Kěài ‘cute’ in Mandarin

Its meanings, uses, and changes
in Internet communication

[中文「可愛」的語意、用法及其在網路通訊
的改變]

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The word *kěài* in Mandarin is semantically rich. However, little research has been devoted to examining its meanings and uses, let alone possible innovative usage following the popularity of social media platforms. Hence, this study aims to examine in detail (a) the descriptive range, meanings and functions of *kěài*, and (b) possible changes of its usage in Internet communication. To achieve these goals, a total of 800 tokens of *kěài* were collected and analyzed—400 from the Sinica Corpus and 400 from two widely used social media platforms, representing the data before and after social media platforms became popular. Our major findings are: First, although human beings and non-human objects are what *kěài* mostly describes, its descriptive range is shifting to more abstract entities for much higher percentages of Abstract Entity and Event are found on the social media platforms. Second, the influence of age and gender factors has weakened. Third, although most of the non-human cases are described as *kěài* due to their external features, most of the human cases in the Sinica Corpus are called *kěài* for their external features while on the social media platforms, for their non-external features. Fourth, *kěài* conveys positive meanings most of the time, and the three most frequently found meanings of *kěài* in the Sinica Corpus are different from those on the social media platforms. Fifth, *kěài* is found to serve as hedges in both sets of data, but it is also used to show surprise on the social media platforms.

Keywords: *kěài* ‘cute’, descriptive range, meaning, function, social media platform, language change

關鍵詞：「可愛」、描述範圍、語意、用法、社交媒體平台、語言變化

1. Introduction

Contemporary Japan is usually considered the land of cuteness for her flourishing *kawaii* culture. In modern Taiwanese society, the Mandarin cuteness term *kěài* is also commonly heard and frequently used. *Kěài*, literally meaning ‘lovable’ or ‘adorable’, is usually translated into *cute* in English. However, McVeigh (1996:293) suggests that “cuteness is a concept of great cultural ubiquity” and can be used to characterize not only the external features of people and things but also human behavior and attitudes. According to McVeigh, almost everything can be called cute. If the notion for cuteness is so rich, the terms for cuteness, such as *kěài* in Mandarin, may likewise be rich in meaning. In fact, Farris (1988) points out that even though the word *kěài* is commonly defined as lovely or adorable, it has a broader descriptive range than the English word *cute*, suggesting that *kěài* is semantically rich. However, previous studies on the phenomenon of cuteness, such as McVeigh (1996), Chuang (2005) and Asano-Cavanagh (2014), mostly examine cuteness from the perspective of material culture and anthropology, focusing on the external features of objects called cute or its relation to gender. The semantics and pragmatic functions that words of cuteness denote in various social interactions have been largely neglected. Besides, although there is literature (e.g., Asano-Cavanagh 2014) explicating the semantics of the cuteness term *kawaii* in Japanese and Yamauchi (2011) conducts a contrastive study comparing Chinese *kěài* and Japanese *kawaii*, to our knowledge no research has been devoted to thoroughly examining the descriptive range, meanings and pragmatic functions of *kěài* in Mandarin. Therefore, the first purpose of this study is to detailedly examine the descriptive range, meanings and pragmatic functions of *kěài*.

In addition, with the popularity of the Internet, text messaging and interacting on social media platforms have become the dominant daily mode of communication. According to a survey done by the Taiwan Network Information Center in 2017, 78.8% of the participants, who were 12 years old or older, were Internet users and 95.3% of these netizens used social networking services or instant messaging services. This way of communication is different from how people communicated with each other a decade or two ago. It has been observed by the authors that the word *kěài* has become more widely used and gained new meanings and usages in recent years. Hence, the second purpose of this study is to investigate whether there are differences in using *kěài* in different times—the times before and after the invention and popularity of social media platforms.

To achieve the two aforementioned purposes, two sets of data were collected for this study, from the Sinica Corpus and from two of the most widely used social media platforms, Facebook and Dcard, each consisting of 400 tokens of *kěài*. The

data from the Sinica Corpus, which contains texts created between 1981 and 2007, represents the data before the invention and popularity of social media platforms; the data from Facebook and Dcard gives us texts created after the popularity of social media platforms. With these two sets of data, the descriptive range, meanings and pragmatic functions of *kě̀ai* and possible changes of the usage of *kě̀ai* could be investigated.

This paper is organized as follows. Section 2 reviews some studies of *kawaii* in Japanese and *kě̀ai* in Mandarin. Section 3 reports how the data used in this study was collected. Section 4 presents the analysis framework of the descriptive range of *kě̀ai*, including the objects and properties that *kě̀ai* describes, along with the results of data analysis and the discussion. A detailed analysis of the meanings and pragmatic functions of *kě̀ai* is given in Section 5, and Section 6 summarizes the findings of this study and makes concluding remarks.

2. Literature review

In Section 2.1, we first review three studies on the cuteness word *kawaii* in Japanese for the cuteness culture is more highlighted in Japan than in other countries and the findings from these studies are the basis in analyzing *kě̀ai* in this study. In Section 2.2, two studies related to *kě̀ai* in Mandarin are discussed.

2.1 Studies of *kawaii* in Japanese

There are a large number of studies about the *kawaii* culture in Japan and around the world. In this section, we review three studies which are considered most relevant to our study, namely McVeigh (1996), Yomota (2006) and Asano-Cavanagh (2014). These three studies discuss cuteness and Japanese *kawaii* from different perspectives.

McVeigh (1996) analyzes the phenomenon of cuteness in Japanese society from an anthropological perspective. The aspect of McVeigh’s findings related to this study is that cuteness is a versatile concept and has a broad descriptive range, including inanimate objects such as toys and small things, human beings such as children and young women, and even people’s behavior and attitudes. Although McVeigh points out why the nature of cuteness is ambiguous and the various things that can be described as cute, he does not classify the objects and the features described as cute in a systematic way. In fact, he mixes external features, such as small and young, and behavioral properties and attitudes, with objects or entities, such as children and toys. That is, in McVeigh’s study, the descriptive range of cuteness is not clearly defined.

In his book ‘*Kawaii*’ *ron*, Yomota (2006) rigorously discusses the phenomenon of *kawaii* and analyzes its features. Using questionnaires with open questions, Yomota examines people’s thoughts and attitudes toward the word *kawaii* from two aspects: (a) situations described as *kawaii*, and (b) the antonyms and the synonyms of *kawaii*. Yomota concludes that it seems difficult to define the meaning of *kawaii* since it has multiple features, and that *kawaii* may not refer to specific items but rather to a kind of fictional state within relationships. Since it is hard to capture the meaning of the semantically rich word *kawaii*, Yomota analyzes *kawaii*’s synonyms and antonyms instead of sorting out what features may constitute *kawaii*. When Yomota contrasts *utsukushii* ‘beautiful’ with *kawaii*, the meaning of *kawaii* becomes clearer. According to Yomota, *utsukushii* incorporates features such as flawless and perfect while the features of *kawaii* are imperfect and immature. Yomota’s findings about the features of *kawaii* may have important implications for analyzing the semantics of *kèdài* in Mandarin.

In order to capture the exact meaning of *kawaii*, Asano-Cavanagh (2014) adopts the framework of the natural semantic metalanguage (NSM) approach, an approach proposed by Wierzbicka (1991) to explicate complicated meanings of words in different languages by means of exact paraphrases composed of words simpler than the original ones. Asano-Cavanagh points out that in terms of external features to be considered *kawaii*, an object must be small, delicate and perhaps even fragile. She also suggests that *kawaii* items can evoke strong positive feelings and a person’s wish to possess the items. In addition, Asano-Cavanagh specifies that *kawaii* can also be used to describe something which is special and unique. Most importantly, Asano-Cavanagh (2014: 352) suggests that the core meaning of *kawaii* lies in: “when people see this thing, they can’t not feel something very good, like people often can’t not feel something very good when they see a small child.” In other words, when people see a *kawaii* object, they experience a kind of uncontrollable affection towards it, and this is the same as how they feel when they see a small adorable child. Since *kawaii* is closely associated with the notion of children, it is “not something artificial, but it has a natural quality to be adored like an innocent child” (Asano-Cavanagh 2014: 349). Asano-Cavanagh has paraphrased the meanings of *kawaii* in a clear and understandable way; however, most of her explanations regarding *kawaii* are about the external features of objects and not about people’s behavior or attitudes.

In sum, according to McVeigh (1996), the concept of cuteness is ambiguous and cuteness can be used to describe not only the appearance of things and people but also people’s attitudes and behavior. Yomota (2006) and Asano-Cavanagh (2014) suggest that the properties which constitute *kawaii* include features such as imperfect and immature, along with the quality of “being like a child”. These

properties are seen as the most important elements for something or someone described as *kawaii* and may be helpful to us when analyzing the meaning of *kě'ài*.

2.2 Studies of *kě'ài* in Mandarin

In this section, two of the few studies related to *kě'ài* in Mandarin are reviewed, namely Farris (1988) and Yamauchi (2011).

