The acquaintance inference as an evidential effect

Abstract. Predications containing a special restricted class of predicates, like English *tasty*, tend to trigger an inference when asserted, to the effect that the speaker has had a specific kind of ‘direct contact’ with the subject of predication. This ‘acquaintance inference’ has typically been treated as a hard-coded default effect, derived from the nature of the predicate together with the commitments incurred by assertion. This paper reevaluates the nature of this inference by examining its behavior in ‘Standard’ Tibetan, a language that grammatically encodes perceptual evidentiality. In Tibetan, the acquaintance inference triggers not as a default, but rather when, and only when, marked by a perceptual evidential. The acquaintance inference is thus a grammaticized evidential effect in Tibetan, and so it cannot be a default effect in general cross-linguistically. An account is provided of how the semantics of the predicate and the commitment to perceptual evidentiality derive the inference in Tibetan, and it is suggested that the inference ought to be seen as an evidential effect generally, even in evidential-less languages, which invoke evidential notions without grammaticizing them.

1 Introduction: the acquaintance inference

A certain restricted class of predicates, like English *tasty*, exhibit a special sort of behavior when used in predicative assertions. In particular, they require as a robust default that the speaker of the assertion has had direct contact of a specific sort with the subject of predication, as in (1).

(1) This food is tasty.
   $\rightarrow$ The speaker has tasted the food.
   $\leftrightarrow$ The speaker liked the food’s taste.

This so-called ‘acquaintance inference’ has two components, both of which are predictable from the lexical semantics of the predicate. First, the speaker must have come into contact with the subject in some direct way conducive to a specific kind of experience (for *tasty*, tasting it). Second, the experience resulting from this contact must have had a particular quality (for *tasty*, it roughly must have been pleasant).

This inference is remarkable for two reasons. First, it occurs even in languages like English, where assertions of predications generally have no such requirement of direct contact with their subjects – and so the question arises what it is about predicates like *tasty* in particular that gives rise to this requirement. Second, the inference displays an array of properties that, taken collectively, make it difficult to assimilate to many well-known classes
of implication. In particular, the inference is uncancellable by denial (2), it projects out of negation in a specific way (3), and it disappears beneath a range of operators, such the English epistemic modal must (4). And so the question arises of what sort of status this inference has.

(2) ?This food is tasty, but I haven’t tried it.
(3) This food isn’t tasty.
   \[\rightarrow\] The speaker has tasted the food.
   \[\rightarrow\] The speaker didn’t like the food’s taste.
(4) This food must be tasty.
   \[\not\leftrightarrow\] The speaker has tasted the food.

There has been some recent interest in the nature of this inference (cf. Pearson 2013, Ninan 2014, Bylinina 2017, Anand & Korotkova 2018, Willer & Kennedy 2020, Ninan 2020), and the accounts offered of it invariably derive the inference as resulting from some combination of the nature of the taste predicate with the commitments imposed on the speaker by assertion. The idea has thus invariably been that the acquaintance inference is a default effect, which is somehow to be ‘hard-wired’ into the assertion of contents represented by sentences like (1), unless some intervening operator voids this default, as in (4).

The purpose of the present paper is to reevaluate the nature of the acquaintance inference, through the examination of its behavior in ‘Standard’ Tibetan, a language that encodes grammaticized perceptual evidentiality. Tibetan serves as a case study for why these previous approaches to the inference cannot be universally applicable, as there is no default acquaintance inference in Tibetan. Rather, the Tibetan inference must be semantically motivated by overt perceptual evidentials: it appears in the presence of these perceptual markers, and not in their absence.

There are two lessons to be drawn from the Tibetan case. First, the acquaintance inference is not always a default, and so a general account of it cross-linguistically must be given some treatment different from those that it’s been given thus far. Second, in Tibetan specifically, the inference is a grammaticized evidential effect, and is triggered by the presence of perceptual evidentiality. In what follows I demonstrate both of these points by laying out the distribution of the inference in Tibetan, and then offering a formal account of how the inference does not trigger by default in the language, but does trigger as the result of the semantics of the taste predicate and the perceptual evidential in combination.

