper will focus on *a*, the most ubiquitous sentence final particle, beginning with previous analyses, then understanding *a* as a polarity

particle, and finally creating a new definition that accounts for all of its uses. In the next section, we will examine a number of cases to understand the breadth of *a*'s use.

## 2 The empirical landscape

When asked for a general definition, many Mandarin speakers cite an effect of friendliness or coaxing that accompanies *a*, noting that the use of *a* makes an otherwise formal sentence more personable. This last statement is true of many particles cross-linguistically-- because discourse particles often appear exclusively in colloquial speech, their very presence within an utterance can make the speaker seem more present or responsive. However, *a* has the unique effects of expressing doubt or insistence towards some conversational goal. In these cases, *a* expresses an unfulfilled expectation or goal on the speaker's part, which has varied effects on different utterances.

(4) Context: A father has offered his son some money and left it on the desk for him to take. He later sees that the money is still on the desk. A:

(a) *naqu*  
take  
“Take [it]”

(b) *naqu a*  
take a  
“Go ahead, take [it]” (Lu 2005, 83:11)

Here, (4a) would simply be a repetition of the father's initial intent, but (4b) acknowledges the son's seeming reluctance to take the money, and communicates that regardless of any hesitations, the father really would like for his son to take the money. Thus, we see that *a* addresses the difference in intentions between the two interlocutors. On a speech act level, this act of considering the son's intentions makes (4b) appear more gentle. However, the politeness of

this exchange is not required for a felicitous use of *a*. In these next examples, we see *a* used to accompany an indignant (5) and excited (6) tone.

Context: A has run out of apples and asks B, a very busy person, to buy more. B:

(a) *wo meiyou shijian qu shichang*  
 I have no time go to market  
 “I don’t have time to go to the market”

(b) *wo meiyou shijian qu shichang a*  
 I have no time go to market a  
 “What? I don’t have time to go to the market”

Here, (5b) communicates that B is surprised and offended by A’s request. Detaching the dismayed surprise from the already negative propositional content of (5a), we conclude that *a* communicates B’s expectation that A already knows B is busy. Once again, this is a case of reality mismatched with expectation, and the use of *a* is referring to B’s expectation within their statement.

(6) Context: A speaker has just noticed that apples are twice their normal price.

(a) *na me gui*  
 that much expensive  
 “It’s so expensive!”

(b) *na me gui a*  
 that much expensive a  
 “Wow, it’s so expensive!”

(Michaelis 2001, 1042:20)

Although there is no addressee in this scenario, the use of *a* in (6b) is still felicitous. Here, it indicates that the speaker is more personally affronted by this information, and that the price is significantly different than their own expectation. The use of *a* in (6b) uses the notion of unexpectedness to magnify the dismay expressed in (6a), resulting in a more powerful

exclamatory sentence. In all of these cases so far, *a* has been used to express the speaker's reaction to new circumstances or information that contradicted with their expectations. Yet the basic definition of “communicating unfulfilled expectations or goals” also allows for cases where the speaker is not already committed to a belief. This dynamic is best exemplified in the form of a question, where the speaker is by design lacking in belief.

(7) Context: A is visiting B, and they are on the phone establishing the details of the visit. A:

(a) *ni shenme shihou yao lai*  
 you what time will arrive  
 “When will you arrive?”

(b) *ni shenme shihou yao lai a*  
 you what time will arrive a  
 “So, when will you arrive?”

In both of these interrogative utterances, A seeks information about B's arrival time, but (7b) conveys an additional level of investment behind the question from the speaker. Although A has no prior belief, their use of *a* still indicates an expectation and interest toward being told. If A were instead a taxi driver planning to pick B up from the airport, (7b) would be infelicitous. In this scenario, the use of *a* shows a genuine interest in the answer to A's question, or a sense that B's response will become valuable common information. From examples (4)-(7), we see that *a* establishes the speaker as receptive to a question's answer or as cognizant of opposing viewpoints. In one final example, the two functions are combined, and the speaker's acknowledgement of potential disagreement creates a question in and of itself.

(8) Context: A has not been outside, but knows from the weather forecast that the temperature is supposed to be very hot. B has just come home. A:

(a) # *tianqi hao re*  
 weather very hot  
 “It is very hot outside”

(b) *tianqi hao re a?*  
 weather very hot a  
 “It is very hot outside, no?”

In this case, (8a) is not felicitous because it is not a question, but in (8b) *a* is appended to a declarative statement to form a question. Here, the use of *a* calls in question the truth value of the proposition, and results in A asking B to confirm that the suspicion they have is true.

From these examples, we see that the particle *a* can be felicitous at the end of an imperative sentence (4), a declarative sentence (5), an exclamatory sentence (6), or a question (7), and can even turn a declarative sentence into a question (8). In each of these situations, *a* adds a slightly different meaning to the original utterance. In (4) mitigates the illocutionary force of a command; in (5) it turns the declarative into a reminder to the addressee; in (6) it expresses surprise on the part of the speaker; in (7) it conveys a sense of cooperation from the speaker to the addressee; and in (8) it calls the asks for the truth value of a proposition. Traditionally, *a* has been interpreted as an indicator of mood, but from just these examples we see the diversity of moods it can convey. With such a wide variety of sentence types and moods that support the use of *a*, a sufficient generative definition must address some underlying relationship that supports each of these situations.

