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Bare classifier/noun alternations in the Jinyun (Wu) variety of Chinese and the encoding of definiteness

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Abstract: Certain numeral classifier languages allow for the combination of a classifier and a noun to represent a definite individual/entity when no numeral accompanies the classifier (Vietnamese, Bangla, Oriya, Hmong, varieties of Chinese). In many instances, such a patterning alternates with the use of a bare noun to reference definite individuals/entities, but there has been little systematic study of such alternations, and whether the "bare classifier" and "bare noun" patterns are in free variation or encode different aspects of definite reference. The current paper argues for the latter conclusion with a detailed study of the Jinyun variety of Chinese, showing that bare classifier and bare noun patterns are used to highlight different aspects of "definiteness." The bare classifier pattern dominates cases of anaphoric definite reference, bridging cross-reference, reference to salient visible entities and non-speaker kin terms and personal relations, while bare nouns are used predominantly for individuals and entities perceived to be specifically unique or directly connected to the speaker. This distribution interestingly shows strong parallels to the way that languages with more than one definite article use such elements for definite reference.

Keywords: classifiers, definiteness, definite determiners, bare nouns, Chinese

1 Introduction

While the primary, crosslinguistic function of numeral classifiers is to license the occurrence of numerals in the counting of nouns, in various languages such elements may occur without any numeral in structures that are associated with definite interpretations of the noun phrases they are combined with. Thus in Cantonese, it is well-described (Matthews and Yip 1994; Cheng and Sybesma 1999, 2005) that definite noun phrases must regularly be represented by means of a classifier-noun sequence – a "bare-classifier

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(1) *(Zek) gau soeng gwo maalou. (Cantonese)
CL dog want cross road

"The dog wants to cross the road."
(Cheng and Sybesma 1999)

(2) <u>gou</u> xiang guo malu. (Mandarin) dog want cross road 'The dog wants to cross the road.'

In certain other languages and varieties, both a bare classifier and a bare noun pattern may be used to represent definite noun phrases, as in the Wenzhou (Wu) variety of Chinese illustrated in (3) reported in Cheng and Sybesma (2005).¹

(3) a. $\frac{d\gamma u}{CL} \frac{kau}{dog} I \frac{kau - ku}{dog} \frac{ka - l\phi y}{dog}$ (Wenzhou)

"The dog wants to cross the road."

b. $\frac{kau}{dog} i \frac{tshi}{niou}$ (Wenzhou)

dog want eat meat

"The dog wants to eat meat."

The purpose of this article is to reach a better understanding of the alternations between bare classifier structures and bare nouns in languages which permit both options for definite noun phrases, and determine whether there is free alternation between the two forms of representation, or whether differences in meaning are associated with the two available strategies. To this end, the article documents and describes such alternations in a variety of the Wu dialect of Chinese spoken in Jinyun county in Zhejiang province (henceforth referred to simply as Jinyun).² The study of Jinyun shows that bare classifier and bare noun patterns are not simple variants of each other, but are used in different

¹ See also the Fuyang variety of Wu Chinese described in Li and Bisang (2012) for similar alternations. Beyond the Sinitic languages, Bangla, Vietnamese and Hmong have also been noted to exhibit bare classifier and bare noun forms in instances of definite reference (Bhattacharya 1999; Bisang 1993; Simpson et al. 2011; Simpson and Biswas 2016).

² The Jinyun variety of Chinese is described in Lou and Wu (2012). It has approximately 350,000 speakers and is part of the Chuzhou dialect (处州) of Wu Chinese. The data from Jinyun presented in the paper was collected from multiple native speakers of the variety living in Jinyun county.

situations, when different aspects of definiteness are highlighted by speakers. It will be argued that the distribution found in Jinyun presents very clear parallels to a certain type of "definiteness split" identified in languages with definite determiners, as described and analyzed in Löbner (1985, 2011), and Ortmann (2014), and provides novel empirical support from Sinitic for the "scale of uniqueness" argued by Löbner and Ortmann to underlie and determine definiteness splits across languages. The similarity of the patterns in Jinyun to those present in many definite determiner languages additionally demonstrates that languages which have not developed definite articles may sometimes adapt and use other lexical means to encode the same interpretative divisions otherwise communicated by dedicated definite determiners.

The structure of the paper is as follows. Section 2 reviews a number of approaches to the concept of definiteness and the use of definite determiners, as well as the observation made in Ebert (1971a, 1971b), Schwarz (2009, 2013), Löbner (1985, 2011), and Ortmann (2014) that two distinct representational forms of definite noun phrases may sometimes occur in languages with definite determiners. Section 3, the bulk of the paper, presents a broad range of data from Jinyun, showing how definiteness is typically encoded in different linguistic situations, and analyzes this distribution. Section 4 compares the Jinyun patterns to those found in other languages with definiteness splits, and shows how there is a high degree of correspondence of these patterns with the notions of "semantic and pragmatic uniqueness" developed in Löbner (1985, 2011), and Ortmann (2014). Section 5 presents the conclusions of the paper.

2 The marking of definiteness: Issues and approaches

Lyons (1999), Barker (2004) and Abbott (2010) all present useful overviews of various central issues and challenges in the study of definiteness and the use of definite determiners, discussing a range of factors that may cause definite articles such as English the to be used in instances of nominal reference. Lyons begins by noting that one common approach to definiteness, heavily associated with Christophersen (1939) and Heim (1982), has been to associate use of definite determiners with the notion of familiarity. The English definite determiner the and its analogues in many other languages are observed to frequently be used in situations where the referent of a nominal expression is familiar to both speaker and hearer, in contrast to situations where only the speaker may be familiar with a referent, and the indefinite determiner is used. The following characterization from Christophersen (1939: 72) is given in Barker (2004):

The article the brings it about that to the [noun] is attached a certain association with previously acquired knowledge, by which it can be inferred that only one definite individual is meant. This is what is understood by familiarity. Barker (2004: 92)

Lyons notes, however, that there are cases of definite reference in which it is not clear that the hearer is genuinely familiar with the referent of a noun combined with the definite determiner, as illustrated in Examples (4) and (5) from Lyons (1999):

- (4) A: An old man, two women and several children were already there when I arrived.
 - B: Did you recognize the old man?
- (5) Put these clean towels in the bathroom, please.

