

# Little cutie one piece

## An innovative human classifier and its social indexicality in Chinese digital culture

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This study investigates emerging usages in Chinese cyberspace of the numeral classifier *méi* that violate syntactic and semantic conventions of canonical grammar of modern Chinese. We treat these usages as constructional variants of the canonical classifier construction and show how they afford users of Weibo a device of social indexicality in the sense of Silverstein (1976, 1985, 2003) and Eckert (2000, 2003, 2008). We argue that the constructional variants facilitate the creation of a cute, chic, playful, humorous, and youthful online style and that its popularity draws on multiple indexical resources including contrast to canonical grammar, contemporary language contact with Japanese, influence of the cuteness culture and its commodification, and consumerism in the digital economy. This study contributes to research on the linguistic construction of identity and style, linguistic creativity in the new media and digital culture, and usage-based constructionist approaches to language.

**Keywords:** social indexicality, variation, digital culture, usage-based constructionist approach

**关键词:** 社会指向性、变异、网络文化、基于使用的构式理论

### 1. Introduction

#### 1.1 Linguistic variation and social indexicality

Language variation pertains to the way speakers of the same language differ in a certain linguistic structure, whether phonetic, lexical, or morphosyntactic (Coupland 2007; Eckert 2003; Mendoza-Denton 2002; Trudgill 2002). Earlier variationist studies investigated the correlations between linguistic variables and social categories such as class, gender, and age. In this tradition, social meanings

were interpreted as directly associated with, or even determined by, speaker membership in social groups (Labov 1967; Wolfram 1969; Trudgill, Trudgill, & Stephen 1974). Recent studies have argued that variables are not always directly mapped to social categories. Rather, variation is employed to convey speaker stances and characteristics that reflect those categories. This is the view of variation in terms of social indexicality. Silverstein (1976, 1985, 2003) maintained that variables function as signs which indirectly index social referents. Eckert (2000, 2003, 2008) argued that variations do not mechanically emerge in style with fixed meanings, but instead constitute social practices. As such they play a role in the construction of style and social meanings (Eckert 2003; Irvine & Gal 2009). The social meanings of linguistic forms, in this regard, are not merely social categories but rather subtler and more fleeting interactional moves through which speakers take stances, create alignments, and construct personae at a given moment (Bucholtz 2009). As Eckert (2003: 2–3) argued, it is in “the day-to-day give and take of social practice that communities come to construct a shared take-on of themselves, on others, and on the differences between them”. In this sense, a stylistic practice can be viewed as a process of bricolage in which variables are interpreted and combined with other resources for constructing a more complex social meaning entity (Hebdige 1984). The selection of linguistic variants for style depends on people’s interpretation of potential social meanings from available resources, which Eckert (2008) called the *indexical field*, or a constellation of ideologically related meanings. Language users exercise agency to activate variations and thereby modify the indexical field through novel ideological connections. While the relationship between stance, style, and identity unfolds in local interactions these three constructs interact with broader cultural ideologies (Bucholtz 2009). Irvine and Ga (2000) detailed the process of variationist social meaning construction. As they explained, stylistic practices start with a person’s perception of a particular feature based upon previous stylistic experience. Once this feature is distinguished and interpreted, it becomes a resource to be incorporated into one’s own style. The adoption of this resource in a new style may eventually contribute to the development of a semi-otic landscape because it would modify both the resource and the original style. Eckert (2008) pointed out that people’s effort to connect themselves with particular macro-sociological categories motivates their social practices. In this process, they can adopt various styles and move their personae across situations and contexts. Therefore, within the social indexicality framework, style can be treated as a multimodal and multidimensional cluster of linguistic and other semiotic practices for the display and construction of identities in interaction (Irvine & Gal 2000).

Studies on Chinese have shown increasing interests in variation and social indexicality. Chan (2000) investigated the sentence-final particles used in Hong Kong TV shows and reported a more frequent adoption by women. Chan (2000)

interpreted this gender variation as a reflection of women's active gender construction in real life. Through examining gender movement terminologies and Chinese revolutionist discourses, Wong and Zhang (2000) investigated how distinctive linguistic symbols and styles are employed to construct an imagined Chinese *tóngzhì* (gay) community. Their study stressed the significance of adopting comprehensive symbolic resources for the expression of social meaning and style. Zhang (2005) compared speech samples from Chinese professionals in international joint-ventures and state-owned companies based in Beijing with regard to phonetic variables. She regarded group differentiation as the motivation of the intentional construction of distinct styles. That is, rather than passively reflecting assumed social groups, the Chinese professionals consciously manipulated their speech features such as tones and rhotacizations to construct expected or desired social identities. Zhang's (2005) study echoes Irvine and Ga's (2000) theory that stylistic practices can make contributions to the semiotic landscape. It also highlights speaker's active selection and manipulation of linguistic resources. In a more recent investigation, Qiu (2013) treated the *sājiāo* or female cuteness practice as part of the *fēizhǔliú* 'non-mainstream' online youth culture in China. She regards *sājiāo* as a subtle strategy employed by Chinese females to deploy gender performativity, emphasizing the role of the new media in facilitating the performance of femininity and female sexuality.

These studies demonstrate that Chinese language users play an active role in manipulating linguistic variations to convey social meanings and construct styles. They uniformly shed light on how linguistic variations are tightly associated with social indexicalities. However, previous studies largely focused on lexical variations (Chan 2000; Wong & Zhang 2000), phonetic features (Zhang 2005), and linguistically unspecified speech styles (Qiu 2013). Few studies investigated the social indexicality of semantic and syntactic variations in Chinese. Furthermore, little attention has been paid to novel language variations in the Chinese new media and the booming digital youth culture. To fill this gap, this study examines the social indexicality of innovative usages of classifier constructions involving the classifier 枚 *méi* in the Chinese microblogging platform Weibo. In particular, we focus on how these innovative usages serve as a linguistic resource for constructing an online persona or style that is grounded in the digital youth culture and contemporary consumerism.