Previous researchers (Li & Thompson 1989, Zhou 2018) have commented that the contribution of *a* is often confused with the actual propositional content present within the

sentence. For example, in (6), *a* cannot exclusively contribute an exclamative meaning because the proposition itself already has exclamative meaning. As such, we must also be careful going forward to examine only the effects of *a*, and omit any sense of speaker emotion that comes from the sentence content, rather than the particle. In so doing, we propose that *a* should be treated as a producer of conventional implicature, rather than propositional content (Potts 2007, Karttunen & Peters 1979). This classifies *a*'s contribution as not-at-issue meaning, which is consistent with the ways in which many other particles operate. The meanings that these particles offer are largely implied, so while the use of *a* may be felicitous or infelicitous in various contexts, it never goes as far as to make a proposition false. The specific positive or negative interpretation of *a* also depends on speaker tone, a distinction with consequences that will be explored in the next section.

### 3 Early definitions: *a* as a modifier of magnitude

In keeping with basic speaker judgements, Li & Thompson (1989:313) and Fang & Hengeveld (fc) propose that *a* reduces the forcefulness of the sentence it is appended to. This sense of mitigation takes a formal statement and softens its illocutionary force.

(9a) *chi fan*  
eat food  
“Eat!”

(9b) *chi fan a*  
eat food a  
“Eat, ok?”

(Li & Thompson 1989, 315:254)

The use of *a* in (9b) mitigates the initial imperative, adding speaker-oriented concern that makes the order seem less impersonal. As Li & Thompson note, (9b) would be felicitous if spoken by a concerned parent to a child, but infelicitous if spoken by a marine sergeant to

recruits in a mess hall. Thus in (9b), the use of *a* communicates the same goal as (9a), but softens the illocutionary force of the bare utterance.

However, *a*'s effect of reduced force is not universally agreed upon. In direct contradiction to Li & Thompson, Han (1988:28) defines *a* as a particle that “intensifies the speech act force of a statement”. These seemingly opposite interpretations even apply to the same sentence. By Han’s interpretation, (9b) is a frustrated plea from a parent whose child refuses to eat. This plea carries more illocutionary force than the impersonal imperative of (9a), thus satisfying Han’s definition but not Li & Thompson’s.

How can both gentle concern and annoyed frustration be obtained from the same utterance? Within this minimal pair, the difference in interpretation stems from a difference in tone. Spoken in the Mandarin first tone, (9b) fits Li & Thompson’s definition. Spoken in the fourth tone, it aligns more with Han’s definition. Between these distinct surface interpretations, *a* must convey some common meaning, an “absolute value” definition that accounts for both positive and negative effects. The uniting force behind these utterances is the sense of speaker reaction to the actions of the addressee, whether it is exasperation or compassion. By contrast, the unadorned utterance acts only to impersonally deliver the imperative. Thus, we can consider *a* not as a mitigator or intensifier of illocutionary force, but on an underlying level as the speaker’s reaction to how some portion of the conversational context has failed to meet their expectations or beliefs. Having reconciled the definitions proposed by Li & Thompson and Han, we are now able to move forward to Lu’s interpretation.

#### 4 Lu's definition: Beliefs about beliefs

Lu's analysis (2005:76) of *a* proposes a definition based on speaker belief and intention that generates the meanings presented by both Li & Thompson and Han. Because *a* is felicitous in the context of intentions and beliefs, Lu uses the word "attitude" to address both. In this model, the behavior of beliefs and intentions are analogous, meaning that mismatched beliefs act in much the same way as mismatched intentions. With this in mind, Lu states, "the use of the particle *a* reflects the speaker's belief that the addressee's attitude towards the state of affairs denoted by the propositional content of the sentence preceding the particle differs from the speaker's attitude". This predicts that *a* is felicitous in all situations where the speaker believes their attitude is different than that of the addressee's.

Addressee attitude → Speaker attitude ↓	True	False	Indifferent
True	Infelicitous	Felicitous	Felicitous
False	Felicitous	Infelicitous	Felicitous
Indifferent	Felicitous	Felicitous	

Table 1: A table mapping the possible intersections of attitudes. *a* is infelicitous in cases where speaker and addressee attitudes are shared.

For differences in belief, speaker and addressee attitudes are realized as beliefs that each person might believe to be true, believe to be false, or be agnostic to. For example, a situation where the speaker believes their statement is true and their addressee believes it is false would result in a felicitous use of *a*.

(10) Context: A mistakenly believes it is B's birthday and wishes them a happy birthday. B:

*bu shi wode shengri a*  
not be my birthday a  
"What? It is not my birthday"

Here, A and B's beliefs regarding the truth value of the proposition "it is B's birthday" are clearly mismatched. Without *a*, B would simply be contradicting A's belief by saying, "it is not my birthday". But the use of *a* allows B to orient their statement as a response to A's birthday wishes, addressing the difference in their beliefs as alongside the correction. Interestingly, Lu's analysis also accounts for the use of *a* after a question, which we see in (11).