With these lessons in mind, I finally propose a reconsideration of the nature of the acquaintance inference in general. As the inference is a perceptual evidential effect in Tibetan, I suggest as a plausible hypothesis moving forward that it is likewise a perceptual evidential

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1The language I refer to throughout this paper is a Tibetan variety grounded in the colloquial speech of Central Tibet / Ù-Tsang, which is spoken also both as a native language and Tibetan lingua franca elsewhere throughout the Tibetosphere and diaspora. Internal to so-called ‘Standard’ Tibetan, specific dialects are sometimes isolated in research, e.g. in describing the speech of Lhasa specifically, or in noting features common in the diaspora. So far as I know, the claims I make here pertaining to the acquaintance inference are not affected by dialectal variation internal to these Central Tibetan varieties. I refer the language described here simply as ‘Tibetan,’ both (i) because this is how the speakers themselves refer to it, and (ii) to avoid some of the taxonomic difficulties in the labeling of Tibetan (i.e. Tibetic, Central Bodish) languages (cf. Tournadre 2013).
effect in languages that do not grammaticize evidentiality. The resulting picture is that all languages have access to evidential notions, even if they are not grammaticized, and commitment to belief in a predication using a predicate like \textit{tasty} is by default taken to be made on the basis of perceptual evidence, unless the grammar of a language marks perceptual evidentiality, in which case the inference loses its default status and must be the result of an overt evidential marker.

A couple methodological points are in order before continuing. First, the range of constructions considered in Tibetan will be narrow, in order to match as closely as possible the examples considered previously as exemplars of the acquaintance inference. I do this to make absolutely sure that the present treatment is not talking past previous descriptions of the phenomenon – and as will be seen, even accounting for this narrow set of examples is quite a rich and difficult matter.

As such, I limit myself to predication with adjectives, as in (1), and further to a small handful of ‘taste’ predicates with meanings similar to that of \textit{tasty}. Which predicates exactly trigger the inference is not entirely clear, but the canonical cases are those with (i) an experiential semantics of a certain sort, which predicate of an individual the disposition to stimulate a certain kind of experience, where (ii) the kind of experience in question does not necessarily track any non-experiential property of the individual, and so the experiential reaction to the individual encoded by the predicate tends to vary from experiencer to experiencer. By a ‘taste’ predicate, I mean one that has both these properties, including e.g. \textit{tasty}, as well as related predicates like \textit{delicious}, and other manifestly experiential predicates like \textit{frightening} (but excluding, for instance, \textit{sweet}, which unlike the aforementioned predicates tracks non-experiential properties in individuals, such as having a high sugar content).

For the Tibetan cases, I focus on the adjective \textit{bro.ba.chen.po} ‘tasty.’\footnote{All Tibetan examples and mentions of Tibetan words are transcribed into Roman characters from the Tibetan script (which is often opaque to the phonology) using the Wylie system. Spaces and periods both mark syllable breaks; spaces additionally mark a break in glossing for examples. Key to the Tibetan glosses: ? = polar question; 1 = first person; 3 = third person; AG = agentive; CONF = confirmatory; EGO = egophoric; ERG = ergative; EXP-PRF = experiential perfect; FUT = future; GEN = genitive; HRS = hearsay; IMPFV = Imperfective; NEG = negation; NMLZ = nominalizer; PER = perceptual; PFV = perfective; QUOT = quotative; REV = revelatory.} It is particularly perspicuous for cross-linguistic comparison with predicates like \textit{tasty}, as it mirrors their meaning and morphological shape: it is derived from the noun \textit{bro.ba} ‘taste’ and the adjectivalizer \textit{chen} (elsewhere ‘big / great,’ but used here as a bleached adjectival marker), while \textit{po} is the default obligatory degree marker for positive-form adjectives. I will use this adjective in all the core examples to follow, with the understanding that the generalizations made extend to other Tibetan ‘taste’ predicates like \textit{zhim.po} ‘delicious’ and \textit{zhed.snang.tsha.po} ‘frightening’ (itself manifestly experiential, being derived from \textit{zhed.snang} ‘fear’).