## 1.2 Chinese classifier constructions

Chinese systematically uses numeral classifiers for quantification and individualization (Li & Thompson 1981; Sun 2006; Tai 1994; Tang 1996; Wang 1994). Historically, most Chinese classifiers grammaticalized from nouns and their classifier

semantics is influenced by the persisting association with their original nominal semantics (Loke 1997; Tai 1994; Wang 1994). Hence, the mutual selection between classifier and noun is based on the perceptual properties of the referent of the noun (Chao 1968; Cheng & Sybesma 1998; Kuo & Sera 2009; Li & Thompson 1981; Erbaugh 2013; Sun 2006) whereby prototype categorization plays a cognitive role in the strength of the classifier-to-noun association (Ahrens 1994).

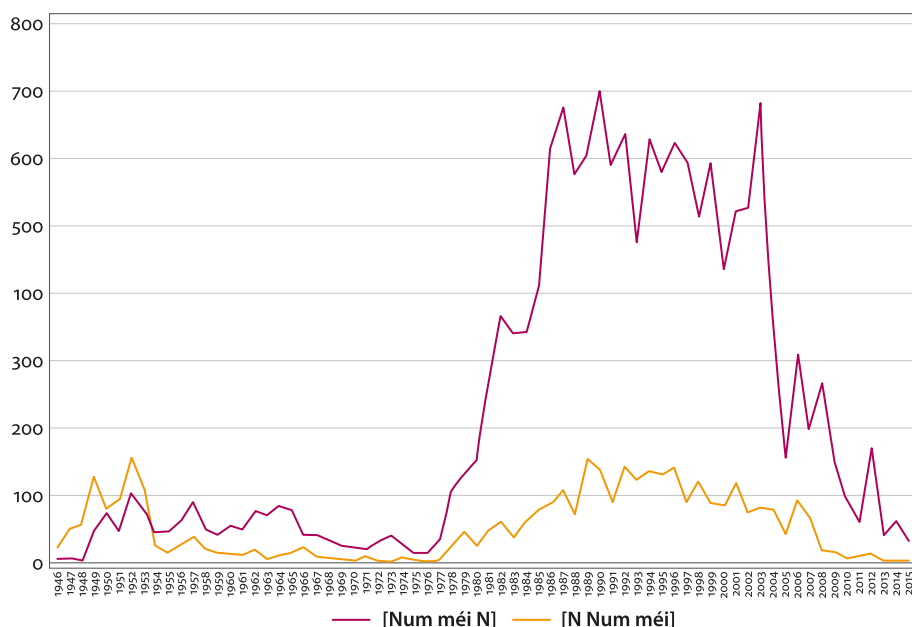


Figure 1. Coexistence of the two *mei* classifier constructions in Modern Chinese

In Classical Chinese, classifiers held a postnominal position in the classifier construction [N NUM/DEM CLF], as in 马五匹 *mǎ wǔ pǐ* 'horse five CLF'. In modern Chinese, classifiers occur in the prenominal position in the classifier construction [NUM/DEM CLF N] (Chao 1968; Li & Thompson 1981; Sun 2006). The change in constituent order is considered the result of syntactic reanalysis in ambiguous contexts (Peyraube 1998a, b; Tang 1996). At the same time, the postnominal classifier usage still exists, largely as a genre variation due to its archaic origin. As Figure 1 shows, data from 1946 to 2015 derived from the BCC corpus (<http://bcc.bcu.edu.cn/>) indicates that [NUM *mei* N] and [N NUM *mei*] coexist in modern Chinese, but the frequency of the former is significantly higher than that of the latter over the time period in question,  $t(70) = 6.15575$ ,  $p < .00001$ . Frequency of use reflects conventionality. Thus, the data suggests that the prenominal construction

is the conventional or unmarked form and the postnominal construction by comparison is the marked form.

### 1.3 枚 *méi*: A brief history

The earliest use of *méi* can be traced back to the Western Zhou period (1046–771 BCE) where it was used as a noun meaning ‘small twig’ (Wang & Tang 1931; Zhang 1998), as in (1) from 《诗经》 *Book of Songs*:

(1) 遵彼汝坟，伐其条枚

*zūn bǐ rǔ fén, fá qí tiáo méi*

‘Walk along the Ru River bank, and cut those twigs’

By early Han dynasty (202 BCE–9CE), *méi* developed a semantic extension namely *suàn chóu* ‘counting rod’ (Li & Zhang 2009). This sense laid the ground for a categorial transition from noun to classifier for counting objects regardless of physical size and animacy (Li & Zhang 2009: 66). Evidence of this transition can be seen in (2) from 《尚书》 *Book of Documents*:

(2) 今人数物云一枚两枚，则枚是筹之名也

*jīn rén shù wù yún yī méi liǎng méi, zé méi shì chóu zhī míng yě*

‘Currently, people count items and say one *méi* two *méi*, therefore, *méi* is the name of counter’

During the Southern and Northern Dynasties period (420–589 CE), *méi* reached its peak as a general classifier for any countable item. Contexts that demanded extensive enumeration and quantification facilitated its functional maturation (Wang 1994; Zhang 2017; Yuan 2019; Zhang 1998). Starting from the Tang dynasty (618–907 CE), numerous sortal classifiers emerged and competed with *méi*. Eventually, *méi* lost ground to 个 *gè* as the new general classifier (Chen 2002; Li & Zhang 2009). Example (3) from 《东观汉记》, *Dongguan History of Han*, illustrates the use of *méi* in the postnominal position in Classical Chinese:

(3) 得剑匕首二三千枚

*dé jiàn bǐshǒu èr sān qiān méi*

‘Obtained swords and daggers two to three thousand *méi*’