(11) Context: A has found a book on their desk and addresses this to the room

(a) *zhe shi sheide shu?*  
 this is whose book  
 "Whose book is this?"

(b) *zhe shi sheide shu a?*  
 this is whose book a  
 "Hey, whose book is this?"

Because A does not know the answer to their question, they are considered to have agnostic belief with respect to the response. When they pose the question in (11a), they are simply asking the question in the event that somebody is able to respond. However, the question in (11b) conveys an expectation that someone in the room will know the answer. Thus, the use of *a* again addresses the difference in belief between A and their addressees.

For differences in intentions, speaker and addressee attitudes are goals that each party may intend to carry out, not intend to carry out, or be indifferent to. Thus, the use of *a* when A intends to carry something out and B does not addresses that difference in their intentions.

(12) Context: Two people are getting ready to leave the house, but A is ready before B. A:

(12a) *kuai dian*  
 quick a bit  
 "Hurry up"

(12b) *kuai dian a*  
 quick a bit a  
 "Hurry up, already"

(Lu 2005, 84:13)

While the imperative (12a) is already a command, the use of *a* addresses the difference between A's intention to leave quickly and B's apparent indifference to that goal. (12b) is different from a simple command in that it acknowledges the opposing intention of its addressee, and as a response reiterates A's interest in moving quickly. From these two examples, we see that Lu's definition is applicable to situations regarding both belief and intention. In these situations, *a* comments upon the difference between A and B's attitudes. This use fits Li & Thompson's definition of mitigation in that it qualifies the speaker's utterance by acknowledging potential opposition. On the flip side, addressing a difference in beliefs can also make a statement more adversarial, depending on context. It is in these situations that Han's definition of increased force is applicable. Thus, Lu's analysis shows that the two early definitions are simply surface level variations of the same underlying definition of *a*.

## 5 *A* as a polarity particle

In Lu's analysis, *a* addresses the difference in beliefs between two interlocutors. This use to express disagreement echoes Farkas & Roelofsen's (2019) feature model for polarity particles. Polarity particles hold the meaning of agreeing or disagreeing with the previous utterance, and in English correspond with "yes" and "no". Farkas & Roelofsen's model marks the distinction between relative polarity features and absolute polarity features, and classifies particles based on the contexts in which they are felicitous. A relative polarity particle addresses the truth value of some salient proposition in the immediately preceding discourse. On the other hand, an absolute polarity particle addresses the truth value of the previous utterance itself. To illustrate this, we consider the following possible responses to the utterance "Sam is not home" (Farkas & Roelofsen 2019, 1:1)

- (13) A: Sam is not home  
 B: Yes, he isn't/ No, he isn't (Farkas & Roelofsen 2019, 1:1)

The polarity particles here are responding to two different parameters. “Yes, he isn’t” responds to A’s utterance as a whole, confirming the statement “Sam is not at home”. In this case, the polarity particle interacts with the relative parameter of A’s proposition. However, in the alternative response, “No, he isn’t”, B instead responds to the initial question of whether or not Sam was home. Here, the polarity particle “no” interacts with the absolute parameter of whether or Sam was home, rather than the relative parameter based on A’s assessment. Thus, we see the difference in how the English *yes* and *no* are used to respond to the relative parameter ([AGREE/REVERSE]) or the absolute parameter ([+/-]).

Based on Lu’s assessment that the particle *a* is felicitous when the speaker’s attitude does not align with the addressee’s, *a* would be classified as a negative particle responding to the relative parameter ([REVERSE]).

- (14) A: *Paul hai mei dadianhua lai*  
 Paul yet not call in  
 Paul did not call
- B: *Ta qi dian dadianhua lai le a*  
 he seven o'clock call in past-part a  
 He called at seven a.

In (14), B’s response uses *a* to convey the [REVERSE] polarity particle meaning, responding negatively to the relative parameter of A’s utterance and correcting their statement. Because Lu’s definition is predicated upon a difference in speaker and addressee attitude, the [REVERSE] polarity particle meaning remains consistent for all of Lu’s cases in Table 1.

- (15) *Paul hai mei dadianhua lai a?*  
 Paul yet not called in a  
 Paul did not call, no?

Additionally, the classification of *a* as a polarity particle explains its ability to turn a declarative sentence into a polar question. Just as in English, (15) takes a proposition and offers it to the reader, with the expectation of a confirmation or denial. The rationale for this subset of questions supports the polarity particle classification, yet there are still some uses of *a* that cannot be accounted for by Lu's definition, and by extension the polarity particle definition.

(16) Context: Two friends are trying soup made by a world famous soup chef. A has tried a spoonful and B asks how it was. A:

*tang hao chi a!*  
 soup good taste a  
 "The soup is tasty!"

By Lu's definition, *a* should be infelicitous when the two interlocutors agree. And indeed, there is a potential argument that the second soup taster is agnostic to believing the soup tasted good, thus fulfilling the required mismatch of beliefs. However, the background knowledge that the soup was made by a master soup chef would bias both speakers to expect the soup to taste good, thus preventing them from being truly agnostic. In this case, the context contains no potential world in which the soup does not taste good. Thus, we see that Lu's analysis is neither able to account for cases of speaker agreement nor exclamatives. Having found this analysis to undergenerate significantly, we must look to a different paradigm in order to accurately characterize the meaning of *a*.