In these cases of definite reference, it is very possible that the hearer has no familiarity with the referents of the definite NPs prior to their mention by the speaker. Barker adds that there are further cases in which the presence of a mental representation of an entity, making it "familiar" in a more technical sense, is actually not sufficient for the use of the definite determiner, as illustrated by the inappropriateness of (6c) as a continuation to (6a) when compared with (6b). If mention of the truck in (6a) evokes a mental representation and "familiarity" with its various subparts, this might be expected to license the use of the definite determiner with both hood and hubcap, but only (6b) is a felicitous continuation for (6a).

- (6) a. I bought a truck.
 - b. The hood was scratched.
 - c. #The hubcap was scratched.

Because of such issues, it has been suggested that what is necessary for the appropriate use of the definite determiner the might in fact be the notion of "identifiability" rather than simply familiarity (Gundel et al. 1993). Use of a definite determiner may assume that the hearer is in a position to correctly identify the reference of a definite NP, even though the hearer may not previously be familiar with such an individual. In approaches to definiteness which see identifiability as the key property that definite NPs have, personal familiarity is viewed as one way in which the hearer can successfully identify a

referent: "In such cases, the hearer is invited to match the referent of the definite noun phrase with some real-world entity he knows to exist because he can see it, has heard of it, or infers its existence from something else he has heard." (Lyons 1999: 6).

In certain other situations, a definite determiner may appear to be licensed where the hearer is arguably not in a position to identify the reference of the NP introduced by the, posing potential problems for the assumption that identifiability is the central notion underlying definite reference. For example, it is possible to use definite NPs in English in contexts where the hearer would be unable to identify the referent of the NP at the point in time when reference to this NP is made by the speaker, as in (7) and (8), also from Lyons (1999)

- (7) I wonder who the anesthetist is today.
- (8) *The winner of this competition will receive \$5,000.*

Such challenges to a strict identifiability approach to definiteness have led to proposals that it is actually *uniqueness* that is the core licensing property present in definite reference, as initially proposed in Russell (1905) and later assumed in Kadmon (1987), Roberts (2003), Abbott (1999, 2001), and Barker (2004) among others. Use of the definite determiner the is taken to signal that there is just one entity satisfying the content of the description provided by an NP (in a particular context), while use of the indefinite article does not necessarily signal uniqueness. Lyons (1999) notes that the uniqueness hypothesis of definite reference appears better able to deal with cases in which the referent of a definite NP is hypothetical, potential, or placed in the future, as in Examples (7)–(8).

A uniqueness approach to definiteness has nonetheless been questioned by the occurrence of apparently licit uses of the definite article in instances where an NP introduced by the is not unique in a context, but may however be identifiable, due to the presence of other contextual information. Examples of such scenarios, which may seem to favor identifiability over uniqueness, are given in (9)–(10). In (9), the hearer is able to figure out and identify which of several doors present in the context the speaker is referring to, based on other information which is accessible (hence the door is non-unique in the context, but identifiable). Similarly, in (10), reference to the student is legitimate, even though the context contains multiple students, because there is additional information which potentially allows the hearer to identify which of the students is being referred to by the speaker.

(9) Context A. In a hallway where all four doors are closed. The speaker is dressed in a coat and a hat and has a suitcase in hand, ready to go out. Only one door leads outside the house.

Open <u>the door</u> for me please (Lyons 1999)

(10) Context B. Two professors talking about a seminar in which one of the many students attending the seminar gave a presentation:

A: How did the seminar go?

B: The student gave an excellent presentation.

(Lyons 1999)

Because of the above challenges to the familiarity, identifiability and uniqueness approaches to definiteness, Lyons suggests that definiteness might perhaps be concluded to involve two distinct components, identifiability and uniqueness (with familiarity being seen as a sub-case of identifiability), both of which might be able to license the use of the definite determiner the in English.³ In a number of languages, it is additionally found that two distinct definite determiners actually occur (or two distinct "weak" and "strong" forms of a single determiner), and these are used in different ways, potentially supporting a complex analysis of definiteness as characterizing more than one kind of discourse relation. This has been reported for a number of varieties of Germanic including Austro-Bavarian, Rhineland German, Hessian, and Frisian (see Ebert 1971a, 1971b: Schwarz 2013 and references therein). Dutch and mainland Scandinavian (Löbner 2011; Ortmann 2014), Hausa (Afroasiatic; Jaggar 1985) and Lakhota (Siouan; Lyons 1999), as well as other languages (see Ortmann 2014 for an extensive listing). For example, Fering, a variety of North Frisian, employs two articles for definite reference: a "D-Article" di, det, dön occurs in instances of anaphoric reference and when a referent is visible, and an A-article: a, at which is used with referents which are perceived to be situationally unique or unique in a wider context, generic noun phrases, and referents identified by means of association with some other entity/individual. Similar distinctions have also been suggested to be present with determiners in standard German, and manifested overtly in the im/possible conflation of prepositions with determiners (e. g., in dem 'in the' \rightarrow im). The strong definite article resists contraction

³ Whether or not it is correct to posit a uniform notion of definiteness is also discussed in Schwarz (2009), Abbott (2010), and Löbner (1985).

with prepositions and is noted to occur when the contextual licensing of definiteness critically involves anaphoric reference. The weak article, by way of contrast, occurs naturally in contexts where the uniqueness of a referent is in focus, and regularly leads to D/P conflation (Schwarz 2009). Related patterns and divisions observed in other languages and varieties repeatedly confirm the need for a more nuanced understanding of definite determiners and their application in different discourse situations. Frequently it is observed that languages may reserve one type of determiner for anaphoric reference, exophoric reference (to a visible entity), and cases in which speaker and hearer already have some mental representation of a referent due to expectations about particular situations, and that another determiner type or representational strategy (perhaps the omission of any determiner) may be made use of in cases where there is unique identifiability of a referent, but no pre-existing speaker/hearer mental representation/"familiarity" with this individual/entity.

In Löbner (2011), and Ortmann (2014) such distinctions are analyzed by means of a "scale of uniqueness", which ranges from "semantic uniqueness" to "pragmatic uniqueness". 4 The reference of noun phrases which are semantically unique is said to be unambiguous for context-independent reasons, due to the inherent lexical semantics of the noun (e.g., reference to the pope, the US president). Pragmatic uniqueness, by way of contrast, critically results from information present in the linguistic or extra-linguistic context, and occurs regularly in instances of deictic and anaphoric reference (Ortmann 2014: 296). Languages with two definite articles are shown to mark one contiguous portion of the scale of uniqueness with one determiner, and remaining points on the scale with the second determiner. In certain other languages a single definite determiner is used for instances of reference involving pragmatic uniqueness, and no determiner is present with NPs that are semantically unique, again instantiating a systematic partitioning of the scale of uniqueness.