An important part of the history of Chinese language is the influence of Old Chinese vocabulary on neighboring languages such as Japanese and Korean. In particular, Japanese borrowed *jōsūshi* (助数詞) ‘counters’ from Old Chinese and adopted the original postnominal classifier position, though Japanese counters have since undergone changes (Makino & Tsutsui 1986). The classifier *méi* was one of the items that made it into the Japanese lexicon. It became *mai*, which

shares the written character 枚 and is amongst the highest frequency counters in Japanese. The Sino-Japanese *mai* quantifies [+thin] and [+flat] objects such as paper, photographs, plates, or articles of clothing.<sup>1</sup> *Mai* is worth noting because of its success in Chinese e-commerce. Specifically, the Sinicized formulaic construction [NUM 枚入 *méi rù*] ‘NUM pack’ (e.g. 五枚入 ‘five pack’) serves as a salient product packaging and branding tool that, as our study will show, impresses the Chinese consumer with a modern, chic, and exotic flair along with an expectation of high quality.<sup>2</sup>

In canonical grammar, the noun selection of *méi* is constrained to a limited set of small inanimate objects. As prescribed in *Xiàndài Hànyǔ Cídiǎn* ‘Contemporary Chinese Dictionary’ (Chinese Academy of Sciences 2002) and *Hàndiǎn* ‘Han Language Dictionary’ (<https://www.zdic.net>), *méi* classifies two types of inanimate objects in modern Chinese:

- i. *Small objects that come in aggregates (e.g. stamps, rings, medals, coins)*
- ii. *Projectiles for firing from firearms or for throwing (e.g. bullet, bomb, missile, grenade)*

The first category holds [+small] [+flat] [+delicate] as its prototypical features (Chen 2002; Li & Zhang 2009). The second category is defined by the shared meaning 弹 *dàn* ‘projectile’. In any case, it is infelicitous to use *méi* with human nouns. Contra prescriptive grammar, innovative uses of *méi* that violate this semantic constraint have been around in Chinese cyberspace for over a decade. Characteristic of the innovation is the use of *méi* to quantify or individuate certain human nouns. This function is observed in two constructions: [NUM *méi* N] and [N NUM *méi*], and is particularly noteworthy in the marked postnominal construction [N NUM *méi*].

It is the goal of the present paper to examine the innovative uses and how they contribute to the construction of local social indexical meanings in the global context of the contemporary digital youth culture and cuteness-infused consumerism. We take a usage-based constructionist approach to the linguistic analysis of [N NUM *méi*] and [NUM *méi* N]. On this approach, language is a system of conventionalized form-function pairings generalized and learned through frequent usage events (Goldberg 2006, 2019). To account for the social indexical function of these constructional variants we adopt the social indexicality framework discussed in 1.1. The rest of the article is organized as follows. Section 2

1. See *Cambridge Japanese-English Dictionary* (<https://dictionary.cambridge.org/us/dictionary/japanese-english/>)

2. The original Japanese is “NUM 枚入り” and the Sinicized form is a partial borrowing that left out the hiragana.

introduces corpus data retrieval, annotation, survey data design, and research methods. Section 3 reports the results from both corpus and survey data. Section 4 discusses the indexical significance of the innovation and accounts for its popularity against the larger cultural and socioeconomic contexts. Section 5 concludes the article and draws theoretical and methodological implications.

## 2. Data and methods

For this study, we used both naturally occurring corpus data from Weibo and subjective data from a survey and follow-up interviews. From a usage-based perspective, grammar is the cognitive organization of experience with language, and frequency plays an essential role in category learning and category expansion (Nosofsky 1988; Bybee 2006; Harris, Murphy, & Rehder 2008; Kapatsinski 2014; Behrens & Pfänder 2016). Corpus data was intended to shine light on the usage patterns of the emerging linguistic innovations. At the same time, we are aware of the limitations of corpus data, especially its limited size due to the novelty of the usages. Therefore, additional subjective data was collected to complement the natural data. The survey and interviews are intended to throw light on how language users perceive the linguistic variations and their social meanings.

### 2.1 The Weibo blogpost dataset

The data used for this study was collected from Weibo, the Chinese counterpart of Twitter. Weibo was chosen because it offers authentic, abundant, and publicly available language data. Used by over 30% of netizens in China, Weibo is one of the most popular social networking services in China and neighboring Sino-phone regions (Rapoza 2011). According to the 2018 *Weibo Annual Report*, Weibo had achieved 462 million MAUs (monthly active users) and 200 million DAUs (daily active users) by the end of 2018. Language use on Weibo is up-to-date and in vivo, reflecting spontaneous Chinese online communication and grassroots sociolinguistic behaviors.

We used ‘Weibo Search’ (微博搜索 <https://s.weibo.com/>), the system-internal search engine in Weibo, to obtain blogposts generated between October 27 and November 26, 2018 that contained 枚 *méi* as the keyword. To avoid duplicated items such as reposts and forwards, search control was set as ‘original’ (原创). ScrapeStorm was adopted to collect a total of 1699 blogposts (145,823 characters) with *méi* as raw data. The original blogposts including the target tokens were retained for further analysis whereby associated personal identifying information (e.g. user names) was removed for anonymity. Subsequent manual annotations filtered out instances

where *méi* takes non-human nouns, leaving a total of 575 items with *méi* as a classifier collocating with human nouns in the N slot.

2.2 Corpus data analysis methods

The 575 blogposts were manually inspected and annotated in two steps. First, they were grouped by construction types. There were a total of 328 tokens of the postnominal classifier construction [N NUM *méi*], and 247 tokens of the prenominal classifier construction [NUM *méi* N]. No blogpost was found that involved both constructions. Second, for each group, the head nouns in the N slot of the noun phrases were identified and sorted. Table 1 shows two separate tokens with the same head noun 小姐姐 *xiǎo jiějie* ‘little sis, attractive girl’, which is a neologism endearingly referring to an attractive girl and was treated as a unique type of head noun.