## 6 Modal particles

Farkas & Roelofsen's (2019) investigation of German polarity particles discussed the distribution of the polarity particles *ja*, *doch*, and *nein*. While *ja* and *doch* pattern similarly to English *yes* and *no*, the meaning and use of *doch* reveals complexities that shed light on the

possible contribution of *a*. By the various accounts (Döring 2013, Egg 2013, Repp 2013) *doch* can also be classified as a modal particle, or a particle that is used to indicate how the speaker thinks that the content of the sentence relates to the participants' common knowledge. This extends beyond the polarity particles' simple reaction of agreement or disagreement and is able to encompass a variety of nuances regarding speaker belief and expectation. Döring (2013:99) states that *doch* "conveys the speaker's belief that *p* is not activated in the addressee's mind at the time of utterance-- or at the current stage of discourse. This can have the effect of protesting, or reminding, as in (17).

(17) A: *Maria hat einen VW*  
 Maria has a VW  
 "Maria owns a VW"

B: *Nein, Maria hat doch einen Porsche!*  
 No Maria has PART a Porsche  
 "No, Maria owns a Porsche."

(Döring 2013: 100)

Here, A's statement that Maria owns a VW is contradictory with B's knowledge that Maria actually owns a Porsche. Thus, B uses *doch* to indicate that the proposition "Maria owns a Porsche" is true, even if it is not currently activated in A's mind. Thus, the use of *doch* felicitates the interaction between two propositions, where the antecedent proposition is the a-proposition and the current utterance *p* is the p-proposition. Egg (2013) refers to the initial proposition as the a-proposition, the proposition accompanying *doch* as the p-proposition, and comments that *doch* is felicitous when there is tension between the a-proposition and the p-proposition. But of course, the propositions can be difficult to identify. The p-proposition might not always be directly in conflict with the a-proposition, but could conflict with a presupposition or implicature of the a-proposition. The point of conflict might not even have been verbalized within the conversation, as is the case in (18).

(18) A: *Seit wann hast du denn den Zauberberg?*  
 Since when have you owned the *Zauberberg*?

B: *Den hast du mir doch vor zwei Jahren geschenkt*  
 But you gave it to me two years ago.

The knowledge of A and B's previous exchange in ownership need not have been vocalized within the conversation-- in this case, *doch* was able to interact with a shared experience that caused a presupposition failure within the conversation. With this information, however, one must wonder how an information base so large as the common ground is can be accessed at any point in the conversation. If every conversation involved keeping the interlocutors' entire conversational history accessible, the processing cost of continuing the conversation would rapidly become prohibitive. To remedy this concern, we note that the p-proposition must still remain relevant to the content of the a-proposition, and thus the content of the p-proposition should be limited to propositions that could potentially disagree with the a-proposition, also known as the a-proposition's felicity conditions (Egg 2013: 128). Beyond this, however, *doch* can also be used in a discourse-initial position, wherein it would have no conceivable a-proposition to correct or react to.

(19) *Sie sind doch Paul Meier*  
 "You must be Paul Meier" (Egg 2013:126)

In this case, one could suggest that an introduction to any person must bring with it a salient "this is not that person", even if only in the speaker's mind. However, Egg instead proposes that the use of *doch* in this situation indicates a gesture towards the common ground, which can be taken as an expression of politeness. This interpretation captures the effect of graciousness in (19), rather than doubt about the addressee's identity.

*Doch* is felicitous in exclamatives, where it is used to refer to the felicity conditions of using the exclamation. For this, we turn to a formal analysis of exclamatives. Zanuttini & Portner (2003) propose that within a conversational context, there exists some domain  $D_1$  of the most salient members of a particular set. For example, perhaps on a summer day in New Jersey,  $D_1(\text{temperature}) = \{70^\circ\text{F}, 71^\circ\text{F}, \dots, 85^\circ\text{F}\}$ . Then, if someone were to exclaim, “How hot it is!”, they would be widening the set of salient temperatures by introducing some set  $D_2(\text{temperature}) = \{70^\circ\text{F}, 71^\circ\text{F}, \dots, 90^\circ\text{F}\}$  with a higher upper bound. Thereafter,  $D_2$  would replace  $D_1$  as the most salient temperature domain. So in uttering an exclamation, a speaker is necessarily speaking about some degree or set that they were not expecting to reference. Thus, the use of *doch* within an exclamation produces a sense of sincerity wherein the speaker acknowledges the unexpectedness of their speech but affirms that they are being sincere.