The division of labor of definite reference in Fering, German, mainland Scandinavian, Hausa and Lakhota necessarily involves the use of a definite determiner, and in certain of these languages two distinct determiners. We will now see that observations made about such "definiteness splits" in languages with articles are also highly relevant in a language which does not have a definite determiner, Jinyun Chinese, but where definite reference is

⁴ In Löbner (1985) the terms used to refer to these contrasting notions are "semantic definiteness" and "pragmatic definiteness", and "unambiguous" is used in place of "unique".

nevertheless encoded by two different means - the bare classifier and bare noun strategies.⁵ As we proceed with our investigation of definite reference in Jinyun, it will be seen that a substantial portion of the variation in use of bare classifier and bare noun strategies aligns itself with the definiteness splits identified in languages with determiners, and it will be suggested that the patterns are most appropriately modeled with the approach to such splits proposed in Löbner (2011), and Ortmann (2014). The patterning revealed in Jinyun both supports the typology of definiteness which has emerged from the languages described in Löbner (2011), and Ortmann (2014) and can be argued to provide further support for the analysis of definiteness developed in these works.

3 Patterns of definite reference in Jinyun with bare classifiers and nouns

In order to investigate what properties of reference may influence or determine the use of bare classifier and bare noun patterns in Jinyun, and the degree to which this resembles determiner alternations in other languages, we will first consider the licensing of "anaphoric" definiteness in Sections 3.1, and then in 3.2 how definite reference to specifically unique individuals is canonically realized. Following this, Section 3.3 will examine how bridging reference and definiteness by means of association is represented in Jinyun, Section 3.4 will discuss the potential role of familiarity in the licensing of definite reference, and Section 3.5 will probe the effects of referent visibility on the choice of bare classifier or bare noun patterns in occurrences of exophoric reference.

⁵ In addition to the use of a bare classifier and a bare noun pattern, noun phrases may also be interpreted as definite when combined with demonstratives and strong quantifiers, as indeed in English, German and other languages with definite determiners. An early reviewer of the paper suggests that the demonstrative + classifier + noun pattern may even be the most common representational pattern for definite nominals in Sinitic languages. This is actually not so clear, however. While demonstratives may occur in certain instances of exophoric reference to visible entities and also anaphoric reference, they are not natural and are even unacceptable in many instances of definite reference, and the vast majority of the data presented in the current paper would be extremely unnatural if a demonstrative is added. None of the examples in Sections 3.2, 3.3, 3.4 could occur with demonstratives, and only a small proportion of the data in Sections 3.1 and 3.5 would potentially accept the addition of a demonstrative.

3.1 Anaphoric definite reference

In instances where a referent is first introduced in a discourse and then referred back to anaphorically in Jinyun, it is found that the preferred and clearly dominant pattern of representation is the use of a bare classifier and noun, as illustrated in (11)–(13) for typical human, animal and inanimate referents. In its regular use for anaphoric definites, the bare classifier pattern in Jinyun therefore seems to approximate the use of the strong determiner in German, and the D-determiner in Fering as described in Schwarz (2013) and Ortmann (2014).

- (11) dusuguo ji-go guerdzi tar ji-go ləwsi dzju-ler.
 library 1-CL accountant and 1-CL lawyer hire-Asp
 go guerdzi manzi dzi Zhang Yen-Hui, go ləwsi
 CL accountant name call Zhang Yen-Hui CL lawyer
 manzi dzi Wang Yuling.
 name call Wang Yuling
 'The library hired a new accountant and a new lawyer. The accountant is called Zhang Yen-Hui, and the lawyer is called Wang Yuling.'
- (12) dzissə zönici ji-dzai njism mə-də. gui-le gö dzai njism ha
 Zhangsan yesterday 1-CL cow sell-Asp they say CL cow Neg
 də dziekö.
 be healthy
 'Zhangsan sold a cow yesterday. They say the cow was not healthy.'
- (13) dziss gõ meli dzar ji-der dianju tar ji-der diazidzi mɔ-ler.

 Zhangsan say Mali just 1-CL TV and 1-CL computer buy-Asp ge gõ der diazidzi jedzi dzi ler Meli võgɔ Asp, der dianju he say CL TV now be at Mali room come CL computer ε ler Meli bɔgaunsəuu.

 and at Mali office 'Zhangsan said Mali bought a TV and a computer. He said that the TV is now in Mali's bedroom and the computer is in Mali's office.'

3.2 Definite reference to specifically unique individuals

In situations of definite reference in which there is no anaphoric linking of an individual to a preceding referent, and where the prominent uniqueness of the

individual establishes its definiteness, it is found that the use of a bare noun naturally occurs in Jinyun and is systematically preferred to the bare classifier strategy. A wide range of such examples is provided below, with animate and inanimate referents. In each case, the referent is unique in the situation in which it occurs. In similar discourse contexts in Fering and German, reference will be made by means of the definite article form which is not used for anaphoric definites – the A-article in Fering and the weak determiner form in German. Jinyun therefore interestingly shows that the primary division in use of the two definite determiner forms in Fering and German is mirrored by a parallel dedicated use of bare classifier and bare noun patterns for anaphoric and unique definite reference, respectively.

(14) Context: A firefighter at the scene of a car crash:

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<u>dziosiye</u> lei tçieikei a? ŋø niɔ-a-dzyo.
driver at where Prt. I cannot-see
'Hey, where's the driver? I can't see him.'
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(15) Context: Tracking a fugitive to a small town, an FBI agent needs to get help from local police officers, who he does not know personally. He says to a fellow FBI agent:

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cismcie no-le no ku zən dziantsə dzyodziə. first we need go find police-chief 'First we should go see the chief of police.'
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(16) Context: On a trip through China, the speaker arrives in a new town and says to hisfriend:

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no lei tseizidzio kui mo dia sugo.