Farris (1988) suggests that *kě'ài* is covertly marked as feminine and that even though the word is commonly defined as 'adorable' or 'lovable', it in fact has a broader descriptive range than its English gloss. According to Farris (1988: 299), *kě'ài* "seems to be appropriate to describe anything that is diminutive, the relative size alone apparently taking on endearing connotations"; hence, children, insects, small animals, and small inanimate objects are considered *kě'ài* by Farris. While children of both genders are often described as *kě'ài*, Farris asserts that *kě'ài* becomes covertly marked as feminine in early adolescence and teenage boys are no longer described in this way; however, young unmarried women are often described as *kě'ài*. That is, according to Farris (1988), *kě'ài* in Mandarin bears the semantic features <small>, <child> and <feminine> at a covert level.

Yamauchi (2011) conducts a contrastive study on Mandarin *kě'ài* and Japanese *kawaii*. She finds that *kě'ài* was originally formed through compounding the auxiliary *kě* 'can' with the verb *ài* 'love'; however, she asserts that since *kě* and *ài* are often used together as an adjective, the meaning of *kě* has been grammaticalized and the root *ài* represents its basic meaning instead. Yamauchi also finds eleven different meanings of *kě'ài* in the data retrieved from the CCL Corpus (a corpus built by the Center for Chinese Linguistics at Peking University) ranging from 'adorable', 'satisfying', 'praiseworthy', to 'heartwarming', and 'sentimentally attached'. Yamauchi suggests that *kě'ài* has the same characteristics as *ài* and the descriptive range of *kě'ài* should be as broad as *ài* since *ài* is considered the foundation of morality and polity in Chinese society. Using the data from the CCL Corpus, Yamauchi categorizes the objects that *kě'ài* describes into eleven kinds: (1) the appearance, behavior, and personality of children, (2) the appearance, behavior, and personality of those who are not children (e.g., young women and men, elder people, parents, etc.), (3) small things or images, (4) artworks or art performances (e.g., movies, calligraphy, paintings), (5) the name of articles, people, things, or theories, (6) animals, (7) plants, (8) events, (9) views and things in nature, (10) motherland, cities, and home, and (11) precious things (e.g., life and fortune). However, Yamauchi finds that *kawaii* in Japanese is used mostly for the appearance of children, women and small things. She asserts that *kawaii* may be more limited than *kě'ài* in its descriptive range and its meaning may be rela-

tively simple since external features are the main focus of what *kawaii* is used to describe.

Although Yamauchi (2011) has investigated the semantics of *kěài* and categorized the objects that *kěài* describes into eleven kinds, there are problems with her categorization. First, like McVeigh (1996), Yamauchi mixes objects with features. For example, appearance, behavior and personality are features while animals and plants are objects, but Yamauchi considers them as categories that can be compared with each other. Second, Yamauchi mixes examples of a specific category with categories. For example, one of Yamauchi's categories is "motherland, cities, and home", which in fact are examples of the more general category "space". In other words, Yamauchi's categorization is not systematic enough. As for pragmatic functions, though Yamauchi has pointed out that *kěài* can be used to describe a broader range of things in the world than *kawaii*, little has been done to examine the pragmatic function of *kěài* when it is used in different contexts. The inadequacies found in Yamauchi (2011) indicate that the semantics and pragmatics of *kěài* in Mandarin await to be further explored. Besides, the data that Yamauchi uses is from the CCL Corpus, which contains language used in China only. That is to say, the usages of *kěài* in Taiwanese Mandarin and in this Internet era have not yet been examined.

In spite of their inadequacies and limits, Farris's (1988) and Yamauchi's (2011) studies give us some fundamental ideas about the meanings of *kawaii* in Japanese and *kěài* in Mandarin, which will be helpful to us in analyzing the descriptive range, semantics, and pragmatic functions of *kěài* used in Taiwan before and after the invention and popularity of social media platforms.

3. Data collection

As mentioned in Section 1, to achieve the two purposes of this study—to detailedly examine the descriptive range, meanings and pragmatic functions of *kěài* in Mandarin and to investigate possible changes in the usage of *kěài* before and after the invention and popularity of social media platforms, two sets of data were collected—400 tokens from the Sinica Corpus and 400 tokens from two widely used social media platforms, Facebook and Dcard. The data from the Sinica Corpus, which contains texts created between 1981 and 2007, represents the data before the invention and popularity of social media platforms; the data from Facebook and Dcard gives us texts created after the popularity of social media platforms. The year 2007 was selected as the demarcation line partly because the latest articles included in the Sinica Corpus were created in 2007 and partly because in September 2006, Facebook, the most popular social media platform in the world,

expanded its registration to anyone aged 13 or older and the number of users has been rapidly increasing ever since.¹

The first 400 tokens of *kě̀ài* were collected from the Sinica Corpus. The Sinica Corpus, consisting of more than 10 million word tokens (17 million character tokens) in the current version (Sinica Corpus 4.0), is the first Balanced Modern Chinese Corpus with texts collected from articles of different topic areas created between 1981 and 2007. To find as many usages of *kě̀ài* as possible, we simply entered *kě̀ài* as the keyword in the search engine of the Sinica Corpus with no syntactic category nor any characteristics selected. In total, 670 tokens of *kě̀ài* were retrieved, and the first 400 were used for this study.

The other 400 tokens of *kě̀ài* were collected from social media platforms, which include websites and applications dedicated to forums, blogging and social networking. Facebook and Dcard were selected as the data sources because they are two of the most popular social media platforms in Taiwan.

Facebook, an online social media platform, was launched in 2004. After expanding registration to anyone aged 13 or older in September, 2006, the number of subscribers increased rapidly. According to Internet World Stats, there were more than 18 million Facebook subscribers in Taiwan in 2018. Facebook is not only a website for the general public to share feelings, opinions, and jokes with friends but it also gives organizations and companies a place to create their Fan or Business Pages to report the news, promote products, and interact with netizens. In other words, Facebook has become a social media platform where users can not only exchange ideas with their friends but also post updates, comment on news, view products and swap ideas. According to Statista, Facebook had more than 2.2 billion monthly active users worldwide in 2018. Moreover, according to a survey conducted in August 2016 and reported on the Statistic Brain website, there were one million links shared, two million friends requested, and three million messages sent every 20 minutes on Facebook. These statistics suggest that Facebook has become the most dominant and influential social media platform. Since this platform generates so many utterances every day worldwide, it is surely a suitable corpus for linguistic research.

Dcard, founded in December 2011 in Taiwan, is a bulletin board system which provides social networking services targeting Taiwanese college students, although today its members include people other than college students. Dcard has around 200 boards covering a multitude of topics. Once logged in, a user can post,

1. Facebook had 12 million subscribers at the end of 2006; the number of its subscribers had increased to 1.01 billion by September 2012 and 2.7 billion in 2020. (<https://finance.yahoo.com/news/number-active-users-facebook-over-years-214600186--finance.html>; <https://www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/>)

read and comment on articles, and even make friends on the platform. According to a report published in Business Today in April 2020, Dcard has 10,000 posts, 15 million unique visitors, and more than 1.5 billion page views per month. Viewed in this light, analyzing data collected from Dcard may help find out how young people in Taiwan use *kěài* in online communication.

The second set of data of *kěài* was collected from social media platforms—200 tokens from Facebook and 200 from Dcard. All 400 tokens were manually collected through the first author's own personal accounts on Facebook and Dcard. Dcard has a search function which can be used to search for the keyword on all the boards and articles posted by all members. Therefore, we entered *kěài* as the keyword in the search engine of Dcard to retrieve the data needed. However, the search engine of Facebook is quite different and there is no way to search for the keyword *kěài* by using the Facebook search function. Therefore, in order to collect data from Facebook, tokens of *kěài* were retrieved by browsing articles and comments on Fan/Business Pages and news feeds of friends and groups posted on the first author's own Facebook account in recent years. Once the keyword *kěài* was found in an article or comment on a Fan or Business Page, auction group, advertisement, news feed of friends, etc., it was recorded and included in the data for this study. The data was mostly collected from Fan/Business Pages in news media, such as ETtoday, NOWnews, Anue (cnYES) and Storm Media Group. In addition, in order to make sure that the retrieved data was truly Taiwanese Mandarin, only those tokens written in traditional Chinese characters were included.

4. Descriptive range of *kěài*

This section presents the analysis of the descriptive range of *kěài*, including objects and properties that *kěài* describes, based on the data collected from the Sinica Corpus and the social media platforms, along with a detailed discussion. Section 4.1 presents the framework of analysis of *kěài*, namely the classification criteria of the descriptive range of *kěài* based on the review in Section 2. Then, the results of the analysis and a discussion of the descriptive range of *kěài* found in the Sinica Corpus and on the social media platforms are given in Section 4.2.

4.1 The classification criteria of *kěài*-objects and *kěài*-properties

This section introduces the framework used to classify the objects and properties that *kěài* describes (hereafter referred to as *kěài*-objects and *kěài*-properties respectively).