With this analysis in place, Repp (2013) proposes the following definition of *doch*, detailing the requirements that must be met for the particle to be used felicitously with an utterance  $p$  that has propositional or implied meaning  $\neg r$ .

$$(20) [[\textit{doch}]] = \lambda p_{\langle s,t \rangle} \cdot p$$

Discourse condition for utterance  $u_n$  with the meaning  $[[\textit{doch}]](p)$ :

- (i) Common ground entails or implicates  $p$
- (ii) The previous utterance does not entail, presuppose, or implicate  $p$
- (iii) The previous utterance defeasibly entails  $r$
- (iv)  $p$  defeasibly entails  $\neg r$

Typically, felicity requirements are insufficient to serve as a definition for a lexical item-- There is a difference between what a word means and where it is able to be used. However, *doch* serves to acknowledge the presence of these conditions, and in so doing is able to produce the effects we have discussed.

### 6.1 Comparison with *a*

Much of the analysis of *doch* rings true when applied to *a*. Like *doch*, *a* is able to access the felicity conditions of the a-proposition, and can convey surprise or confusion at the tension between the a-proposition and p-proposition. This bears similarity to the “Hey, wait a minute” response an addressee might have when failing to accommodate a presupposition, reinforcing the notion that *a* works to manage the common ground.

(21) Context: A says “Sihan’s dog is so cute”

(a) B: *Sihan mei you gou*  
Sihan not have dog  
“Sihan doesn’t have a dog.”

(b) B: *Sihan mei you gou a*  
Sihan not have dog a  
“What? Sihan doesn’t have a dog.”

In response to A’s initial utterance, B had the option to accept the presupposition that Sihan had a dog, but they instead chose to address it directly. Thus, in (21), *a* is used to access A’s presupposition that Sihan has a dog. If *a* were only able to access the a-proposition within the conversation, B would only be able to disagree with the claim “Sihan’s dog is so cute”. However, B is able to access the presupposition of the a-proposition and so we know *a*, like *doch*, must be able to interact with the felicity conditions of the a-proposition.

(22) Context: A is nervously presenting their homemade soup to B.

(a) B: *hao chi*  
good eat  
“This tastes good”

(b) B: *hao chi a*  
good eat a  
“This tastes good, nice job”<sup>1</sup>

---

<sup>1</sup> This utterance could also be interpreted in an exclamatory manner, but we will touch later on the use of *a* after exclamatives. For this section, consider the utterance only as a declarative.

In (22), we revisit the example of tasting soup. In the original example, both interlocutors were biased towards believing the soup would be good because they knew it had been prepared for them by a famous chef. However, when the context is changed to one friend presenting soup to another, this bias does not remain. Presenting homemade food to a friend can be a slightly vulnerable act, so (22b) is a response to the nebulous *a*-proposition that the soup might taste bad. Thus, we see again that *a* is able to interact with a conversational dynamic beyond the specific utterances in a conversation. Furthermore, the use of *doch* as a nod to the common ground as in (19) is consistent with the use of *a*, which conveys a similar sense of politeness in a discourse initial position.

As previously mentioned, expressives have a unique interaction with the common ground, as they convey surprise or emotion, but not necessarily the disagreement of beliefs. Once again, the use of *a* with exclamation marks mirrors the use of *doch* with exclamation marks. By appealing to the felicity conditions of the exclamation mark, the use of *a* adds sincerity to an exclamation mark utterance, in spite of its surprising content.

Through the lenses of exclamation marks and basic declaratives, *a* and *doch* seem almost identical in their use next to declaratives. However, it is when we consider cases of context shift and imperatives that the two particles begin to diverge.

## 7 Context shift with *a*

In a simple sentence, there is a subject, a verb, and perhaps an object. A sentence such as “This book is fascinating” is unequivocally a reflection of the speaker’s beliefs, and not attributed to anyone else. But if this sentence were to be in a larger sentence, for instance “Sally told me this book is fascinating”, would the assessment of the book be indexed to the narrator or

to Sally? In this case, the “fascinating” judgement is able to undergo context shifting and remains indexed to Sally, rather than the narrator. But even within the language of English, this changes from construction to construction. A descriptor such as “too hot” can undergo context shifting in the utterance “She says the tea is too hot”. But when we use the phrase “so hot” instead, we see that “She says the tea is so hot” is infelicitous, and thus “so” is unable to undergo this context shift. Döring’s (2013) analysis shows that *doch* is able to undergo context shifting in the forms of reported speech, embedding under attitude verbs, free indirect discourse, questions, and evidential constructions. In these situations, *doch* occurs within the utterance, but the speaker-oriented meaning that refers to a felicity condition violation is shifted to somebody other than the person who is producing the utterance.

### 7.1 Reported speech

The case of reported speech is one in which one person conveys the speech of another, not through quotations, but rather through paraphrasing. In (23), we see that *doch* is able to remain indexed to the intermediate speaker, rather than to the current speaker. But although *doch* is able to retain the perspective of the intermediate speaker, *a* is unable to do so in (23).

(23) *Der kleine Saal platzt aus allen Nähten; [...] und noch mitten in Boudrillards Vortrag ruft jemand verzweifelt, das doch in Raum 104 mehr Platz sei*

“The small hall bursts at the seams; [...] and in the middle of Baudrillard’s Lecture, somebody shouted that there was more free space in room 104”

(Döring 2013:105:16)

(24) Context: One class is making excessive noise next door to another class, so A is sent as a messenger to ask them to be quiet.