I go market go buy some fruit
'I'm going to the market to buy some fruit.
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(17) Context: A new store is opening in a village in China. By tradition, when people open new businesses in this village, they ask a Buddhist monk to come and perform a short ceremony. On the opening day, a villager is inside the store with his sister and she says:

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kwədia tçy\varepsilon ler. \underline{ozo} kwə \etao dju və. quickly come out. monk quickly will arrive Asp 'Quick. Come out. The monk will arrive soon.'
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(18) Context: The speaker is working as an intern in a hospital. Each day in the operating room, there is a different surgeon who the interns are not familiar with. The speaker says:

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kwɔdia. dzyanbi hu. cismzyaɪsi kwɔ no dju vɔ. quick prepare well surgeon quickly will arrive Asp 'Quick. Get ready. The surgeon will arrive soon.'
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(19) Context: An FBI agent is assigned to protect the president of Uganda when he is visiting

New York. When the presidential plane arrives, several men descend and the agent asks:

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tgier-go dzi <u>dzauntaun?</u>
which-CL be president
'Which one is the president?'
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(20) Context: The speaker enters a building she is not familiar with and says:
<u>diati</u> ler gεbiε ηθ-lε ler zəwsɨ lism kw a.
elevator at there we go 14 floor go Prt.
'The elevator is over there. Let's go up to the 14th floor.'

While the bare noun rather than the bare classifier strategy is naturally made use of in the contexts above, there are some situations in which reference to a unique individual appears to permit the use of either a bare noun or a bare classifier form with an equally high degree of acceptability. In (21), either of such forms is fully acceptable. However, the alternation between bare noun and bare classifier forms results in a difference in meaning. When the bare classifier form is made use of, the speaker has a specific individual in mind as the identity of the 'murderer', but when a bare noun is used, the speaker has no particular individual in mind:

(21) The speaker tells her friend that a well-known singer was recently shot dead and adds:

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dziantsə huə ler-ker zəŋ <u>cyőciəm/gə cyőciəm</u>.

police still be look-for murderer/CL murderer

'The police are still looking for the murderer.'
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This relates to a similar phenomenon commented on in Keenan and Ebert (1973), who observe that sentences in English such as *Mary was surprised that the man who won was drunk* have two potential interpretations. The first of these is a "transparent" *de re* interpretation in which *Mary* knows the identity of the individual being referred to,

and the relative clause is not critical for identification of this person. The second "opaque" interpretation is that Mary understands that the person who won was drunk and is amazed by this, but she may not know the identity of the actual person. Keenan and Ebert observe that the ambiguity present in English does not occur in Fering, which reserves the A-article for the opaque de dicto reading, in which it is the concept of 'winner' rather than the extensional meaning of 'winner' that determines the meaning of the sentence. As it is the Fering A-article which is used for reference to entities whose uniqueness is focused ("semantically unique" individuals in Löbner's and Ortmann's terms), there is a further correspondance between Fering article choice and the way in which definite noun phrases are represented in Jinyun – a bare noun pattern is used in Jinyun in examples such as (21) to impart the same kind of opaque de dicto reading that the Fering A-article communicates.

Second, it is sometimes found that a referent that is unique in a situation may also be linguistically present in a preceding part of the discourse. In such cases, the presence of an anaphoric linking to an antecedent in the discourse and the unique status of the referent may allow for either a bare classifier or a bare noun form to occur, the former licensed by the anaphoric relation, the latter by the uniqueness of the referent. Where there are thus two routes to the licensing of a form of definite reference, speakers may exploit and accept both, leading to the appearance of free variation in a restricted number of contexts.⁶ Sections 3.4 and 3.5 will highlight other situations where the use of a particular noun may apparently alternate between bare classifier and bare noun forms in instances of definite reference, but where this variation occurs for other reasons, signaling differences in referent familiarity and physical presence of the referent at the place and time of speech act.

3.3 Bridging and definiteness by association/definite associate anaphora

A third set of situations in which definite articles regularly appear in many languages is known as "bridging (cross-reference)", definiteness "via association",

⁶ In this aspect of its internal variation, Jinyun is similar to Fering, which may allow for either its D-article or its A-article to occur where the licensing conditions for both articles are met in a single sentence, as in (i) and (ii) from Lyons (1999):

Dön/A foomen, wat ei mulki kön, fu neen maan. 'Girls who can't milk don't get a man.'

Wäl dü mi ans di/a brons dask auerda? (ii) 'Will you pass me the purple bowl?'

or "definite associate anaphora", and involves the parasitic licensing of definiteness by means of a link that is established to some other, associated referent or situation present in the discourse, as, for example, in (22) and (23).

- (22) Last year I bought a beautiful painting of Amiens. The artist is now quite well-known.
- (23) I'm going to return my new laptop to the store. The screen is already broken.

Schwarz (2013), Ortmann (2014) and others have pointed out that bridging may either be seen as a subcase of anaphoric definiteness, in which the definiteness of a referent results from an anaphoric-like dependency with some antecedent – artist/painting, screen/laptop in (23)-(24) - or be viewed as definiteness which arises from situational uniqueness – the painting and laptop referred to in the situation in (22)–(23)being inferred to have a unique artist and screen. Interestingly, it is noted that the marking of definiteness in contexts of bridging may in fact at times be similar to that used in instances of anaphoric definite reference, and at other times resemble the representation given to situationally/globally unique individuals, when such cases are distinguished in various languages. It is furthermore suggested that at least two different cases of bridging may need to be recognized: (a) part-whole association, in which an entity with definite reference instantiates a part of the preceding associate, as in (24), and (b) "relational anaphora bridging" (Arkoh and Matthewson 2013: 13), where the definite has a non-part-whole relation with the preceding associate, often that of producer and product, as in (22). In German, the latter relational bridging is coded by means of the same strategy used for anaphoric definiteness, the strong determiner, whereas part-whole bridging is represented with the marking found in definite reference with noun phrases that are situationally or globally unique, the weak determiner form.

Conceptually, it is clear that the definiteness found in instances of bridging may plausibly be conceived of as either close to anaphorically licensed definiteness or the definiteness triggered by situational/global uniqueness, and a priori it may not be possible to predict with certainty how a language with two modes of definiteness marking will actually encode bridging referents. In Jinyun, it is found that referents in situations of bridging relations are regularly represented with the bare classifier pattern, both when there is a producer-product relation, and when the relation is that of part to whole. As the bare classifier strategy is dominant in cases of anaphoric definiteness in Jinyun, the use of this strategy in cases of indirect anaphoric linking and producer-product relations is in line with what is found in German. However, the extension of the bare classifier "anaphoric" pattern also to cases of part-whole bridging is different from German, and the nuanced separation of bridging contexts in German has not arisen in Jinyun (where it might be expected to give rise to the use of bare nouns). In Jinyun, bridging relations of both partwhole and producer-product type appear to be assimilated to instances of anaphoric relations in which the linking of an element to a preceding referent is more significant for its mode of definiteness marking, rather than any inferred property of uniqueness. (24) below is an example of a typical producer-product bridging relation, while the use of bare classifiers for part-whole bridging relations is illustrated in (26)–(30), for both animate and inanimate referents.