According to Farris (1988), McVeigh (1996), Yomota (2006), Yamauchi (2011), and Asano-Cavanagh (2014), reviewed in Section 2, words of cuteness such as *kawaii* in Japanese and *kě̀ai* in Mandarin can be used to describe almost everything due to the ambiguous nature of cuteness. Farris (1988) suggests that the term *kě̀ai* in Mandarin bears the semantic features <small>, <child> and <feminine> at a covert level since *kě̀ai* is usually used to describe small objects, young women, and something diminutive, such as children. Besides, as discussed in McVeigh (1996), Yomota (2006), and Asano-Cavanagh (2014), things described as *kawaii* possess properties such as small, immature or childlike. In other words, most Chinese and Japanese studies regard “small” and “child” as key elements for things to be called cute. Taking a closer look, we may find that “small” is a property of the appearance or an external feature of cute things while “child” is an object or entity that *kě̀ai* or *kawaii* describes. Hence, in our analysis, the things in the data that *kě̀ai* describes are first categorized into different kinds of “objects” and then the “properties of these objects” described as *kě̀ai* are also classified. “Objects” and “properties” are further divided into subtypes afterwards.

The objects that *kě̀ai* describes are categorized into three main types, which are further divided into subtypes, based on the data retrieved from the Sinica Corpus and the social media platforms. The three main types are: Human, Non-human, and Event.

The category Human is divided into four subtypes—Child, Adult, Human-other, and Human Organization, with cases of personification such as *shítou wángguó de xiǎowáwá* ‘babies in the stone kingdom’ included because they are conceived as humans by the speaker or writer. As previous studies suggest, words of cuteness are mostly used to describe children, implying that age is closely related to what *kě̀ai* can describe. Hence, the subtypes Child and Adult are adopted. Babies, children and teenagers are categorized into Child. The category Adult is further divided into three subtypes: Young, Old, and Adult-other. Young Adult includes people in their twenties; Old Adult refers to people older than sixty, for example, grandmothers and grandfathers, who are generally over sixty years old; Adult-other refers to people aged thirty to sixty and those who are clearly adults without their ages being specified in the context, such as *Lǐ xiānshēng* ‘Mr. Li’ and *Zhāng xiǎojiě* ‘Miss Zhang’. People whose age is not mentioned nor implied in the context are categorized into Human-other. Human Organization refers to an organized group of people with a particular purpose, such as *zhōnggōnghuì* ‘zhōnggōng organization’. Human organizations are included in the Human category because they are composed of human beings and their activities are carried out by human beings. Besides age, gender is also a feature mentioned in previous studies and hence should be a criterion in deciding on what *kě̀ai* can describe. Therefore, except for Human Organization, the categories

Child, Adult, and Human-other are further divided into subtypes based on gender, namely Male, Female, and Gender-unspecified. The reason why we classify the Human category in detail is because we would like to find out whether *kě'ài* usually describes young women and children as suggested in previous literature or whether its usage has been extended to cover men and older people.

The Non-human category is divided into five subtypes, namely Animate Object, Inanimate Object, Time, Space, and Abstract Entity. Animate Object includes creatures that are alive, such as animals. Inanimate Object includes lifeless or material things, such as toys; however, besides visible material things, things that can be heard (e.g., sounds and music) or touched are also categorized into this subtype for the senses of sight, hearing, and touch are what our body uses to perceive external stimuli. Space and Time are relatively abstract in comparison with Animate Object and Inanimate Object; however, they can still be perceived by our senses. Time includes daytime, nighttime, the seasons, etc., and Space includes places, such as campuses, towns, and cities such as Taipei. The last subtype under the Non-human category is Abstract Entity, referring to abstract things such as knowledge and fate, which are intangible and cannot be perceived by our senses.

In addition to human beings and non-human objects, *kě'ài* can also be used to describe a whole event or situation. Thus, the third main type Event is needed to analyze the descriptive range of *kě'ài* in Mandarin.

The classification of the objects that *kě'ài* describes is summarized as Figure 1.

What *kě'ài* mostly describes however is not an object itself but some of its properties. McVeigh (1996) suggests that cuteness can characterize the external features of people and things as well as human behavior and attitudes. Based on this idea, the properties or features of Human Being and Non-human Object that *kě'ài* can describe are divided into two kinds: external features and non-external features. External features refer to an object's appearance, such as its size, color, shape, texture, and design. Non-external features consist of humans' and animate objects' deportment, including their behavior, manner, and personality, and some things' atmosphere as a whole. Note that Abstract Entity under Non-human category cannot be perceived by our senses and their properties thus cannot be examined. Sounds under Inanimate Object are not subject to property analysis either because it is hard to judge what kind of properties the sound has based on the retrieved text, which is in written form. Although some aspects of sound can be described in words, such as the lyrics or melody of a song, no such instances are found in our data. Figure 2 below displays the properties of the objects that *kě'ài* describes.

To clarify the classification, the types and subtypes of *kě'ài*-objects and *kě'ài*-properties discussed above are illustrated with examples below. Examples (1)

Figure 1. Classification of *kěài*-objects

Figure 2. Classification of *kěài*-properties

and (2) are examples of Human, (3) and (4) examples of Non-human, and (5) an example of Event.

In (1), the object that *kěài* describes is children with smiling faces and therefore categorized into Child. The reason why these children are described as *kěài* is due to their external features, namely their smiling faces. Since the context does

not mention the gender of these children, they are then classified into the category Gender-unspecified. In (2), the object that *kěài* describes is *dàgē* ‘big brother’, a term usually used to call a mature male adult with no specific age range, and therefore this example is classified into the category of Human-Adult-other-Male. The phrase *chìzìzhīxīn* ‘being like a kid at heart’ tells us that the property *kěài* describes here is the big brother’s manner and personality rather than his appearance; hence, the property described as *kěài* is categorized into Humans’ deportment, which is a non-external feature.

(1) **Object: Human-Child-Gender-unspecified; Property: External feature**

... Cǐdì de xiǎohái dōu jùyǒu kěài-de xiàoróng ...

this.place DE² child all have KEAI-DE smile

‘... The children in this place all have sweet smiles...’ (Sinica Corpus)

(2) **Object: Human-Adult-other-Male; Property: Non-external feature**

“Hāi, dàgē.” ... “Nǐ hái shì zhème kěài bǎochí-zhe chìzìzhīxīn.”

hi big.brother you still very KEAI keep-DUR kid.at.heart

“Hi! Big brother,” ... “You are still so pure, a kid at heart.” (Sinica Corpus)

Different from the first two examples, the object that *kěài* describes in (3) is Time- *qiūtiān* ‘autumn’. Judging from the context, the reason why *qiūtiān* is described as *kěài* is because of the pleasant atmosphere that it brings to people. Hence, the property of this example is categorized into atmosphere as a whole, which is a non-external feature. Besides, Time can also be described as *kěài* due to its external features; for example, *qīngqīngde shān, lùlùde shuǐ, kěàide chūntiān jǐngsè zhēnměi* ‘Green mountains and green water, what an attractive spring scene.’ In (4), the object that *kěài* describes is *xuéwèn* ‘knowledge’, which is abstract and therefore categorized into Abstract Entity. Since *xuéwèn* does not have a physical or concrete existence but exists as an idea, its properties cannot be perceived nor examined and thus are recorded as not applicable.

(3) **Object: Non-human-Time; Property: Non-external feature**

Chóngē de yīnyuèhuì kāishǐ le, yínghuǒchóng wèi chóngē de yīnyuèhuì

worm DE concert start PFV firefly for worm DE concert

bùzhì le měilì de dēngjǐng, qiūtiān zhēn kěài.

decorate PFV pretty DE light.scene autumn true KEAI

‘The worms’ concert has started. Fireflies decorated beautiful scenes for the worms’ concert. Autumn is truly pleasant.’ (Sinica Corpus)

(4) **Object: Non-human–Abstract Entity; Property: Not applicable**

Xuéwèn zhēn shì kè'ài a, tā xiàng shì yìnzhāng gài zài nǐ rénshēn de
 knowledge true be KEAI DM it like be signet stamp on you life DE
 zhīpiào shàng, dào shíhòu jiù kěyǐ tiling.
 check above arrive time then can withdraw

'Knowledge is so praiseworthy; it is just like a signet, stamping on the check of your life. When the right time comes, you can withdraw it from your account.'

(Sinica Corpus)

Example (5) is an example of the third main type–Event. In this example, there are two instances of *kè'ài* and the second one, in boldface, is the target. Judging from the context, this *kè'ài* is used to describe the unpleasant experience of having a wisdom tooth in the mouth although *zhìchǐ* 'wisdom tooth' is omitted in the sentence *suīrán (zhìchǐ) zhǎng zài zuǐbā lǐmiàn jiù yīdiǎndōubù kè'ài le* 'although having a wisdom tooth in the mouth is not cute at all'. In other words, different from the first four cases, the thing that the second *kè'ài* describes in this example is the whole event–the event of having a wisdom tooth in the mouth, and this event has no property to be examined.

(5) **Object: Event; Property: Not applicable**

Yí wèi zài dāng yáyī de péngyǒu huà de zhìchǐ gē
 one CL PROG work.as dentist DE friend draw DE wisdom.tooth brother
 kè'ài-dào líng rén rěnbúzhù yào fēnxiǎng, suīrán zhǎng zài zuǐbā
 KEAI-till let people can.not.stand will share although grow in mouth
 lǐmiàn jiù yīdiǎndōubù **kè'ài** le.
 inside then not.at.all KEAI DM

'This picture of a wisdom tooth was drawn by a friend of mine who is a dentist and it is so cute that I had to share it with everyone, though it is not praiseworthy at all to have a real wisdom tooth in the mouth.'