Table 1. Illustration of head noun sorting

[Num <i>méi</i> N]	N slot	Head Noun
[一枚话超多的小姐姐]	话超多的小姐姐	小姐姐
[yì <i>méi</i> huà chāoduō de xiǎo jiějie]	huà chāoduō de xiǎo jiějie	xiǎo jiějie
‘[one <i>méi</i> super chatty little sis]’	‘super chatty little sis’	‘little sis’
[一枚漂亮的小姐姐]	漂亮的小姐姐	小姐姐
[yì <i>méi</i> piàoliang de xiǎo jiějie]	[piàoliang de xiǎo jiějie]	xiǎo jiějie
[one <i>méi</i> pretty little sis]’	‘pretty little sis’	‘little sis’

Two kinds of frequency data were analyzed. Type frequency refers to the number of different tokens that occur in the data. It is associated with the productivity and the strength of a construction as a cognitive schema. The higher the type frequency, the more productive the schema and the easier it is to use it in a new context (Bybee 1995, 2006). Token frequency is the total number of times a particular type is observed in the data. It reflects the entrenchment of the lexical representation of individual types. Forms of high token frequency are more likely to be unanalyzed, acquired, remembered, and recalled as the central members of a prototype category (Rosch & Mervis 1975; Bybee 1995, 2006). The respective type frequencies of the head nouns in the postnominal classifier construction [N NUM *méi*] and the prenominal classifier construction [NUM *méi* N] were 179 and 151. While Goldberg (2006: 5) included “sufficient frequency” of uses as an independent criterion that defines a construction, Gries (2012: 505) operationalized the measurement of frequency in terms of the skewedness of type-token distributions.



Following this proposal, we analyzed rank-frequency distributions of the N slot in each classifier construction to identify skewedness as a measure of productivity. The free software R (3.6.2) and R-studio (1.2.5033) were used for statistics and graphics as part of the quantitative analysis.

In addition to productivity, we analyzed the semantics and pragmatics of the items in the open N slot in both classifier constructions. From a usage-based perspective, semantic coverage has a central effect on exemplar-based category expansion (Osherson et al. 1990; Goldberg 1995, 2006). Pragmatics is closely related to semantic coverage. In particular, we examined the group membership of the referents of the nouns in the N slot wherever such information is available in the blogposts. Ingroup referents include self, family, and friends and outgroup referents include any non-ingroup members such as delivery agents and celebrities, etc.

### 2.3 Survey on language user perceptions

The use of linguistic variants as a stylistic practice relies on language users' interpretation of the social meanings of available linguistic resources in the indexical field (Eckert 2008). Therefore, our analysis of the indexicality of the innovative uses included an online survey designed to elicit subjective data on how language users interpret the innovative usages in question. The survey was distributed among volunteer naïve language users residing in Nanjing City, China. Out of a total of 32 responses collected with consent, 25 were valid. Seven responses were removed because of incomplete answers. Of these 16 were from females and 9 from males. The valid data fall into four age groups: 20–29 ( $n=4$ ), 30–39 ( $n=12$ ), 40–49 ( $n=7$ ), 50 and above ( $n=2$ ). Brief follow-up interviews were conducted with four randomly chosen participants to inform data interpretation.<sup>3</sup> Besides demographic information (age, gender, education), the survey focused on the following aspects:

- i. Preference on a scale from 0–5 of [N NUM *méi*] and [NUM *méi* N] with innovative head nouns.
- ii. Preference on a scale from 0–5 of [N NUM *méi*] and [NUM *méi* N] with canonical head nouns.
- iii. Awareness and perception of Japanese loan phrase 枚入 *méi rù* in the context of Chinese e-commerce as a suspect responsible for the popularity of *méi* in Chinese cyberspace.

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3. The survey can be accessed via the link [https://oregon.qualtrics.com/jfe/form/SV\\_bNjVUfkAbT6kY5f](https://oregon.qualtrics.com/jfe/form/SV_bNjVUfkAbT6kY5f).

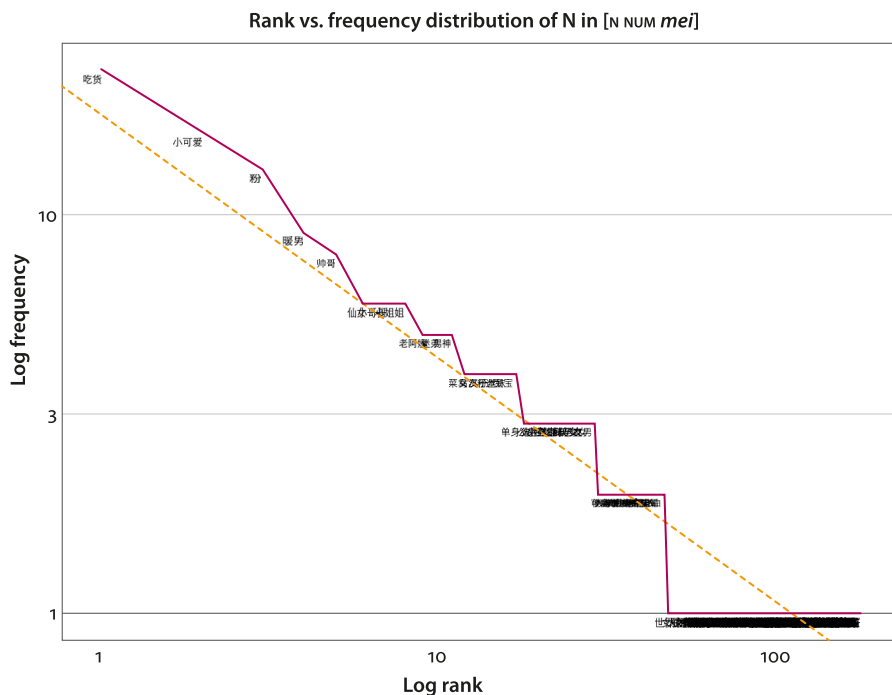
- iv. Awareness of *méi*'s archaic usage in Classical Chinese.
- v. Self-reported classifier *méi* usage on social media and the motivations.