- (24) ŋø jɔ-gø sandzi ji-bɛ guɔju fəəugo dar su dau lo. gø dzodza
 I last week 1-CL about Buddhism Prt book read Prt CL author
 dzi yandunan.
 is Indian
 'Last week I read a book about Buddhism. The author was from India.'
- (25) ŋø ŋo yo ŋø-bu dɔdzyotçia mɔ dø. gø zødia
 I need take I-CL bicycle sell Prt CL saddle

 zø-leɪ nɔgøtçi ma.

 sit-Asp uncomfortable very
 'I'm going to sell my bicycle. The saddle is very uncomfortable.'
- (26) *ni t¢iɔdzi mɔ-laɪ ji-bu ni-¢iɔm tçia daɪ* ə, <u>gə jɛŋdzian</u> you if buy 1-CL 2-hand car suppose CL engine *kənan weɪ jiɔm mjuban*.

 possibly will have problem 'If you buy a second-hand/used car, <u>the engine</u> may have problems.'
- (27) darguar jiəm ji-dzar hu ma dar dzodziəm der. <u>go derdzio</u> Germany have 1-CL good very Prt soccer team. CL captain jiəmman ma. famous very 'Germany has a very good soccer team. <u>The captain</u> is very famous.'
- (28) no tgiɔdzi mɔ-leɪ ji-dzu səŋ au, na go dzuvõ weɪ dzi
 I if buy-Asp 1-CL new house, then CL kitchen will be
 daɪbiɛ do.
 especially big
 'When I buy a new house, the kitchen will be very big.'

ηθ-lε ku tsegθ ji-gθ hueli. (29) *zõnei* ge səənnə pjuljə ma. go attend 1-CL wedding CL bride vesterday we beautiful verv 'Yesterday we went to a wedding. The bride was beautiful.'

3.4 The role of familiarity

As noted in Section 2, certain approaches to definiteness, in particular Christophersen (1939) and Heim (1982), have argued that familiarity plays an important role in the use of definite determiners, where referent familiarity is viewed as the existence of a mental representation of an individual/entity in the minds of speaker and hearer at the time when reference to the individual/entity is made within a discourse. In German, Schwarz (2009) and Arkoh and Matthewson (2013) have observed the occurrence of familiarity effects in the use of strong and weak determiner forms. Whereas anaphoric reference to familiar entities automatically triggers use of the strong article, as occurs with all instances of anaphoric reference, non-anaphoric reference to certain entities that are familiar to speaker and hearer results in use of the weak article, as illustrated in (30), where reference is made to a family dog.

(30) Context: You and your spouse own a dog. While your spouse is away, someone breaks into your house and you are telling them about it on the phone. You say:

Der Einbrecher ist zum Glück vom/#von dem Hund verjagt worden. is luckily by-the/by the dog chased been 'Fortunately, the burglar was chased away by the dog.' (Arkoh and Matthewson 2013, adapted from Schwarz 2009)

Arkoh and Matthewson (2013) also argue that familiarity is responsible for the selection of a certain definite determiner in Akan (Kwa), which is one of multiple representational forms for definite noun phrases in the language. In Jinyun, there similarly appear to be certain effects of familiarity in the choice of definite reference forms, and it is found that where speakers have an existing mental representation for an entity and are familiar with it, a bare noun form is frequently used for definite reference. Where the same noun is used in definite reference without such familiarity, the bare classifier pattern is instead preferred. Consider the following example. The exchange in (31) occurs between two people who are both familiar with the University of Southern California (USC), and reference to the university library is naturally made with a bare noun. (32), by way of contrast, is addressed to someone who is not familiar with USC, and a bare classifier form is most naturally used to refer to the library, licensed as an instance of bridging/associate anaphora.

- (31) A: nɛdziɔdziəmdə'o tçiei-zõ liom zəən piuliɔ a? USC which-CL building most beautiful Prt B: dusuguz. library 'In USC, which is the most beautiful building?' 'The library.'
- nedziodziomdo'o jiomman ma. go dusuguo do ma USC famous very CL library big very 'USC is very famous. The library is very big.'

Speaker-centered familiarity is also present and at work in (33), where reference to a computer and a television recently purchased by the speaker is represented by a bare noun in both instances, due to the mental representation of these entities that the speaker has. In the similar Example (34), in which the speaker is reporting hearsay about a television and a computer s/he has never come into contact with, this results in the use of a bare classifier pattern for definite reference to the television/computer, due to the non-existence (or very weak existence) of a mental representation for these objects. The bare classifier pattern is licensed by the anaphoric link to the noun phrases in the first sentence of (34).

- (33) ηθ dzaɪ ji-deɪ dianju taɪ ji-deɪ diazɨdzi iust 1-CL TV and 1-CL computer buy-Asp 'I just bought a computer and a tv-set.' diazidzi judzi lei votan lei, dianju lei tçia lei. ε WЭ now is dining-room Asp computer Prt still is car Asp 'The TV is now in the dining-room, but the computer is still in the car.'
- (34) *dzisss* gõ moli dzaı ji-deı dianju taı ji-deı diazidzi mɔ-leɪ. Zhangsan say Mali just 1-CL TV and 1-CL computer buy-Aspv go gõ dei diazidzi jodzi dzi lei Moli võgo lei, dei dianju he say CL TV now be at Mali room Asp CL computer lei Moli bəgaunsəm. and at Mali office 'Zhangsan said Mali bought a TV and a computer. He said that the TV is

now in Mali's bedroom and the computer is in Mali's office.'

Finally, consider Examples (35a) and (35b). In (35a), the speaker makes reference to the boss of his/her own company, and a bare noun occurs, whereas in (35b), the speaker refers to the boss of the hearer's company, and a bare classifier pattern is naturally used. This difference in use of the bare noun/bare classifier patterns would seem to relate to a difference in degree of speaker familiarity with an individual/entity referred to. A significant level of familiarity/strength of mental representation of an entity being required for use of a bare noun form in definite reference.7

- liubə ii-gə ləwsi dziu-lei. (35) a. $n\theta$ -le gueidzi taı ii-gə boss 1-CL our accountant and 1-CL lawyer hire-Asp ljubo dzidzina pi-ban zõnei gθ lawsi yesterday boss much criticize CL lawyer 'Our boss just hired a new accountant and a new lawyer. Yesterday the boss criticized the lawyer a lot.'
 - b. ni-ge çiei. go ljubo dei yegaun hui gaunsi ha you-CL company Neg bad. CL boss to worker good very 'Your company is not bad. The boss is very nice to the workers.'