(Facebook)

4.2 Results and discussion

Kè'ài-objects and *kè'ài*-properties found in the two sets of data in this study were classified based on the framework discussed in Section 4.1. To avoid subjectivity, during the process of analyzing the two sets of data, each and every token was discussed and double-checked by five people, including the authors, to make sure that the judgment of the descriptive range of each token was correct. The results of the analysis of *kè'ài*-objects and a comparison between the two sets of data in terms of *kè'ài*-objects are presented in Section 4.2.1, and the results of the analysis of *kè'ài*-properties and a comparison between the two sets of data in terms of *kè'ài*-properties are presented in Section 4.2.2.

4.2.1 *Kě̀ài*-objects

Table 1 below displays the objects that *kě̀ài* is used to describe in the Sinica Corpus and on the social media platforms. *Kě̀ài* can be used as an adjective or a noun, or even as a verb or adverb. But over 95% of the tokens of *kě̀ài* are used as an adjective in the data. To be consistent, only the cases of adjective *kě̀ài* are included and those few cases of non-adjective *kě̀ài* are excluded from Table 1. Table 2 summarizes the gender information of human beings described as *kě̀ài* found in the data.

Table 1. *Kě̀ài*-objects in Sinica Corpus and on social media platforms

Type	Sinica Corpus		Total	Social media platform		Total
Human	Child	93 (23.5%)	208 (52.7%)	Child	22 (5.8%)	176 (46.2%)
	Adult	Young 21 (5.3%)		Adult	Young 15 (3.9%)	
		Old 2 (0.5%)			Old 14 (3.7%)	
		Age unspecified 15 (3.8%)			Age unspecified 19 (5%)	
	Human-other	75 (19%)		Human-other	104 (27.3%)	
	Human Organization	2 (0.5%)		Human Organization	2 (0.5%)	
Non-human	Animate Object	65 (16.5%)	184 (46.6%)	Animate Object	19 (5%)	159 (41.7%)
	Inanimate Object	68 (17.2%)		Inanimate Object	92 (24.1%)	
	Time	4 (1%)		Time	0 (0%)	
	Space	15 (3.8%)		Space	4 (1%)	
	Abstract Entity	32 (8.1%)		Abstract Entity	44 (11.5%)	
Event		3 (0.8%)	3 (0.8%)		46 (12.1%)	46 (12.1%)
			395 (100%)			381 (100%)

Table 2. Gender of human beings described as *kě̀ài*

Gender \ Corpus		
	Sinica Corpus	Social media platforms
Male	18 (8.7%)	49 (28.2%)
Female	70 (34.0%)	58 (33.3%)
Gender unspecified	118 (57.3%)	67 (38.5%)
Total	206 (100%)	174 (100%)

As can be seen in Table 1, of the 395 tokens of adjective use found in the Sinica Corpus, which represent usage of *kě̀ai* during the period of 1981–2007, *kě̀ai* is found to describe Human most of the time (52.7%), followed by Non-human (46.6%) and Event (0.8%). Within the category Human, Child is what *kě̀ai* most frequently describes, followed by Human without age specified (Human-other) and Adult; Human Organization is least frequently described as *kě̀ai*. In the category of Adult, *kě̀ai* is found to describe young people much more often than old people (21 tokens vs. 2 tokens). In terms of Gender of Human, shown in Table 2, even though the results show that *kě̀ai* mostly describes people without gender specified, Female is still found to be described as *kě̀ai* a lot more often than Male (34.0% vs. 8.7%) in the data from the Sinica Corpus. Generally speaking, the results of the first main type Human show that in the data from the Sinica corpus, *kě̀ai* is usually used to describe young people, especially children and females. This corresponds to what Farris (1988) suggests—*kě̀ai* in Mandarin bears the semantic features <small>, <child> and <feminine> at a covert level.

In Non-human cases in the Sinica Corpus, what *kě̀ai* usually describes is Inanimate Object (37%), followed by Animate Object (35.3%), Abstract Entity (17.4%), Space (18.2%), and Time (2.2%). The last main type is Event. Quite different from the first two main types, there are only 3 tokens of *kě̀ai* describing a whole event, which implies that from 1981 to 2007, *kě̀ai* was almost always used to describe certain objects, either human or non-human, but rarely events.

As for the data from Facebook and Dcard, which represents the usage of *kě̀ai* after social media platforms became popular, Table 1 shows that of the 381 tokens of adjective use, *kě̀ai* is found to describe Human most of the time (46.2%), followed by Non-human (41.7%) and Event (12.1%). Within the category Human, Human with no age specified (Human-other) is what *kě̀ai* most frequently describes; the type that has the second highest frequency is Adult, followed by Child, and the least frequently found is Human Organization. In the category of Adult, although *kě̀ai* is most often used to describe Adult whose age is not specified (19 tokens), it is found to describe older people almost as often as it does with young people (15 tokens vs. 14 tokens). In terms of Gender of Human, shown in Table 2, *kě̀ai* is mostly used to describe people with no gender specified (38.5%), followed by Female (33.3%) and then Male (28.2%). Generally, the results of Human in Table 1 and 2 show that in the data from the media platforms, instead of being used to describe children and young females as previous studies have suggested, *kě̀ai* is also often used to describe males and older people. In other words, now the factors of gender and age seem to have become less important when *kě̀ai* is used to describe people. This finding is quite different from that of previous studies and indicates that the descriptive range of *kě̀ai* has changed.

Table 1 also shows that, within the category of Non-human, Inanimate Object is what *kěài* most frequently describes (92 tokens) in the data from the social media platforms. Much to our surprise, Abstract Entity (44 tokens) takes up the second highest rate. What follows Abstract Entity is Animate Object (19 tokens) and Space (4 tokens). No tokens of *kěài* are found to describe Time in this set of data. Table 1 also shows that there are 46 tokens of *kěài* (12.1%) used to describe a whole event and situation—the last main type.

As shown in Table 1 above, the order of what *kěài* usually describes in both sets of data based on their percentages is Human, followed by Non-human, and finally Event. However, in terms of the three main types, the distribution of *kěài*-objects in the Sinica Corpus is found to be significantly different from that on the social media platforms ($\chi^2_{(2)} = 41.985, p = 0.000^{**}$). The most obvious difference is that many more cases of *kěài* are used to describe Event on the social media platforms. This indicates that the scope of objects that *kěài* can describe has broadened with Internet communication.

Besides, there are differences between the two sets of data when the Human subtypes are considered. First, in the Sinica Corpus, the most prominent object that *kěài* describes is Child (23.5%) while on the social media platforms only 5.8% of *kěài* is used to describe Child. Second, in the category of Adult in the Sinica Corpus, *kěài* is used to describe young adults (5.3%) more often than older people (0.5%) while on the social media platforms, *kěài* is found to describe young people as often as it does with older people (young adult: 3.9%; old adult: 3.7%). In other words, the kind of human beings that *kěài* describes has been extended and the influence of the age factor has weakened. This result is different from what Yomota (2006) suggests. Yomota asserts that there would not be a Chinese counterpart of Japanese phrases like *kawaiiojiichann* ‘cute grandpa’ even though it is grammatical in Chinese. According to Yomota, this is because Chinese people place a high value on Confucianism and it seems inappropriate to call an old person *kěài*. However, there are several examples of older people described as *kěài* in the data from the social media platforms. This indicates that the descriptive range of *kěài* has undergone some change.

Another important difference found between the two sets of data regards the gender factor. As shown in Table 2 above, although quite a large proportion of *kěài* is used to describe people without gender specified and the percentage of Female is almost the same in both sets of data, the percentage of males described as *kěài* on the social media platforms is 28.2%, while in the Sinica Corpus it is only 8.7%. The male and female distribution in the two sets of data is significantly different ($\chi^2_{(1)} = 13.748, p = 0.000^{**}$). This suggests that the gender effect regarding the use of *kěài* has weakened and now both males and females can be described as *kěài*.

What is now going to be discussed is the second main type of *kě̀ai*-objects, Non-human, found in the two sets of data. As shown in Table 1, what *kě̀ai* most often describes among the subtypes of Non-human in both sets of data is Inanimate Object (Sinica Corpus: 17.2%; social media platforms: 24.1%). However, the second most frequently described subtype in the Sinica Corpus is Animate Object (16.5%) while it is Abstract Entity (11.5%) on the social media platforms. This shows that after the emergence and popularity of social media platforms, besides inanimate objects, *kě̀ai* is more often used to describe abstract objects rather than concrete and living things.

After comparing what has been found in both sets of data, some tendencies regarding what *kě̀ai* describes are revealed. First, when *kě̀ai* is used to describe human beings, the influence of age and gender has weakened as in the data from social media platforms, *kě̀ai* is more often used to describe people who are male or older than in the data from the Sinica Corpus. Second, the descriptive range of *kě̀ai* is shifting to more abstract entities for much higher percentages of Abstract Entity in the Non-human category and the main type Event are found in the data from social media platforms.

4.2.2 *Kě̀ai*-properties

As mentioned previously, what *kě̀ai* describes is not only an object itself but some of its properties. Table 3 displays the results of the *kě̀ai*-properties found in the Sinica Corpus and on the social media platforms. As above, only adjective uses of *kě̀ai* are included.