### 3. Results

#### 3.1 Productivity

The respective frequency counts of the two classifier constructions in which *méi* counts human nouns are 328 tokens and 179 types for [N NUM *méi*] and 247 tokens and 151 types for [NUM *méi* N]. These figures exceed by a wide margin what it took for adults to readily generalize a new pattern to novel lexical items under experimental conditions, namely 16 tokens and five types (e.g. Wonnacott et al. 2012; Boyd & Goldberg 2012). Boyd and Goldberg (2012) suggested that minimal exposure is sufficient for adults to form generalizations beyond encountered exemplars. This tendency can be attributed to adult capacities for high-level categorization (Taylor 2012) and/or creative analogical and associative learning (Barðdal 2008; Madlener 2016). If the minimal exposure model holds true, there is reason for greater confidence in the productivity of the two innovative classifier constructions under investigation.

As well skewed distributions were observed with both constructions. For [N NUM *méi*], as Figure 2 shows, the top five high frequency items of viz. 3% of the 179 types, have 69 tokens and account for 21% of the total of 328 tokens. More notably, 132 (74%) out of 179 types are hapax legomena, i.e. words that occur only once in the data. Their aggregated token frequencies comprise 40% of the total token frequencies of the construction. Similarly, as Figure 3 shows, the top five high frequency items of [NUM *méi* N], viz. 3% of the 151 types, have 62 tokens and constitute 25% of the total 247 tokens. Here the number of hapax legomena is 118, making up 78% of 151 types and accounting for 48% of the total tokens of the construction. The log-log plots in Figures 2 and 3 visually represent the skewed distributions toward high-frequency items, which bump up toward the upper left area on the vertical axis. In contrast, the low-frequency items are increasingly crowded toward the lower right part of the graphic. The hapax legomena, in particular, concentrate in a dark long tail above the right side of the horizontal axis. The Zipfian certainty and reduced entropy as seen in the rank-frequency distributions suggest that the N slot has become productive in admitting human nouns and can readily admit new items by analogy to the existing exemplars. The sheer number of hapax legomena reflects a spontaneity with which speakers use a human noun in the N slot.



**Figure 2.** Rank vs. frequency distributions of N in construction [N NUM *méi*]

Although both classifier constructions display productivity in the N slot for human nouns, they differ in significant ways. First, there is a genre-specific preference for [N NUM *méi*]. Table 2 contrasts the two constructions in token frequency distributions across two corpora: Weibo corpus and BCC balanced corpus. A chi-square test showed significantly different distributions of *méi* constructions across corpus types ( $X^2 = 238.218$ ,  $df = 1$ ,  $p < .00001$ ). This suggests that although the prenominal construction [NUM *méi* N] remains dominant (72%) in modern Chinese at large, Weibo bloggers prefer the postnominal construction [N NUM *méi*] for human counting (57%).

**Table 2.** Distributions of *méi* constructions in different genres

	[N NUM <i>méi</i> ]		[NUM <i>méi</i> N]	
Innovative uses on Weibo	328	(57%)	247	(43%)
All uses in BCC corpus	7,609	(28%)	19,825	(72%)

It is worth noting that there is a head noun length effect on construction choice. On average the head noun of [N NUM *méi*] is over two syllables shorter than that of [NUM *méi* N] ( $2.91 < 5.14$ ). That is, longer head nouns prefer to occur

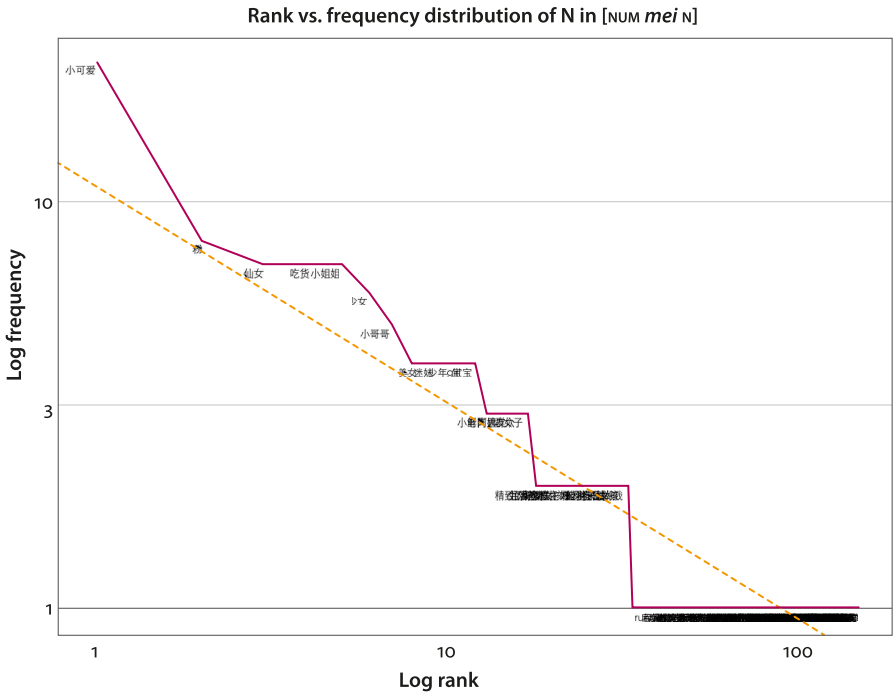


Figure 3. Rank vs. frequency distribution of N in construction [NUM méi N]

phrase-finally after *méi*. This is consistent with the accessibility-based Heavy NP Shift observed as an information structuring strategy (Kuno & Takami 1993; Stallings & MacDonald 2011). Despite this effect that prevents longer head nouns from freely entering the N slot of [N NUM *méi*], the postnominal construction still received higher preference as measured by token frequency.