The common patterning found is therefore that familiarity favors the use of bare noun forms, and a lack of familiarity (or a comparatively weaker sense of familiarity) is associated with the use of bare classifier forms, as a natural form used in either bridging or anaphoric reference.

⁷ A similar effect occurs with reference to family members, distinguishing a speaker's own kin from others' kin. Where a speaker refers to his/her own family members, as in (i), it is common for a bare noun to be used, whereas definite reference to other people's kin is commonly made with a bare classifier pattern, as in (ii). Such distinctions may not reflect any complete absence of familiarity with the family members of other people, but rather encode differences in the degree of familiarity the speaker has with his and others' family members. The bare noun pattern appears to be appropriate for reference to those individuals who the speaker is most familiar with - his/her own family members, while bare classifier forms are felt to be more appropriate for others' kin, who may be assumed to be less familiar to the speaker than his own family members (either in reality or as a result of conventional usage).

⁽i) ηθ ji9m ji-gθ ni taı ji-ge nə. ni lio su vo. have 1-CL son and 1-CL daughter son 2 year Asp 'I have a son and a daughter. The son is two years old.'

⁽ii) Lisi ji9m ji-ge ni taı ji-ge nə. go ni liə su və. Lisi have 1-CL son and 1-CL daughter CL son 2 year Asp 'Lisi has a son and a daughter. The son is two years old.'

3.5 Exophoric reference – referent visibility and pointing

A final, significant factor influencing the appropriateness of bare noun and bare classifier patterns in definite reference in Jinyun is the salient presence/absence of the referent at the time and place where reference to the entity/individual is actually made. Quite regularly, if a referent is very obviously present in front of the speaker and hearer (for example, the speaker and hearer are standing in front of or approaching a building), or if a speaker deliberately draws attention to the presence of a referent, for example by pointing it out to the hearer, this will naturally result in the use of a bare classifier form, the classifier performing a deictic, demonstrative-like function. Conversely, where the speaker places clear emphasis on the absence of a particular referent, for example by means of a question inquiring about the location of the referent ('Where's the X?'), this will regularly result in a bare noun pattern. Alternations between bare classifier and bare noun patterns caused by force of referent (in)visibility for the same noun/ referent type are illustrated in (36)–(37), where it is seen that specifically drawing the hearer's attention to a referent present on the scene causes a bare classifier pattern to occur, while emphasis of the referent's absence results in a bare noun pattern.

- (36) a. niɔ a! bo sozi/#sozi ler derdo dziɔmie.
 look Prt CL key key is table top
 'Look! The key is on the table.'
 b. sozi/#bo sozi ler tçierker a?
 key CL key be where QP
 'Where is the key?'
- (37) a. Context: A car has crashed into a wall. The speaker and a friend are walking by. They stop to look into the car and the speaker says:
 niɔ lɛ, go sidzi/#sidzi ziɔmciɔ vɔ. kuɔdia, bõmō-dzi ηo.
 look Prt. CL driver/driver injured Asp quick help-some me 'Look. The driver is injured. Quick, help me.'
 - b. Context: A firefighter at the scene of a car crash:

 <u>dziosiye</u>/#go <u>dziosiye</u> ler tcierker a? no nio-a-dzyo.

 driver /CL driver at where Prt. I cannot-see

 'Hey, where's <u>the driver</u>? I can't see him.'

As shown in (38) and (39), the salient presence of an entity at the location of the speech act referring to the entity can cause a switch away from the mode of

representation that would otherwise be appropriate for an entity in a particular relation to the speaker and hearer. In (38), where the speaker and hearer are both students in a particular school and familiar with their school's unique library, the natural choice of a bare noun to refer to the library occurs in (38a), when the speaker and hearer are inside a classroom and cannot see the library. This default choice of bare noun is however naturally overridden when the speaker and hearer are actually facing the library, as in (38b), and causes a bare classifier pattern to occur:

- (38) a. Context: The speaker and a friend are in a classroom. The speaker asks: dusuguə/#gə dusuguə jidzian gən-lo və dza? library/CL library already closed Asp Prt QP 'Is the library already closed?'
 - b. Context: The speaker and friend are standing in front of the school library, looking at it.

```
go dusuguɔ/#dusuguɔ jidzian gəŋ-lo vɔ
                                              dza?
CL library/library
                     already closed Asp Prt QP
'Is the library already closed?'
```

In (39a), a bare noun is the appropriate choice for reference to the unique dog owned by and familiar to a family. When the presence of the same referent is stressed, as in (39b), this causes a switch to a bare classifier pattern.

(39) a. Context: The speaker and his family members hear a dog barking outside their house and wonder if it's their (unique) dog. The speaker says:

gɔdziəm/#dzai gɔdziəm lei tçieikei a? dog/CL dog is where Prt

'Where's the dog?'

b. Context: The speaker and his family are looking for their missing dog. When they finally see it, the speaker says, "Look! The dog is on the roof of the house".

a! dzai godziem/#godziem lei au-dan dzio. look Prt CL dog/dog is roof top 'Look! The dog is on the roof of the house.'

(40)-(42) are further examples of contexts in which an entity that is either situationally unique, or unique in relation to a particular individual, is referred to with a bare classifier pattern in the salient presence of the entity, rather than with the bare noun pattern that is otherwise common for elements understood to be unique in a particular context.