A: *laoshi shuo anjing a!*

teacher said be quiet a!

“The teacher said to be quiet!”

# “The teacher said to ‘be quiet a’”

In (23), the use of *doch* is attributed to the person who was shouting, wondering why everybody would cram into room 104 if there was space elsewhere. However, in (24) it is not possible for the meaning of *a* to be indexed to the teacher. For *a* to be felicitous and attributed to the teacher's perspective, the message must be in the form of a quotative, not paraphrased reported speech. In any other case, the use of *a* would have to be attributed to the messenger, not the teacher.

Referencing the examples in English, we see that the use of “too” would remain both felicitous and attributed to the teacher whether it was the teacher saying, “That class is too loud” or the student messenger saying, “The teacher says you are being too loud”. On the other hand, the teacher is able to say “That class is so loud”, but when reported by the messenger, “The teacher says you are being so loud” is not as felicitous.

## 7.2 Embedding under attitude verbs

In a similar manner, the phenomenon of embedding under attitude verbs allows the speaker to reference the beliefs of another person without citing a specific speech act. These belief clauses can be embedded under verbs of claiming, reporting, believing, or more, and once again *doch* is able to undergo a context shift and remain indexed to the intermediate speaker, while *a* is not.

(25) *Max schüttelte den Kopf und dachte bei sich, dass es doch nun wirklich nicht das erste Treffen war, das Paul absagte*  
 “Max shook his head and thought to himself that it indeed was not the first meeting Paul cancelled.”

(Döring 2013:109:22)

(26) Context: Paul is bothered that Max would assume this  
*Max shuo Marjorie hui qu shichang, keshi Paul zhidao ta meiyou shijian a*  
 “Max said Marjorie could go to the market, but Paul knew she didn't have time a”  
 #Paul is thinking “she didn't have time a”

In (25), we see that *doch* is still indicative of Max's reflection about Paul, even though it is being described by a third person. In the similar situation of (26), we suppose that Paul would produce an utterance to the effect of "Marjorie doesn't have time a", communicating Max's a-proposition was inconsistent with some information in the common ground. Embedding this interaction in a third person report (26b), we are unable to retain the meaning that Paul is using the meaning of *a* to communicate, and instead find that the use of *a* must be attributed to the narrator. In fact, *a* is unable even to access the p-proposition "Marjorie doesn't have the time", and instead must refer to the entire utterance in (26a).

### 7.3 Free Indirect Discourse

The use of free indirect discourse describes the situations in which one person is narrating the thoughts of another, typically in the case of narrated literature. In this situation, the narrator is freely able to describe the beliefs of their subject, without needing to report speech. From (25), we have already seen that *doch* is able to undergo the context shift in this scenario. But even with this level of narrative freedom, *a* is still unable to undergo context shift in this situation. Returning to the example of A forgetting that they had given B the *Zauberberg* (18), let us narrate the scene in Mandarin.

(27) *Steve bugan xiangxin Paul wen de wenti. Paul liang nian qian gei ta zhe zhong*

*fangzi a*

"Steve could not believe Paul's question. Paul had given the building to him two years ago a."

Even though the utterance "Paul gave me the building two years ago a" is felicitous when spoken from Steve's perspective, the use of *a* can no longer be attributed to Steve when his

response is put in the context of free indirect discourse. Once again, the presupposition failure use of *a* can only be attributed to the speaker of the sentence-- in this case, the narrator.

#### 7.4 Evidential constructions

Finally, the use of evidential constructions is a method of conveying information from a particular source without directly quoting the source or using verbs of saying. The source is typically included in a separate clause. In this construction, we expect to hear practically verbatim what the source has said. Once again, *doch* successfully undergoes context shift in this situation as in (28), but even with a source mentioned, *a* is unable to survive the context shift in (29).

(28) *Laut Medien ist diese Frage doch längst geklärt.*

“According to the media this question has been answered long ago”

(Döring 2013:116:42)

(29) Context: Tom has just said the apples are sweet

*genju Juliede shuofa, zhege pingguo hao suan a*

According to Julie’s utterance these apple very sour a

According to Julie, the apples are sour a

#Julie is the person expressing the meaning of *a*

The use of *doch* in (28) is attributed to the media, as though the media itself were using *doch* to state that the question had been answered long ago”. And indeed in (29), the embedded utterance of “The apples are sour” is an appropriate p-proposition to respond to Tom’s a-proposition, and the use of *a* refers to the tension that Julie feels between the two propositions. When a third party references Julie’s opinion in the form of an evidential, the p-proposition must encompass the entirety of (29a), rather than just the second clause.

#### 7.5 Discussion

With these examples, we see that *a* is unable to be used in a context shifting scenario, and can only be attributed to the speaker who is actually producing the utterance. Given its similarity

to *doch*, this might be surprising, but *a* is a sentence final particle, whereas *doch* is not. Because *doch* is able to stay with the clause in which it is embedded, it is understandable that an indexical shift remains clear even with multiple layers of embedding. On the other hand, *a* is always clause final, so without context, it is impossible to know which clause *a* belongs to.