The paper is organized as follows. Section 2 reports the relevant descriptive facts surrounding adjectival predication in Tibetan and the evidential distinctions it encodes, showing that the acquaintance inference patterns with perceptual evidentiality. Section 3 adduces additional arguments internal to Tibetan that the acquaintance inference is an evidential effect in the language. Section 4 provides a formal account of how the inference is derived in Tibetan. Section 5 examines how previous approaches to the phenomenon are not appropriate for Tibetan. Section 6 concludes, suggesting that the lessons from Tibetan ought to
be extended cross-linguistically, and that the acquaintance inference ought to be seen as an
evidential effect generally.

2 The inference in Tibetan

This section lays out the basic descriptive facts surrounding the distribution of the acquain-
tance inference in Tibetan, showing where the inference triggers in adjectival predication
using taste predicates like bro.ba.chen.po ‘tasty.’ The inference patterns with the overt
marking of perceptual evidentiality: it triggers when, and only when, a perceptual copula is
used. The acquaintance inference therefore doesn’t arise by default, but is motivated by this
grammaticized perceptual marking. Section 2.1 describes the relevant basic facts regarding
Tibetan adjectival copulas and their evidential distinctions, and Section 2.2 shows the dis-
tribution of the acquaintance inference using these various copulas. Section 2.3 then clarifies
an issue regarding the relation between evidentially neutral ‘factual’ copulas in Tibetan and
indirectivity, and Section 2.4 shows why, given the Tibetan data, the question familiar from
the literature of how the acquaintance inference is ‘canceled’ is inappropriate for Tibetan.

2.1 Evidentiality in Tibetan copulas

Tibetan has a vast system of copulas used in predication, and this system contains several
internal grammatical divisions, some of which are evidential in nature. Here I disregard
the language’s numerous epistemic modal forms (on which, see Vokurková 2017), and focus
just on six unmodalized copulas: yin, red, yod, yod.red, ‘dug, and red.bzhag. These are
schematized in Table 1.\textsuperscript{3}

\begin{table}
\centering
\begin{tabular}{|c|c|}
\hline
essential & existential \\
\hline
yin & yod \\
\hline
egophoric & egophoric \\
\hline
red & yod.red \\
\hline
factual & factual \\
\hline
red.bzhag & ‘dug \\
\hline
revealatory perceptual & perceptual \\
\hline
\end{tabular}
\caption{Tibetan copulas used in adjectival predication.}
\end{table}

\textsuperscript{3}The forms of these copulas suggest that some of them may be compositionally complex, or somehow
derived from one another. I am aware of no plausible compositional analysis that would make this so, and
the paradigmatic distribution of the forms makes the best sense if these copulas are treated as \textit{sui generis},
so I do this, following the standard treatment. In the case of yod.red, the relation to yod and red is partly
an illusion of the orthography: yod.red’s first vowel is distinct from that in yod, and the copula is sometimes
spelled yog.red or yo’o.red to reflect this; it also sometimes spelled yod.pa.red, where the second spelled
syllable is silent.
Each of these forms occurs in adjectival predication, though none of them is limited to that use. The forms *yin* and *red*, which following Tournadre & Dorje (2003) I call ‘essential’ copulas, are also used in predication with nouns and in equative statements of identity, as is *red.bzhag*. The forms *yod*, *yod.red*, and ‘*dug*, which following Tournadre & Dorje (2003) I call ‘existential’ copulas, are also used in existential-locative-possessive constructions, and cannot be used in predication with nouns or identity statements. Adjectival predication is thus unusually rich in the number of distinctions it draws in Tibetan, having access to six unmodalized options, while predication with nouns and identity statements have access to three. Each of the above morphophonological forms, with the exception of *red.bzhag*, appears elsewhere in the grammar, in distinct but related roles.4