Table 3 below shows that, among the Human tokens from the Sinica Corpus, most cases of Child described as *kě̀ai* are due to their external features (73%), while the frequencies of External and Non-external features of Adult described as *kě̀ai* are quite similar (20 tokens vs. 18 tokens); on the other hand, in the category of Human-other, non-external features are described as *kě̀ai* more often than external features (44 token vs. 31 tokens) while for Human Organization, only non-external features are described as *kě̀ai*. As for the second main type, Non-human, in the data from the Sinica Corpus, the subtype Animate Object is almost always described as *kě̀ai* due to external features (61 out of 65 tokens) and a similar result is found in the subtype Inanimate Object (66 out of 68 tokens). The remaining subtypes, Time and Space, are comparatively abstract entities. 3 out of 4 Time tokens are described as *kě̀ai* due to non-external features while 60% of Space cases are described as *kě̀ai* for their external features. In sum, in the data from the Sinica Corpus, the properties of human beings most often described as *kě̀ai* are their external features (57%). Similarly, in the Non-human category, external features (90%) are also the main reason for animate and inanimate entities to be described

as *kěài*. On the whole, the appearance of people or things is what *kěài* usually describes during 1981–2007.

Table 3. *Kěài*-properties in Sinica Corpus and on social media platforms

Main type	Property Object	Sinica Corpus			Social media platform		
		External features	Non-external features	Total	External features	Non-external features	Total
Human	Child	68 (17.2%)	25 (6.3%)	208 (52.7%)	11 (2.9%)	11 (2.9%)	176 (46.2%)
	Adult	20 (5.1%)	18 (4.6%)		7 (1.8%)	41 (10.8%)	
	Human-other	31 (7.9%)	44 (11.1%)		34 (8.9%)	70 (18.4%)	
	Human Organization	0 (0%)	2 (0.5%)		0 (0%)	2 (0.5%)	
Non-human	Animate Object	61 (15.4%)	4 (1.0%)	152 (38.4%)	12 (3.1%)	7 (1.9%)	115 (30.2%)
	Inanimate Object	63 (+3) ¹ (15.9% + 0.8%)	2 (0.5%)		84 (+4) (22.1% + 1.0%)	4 (1.0%)	
	Time	1 (0.2%)	3 (0.8%)		0 (0%)	0 (0%)	
	Space	9 (2.3%)	6 (1.5%)		2 (0.5%)	2 (0.5%)	
	Abstract Entity	N/A ²		32 (8.1%)	N/A		44 (11.5%)
Event		N/A		3 (0.8%)	N/A		46 (12.1%)
Total		256 (64.8%)	104 (26.3%)	395 (100%)	154 (40.4%)	137 (36.0%)	381 (100%)

Note:

1. Here, (+3) means that the three tokens of *kěài* are not subject to property analysis because they are cases of sound.

2. N/A indicates that Abstract Entity and Event are not subject to property analysis.

As for the *kěài*-properties found in the data from the social media platforms, as shown in Table 3, within the Human type, the chance of Child being described as *kěài* for its external features is the same as for non-external features. In contrast, 85% of Adult and 67% of Human-other are described as *kěài* due to their deportment rather than their external features. As for Human Organization, obviously, when an organization is described as *kěài*, it is due to its non-external features. These results suggest that on social media platforms, people’s deportment, includ-

ing their attitudes, manner and behavior, is the main reason for them being described as *kě̀ai*. Within the second main type, Non-human, most Animate Object and Inanimate Object cases are described as *kě̀ai* due to their external features, being 63% and 91% respectively. The other subtype, Space, is described as *kě̀ai* due to external features (50%) as well as atmosphere (50%). In sum, in the data from the social media platforms, the non-external features of human beings are the main property described as *kě̀ai* since this property occupies 70% while external features account for 30%. In contrast, external features are the main property for non-human beings being described as *kě̀ai*, accounting for 88%.

A tendency found in the comparison between the two sets of data in terms of *kě̀ai*-properties is that although in the Non-human category, the objects described as *kě̀ai* in both sets of data are mostly due to their external features, the property of human beings described as *kě̀ai* is shifting from external features to non-external features. In the Sinica Corpus, over 50% of the human beings are described as *kě̀ai* due to their external features, while on the social media platforms, 70% of the human beings are called *kě̀ai* for non-external features ($\chi^2_{(1)} = 29.541, p = 0.000^{**}$). In other words, in the age of Internet communication, the word *kě̀ai* is being used to describe people's deportment more often than before.

5. Meanings and pragmatic functions of *kě̀ai*

This section shows the meanings and pragmatic functions of *kě̀ai* found in the Sinica Corpus and on the social media platforms. Section 5.1 displays the meanings and functions of *kě̀ai*, along with examples and discussions, found in the Sinica Corpus and on the social media platforms. Section 5.2 compares and contrasts the meanings and functions of *kě̀ai* found in the two sets of data, and in Section 5.3, possible reasons for meaning extension of *kě̀ai* based on the framework of Emergent Lexical Semantics are discussed.

5.1 Meanings and pragmatic functions of *kě̀ai* found in the data

After rigorously examining the two sets of data, we found that *kě̀ai* has ten different positive meanings. Besides the positive meanings, negative meanings are also found, but they occur only when *kě̀ai* functions as a hedge, which is a pragmatic function. Table 4 displays the meanings and examples of *kě̀ai* found in the Sinica Corpus and on the social media platforms, along with their English paraphrases according to the online Oxford dictionary of English. One thing that should be specifically mentioned here is that when the data of *kě̀ai* was analyzed, all of the meanings were discussed in Mandarin based on the first author's intuition and

then double checked with the second author and four other native speakers of Mandarin. Then we found the closest counterparts of those meanings and paraphrases in English. Note that the meanings shown in Table 4 are the meanings of the adjective uses of *kě'ài* because this is the most common syntactic category used and is what was analyzed when the descriptive range of *kě'ài* was examined above.

Table 4. Meanings of *kě'ài* in Sinica Corpus and on social media platforms

	Meaning/function			Sinica Corpus	Social media platform
	Chinese	English and paraphrase	Example		
Positive meaning	<i>tǎorén xǐàide</i>	adorable (inspiring great affection or delight)	(6) <i>Xǔduō shūjú mùqián chéle yībān túshū zhīwài, kě'ài xīnxiān qiàopí-de lǐpǐn yěshì cùxiāo zhòngdiǎn.</i> 'Besides selling general books, many bookstores promote adorable , novel, and nifty gifts nowadays.'	246 (62.3%)	190 (49.9%)
	<i>mírénde</i>	attractive (pleasing or appealing to the senses)	(7) <i>Nánrén rènwéi kě'ài-de xiǎosān yīnggāi jùbèi shénme tèzhì ne?</i> 'What characteristics does a man think an attractive mistress should have?'	14 (3.5%)	4 (1%)
	<i>zhídé chéngzànde</i>	praiseworthy (deserving approval and admiration)	(8) <i>Yǒulǐmào-de xiǎohái zuì kě'ài lā, māmā zhèyàng jiāo xiǎohái cái shì chéngquē-de.</i> 'Polite children are most praiseworthy . And that's how a mother should teach her kids.'	47 (11.9%)	25 (6.6%)
	<i>yúkuàide</i>	pleasant (giving a sense of happy satisfaction or enjoyment)	(9) <i>Xiànzài kàn zhe dì-mèi-de yījǔyí dòng yě rang wǒ huíxiǎngqǐ tóngnián shíhòu de kě'ài qíngqù.</i> 'It makes me think of my pleasant childhood when looking at my younger brother's and sister's every move.'	5 (1.3%)	4 (1%)

Table 4. (continued)

	Meaning/function			Sinica Corpus	Social media platform
	Chinese	English and paraphrase	Example		
	yǒushànde	friendly (kind and pleasant)	(10) <i>Zài duìfāng yāoyuē shí, jiànjiàn gùyì xiǎnlù bù-kě'ài-de yī-miàn, zài tā qīnyǒu miànrán biǎoxiàn rěrényàn-de jǔzhǐ.</i> 'When he invited me, I just gradually and deliberately behaved unfriendly and made a nuisance of myself in front of his relatives and friends.'	24 (6.1%)	20 (5.2%)
	dānchúnde	innocent (simple; naïve)	(11) <i>Yuánzhùmín shì shèhuì shàng shǎoyǒu-de yī-qún-rén, tāmen shì tiānzhēn-de, kě'ài-de, érqǐě hǎokè.</i> 'Indigenous people are a rare group of people in our society. They are innocent and hospitable.'	34 (8.6%)	7 (1.8%)
	yǒuqùde	interesting (arousing curiosity or interest; holding or catching the attention)	(12) <i>Jīn wǔ-bǐ zhīdǎo lùnwén tínmù: 102 shuōlùn liánshǔ túyāqíáng de yìyìyǔ shíyòng.</i> (<i>Hǎo kě'ài-de tínmù!</i>) 'The title of the five supervised theses in recent years: 2013 MA thesis–Disagreements on Facebook Walls. (What an interesting topic!).'	9 (2.3%)	19 (5%)