There is, however, one apparent case of context shifting in which *a* is felicitous. In discussing the transferral of an indexical from one speaker to another, Döring posits that the asking of questions underlyingly involves a context shift from the speaker to the addressee. Because the speaker is requesting an answer from the addressee, they must pose the question in a way that will activate the intended response in the speaker's mind. We see this in (30), where the speaker poses a question using *doch* that serves to activate the contents of the question in the addressee's mind.

(30) *Du has doch den Herd ausgemacht?*

“You turned off the stove, right?”

(Döring 2013:113:35)

(31) *nide bingqiling hao chi a?*

your ice cream good eat a?

“Does your ice cream taste good?”

As we see in (31), *a* can also be felicitously used after a question. In this case, the *a* is used to create a confirmation question out of a declarative sentence, and appears to be the only felicitous case of context shifting for *a*. From here, we must further consider the construction of confirmation questions with *a*. To do this, let us first consider the use of *a* with commands.

## 8 The To Do List

The derivational interpretation of imperatives has previously been realized as affecting the To Do List of various conversational participants (Portner 2004). Although each interlocutor

has a unique To Do List, the contents of these To Do Lists are accessible to other interlocutors and subject to conversational change in the same manner as the common ground. Thus, the speech act of an imperative has the effect of adding a property to a particular interlocutor's To Do List, with the intention that they will work to create a world in which the property applies to them. For example, the imperative “close the door” directed at a person  $x$  adds the following property to  $x$ 's To Do List: *has closed the door(x)*. Then, it is  $x$ 's responsibility to make this property true, by obeying the imperative and closing the door.

In a distribution that echoes that of *doch*, *a* occurs after a command when the addressee is acting in a way that the speaker did not expect, and the speaker wishes to reiterate their original request. Often this occurs because the speaker has already communicated their imperative once to no avail, as in (32).

(32) Context: A has asked B to come over and B has ignored the request

(a) A: *ni kan*  
you look  
“Look ”

(b) A: *ni kan a*  
you look a  
“Come on, look outside”

(Lu 2005, 83:11)

Here, (32a) is sufficient as a second assertion of A's imperative with no added information. However, the use of *a* in (32b) responds to B's previous rejection of the command, and reaffirms A's intent despite B's disinterest. In this situation, B has rejected an addition to their To Do List, and so (32b) not only adds this property to B's To Do List for a second time, but also reorders the set of worlds such that worlds in which B does not have this task on their To Do List are ranked lower.

In light of this example, let us consider the class of commands as a whole. Searle's second preparatory condition of a request is that it is not obvious that the speaker and hearer that

the hearer does what is requested of him in a normal course of events. In other words, a request is appropriate only when its completion is not the natural continuation of the most salient world. We know *a* is felicitous when the addressee's To Do List does not already prioritize the speaker's request, and so by this logic we are able to account for the fact that *a* is uniformly able to compose with commands that are definitively low on the addressee's To Do List.

### 8.1 Questions and the To Do List

With this paradigm in place, we are able to revisit the issue of using *a* with questions. Previously, we discussed that Döring's analysis of *doch* in questions showed an ability to ask the question from the speaker's perspective and retain that indexicality even after undergoing a context shift. However, we saw that *a* was not able to retain its original indexicality under other types of context shifts, so why would it work with questions?

When *a* is appended to a question, its effect on the utterance is not necessarily in activating a proposition in the addressee's mind. Consider the two questions in (33).

(33a) *shei yao bang wo zuo wanfan?*  
 who will help me make dinner  
 "Who will help me make dinner?"

(33b) *shei yao bang wo zuo wanfan a?*  
 who will help me make dinner a  
 "Who's going to help me make dinner?"

Although the variations are slight, these utterances are felicitous in slightly different contexts. (33a) evokes a neutral context, perhaps where the cook is planning a day in advance and is idly wondering if somebody will help them. (33b), on the other hand, evokes a more charged situation, where the cook suddenly needs help mid-preparation or is upset about the lack of help. In situations where (33b) is felicitous, the speaker needs a response more urgently than

when (33a) is used. Thus, *a* is not necessarily enforcing the communicating a context shift, but rather asserting the speaker's need for an answer.

The traditional interpretation of questions is that they push a question set of potential propositions to the common ground, with the expectation that the addressee will return the most felicitous proposition based on their knowledge (Karttunen 1977). Thus referring again to the urgency in (33b), the task of responding to the speaker's question is pushed to the addressee's To Do List in a similar manner to commands. As such, we can extend the felicity of *a* when used with imperatives to explain why *a* is felicitous with questions even when it cannot undergo other types of context shifting.