There are then three internal divisions to be drawn within these six copulas. The first, as already noted, is the distinction between essential and existential copulas, which in addition to their different functions noted above, pattern apart somewhat even internal to their use in adjectival predication. While both sets of copulas occur with adjectives generally, (i) some genres of adjectives prefer the use of one class of copula to the other, and (ii) even where an adjective occurs happily with both classes, which of the two is used creates subtle, and to my knowledge poorly-understood, effects on interpretation (though see Dugdak & Hill 2019 for some illustrations on the difference in predications of *yag.po* ‘good’). Metalinguistically, speakers sometimes describe essential copulas as predicating intrinsic, general properties of the subject, while existential copulas predicate particular or impressionistic properties. What these glosses amount to is unclear to me, and I would be skeptical of attempting to assimilate this distinction to any others familiar to linguists, such as the individual-level versus stage-level copular distinction.5

The second internal division is evidential, and so the one most important for present purposes. Tibetan has two overtly-marked and non-modal evidential categories: the egophoric and the perceptual.6 These two often paradigmatically contrast with a third evidentially neutral marking, which following Hill & Gawne (2017) a.o. I call the ‘factual.’ *yin* and *yod* are egophoric markers: they require the evidential origo – the individual responsible for the evidential commitment – to have learned the information associated with a clause by being a participant in the eventuality the clause denotes. This typically means that the origo has to

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4 *bzhag* (or *shag*) does appear, though not *red.bzhag* (or *red.shag*), in a limited set of syntactic environments in aspectually perfect verbal constructions.

5 Garret (2001: 66-71) claims that existential predication with adjectives requires a stage-level interpretation, but this is apparently not right, as I’ve come across numerous examples of individual-level predication (that is not coerced to have a stage-level interpretation in context) using the existential copulas. The distribution of these two kinds of copula in general doesn’t behave much like any individual/stage-level split I’m independently aware of, e.g. in Spanish or Basque. For instance, Tibetan adjectives do not in general tend to exclusively prefer one class of copula over the other, and where they do, the split doesn’t pattern along individual/stage-level lines familiar from these languages.

6 The Tibetan literature varies widely as to how these categories are named, but is in broad agreement as to their classification. ‘Egophoric’ can be found e.g. in Tournadre & La Polla (2014), though the terms ‘personal’ (e.g. in Hill & Gawne 2017) and ‘conjunct’ (e.g. in DeLancey 1992) are also attested. ‘Perceptual’ can be found e.g. in Caplow (2017), but ‘sensorial’ (e.g. in Oisel 2017), ‘experiential’ (e.g. in Hill & Gawne 2017), and ‘testimonial’ (e.g. in Tournadre & Dorje 2003) are also attested. Egophoricity is sometimes considered a distinct category from evidentiality, e.g. by DeLancey (2018). For a classic treatment of the Lhasa Tibetan evidential system, see Yukawa (2017 [1975]). For more recent overviews of Central Tibetan evidentiality, see Oisel (2017) on Lhasa Tibetan and Caplow (2017) on diasporic Tibetan.
occupy one of the thematic roles introduced by the predicate, though as we’ll see in Section 2.2.2, egophors allow access to other more peripheral participatory roles as well. \textit{red} and \textit{yod.red} are factual markers, and require no particular evidential commitment on the part of the origo, though their paradigmatic contrast with egophoric or perceptual forms may trigger evidential implicatures (cf. Section 2.3). \textquote{dug} and \textit{red.bzhag} are perceptual markers, and require the origo to have learned about the relevant eventuality by directly perceiving that eventuality, through any sensory modality, including internal feeling. It is these latter perceptual markers that invariably trigger the acquaintance inference, while the other two categories do not.