3.2 Head noun semantics

As noted in 2.1, counting human nouns is the defining feature of the innovative classifier constructions. A closer semantic examination of the items in the N slot suggests a rather narrow semantic subclass of human nouns. Specifically, they are largely human labels that share one or more of such features as [+hip], [+chic], [+playful], [+small] and [+youthful]. For example, the top-ranked item *chīhuò* ‘foodie’ in [N NUM *méi*] refers to a gourmet with a hip lifestyle and refined culinary taste. As a self-reference it playfully highlights a person’s stylistic discernment and culinary privilege. Similarly, *xiǎo kě’ài* ‘little cutie’, the top-ranked item of [NUM *méi* N], is a loan translation of the Japanese *kawaii*, which refers to humans and nonhuman items that are cute, vulnerable, and childlike. The

phonetic loanword *fēn* ‘fan’ is a neologism that captures the pulse of the digital youth culture of fandom. As frequent collocates of *méi*, these human labels serve as the central members of the semantic class that emerges through exemplar replication based on analogy or family resemblance (Bybee 1995, 2006; Rosch & Mervis 1975). As shown in Table 3, the two human counting classifier constructions share many head nouns. These nouns fit in the semantic subclass characterized by [+hip], [+chic], [+playful] and [+youthful] in a family resemblance fashion. A number of these human labels are neologisms born out of the digital youth culture. For example, *dānshēn gǒu* ‘single dog’ is a playful and self-deprecating label for a person romantically unattached and desperate for love; *mí mèi* ‘enchanted younger sister, fangirl’ labels in a playful and lighthearted way a young girl starstruck by her idols. The neologism *xiǎo xiānròu* ‘little fresh meat’ metaphorizes a brand new masculinity embodied by male idols whose “young, delicate-featured, makeup-clad” image is “antithetical to the patriarchal and stoic qualities traditionally associated with Chinese men” (Gao 2019).

Based on the data in Table 3, the shared top-three types show a statistically significant preference of [N NUM *méi*] over [NUM *méi* N] in terms of token frequencies ( $X^2 = 8.3812$ ,  $df = 1$ ,  $p = .015138 < .05$ ). Taking into account the information-structure relevant length effect discussed previously, this result suggests that [N NUM *méi*] is more dominant in the innovative use for human counting. Obviously, as an emerging usage, the quantitative data is far from robust to warrant a conclusive generalization, which awaits further usage data.

As noted previously, the canonical head nouns of *méi* refer to small and delicate objects that come in aggregates. This original meaning gets profiled in human counting in the Weibo data. The number of distinct head nouns morphologically prefixed with *xiǎo* ‘small, little’ was 47, making up 14% of all 330 types and the total token frequencies of these 47 types were 109, making up 19% of all 575 tokens. Among these types, *xiǎo kě'ài* ‘little cutie’, the faux kinship terms *xiǎo gēge* ‘little bro’ and *xiǎo jiějie* ‘little sis’, and the well-groomed cute male idol *xiǎo xiānròu* ‘little fresh meat’ appear to be the favorites in the Chinese digital world. In addition, there were also other head nouns that inherently refer to small or young persons, such as *bǎobao* ‘baby’, *shàonǚ* ‘young girl’ and *shàonián* ‘young boy’. It is clear that cuteness is a dominant theme in the semantics of the human nouns counted by *méi*. A direct pragmatic implication of applying a classifier conventionally used to count small objects to counting humans is the humor effect resulting from incongruity and surprise (Clark 1987; Morreall 1987, 2009). In other words, there is something unexpectedly comical about putting humans in the same category as stamps and coins. Humor aside, one might wonder about something more sociological: what does the objectification of persons by way of the innovative classifier

**Table 3.** Shared head nouns (number shown in token frequency)

No.	Type		[N NUM <i>méi</i> ]	[NUM <i>méi</i> N]
1	<i>chīhuò</i>	foodie	23	7
2	<i>xiǎo kě'ài</i>	little cutie	16	22
3	<i>fēn</i>	fan	13	8
4	<i>xiānnǚ</i>	fairy	6	7
5	<i>xiǎo gēge</i>	little bro, attractive boy	6	5
6	<i>xiǎo jiějie</i>	little sis, attractive girl	6	7
7	<i>lǎo āyí</i>	old auntie (young women's self-mocking)	5	3
8	<i>fěnsī</i>	fan	4	2
9	<i>mí mèi</i>	fangirl	4	4
10	<i>bǎobao</i>	baby	4	4
11	<i>dānshēn gǒu</i>	the dog-liked single (slang)	3	2
12	<i>gōngzhǔ</i>	princess	3	2
13	<i>xiǎo xiānròu</i>	handsome young boy	3	3
14	<i>měinǚ</i>	beauty	3	4
15	<i>nányǒu</i>	boyfriend	3	3
16	<i>shàonǚ</i>	teenage girl	3	6
17	<i>tiānshǐ</i>	angel	2	2
18	<i>pàngzi</i>	fatty	2	2
19	<i>xìng mí</i>	Xing's fan	1	1
20	<i>bǎozàng nánhái</i>	disingenuous boy	1	2
21	<i>xiǎo qīngxīn</i>	indie-style person	1	1
22	<i>xiǎo měi niū</i>	pretty chick	1	1
23	<i>fèi chái</i>	useless guy (slang)	1	1
24	<i>shèchù</i>	wage slave	1	2
25	<i>měi shàonǚ</i>	beautiful girl	1	1
26	<i>shàonián</i>	teenage boy	1	4
27	<i>xiǎo gē</i>	young male staff (slang)	1	1
28	<i>lùrén</i>	passerby	1	1
Total Token Freq.			119	108

usages in the larger context of the digital culture convey about that culture? We will return to this point in the discussion section.