(40) Context: While hiking, the speaker suddenly sees a rattlesnake, which his friend is about to step on by accident. The speaker shouts:

```
cjusəŋ <u>gɛ zia!</u> careful CL snake 'Careful of the snake!'
```

(41) Context:The speaker is in an elevator with a friend and several other people. The speaker notices that the person standing next to them has a cute puppy and whispers to his friend, who also sees the puppy:

```
cute puppy and whispers to his

dzai gɔdziəmni ke'ei ma, dɔ?

CL doggy cute very QP

'The dog is very cute, right?
```

(42) Context: The speaker is in a car park, which has many cars. When he reaches his car, he exclaims to his friend:

```
naun'õ vɔ! <u>bu tçia</u> naı tçjugə guɔ-hə də vɔ.
darn-it Asp CL car Pass someone scratch Prt Asp.
'Darn it! <u>The car</u>'s been scratched.'
```

We thus find a third common use to which bare classifier patterns are regularly put in definite reference in Jinyun, in addition to their occurrence in instances of (discourse) anaphoric reference, and bridging reference/associate anaphora, as summarized in Table 1. Bare nouns, as indicated in Table 1, occur primarily in reference to individuals and entities whose situational, broader or global uniqueness is clearly perceived. "Familarity" also appears to play some role in the selection of bare noun vs. bare classifier patterns, specifically in reference to individuals and entities connected to the speaker vs. non-speaker/others, the former favoring bare nouns, the latter being represented by the bare classifier pattern, as shown in Examples (31)–(35) and Footnote 7, Examples (i)–(ii). We have also just seen that the use of the bare classifier pattern for salient visible referents may forcefully

Table 1: Use of bare classifier and bare noun patterns in definite reference.

Bare classifier patterns (CL N)	Bare nouns (N)
1. anaphoric definite reference	1. specifically unique individuals/entities
2. bridging reference/definite associate anaphora	2. speaker's kin and personal relations
3. exophoric reference/salient visible referents	
4. non-speaker kin terms, personal relations	

override the otherwise natural use of a bare noun for such referents, when these elements are not so clearly present at the time and place of the speech event.

In Section 4, we will now examine how the Jinyun patterns compare globally with what has been reported for other languages in which definite noun phrases may regularly be represented in two distinct ways, and how such patterns may be analyzed.

4 Crosslinguistic comparison and analysis

The preceding documentation of bare classifier/bare noun patterns in Jinyun Chinese has noted that alternations in the use of such representational forms do not involve simple free variation, but occur as the result of the use of these forms in different situations, with the bare classifier pattern dominating cases of anaphoric definite reference, bridging, and exophoric reference (to salient visible entities), while bare nouns are used predominantly for individuals and entities perceived to be specifically unique or directly connected to the speaker, as summarized in Table 1. If we now consider related patterns in other languages, it can be concluded that the bare classifier/bare noun alternations which occur in definite reference in Jinyun seem to correspond in a very clear way with patterns of determiner alternation in languages which have more than one definite article form, such as Fering, and varieties of German. Schwarz (2013) documents "two types of definites cross-linguistically", and points out that languages which make use of two different representational forms in instances of definite reference, one at least of which is a definite determiner, appear to do this in an obviously principled way, with one form being regularly applied in anaphoric reference, and the other in definite reference to entities which are unique, either situationally or in a wider context/globally. Löbner (2011) and Ortmann (2014) observe these basic divisions to be consistently repeated in further range of languages and dialects, and analyze this by means of a scale of uniqueness, ranging from elements which are pragmatically unique (unambiguously identified due to properties of the context of utterance, as with deictic and anaphoric reference) to those which are semantically unique (unambiguous in reference due to nouns' inherent lexical semantics). Ortmann's (2014: 314) fully refined scale of uniqueness represented in Table 2 references nouns of four types (following distinctions argued for and described in Löbner 2011: 280–282): (a) Sortal Nouns/SNs – unary predicate terms of type <e,t> such as dog, house (b) Individual Nouns/INs - individual terms of type e, such as the US president, the pope, (c) Relational Nouns/RNs - binary predicate terms of

Table 2: Scale of uniqueness (Ortmann 2014: 314).

deictic SN < anaphoric SN < SN with establishing relative clause < relational

definite associative anaphora < part-whole definite associative anaphora < nonlexical FNs < lexical INs/FNs < proper names < personal pronouns

type <e.<e.t≫ which are binary relational concepts involving a further argument. such as arm, sister, and (d) Functional Nouns/FNs - unary function terms of type <e,e> which involve a possessor argument, such as head, father, author, bride. The left portion of the scale corresponds to pragmatic uniqueness and the right portion to semantic uniqueness, with the latter extending leftwards to include at least non-lexical IN/FNs:

Löbner and Ortmann's scale of uniqueness is a modeling of the patterns found to occur repeatedly in languages with definite articles which make use of more than one representational form in definite reference. It captures the observation that such languages encode definite reference at one end of the scale with one form of representation, and those at the other end with a second, distinct form. As a crosslinguistic, putatively universal model, it also predicts that other languages with two ways of encoding definite noun phrases should similarly conform with the scale of uniqueness, and utilize one representational form for one continuous segment of the scale, and a second form for the remaining portion of the scale, with crosslinguistic variation being restricted to exactly where on the scale the division between the two modes of representation actually occurs (this typically being in the region of definite associative anaphora/instances of bridging reference of different types).

The dominant patterns observed to occur in Jinyun bare noun/bare classifier alternations can now be noted to fully accord with the predictions of the scale of uniqueness. Bare classifier patterns are used to encode the leftward portion of the scale - instances of pragmatic uniqueness - and occur in instances of exophoric reference with deictic sortal nouns (salient visible entities), with anaphoric definite reference with sortal nouns, and with definite associative anaphora of both relational and part-whole types (i.e., contexts of bridging reference).8 The archetypal use of bare nouns in instances of definite reference

⁸ Relative clauses with sortal nouns, which typically occur in the pragmatic uniqueness portion of the scale of uniqueness in instances of definite reference, have not been investigated in Jinyun. However, Cantonese Chinese, which also makes use of a bare classifier pattern in definite reference has been noted in Matthews and Yip (1994: 111-113) to allow for relative clauses to be optionally structured with a (bare) classifier, as might be anticipated from the scale of uniqueness and observations of other languages in Löbner (2011), Schwarz (2013) and Ortmann (2014).