The third and final distinction is internal to the perceptual copulas \textquote{dug} and \textit{red.bzhag}. \textit{red.bzhag} differs from \textquote{dug} in placing an additional requirement of recency of learning on perceptual evidentiality: it is typically used when the origo is just then learning, or has just learned, of something by directly perceiving it, and when accompanied by a special intonation it is also mirative. Again following Tournadre & Dorje (2003), I call \textit{red.bzhag} a \textquote{revelatory} perceptual copula.

\section*{2.2 Distribution of the inference}

With the above said, we can lay out the basic distribution of the acquaintance inference in Tibetan with respect to the six adjectival copulas. The acquaintance inference does not arise by default: assertions of taste predications with egophoric or factual copulas don’t trigger it in of themselves. The perceptual copulas, by contrast, trigger the inference invariably. The acquaintance inference in Tibetan therefore patterns with the marking of perceptual evidentiality, and the presence of a perceptual evidential specifically is responsible for its occurrence.

\subsection*{2.2.1 The essential copulas \textit{yin} and \textit{red}}

Essential copulas are infelicitous with taste predicates like \textit{bro.ba.chen.po} \textquote{tasty.’} These essential predications are rejected as not being applicable to the sort of property that these predicates denote, and the use of an existential or revelatory copula is preferred instead.

\begin{align*}
(5) \quad & \text{a. } \#kha.lag \ 'di \ bro.ba.chen.po \ yin \\
& \text{food this tasty be.ego} \\
& \text{Intended: ‘This food is tasty.’} \\
\quad & \text{b. } \#kha.lag \ 'di \ bro.ba.chen.po \ red \\
& \text{food this tasty be} \\
& \text{Intended: ‘This food is tasty.’}
\end{align*}

As noted above in Section 2.1, the reason for restrictions like this are so far as I know poorly understood. It is possible that this fact about the incompatibility of essential copulas with taste predicates (including predicates like \textit{zhim.po} \textquote{delicious} and \textit{zhed.snang.tsha.po} \textquote{frightening}) may shed light simultaneously both on the nature of essential versus existential predication in Tibetan, as well as the nature of those predicates we’re calling \textquote{taste} predicates for present purposes. Here, I note this restriction only to set aside \textit{yin} and \textit{red} as not
diagnostically relevant for acquaintance inferences, so that the behavior of the remaining four copulas with the inference can be examined.

2.2.2 The egophoric copula \textit{yod}

The existential egophoric copula \textit{yod} signals that the evidential origo has learned about the eventuality described in the associated clause by being a participant in that very eventuality. The most common way for the origo to fulfill this evidential requirement is to occupy one of the roles introduced by the predicate, and so to be the referent of one of the arguments to that predicate. In the case of adjectival predication, if there is only one such role introduced (the bearer of the state denoted by the adjective), corresponding to one referent (the subject of the adjective), this typically means that the origo knows that the subject has the relevant property in virtue of being that very subject.

For this reason, the use of \textit{yod} for assertions in these constructions can have a functional role similar to first-person marking, signaling that the speaker and subject are identical. So for instance, \textit{yod} used with \textit{bro.ba.chen.po ‘tasty’} is fine with an overt first-person subject, and can have a first-person reading where there is no overt subject, in both cases yielding the somewhat odd interpretation that the speaker is tasty.

\begin{tabular}{l}
\textit{(6)} \textit{(nga) bro.ba.chen.po yod} \\
\textit{(I) tasty \text{ be.EGO}} \\
\textit{‘I’m tasty.’} \\
\end{tabular}

But as with many other Tibetan egophors, this is not the only use of \textit{yod}. If the roles introduced by the predicate are all filled by individuals other than the origo, it is possible for the origo to be identified with some other peripheral role associated with the eventuality, like an oblique or causer. It’s illustrative to see what happens in this regard using \textit{kha.lag ‘di ‘this food’} as a subject (presumably, the food and the speaker are distinct).