Table 4. (continued)

	Meaning/function			Sinica Corpus	Social media platform
	Chinese	English and paraphrase	Example		
	wēnxīnde	heartwarming (emotionally rewarding or uplifting)	(13) Zhōnggōnghuì suī yǐ yánjiù xuéshù wéizhǔ, dàn yì bù fá qí wēnxīn kě'ài-de yí-miàn. 'Although Zhōnggōng Association focuses on academic research, it is still a heartwarming organization.'	2 (0.5%)	15 (3.9%)
	hǎoxiàode	amusing (causing laughter and providing entertainment)	(14) Mom: Jiějiě gānggāng gěi nǐ yī- kē cháyèdàn, nǐ yào gēn jiějiě shuō shíme? Boy: Jiějiě kěyǐ bang wǒ bāo kéké ma? Wǒ gēn tā-mama tóngshí xiào-le-chūlái, dìdì nǐ zěnme kěyǐ zhème kě'ài lā! Mom: "Big sister just gave you a tea egg, so what do you have to say to her?" Boy: "Could you peel the tea egg for me?" 'His mom and I therefore laughed out at the same time. How amusing you are, little boy!'	1 (0.3%)	38 (10%)

Table 4. (continued)

	Meaning/function			Sinica Corpus	Social media platform
	Chinese	English and paraphrase	Example		
	yǒuyúlè xiàoguǒde	entertaining (providing amusement or enjoyment)	(15) Zhēnwōchóng niúdàn nà gūliú-de gǎnjiào ǐ de yǒudiǎn kě'ài . 'The smooth feel of the planarian capsule toy is a little discomforting but entertaining .'	0 (0%)	46 (12.1%)
Negative meaning	Hedge	funny; naïve; silly; stupid; ridiculous	(16) Nǚrén tài kě'ài le, suǒyǐ bù yīnggāi ràng tāmen shèzú zhèngzhì lǐngyù. 'Women are too naïve. So they should not get involved in politics.'	13 (3.3%)	13 (3.4%)
Total				395 (100%)	381 (100%)

In the following, the meanings of *kě'ài* found in the Sinica Corpus and on the two social media platforms are discussed one by one with Examples (6) to (16) shown in Table 4.

In Table 4, we can see that the most commonly used meaning of *kě'ài* in both sets of data is *tǎorén xǐ'ài* 'adorable'. Example (6) in Table 4 states that besides books, many bookstores also promote gifts that are *kě'ài*, *xīnxiān* 'novel' and *qiàopí* 'nifty'. Together with the meaning of novel and nifty, *kě'ài* here refers to the external features of these gifts. Thus, *kě'ài* in this example means 'adorable', referring to the gifts' external features which may inspire people's affection and delight. The second meaning of *kě'ài* is *mírén* 'attractive', which is similar to but still distinct from 'adorable'. When *kě'ài* is interpreted as 'attractive', it means that the object described is more eye-catching since 'attractive' is defined in English as "pleasing or appealing to the senses" in the online Oxford dictionary. In Example (7), *kě'ài* is used to describe *xiǎosān* 'mistress', who is a homewrecker. Generally, compared to a man's wife, we get the impression that a *xiǎosān* is usually younger and more beautiful, that is, more attractive and more appealing to the senses. The two meanings 'adorable' and 'attractive' are used to describe external features of objects, including human beings.

Different from 'adorable' and 'attractive', the other eight positive meanings are used to describe non-external features, such as deportment and atmosphere. The

third meaning of *kěài* is *zhídé chēngzànde* ‘praiseworthy’. *Kěài* in Example (8) in Table 4 is used to compliment the children who are polite. As we know, being polite is a quality deserving of approval and admiration. Hence, *kěài* here is best interpreted as ‘praiseworthy’. The fourth meaning is *yúkuàide* ‘pleasant’. *Kěài* of this meaning in Example (9) is used to describe the *qíngqù* ‘delight of life’ in one’s childhood, and *kěài* here is best interpreted as ‘pleasant’ because ‘pleasant’ refers to a sense of satisfaction and enjoyment, and such *qíngqù* in a person’s childhood must be a happy and satisfying memory. The fifth meaning of *kěài* is *yǒushànde* ‘friendly’. In Example (10), *bù kěài* is used to describe the unfriendly behavior and manner that the person in question had towards her friend. *Kěài* in this example is best interpreted as ‘friendly’ because the context mentions *rěrényànde jūzhǐ* ‘annoying behavior’, which indicates that the meaning of *bù kěài* is ‘unfriendly’. In other words, the meaning of *kěài* as ‘friendly’ is suggested by the context. The sixth meaning of *kěài* is *dānchúnde* ‘innocent’. In Example (11), *kěài* is used to describe the innocent personality and manner of indigenous people. The reason why *kěài* is interpreted as ‘innocent’ is because in the context, the indigenous people’s personality and manner is first described as *tiānzhēnde* ‘innocent’ and then as *kěàide*. This collocation gives *kěài* the meaning of being innocent, referring to the simple and unsophisticated personality of the indigenous people. The seventh meaning of *kěài* is *yǒuqùde* ‘interesting’. In Example (12), *kěài* is used to describe the topic of a thesis entitled “Disagreements on Facebook Walls”. Here, *kěài* is interpreted as ‘interesting’ because the topic of the thesis is new and rare as Facebook only became popular recently and the topic will arouse people’s curiosity and interest. The eighth meaning of *kěài* is *wēnxīnde* ‘heartwarming’. In Example (13), *kěài* is used to describe the atmosphere in a human organization called *zhōnggōnghuì* and is best interpreted as ‘heartwarming’ because of the collocation in the context, in which the atmosphere in *zhōnggōnghuì* is described as *wēnxīn* ‘heartwarming’ and *kěài*. Due to this collocation, the meaning of *wēnxīn* therefore affects the meaning of *kěài*. In other words, *kěài* acquires the meaning of *wēnxīn* through the collocation and the organization’s heartwarming atmosphere is emphasized.

The last two positive meanings of *kěài* are *hǎoxiàode* ‘amusing’ and *yǒuyúlè xiàoguǒde* ‘entertaining’. These two meanings refer to different degrees of amusement or entertainment: the former refers to something that can cause people to laugh but the latter doesn’t have this implication. In Example (14) in Table 4, *kěài* is used to describe the behavior of a little boy (*dìdi*) because what he said to the girl (*jiějie*) was unexpected and hence caused laughter and provided entertainment. In fact, the little boy’s mother was trying to lead him to say “thank you” to the girl who gave him a tea egg; however, instead of expressing appreciation, the little boy asked the girl to peel the egg for him. This reply was ‘amusing’

for it was totally different from what was expected and that's why both the little boy's mother and the girl could not help but laugh. Hence, *kě'ài* here is best interpreted as 'amusing'. On the other hand, in Example (15), *kě'ài* is used to describe the sense of touch of a planarian capsule toy. Here, *kě'ài* is interpreted as 'entertaining' because it is mentioned in the context that the smooth texture of the planarian capsule toy is *ěde yǒudiǎn kě'ài* 'discomforting but a little entertaining'. This indicates that this kind of texture is not that *ěxīn* 'discomforting' since it is also described as *kě'ài*. In other words, the reason why the feel of the planarian capsule toy can be described as *kě'ài*, which is a rather positive word compared with *ěxīn*, may be because it provides a sense of entertainment and enjoyment. Hence, *kě'ài* here is used to convey the meaning of 'entertaining'.

Generally, when *kě'ài* conveys positive meanings, its pragmatic function is to express a person's appreciation or positive feeling toward something. On the other hand, when *kě'ài* implies something negative, it functions as a hedge. According to the literature, hedges are usually used by a speaker to either express a lack of commitment to utterances/statements (e.g., Hyland 1998) or to soften their force to make them more acceptable to the hearer (e.g., Brown & Levinson 1987). In other words, *kě'ài* is found to function as a hedge to avoid face threatening acts and help preserve one's public self-image (Brown & Levinson 1978, 1987). Example (16) in Table 4 was a remark given in an election campaign. In this example, *kě'ài* was used to describe females, especially those females who wanted to engage in the field of politics. According to the context, this example should be interpreted as 'females are too naïve; thus, they should not get involved in politics.' The positive term *kě'ài* was used by the speaker to rationalize gender discrimination. Obviously, the meaning of *kě'ài* here is not positive at all; rather, it is used as a hedge, conveying negative meanings, such as naïve, silly and not competent enough to engage in politics. The reason why *kě'ài* has this pragmatic function is because its meaning is quite vague and people usually treat it as a positive word, and in most cases *kě'ài* is used positively; hence, the speaker took advantage of this feature of *kě'ài* to soften the tone of his remark, trying to avoid offending females. Another example of a hedge is *wàiyù zhōng de rén, zhìshāng jiùxiàng xiǎohái yīyàng de kě'ài* 'For people in extramarital affairs, their intelligence is just as *kě'ài* as children's.' Here, *kě'ài* is used to describe the intelligence of a person who is having an affair. Generally, a person in an affair is an adult; hence, when adults' intelligence is compared to children's and described as *kě'ài*, we know that the meaning of *kě'ài* must be negative, implying silly and even stupid. Hence, *kě'ài* in this example functions as a hedge, helping the speaker avoid a face threatening act and speak the unspeakable.