is for entities which are unambiguously identified in virtue of their semantic uniqueness, at the right end of the scale – typically individual nouns, which are either globally unique or situationally unique, as reviewed in Section 3.2. Proper names and pronouns in Jinyun, further to the right of individual nouns in the scale are similarly represented by means of bare nouns, as naturally expected from predictions of the scale. The primary, major division of the use of bare classifier and bare noun patterns in Jinyun therefore follows the typology of split definite reference which characterizes languages with definite articles such as Fering, varieties of German, Dutch, Swedish, and Upper Sorbian as described in Ortmann (2014). It can also be suggested that an additional feature of definite reference noticed to occur in Jinyun in Table 1, relating to the role of speaker familiarity with a referent, might also be potentially attributed to the relative positioning of elements along the scale of uniqueness, given a particular analysis of certain speaker-familiar referents. In Section 3.4 it was remarked that entities and individuals that a speaker has a high degree of established familiarity with, such as the speaker's own family members or unique possessions, are regularly coded by means of the bare noun pattern, and similar entities relating to others are represented with bare classifier forms. One possible approach to such alternations is to suggest that the high level of speaker familiarity with and reference to the former range of elements results in the nouns regularly used to refer to such individuals being utilized in a name-like way. As can be seen in Table 2, names are nouns that are inherently unique and high up in scale of uniqueness, in the semantically unique portion of the scale. In a language with a split system of representation for definite nouns phrases, it is consequently expected that names will be coded in the same way as other individual nouns. In a variety such as Jinyun Chinese, where individual nouns are represented with bare nouns in instances of definite reference, the distinguished use of bare nouns for individuals/entities with a high degree of speaker familiarity and closely connected to the speaker might be viewed as a further instantiation of the effects of the scale, in which bare nouns are used like proper names.

Further assessing the way that the Jinyun bare classifier/noun patterns may connect up with the variable coding of definiteness in other languages, it is instructive to note that two types of "definiteness split" have actually been observed by Ortmann (2014) to occur in various languages with definite

⁹ See Cheng and Sybesma (2014: 269 n. 12) for a parallel suggestion of the name-like use of certain hare nouns in Cantonese.

determiners. In the first type of language, "Split I", a single definite article occurs, and this is used to mark elements corresponding to points on a leftward segment of the scale of uniqueness involving pragmatic uniqueness. Semantically unique entities corresponding to positions on the rightward remainder of the scale are typically unmarked (i. e., not combined with any definite article). In the second type of split, "Split II", two definite articles or two distinct forms of a single definite article occur, and these are used to mark different segments of the scale, one form being used for pragmatically unique elements, the other for semantically unique referents. Ortmann (2014: 318) provides the following characterization of the splits:

Table 3: Definite splits in languages with definite articles (Ortmann 2014: 318).

Split I: A top (or leftmost) segment of the scale of uniqueness is marked by the definitearticle, whereas the rest remains unmarked(West Slavic, Old Georgian).

Split II: Two segments of the scale (normally pragmatic and semantic uniqueness) are morphosyntactically distinguished in terms of different article forms ...(Germanic).

Jinyun Chinese, in its novel adaptation of bare classifier forms as a marking for pragmatically unique referents would seem to be a classifier language that corresponds to Split I in languages possessing a definite article. A leftmost segment of the scale of uniqueness is marked with bare classifier forms, and the rest of the scale instantiated by semantically unique elements remains unmarked, and noun phrases occur as bare noun forms.

Ortmann (2014: 297) also remarks that "Diachronically, the use of the article spreads from left to right along the scale, thus eventually covering also those areas where it is functionally redundant." Hence over time, semantically unique elements come to be marked for definiteness, even though this might seem unnecessary because the inherent lexical semantics of such elements imparts their unique identifiability/definiteness. It is further added (p. 296) that: "The exact threshold of the occurrence of articles at the borderline between semantic and pragmatic uniqueness is subject to variation and change ...". While Jinyun may appear to be a "well-behaved" Split I language, with a clear distinction in the marking of pragmatic and semantically unique entities, one might wonder whether further research into "bare classifier languages" would reveal a more advanced stage of grammaticalization of classifiers and the application of bare classifier forms to higher/more rightward positions on the scale of uniqueness. In this regard, it has often been remarked that Cantonese Chinese (and in particular, Hong Kong Cantonese) makes much more automatic use of bare classifier forms in definite reference than other varieties such as Wenzhou Chinese and Fuyang Chinese (both varieties of the Wu dialect of Chinese), and many of the alternations between bare classifier and bare noun forms documented here for Jinyun Chinese do not occur in Cantonese – see Cheng and Sybesma (2005) and Li and Bisang (2012). Cantonese may therefore have extended the use of bare classifier forms to elements further to the right on the scale of uniqueness, possibly in redundant ways to certain semantically unique referents (though bare classifier forms do not extend fully to the right of the scale, and names and personal pronouns remain unmarked and do not occur with classifiers). It will be interesting to see what further investigations into bare classifier languages may reveal with regard to the coverage of the scale of uniqueness with bare classifier forms in type I splits, and also whether there may be any type II splits in classifier languages, with two distinct classifier forms being used for different portions of the scale. Such crosslinguistic comparative research into bare classifier languages may be a fruitful area for future investigations.

5 Conclusion

This study of bare classifier/bare noun alternations in instances of definite reference in Jinyun has had two primary goals. First, the paper set out to probe whether such alternations involve simple free variation of form, or correspond to any differences in lexical meaning or discourse use. Observation of a range of contexts showed that there are indeed clear factors which determine whether a bare classifier or bare noun form is made use of for definite reference, and the two patterns are regularly utilized in different kinds of situations and are also potentially distinguished with regard to the lexical properties and inherent meanings of nouns. The common patterns of use of the two forms of representation were summarized in Table 1, which notes that discourse anaphoric, bridging and exophoric reference are realized by means of bare classifier forms, and definite reference to individuals and entities whose uniqueness is a primary function of the meaning of a noun (sometimes restricted by a specific context) occurs with the bare noun pattern. A second goal of the paper was to examine how the classifier-related alternations in Jinyun might relate to alternations in the encoding of definiteness in languages with definite determiners, as documented in works such as Lyons (1999), Löbner (2011), Schwarz (2013), and Ortmann (2014). Here it was seen that Jinyun is replicating patterns and distinctions found in languages with clear definite determiners by another means - the novel adaptation of classifiers without numerals, in a way that corresponds closely to the patterning of Split I definite article languages described in Ortmann (2014). The expectations arising from current studies of languages with determiners that their re-occurring distinct patterns of reference should be found in similar ways in other articleless languages are thus confirmed via patterns of classifier usage in Jinyun, strengthening conclusions that such divisions point to basic underlying common differences relating to the concept of definite reference. Such differences have been modeled successfully by Löbner (2011) and Ortmann (2014) in terms of a scale of uniqueness, and the paper has suggested that such a model now also seems fully appropriate for the analysis of definiteness in bare classifier languages, such as Jinyun or Cantonese Chinese.

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