## 9 Conclusion

At this point, we have considered *a* as it composes with several different types of speech acts, and have considered closely the meaning that it contributes when it is used. Although the specific way that *a* interacts with each speech act is different, it retains some core meaning throughout that allows us to consider it as a speech act operator, in a similar way to the Cantonese particle *ho*. Whereas *ho* consistently added the suggestion that the given speech act was undefined in the current conversational context, we see that *a* consistently has the role of managing the common ground in which it is spoken. This function bears remarkable similarity to the German particle *doch*, even in the effects they have of politeness or consideration. As such, we propose that the definition of *a* (34) echoes the definition of *doch* created by Repp (20). For this definition, we extend the meaning of *p*, from exclusively propositions to be able to include a profile of the common ground that acknowledges the To Do List as well as propositions.

$$(34) [[a]] = \lambda p_{\langle s,t \rangle} \cdot p$$

Discourse condition for utterance  $u_n$  with the meaning  $[[a]](p)$ :

- (i) Common ground entails or implicates  $p$
- (ii) The previous utterance does not entail, presuppose, or implicate  $p$
- (iii) The previous utterance defeasibly entails  $r$
- (iv)  $p$  defeasibly entails  $\neg r$

In studying the divergence between  $a$  and *doch*, we must once again consider  $a$ 's inability to undergo context shift, previously noted as relating to its status as a sentence final particle. However, we see that the ability to undergo context shift is not directly addressed in the definition. Thus, we conclude that  $a$  and *doch* contribute a similar compositional function to the utterances in which they appear, but differ in that  $a$  is necessarily speaker-oriented. In the case of declaratives, it expresses a tension between the speaker's proposition and the common ground into which it is spoken. With exclamatives, on the other hand, it directly interacts with the felicity conditions of the utterance, and reassures the speaker of its sincerity. In both of these cases, the speaker is able to acknowledge the expectations of the addressee before disagreeing, and this conversational gesture accounts for the emphasis or responsiveness that some speakers attribute to  $a$ . With imperatives and interrogatives, on the other hand,  $a$  affects the initial utterance through the To Do List, where it manages the ordering of various requests in relation to the one proposed by the speaker. Overall, this ability to manage the common ground provides an extra means of conversational control for the speaker, and reveals  $a$ 's commonplace yet powerful role in conveying speaker-oriented information.

**Works Cited**

- Beyssade, Claire, and Jean-Marie Marandin. (2006). "The speech act assignment problem revisited: Disentangling speaker's commitment from speaker's call on addressee." *Empirical issues in syntax and semantics* 6.37-68.
- Chao, Yuan Ren. (1968). *A Grammar of Spoken Chinese*. University of California Press.
- Döring, Sophia. (2013). "Modal particles and context shift." *Beyond expressives: Explorations in use-conditional meaning*. 95-123. Brill.
- Egg, Markus. (2013). "Discourse particles, common ground, and felicity conditions." *Beyond expressives: Explorations in use-conditional meaning*. 125-149. Brill.
- Fang, Hongmei & Kees Hengeveld. fc. Sentence Final Particles in Mandarin. *Amsterdam Center for Language and Communication*.
- Farkas, Donka F., and Floris Roelofsen. (2019) "Polarity particles revisited." *Semantics and Pragmatics* 12:15.
- Frana, Ilaria & Kyle Rawlins. (2019). Attitudes in discourse: Italian polar questions and the particle *mica*. *Semantics and Pragmatics* 12(16). 1-48. <https://doi.org/10.3765/sp.12.16>.
- Han, Yang (1988). A Pragmatic Study of Some Sentence-final and Past-Verbal Particles in Mandarin Chinese. Ph.D. Dissertation. University of York.
- Jin, Zhiyan (2011). 现代汉语句末语气词意义研究 Xiàndài Hànyǔ Jù mò Yǔqì Cí Yìyì Yánjiū [A study on the meaning of modal particle in sentence-final in Modern Chinese]. Shanghai: Fudan University.

Karttunen, Lauri. (1977). "Syntax and semantics of questions." *Linguistics and philosophy* 1.1: 3-44.

Karttunen, L., & Peters, S. (1979). Conventional Implicature. In *Presupposition* (pp. 1-56). Brill.

Law, Jess H-K., Haoze Li, and Diti Bhadra. (2018). "Questioning speech acts." *Proceedings of Sinn und Bedeutung*. Vol. 22. No. 2.

Li, Charles. N. & Sandra. A. Thompson (1989). *Mandarin Chinese: A Functional Reference Grammar*. Berkeley: University of California Press.

Lu, W-Y. (2005). Sentence-final Particles as Attitude Markers in Mandarin Chinese. Urbana: University of Illinois at Urbana-Champaign. Ph. D dissertation.

Michaelis, Laura A. 2001. Exclamative Constructions. In M. Haspelmath, E. König, W. Österreicher and W. Raible, eds., *Language Universals and Language Typology: An International Handbook*. Berlin: Walter de Gruyter. 1038-1050.

Portner, Paul. (2004) "The semantics of imperatives within a theory of clause types." *Semantics and linguistic theory*. Vol. 14.

Potts, C. (2007). Into the conventional-implicature dimension. *Philosophy compass*, 2(4), 665-679.

Repp, Sophie. (2013). "Common ground management: Modal particles, illocutionary negation and verum." *Beyond expressives: Explorations in use-conditional meaning*. 231-274. Brill.

Zanuttini, Raffaella, and Paul Portner. (2003). "Exclamative clauses: At the syntax-semantics interface." *Language*: 39-81.

Zhou, Jiayun. (2018). *Function and Meaning of Modal Particle A*. Leiden University: The Netherlands. MA Thesis.