Besides serving as a hedge, *kě'ài* is found to have another pragmatic function in the data from the social media platforms. *Kě'ài* in Example (14) in Table 4,

which has been discussed as meaning *hǎoxiàode* ‘amusing’, also shows surprise. The reason why the little boy’s reply was amusing is because it was unexpected and hence caused laughter and provided entertainment. In fact, right before both the little boy’s mother and the girl laughed, they must feel surprised due to the unexpected reply. Hence, *kěài* here also indicates surprise.

5.2 Comparison of meanings and functions of *kěài* in the two sets of data

As shown in Table 4, *kěài* is found to convey positive meanings most of the time in both sets of data (Sinica Corpus 96.8% and the social media platforms 96.5%). Also, the percentage of the negative meaning of *kěài* is almost the same in the two sets of data (3.3% vs. 3.4%). Such a result indicates that over the past three decades, people have usually used *kěài* to express their positive feelings towards people or things although from time to time also using *kěài* as a hedge to convey negative meanings.

In spite of the similarities, the meanings of *kěài* and their percentage distributions are different in the two sets of data. First, although among the positive meanings of *kěài*, ‘adorable’ takes up the highest percentage in both sets of data, the percentage of this meaning is comparatively lower on the social media platforms (62.3% vs. 49.9%). Second, compared with those found in the Sinica Corpus, the percentages of ‘attractive’, ‘praiseworthy’, ‘pleasant’, ‘friendly’, and ‘innocent’ on the social media platforms are all lower while the percentages of ‘interesting’, ‘amusing’, and ‘heartwarming’ are higher. Third, *kěài* is found to have a new meaning on the social media platforms—‘entertaining’, and it takes up the second highest rate (12.1%) in the data. Fourth, the top three meanings of *kěài* found in the Sinica Corpus are ‘adorable’ (62.3%), ‘praiseworthy’ (11.9%), and ‘innocent’ (8.6%); however, on the social media platforms, they are ‘adorable’ (49.9%), ‘entertaining’ (12.1%), and ‘amusing’ (10%). This suggests that except the most common meaning of *kěài*, namely ‘adorable’, the frequency ranking of the other senses has changed over the past decade, at least when used on social media platforms. In other words, people in online communication tend to use *kěài* to convey a sense of entertainment and amusement, which is quite different from praiseworthy and innocent, the meanings more often found in the Sinica Corpus. There are two possible reasons why now *kěài* is more often used to mean ‘entertaining’ or ‘amusing’ at least on the social media platforms. First, it is possible that Taiwan’s netizens have been influenced by the Japanese *kawaii* culture and hence use *kěài* more often when they would like to express that something is interesting and positive. Second, online communication is fast and effective, and it also carries a higher risk of misunderstanding if words are not appropriately used. Hence, a positive term such as *kěài*, which is semantically rich, may come in handy whenever one

lacks words to show positive feelings or has no time to think of a better word. For example, why would one use *kě'ài* rather than *hǎoxiào* 'funny' to describe an amusing event? It may be because *hǎoxiào* tends to carry a negative meaning while *kě'ài* usually conveys positive senses.

In addition to semantic differences, a pragmatic difference of *kě'ài* is found in the two sets of data. Although *kě'ài* is used as a hedge in both the Sinica Corpus and on the social media platforms, in the data from the social media platforms, *kě'ài* is found to have another function: to show surprise. In other words, two pragmatic functions of *kě'ài* are found on the social media platforms while there is only one in the Sinica Corpus.

5.3 Meaning extension of *kě'ài* based on the framework of emergent lexical semantics

The analysis of the data collected from the Sinica Corpus and the social media platforms has shown that *kě'ài* can not only denote its core meaning—'adorable', but also extends to denote nine other meanings. Since *kě'ài* can now convey so many different senses, we may wonder how and why the meaning of *kě'ài* has extended. This question can be answered by the emergent view of lexical semantics. In Section 5.3.1, the view of emergent lexical semantics is briefly reviewed and based on this view, the question why there are various meanings of *kě'ài* is discussed in Section 5.3.2.

5.3.1 An emergent view of lexical semantics

The term Emergent Grammar was proposed by Hopper (1987, 1998) to capture the view that grammatical structures arise from discourse practice. He argues that the grammar of language is just like culture, which is "always deferred, always in a process but never arriving, and therefore emergent" (Hopper 1987: 141). He further suggests that grammatical structures are not "fixed templates but are negotiable in face-to-face interaction in ways that reflect the individual speakers' past experience of these forms, and their assessment of the present context, including especially their interlocutors, whose experiences and assessments may be quite different" (Hopper 1987: 141).

Different from Hopper's goal to explicate the view that grammar is emergent, Bybee (1998) proposes that not only language structure but also lexical storage are highly affected by language use in our everyday practices. She argues that a lexicon is emergent from the storage of "linguistic experience" rather than "a storage area for all and only the content words or morphemes of a language" that the traditional conception of a lexicon would suggest (Bybee 1998: 421). According to Bybee, the role of the linguistic context is extremely important since the context

itself may activate linguistic units, which makes relevant words and phrases easy to access under appropriate situations.

Based on the extension of the idea of Emergent Grammar, Huang (1998: 129) argues that “meaning is not merely a fixed relation between utterances and objective reality.” He points out that in actual daily interactions, speakers and addressees usually do not assume a general normative approach to get the meaning of lexical entities because they are more interested in negotiating the particulars that are closely related to their life experiences. In other words, according to Huang, interactional processes between participants may shape the meaning of lexical items, and the meaning emerging from conversation practices in actual interactions may bear little resemblance to dictionary definitions.

To highlight the importance of discourse practice in shaping the lexicon and the dynamic nature of meaning, Tao (2003) uses his own corpus examples to argue that meaning emergence and negotiation is due to participant interaction in discourse, that meaning (re)distribution among perceived synonymous lexical entities is due to textual use and communicative demands, and that the category shift of lexical entities is a result of frequent use in discourse. He then proposes that an emergent view of lexical semantics could entail minimally the following (Tao 2003: 839):

- a. Semantic meanings of lexical items and lexical combinations may emerge, be negotiated, and be acquired through language use.
- b. Meaning in isolation may be at variance with meaning in use.
- c. It is therefore indispensable to examine actual discourse practice to understand the nature of lexical semantics.

Related to the emergence of lexical meaning is the notion of semantic prosody, discussed by Sinclair (1987, 1994), Bublitz (1996), Tao (2000), among others. According to Tao (2000: 59), “semantic prosody refers to the overall connotation of not just a single word, but a string of words” and it is a “semantic quality” that is acquired through language use rather than being inherent in the meaning of lexical entities. Tao (2003) suggests that differences in semantic prosody can be attributed to communicative needs and that besides positive, neutral and negative connotations, semantic prosody can also be extended to include different qualities, such as abstractedness or unexpectedness, depending on the data.

5.3.2 Meaning extension of *kě'ài* and emergent lexical semantics

According to the Mandarin dictionary compiled by the Ministry of Education in Taiwan, the meaning of *kě'ài* is *tǎorén xiài* ‘adorable’, which is found to be the most common meaning in the two sets of data examined in this study. However, besides

this basic meaning, *kě'ài* is now found to have another nine different meanings based on our analysis in Section 5.1. This fact implies that the meaning of *kě'ài* has extended and the definition of *kě'ài* codified in the Mandarin dictionary is too simple. From an emergent view of lexical semantics, Huang (1998), Bybee (1998) and Tao (2003) suggest that instead of being static and fixed, lexical meanings are dynamic and highly influenced by language use in everyday interactions and practices. The theory of Emergent Lexical Semantics can explain why *kě'ài* has so many different meanings. Since people now frequently use *kě'ài* in various interactions, different meanings of *kě'ài* may “emerge” to meet different needs in different contexts and that’s why its meaning in use may be different from its meaning in isolation.

In Section 5.1, we have seen that the meaning of *kě'ài* is affected by the words it collocates with. In the data, *kě'ài* is often found to be associated with good qualities, such as *tiānzhēn* ‘innocent’ and *wēnxīn* ‘heartwarming’. Since *kě'ài* often collocates with these words, it gradually acquires their meanings. And these words become the cues that speakers use to signal an intended meaning of *kě'ài*. Viewed in this light, the concept of semantic prosody can be nicely applied here. According to Tao (2000, 2003) reviewed above, “semantic prosody refers to the overall connotation of a string of words” and it is a “semantic quality” that is acquired through language use rather than being inherent in the meaning of lexical entities. Based on this view, we suggest that through the semantic prosody of context, the semantics of *kě'ài* includes those good qualities, such as innocence and warmth. Hence, the meaning extension of *kě'ài* can be explained within the framework of Emergent Lexical Semantics.

The analysis in Section 5.1 also reveals that compared with the meanings found in the Sinica Corpus data, *kě'ài* has one more meaning in the data from social media platforms, namely ‘entertaining’. This difference may be because now *kě'ài* is used a lot more frequently by people in online interactions than it used to be during 1981–2007. In other words, the more often *kě'ài* is used in various contexts, the more meanings it may have due to the impact of language use and the variety of linguistic contexts.