Another pragmatic aspect related to the semantics of the head nouns is how their referents relate to the speaker. Table 4 shows data on construction type versus referent category. A chi-square test of independence was performed to examine the association between construction type and referent category. The results showed a significant association between these variables ( $X^2 = 11.429$ ,  $df = 1$ ,  $p = .001$ ). There were significantly more head nouns with ingroup referents and significantly fewer head nouns with outgroup referents in [N NUM *méi*]. The opposite was true for head nouns in [NUM *méi* N].

**Table 4.** Noun reference distribution

Referent	[N NUM <i>méi</i> ]	[NUM <i>méi</i> N]
Ingroup	180	108
Outgroup	121	131

Examples of ingroup and outgroup referents can be seen in (3) and (4), respectively:

- (4) 没有身份证的我还是黑户女孩一枚，哭唧唧  
*méiyǒu shēnfèn zhèng de wǒ hái shì hēihù nǚhái yī méi, kū jījī*  
 ‘Me without ID is still unregistered girl one *méi*, cry-crying’
- (5) 发现一枚健步如飞的老板  
*fāxiàn yī méi jiànbùrúfēi de lǎobǎn*  
 ‘(I) discovered one *méi* boss who walks as if on wings’

This distribution deserves some attention in light of traditional Chinese politeness strategies. There is evidence that humility for ingroup and reverence for outgroup as a macro cultural model motivates micro-level sociopragmatic behavior in Chinese (Gu 1990; Pan & Kádár 2013). The fact that the marked postnominal construction prefers ingroup referents seems consistent with this cultural model to the extent that the ingroup may have a greater tolerance for marked playfulness and jocularity than the outgroup for which greater seriousness is expected.

### 3.3 Language user perceptions

The survey results yielded interesting insights into language user perceptions on the innovative uses of *méi*, though the effect of age remained unclear due to the small and even samples. Answers to the survey questions regarding construction preference on a scale from 0–5 revealed that the postnominal expressions were significantly higher evaluated than the prenominal expressions ( $t = 3.360672$ ,  $p = .0026$ ;  $t = 2.975403$ ,  $p = .00658$ ). This result converges with

the corpus data on the productivity measures of the two constructional variants. Moreover, participants were generally aware of the fashionable and playful style associated with the postnominal usage in addition to the cuteness of what is being counted, as is evident in the following statements from the post-survey interviews:

- a. “*Méi* seems to be such a superstar now. I shop online often and feel like *méi* is so popular out there, though some are used wrongly. The other day I bought some ‘five 枚入 *méi rù*’ plates from Taobao, which I imagined to be small. It turned out they were the size of basins, what a surprise! Even my chubby neighbor auntie Li calls herself one *méi* square dance enthusiast, she probably copied that from the youth. If you have never counted something with *méi*, you may seem a bit old-fashioned.”
- b. “The first human counting use of *méi* I noticed was probably *chīhuò yī méi* ‘foodie one *méi*’, simply because a lot of people were using it online. Afterward, I learned *shuàigē yī méi* ‘handsome guy one *méi*’ and *měinǚ yī méi* ‘beauty one *méi*’, because they sound less serious when complimenting on someone’s appearance. My own uses are creative. On WeChat Moments, I call my dad *fēngjǐng zhào shèyǐng shī yī méi* ‘landscape photographer one *méi*’ and my husband *chángwèi yán chéngxù yuán yī méi* ‘gastroenteritis programmer one *méi*’. They are fun, people give me a lot of likes!”

Interestingly, 76% of the participants reported an awareness of the Sinicized Japanese borrowing [枚入 *méi rù*] in daily life in the context of shopping, although they were not exactly sure it was of Japanese origin due to the use of the familiar kanjis. These participants also reported positive perceptions of products with 枚入 *méi rù* printed on the packaging in e-commerce platforms, describing them as ‘imported’ (78%), ‘high-grade’ (35%), or ‘good quality’ (39%). Two participants described in the post-survey interviews their respective perceptions of the Japanese [枚入 *méi rù*], as quoted in (a) and (b) below:

- c. “I didn’t know 枚入 *méi rù* was related to Japanese, but I often see it on the packages of higher-grade facial masks, especially the imported ones. For ordinary masks, we just say *one piàn, two piàn*, not *méi*. So, I guess products counted by *méi* have better quality.”
- d. “I feel like 枚入 *méi rù* has a poetic feature, is it from ancient Chinese or Japanese? Our nation is losing language beauty, but *méi* sounds delicate and unique. Manufacturers who prefer this style are the ones who care about business image; thus, their products should be well-made.”

These results indicate that *méi* and, relatedly, 枚入 *méi rù*, play an important part in contemporary consumerism by influencing consumer perceptions and man-



aging consumer expectations of products. By comparison, participants were not particularly familiar with the Classical Chinese constituent order in the postnominal classifier construction: 60% of the participants reported a vague recognition of the archaic postnominal usage of *méi* in Classical Chinese. Compared with the reported awareness of [枚入 *méi* rù], this result suggests a relatively minor influence of Classical Chinese on the structural innovation that we see in the postnominal [N NUM *méi*].

Overall, our results showed that the two innovative classifier constructions have become productive and readily admit new human nouns in the N slot. In terms of form-function pairing, although both constructions count humans, the postnominal [N NUM *méi*] is more frequently used and tends to count persons in the ingroup and does so in a more marked way than the prenominal [NUM *méi* N]. Cuteness and chicness are central to the semantics of the nouns used in the constructions. More importantly, language users are not only aware that these features are central to the social meanings of the innovative usages. They associate these features with good quality of products in the digital economy and with a favorable modern style that they aspire and imitate.