In addition to meaning extension, the syntactic category of *kě'ài* also shifts from adjective and noun to verb and adverb. In the data collected for this study, *kě'ài* in the Sinica Corpus is mostly used as an adjective (98.8%) and seldom as a noun (1.2%) while on the social media platforms, *kě'ài* not only functions as an adjective (95.3%) and noun (3%), but also as an adverb (1.3%) and verb (0.5%). This category shift of *kě'ài* may be nicely explained by what Tao (2003) suggests—frequent use can change the category of a lexical element.

6. Concluding remarks

In this section, we first summarize the findings of this study, and then, present possible limitations and topics for further research.

The major purposes of this study were to discover the uses of the word *kě'ài* in Mandarin, including its descriptive range, meanings and functions, and to investigate whether there have been changes of its use in the Internet era. To achieve the goals, two sets of data were retrieved, from the Sinica Corpus and from the social media platforms Facebook and Dcard respectively. The former represents data before the advent and popularity of social media platforms and the latter, after social media platforms became popular. Below are the findings of this study.

In terms of the objects that *kě'ài* describes, we found that what *kě'ài* most frequently describes in the Sinica Corpus and on the social media platforms is Human, followed by Non-human, and finally Event. However, the distribution of *kě'ài*-objects in the Sinica Corpus was found to be significantly different from that on the social media platforms. The most obvious difference is that much higher percentage of *kě'ài* was found to describe Event on the social media platforms. Besides, within the category Human, *kě'ài* was found to describe Child, Young Adult and Female more often in the Sinica Corpus than on the social media platforms. That is, the descriptive range of *kě'ài* is gradually breaking age and gender limits and is now used to describe people who are not children, not young, or not female more often. Moreover, the descriptive range of *kě'ài* is shifting to more abstract entities for much higher percentages of Abstract Entity in Non-human category and the main type Event were found in the data from the social media platforms.

As for the properties that *kě'ài* describes, in the Sinica Corpus, over half of the human beings described as *kě'ài* are due to their external features; however, on the social media platforms, most human beings are called *kě'ài* due to their deportment, including manner, behavior, attitude and personality. On the other hand, when *kě'ài* is used to describe non-human objects, the property described as *kě'ài* is mostly an external feature in both sets of data.

In the Sinica Corpus, besides the most familiar meaning of *kě'ài*, namely 'adorable', *kě'ài* was found to have another eight different positive meanings: 'attractive', 'praiseworthy', 'pleasant', 'friendly', 'innocent', 'interesting', 'amusing', and 'heartwarming'. On the social media platforms, in addition to the nine meanings found in the Sinica Corpus, *kě'ài* was found to have one more positive meaning, namely 'entertaining'. Despite the similarity, the percentage distributions of the meanings were found to be quite different in the two sets of data. The most conspicuous differences are that although 'adorable' takes up the highest percentage in both sets of data, its rate on the social media platforms is much lower than that in the Sinica Corpus, and that the second and third most frequently used

meanings of *kě'ài* in the Sinica Corpus are 'praiseworthy' and 'innocent' while those on the social media platforms are 'entertaining' and 'amusing'. This indicates that at least in Internet communication, the core meaning of *kě'ài* is gradually changing from something that is morally good, such as 'praiseworthy and innocent', to something that is emotionally enjoyable, such as 'amusing and entertaining'.

Besides the positive meanings, *kě'ài* was found to have negative meanings in both sets of data when used as a hedge. In addition to serving as a hedge, *kě'ài* was found to have one more function on the social media platforms, that is to show surprise. In other words, two pragmatic functions were found on the social media platforms while only one function was found in the Sinica Corpus.

In this study, *kě'ài* was found to have various meanings. Different meanings of *kě'ài* emerge when it is being used in different contexts. Such impacts of textual use may be the reason why the meaning of *kě'ài* has extended from its original lexical meaning. From an emergent view of lexical semantics, Huang (1998), Bybee (1998) and Tao (2003) suggest that instead of being static and fixed, lexical meanings are dynamic and highly influenced by language use in our everyday interactions and practices. Taking this view, we see how lexical semantics of *kě'ài* subordinates to communicative demands and how meanings can emerge due to language practice.

Although the meanings and functions of *kě'ài* were found to be different in the two sets of data, it remains unknown whether the descriptive range, meanings and functions of *kě'ài* used in other forms of communication are the same as those used on the social media platforms. This is because the data obtained from the social media platforms may be different from face-to-face conversations, for example. Hence, it is suggested that in future research, data regarding *kě'ài* from other sources should be collected to examine whether it has different descriptive ranges, meanings and functions. Additionally, although the results of this study show that the meaning of *kě'ài* has extended, the popularity of the Internet and social media platforms is just one of the factors that may lead to this kind of meaning extension. To have a more complete understanding of *kě'ài*'s meaning change, other social factors, genres or speech styles should be explored.

In spite of the limitations, we hope that through this study we now have a better understanding of the meaning and use of *kě'ài* in the Internet era. Besides, the framework of Emergent Lexical Semantics provides a good account of the various meanings of *kě'ài* found in this study. Since relatively little research has been done to explore the emergent nature of semantics, we also hope that this study helps us gain a better understanding of the dynamic nature of meanings of lexical entities.

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List of abbreviations

KEAI	<i>kě'ài</i>
CL	classifier
DE	possessive or adjective marker
DM	discourse marker
DUR	durative aspect marker
PFV	perfective marker
PROG	progressive marker

References

- Asano-Cavanagh, Yuko. 2014. Linguistic manifestation of gender reinforcement through the use of the Japanese term 'kawaii'. *Gender and Language* 8.3:341–359.
<https://doi.org/10.1558/genl.v8i3.341>
- Brown, Penelope and Stephen C. Levinson. 1978. Universals in language usage: Politeness phenomena. *Questions and Politeness: Strategies in Social Interaction*, ed. by Esther Goody, 56–310. Cambridge, UK: Cambridge University Press.
- Brown, Penelope and Stephen C. Levinson. 1987. *Politeness: Some Universals in Language Usage*. Cambridge, UK: Cambridge University Press.
<https://doi.org/10.1017/CBO9780511813085>
- Bublitz, Wolfram. 1996. Semantic prosody and cohesive company: "Somewhat predictable". *Leuvense Bijdragen: Tijdschrift voor Germaanse Filologie* 85.1–2:1–32.
- Bybee, Joan. 1998. The emergent lexicon. *Chicago Linguistic Society* 34:421–435.
- Chuang, Tzu-i. 2005. The power of cuteness: Female infantilization in urban Taiwan. *Stanford Journal of East Asian Affairs* 5.2:21–28.
- Farris, Catherine S. 1988. Gender and grammar in Chinese: With implications for language universals. *Modern China* 14.3:277–308. <https://doi.org/10.1177/009770048801400302>
- Hopper, Paul J. 1987. Emergent grammar. *Proceedings of the Thirteenth Annual Meeting of the Berkeley Linguistics Society*, ed. by Jon Aske, Natasha Beery, Laura Michaelis and Hana Filip, 139–157. Berkeley, CA: Berkeley Linguistics Society.
- Hopper, Paul J. 1998. Emergent grammar. *The New Psychology of Language: Cognitive and Functional Approaches to Language Structure*, ed. by Michael Tomasello, 155–175. Mahwah, NJ: Lawrence Erlbaum.
- Huang, Shuanfan. 1998. Emergent lexical semantics. *Selected Papers from the Second International Symposium on Languages in Taiwan*, ed. by Shuanfan Huang, 129–150. Taipei: Crane Publishing.

- Hyland, Ken. 1998. *Hedging in Scientific Research Articles*. Amsterdam & Philadelphia: John Benjamins. <https://doi.org/10.1075/pbns.54>
- McVeigh, Brian J. 1996. Commodifying affection, authority and gender in the everyday objects of Japan. *Journal of Material Culture* 1.3:291–312. <https://doi.org/10.1177/135918359600100302>
- Sinclair, John. 1987. *Looking up: An Account of the COBUILD Project in Lexical Computing and the Development of the Collins COBUILD English Language Dictionary*. London: Collins.
- Sinclair, John. 1994. Trust the text. *Advances in Written Text Analysis*, ed. by Malcolm Coulthard, 12–25. London & New York: Routledge.
- Tao, Hongyin. 2000. Adverbs of absolute time and assertiveness in vernacular Chinese: A corpus-based study. *Journal of the Chinese Language Teachers Association* 2000.3:53–73.
- Tao, Hongyin. 2003. Toward an emergent view of lexical semantics. *Language and Linguistics* 4.4:837–856.
- Wierzbicka, Anna. 1991. *Cross-Cultural Pragmatics: The Semantics of Human Interaction*. Berlin: Mouton de Gruyter. <https://doi.org/10.1515/9783112329764>
- Yamauchi, Tomoko. 2011. Han yu “ke ai” yu ri yu “kawaii” zhi bi jiao yan jiu [A contrastive study of cute in Chinese and in Japanese]. *Modern Chinese* 5:152–156.
- Yomota, Inuhiko. 2006. *‘Kawaii’ ron [Theory of ‘Kawaii’]* (translated into Mandarin by Guang-fen Chen in 2007). Tokyo: Chikuma Shinsho.

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