#### 4. Discussion

Linguistic markedness refers to the state of standing out as unusual or irregular in comparison to a more common or regular form (Waugh & Lafford 2006). Haspelmath (2006) explains this kind of contrast in terms of frequency of use. The structure with higher frequency of use is unmarked and normal because frequency creates familiarity. By contrast, the lower-frequency structure is irregular and restricted due to a lack of familiarity. Thus, from a usage-based perspective, markedness is fluid and dynamic. Our data confirmed this view. The postnominal [N NUM *méi*] is marked relative to the prenominal [NUM *méi* N] in general counting in modern Chinese. This markedness affords this construction an attention-getting capacity, which in turn renders it a favorable device of counting cute and chic persons in the youth digital culture. This, in its own turn, generates surprise, humor and playfulness, all of which conspire to make the construction a popular tool for manufacturing style. Productivity both follows and feeds popularity, which makes the erstwhile marked variant the more normal choice for human counting unless length effect interferes. From a usage-based perspective, markedness reflects cognitive representation of frequency of use among similar constructions within the linguistic system. Following from this, the unconscious representation of frequency in the sense of implicit statistical learning is all it takes for language users to sense whether some way of

saying something is more natural than some other way of saying it (Jurafsky & Martin 2009). Thus, although the postnominal [N NUM *méi*] may be reminiscent of the Classical Chinese classifier construction, this historical connection is not the only or even necessary reason for the innovative usage to be perceived as special by the naïve language user. Our survey results seem to support this view.

Humor does wonders. It not only enhances popularity, but also motivates the creation of novel meanings (Boyd 2004). Jing-Schmidt and Hsieh (2019) found that humor effect is a common feature of grassroots neologisms in Chinese cyberspace. Our findings on the innovative usages of the two classifier constructions confirmed this. The lighthearted style that arises from humor and jocularity is part and parcel of the social indexical meanings of the linguistic variation. Language users instinctively pick up these meanings and waste no time imitating and reproducing the attractive style by inserting new human nouns into the N slot in new contexts, causing further meme-like diffusions of the innovation.

Linguistic variations are social practices that rely on a range of social meaning resources (Eckert 2003b; Hebdige 1984; Irvine & Gal 2009; Silverstein 1976, 1985, 2003). This study pointed to multiple wellsprings of social meaning interflowing in the indexical field: marked constituent order, semantic incongruity between classifier and head nouns, diminution-infused noun lexical semantics, networked digital communication, vague connection to historical grammar, strange semi-exotic packaging prints in e-commerce, cuteness culture and rampant consumerism. Some are related to mechanisms of language, others are the very products of contemporary digital youth culture and digital economy. Critically, the sociolinguistic phenomenon in question is a mirror of many aspects of contemporary existence that is inextricably tied to social media and digital culture. First and foremost, the linguistic innovations mirror shifting social norms including communication norms, especially the way social media changes language as we know it (Davies 2016). The *méi* constructions and their social indexical meanings are cultivated in the era of the new media. Thus the indexical meanings are very much buttressed by the mediality of the “participatory culture” of social media (Shifman 2014: 4). Consequently, instant and expansive interconnectivity and digital anonymity facilitate spontaneous and speedy grassroots communication and self-expression in an unprecedented way (Castells 2009; Jing-Schmidt & Peng 2018). In this wireless space, creativity and quirkiness win the day; vogue and popularity reign.

Changes in language both perform local changes in identity and reflect global changes in cultural ideologies, as seen in the softening of identities in digital youth culture. Cuteness is front and center in this culture. It is well known that *kawaii* ‘cuteness’ is a key element of Japanese pop culture and digital economy and has

been exported and marketed as a cultural as well as commercial commodity far beyond Japan (Botz-Bornstein 2011; Yomota 2006; Chuang 2011; Hjorth 2005; Lukacs 2015). In this study we witnessed its reach in Chinese cyberspace and its effect on Chinese cyber language use. We argue that the diminution-based neologisms and their popular uses in the innovative classifier constructions reflect and reinforce the cuteness ideology that permeates East Asian youth cultures. The commercialism behind the manufacturing of cuteness provides fertile soil for the grammatical objectification and commodification of persons by counting them with *méi*. Relatedly, the packaging strategy involving 枚入 *méi rù* appears to have contributed to the popularization of the innovative uses of the classifier *méi*. Accompanied by the booming Chinese OEM (Original Equipment Manufacturer) industry in which products are marketed globally, a massive number of commodities with Japanese packaging are circulated in China. For instance, the Chinese e-commerce giant JD.com merchandizes 42,000 products with 枚入 *méi rù*. Similarly, the biggest Chinese e-commerce website Taobao.com offers 1,269,596 枚入 *méi rù* products (Xie 2013). Just as 枚入 *méi rù* products permeate Chinese e-commerce, *méi* classifier constructions are making headway in Chinese cyber communication. The innovative linguistic practices attest to the embracement and entrenchment of the social mores of a society where consumerism has taken root as the new creed.

## 5. Concluding remarks

In showing the multiplicity of the factors that influence linguistic variation as a socio-indexical practice, this study connects micro-level linguistic choice on Weibo to macro-level cultural and socioeconomic forces that shape the context of language use and the construction of style and persona. We hope this study opens doors through which to take indexicality research to new places of relevance to other disciplines concerned with language behavior as a window into human preferences, societal mores, and cultural as well as economic dynamics.

We would like to conclude by drawing methodological implications. The Weibo data reveals *how* variants are used in terms of quantifiable usage patterns. However, it does not tell us *why* the variations are used the way they are used. The survey data throws important light on the metalinguistic and metapragmatic aspects of the variations. This study shows that these different data sources albeit still modest in size, provide complementary and to some extent converging evidences that support a more comprehensive analysis.

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## Abbreviations used in this article

CLF	numeral classifier
DEM	demonstrative
N	noun
NUM	numeral

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