\begin{tabular}{l}
\textit{(7)} \textit{kha.lag ‘di bro.ba.chen.po yod} \\
\textit{food \ this tasty \text{ be.EGO}} \\
\textit{‘This food is tasty.’} \\
\rightarrow_1 \text{The speaker made the food} \\
[no commitment as to whether the speaker has tasted the food]. \\
\rightarrow_2 \text{The food is tasty in the speaker’s opinion} \\
[the speaker has tasted the food]. \\
\end{tabular}

These ‘peripheral’ uses of egophors are limited in the interpretations they allow, and in the case of (7), I’m aware of two possibilities (though I don’t rule out that there might be more).\footnote{For instance, many Tibetan egophors allow for the origo to be a possessor of one of the individuals filling a role introduced by the predicate, and this interpretation occurs sometimes even if there is no overt possessor marking (cf. Garrett 2001: 193-195). If this holds for (7), then it ought also to have the rough interpretation, ‘This food of mine is tasty,’ where the origo possesses the food, and this should not trigger an acquaintance inference. I have not been able to elicit this reading spontaneously, but I leave it open as a possibility.} The first possibility, reflected by the first arrow above, is that the speaker is the causer of the state of the food being tasty: typically, this means that the speaker made the
food, and so is causally responsible for its taste (similar causer interpretations of egophors are available elsewhere in the language). This interpretation crucially does not trigger an acquaintance inference. The speaker must know the food is tasty in virtue of making it, but this may be a boast about one’s own talent as a cook, or it may be an inference based on the ingredients the speaker used. Semantically, it is left entirely open whether the speaker has actually tasted the food.

The second possibility, reflected by the bottom arrow, is that the speaker is identified with a recoverable oblique that could be associated with the experiential predicate. The result is an interpretation that the food is tasty ‘to’ the speaker, or in the speaker’s opinion (Hill & Gawne 2017: 16, ex. 9d gloss this reading, using the adjective zhim.po ‘delicious,’ with the comment ‘I find that it tastes good.’). This interpretation is similar to the one that the egophoric copula can occur with, when the predicate is accompanied by an overt first-person oblique nga la ‘to me.’

\[(8)\] kha.lag ‘di nga la bro.ba.chen.po yod
food this me to tasty be.EGO
‘This food is tasty to me.’
→ The speaker has tasted the food.

Both (8) and the oblique reading of (7) do trigger an inference of a sort, and imply that the speaker has tasted the food. The fact that the first interpretation of (7) does not trigger this inference, however, shows that neither the assertion of the predication itself nor the semantics of the egophoric copula is responsible for the inference. It arises rather due to the function of the oblique, whether overtly included as nga la ‘to me,’ or reconstructed as the peripheral role that the speaker occupies. That this is so can be seen from the fact that such obliques always trigger the inference that the individual has had the relevant experience, whether the oblique is equated with the speaker or not. For instance, using the oblique bkra.shis la ‘to Tashi’ implies that Tashi, not the speaker, has tasted the food (the non-egophoric yod.red is used here, since the oblique is not first-person).

\[(9)\] kha.lag ‘di bkra.shis la bro.ba.chen.po yod.red
food this Tashi to tasty be
‘This food is tasty to Tashi.’
→ Tashi has tasted the food.

This is unsurprising, since these sorts of obliques typically create such inferences of direct experience with experiential predicates: *This food is tasty to x* in general implies that *x* has tasted the food. Why this should be is an interesting question, but it turns on the semantics of the experiential predicate and the oblique, and represents a different sort of inference from the strictly origo-oriented acquaintance inferences relevant here (cf. Anand & Korotkova 2018 for similar comments on the division between these two kinds of inferences). The speaker-oriented inferences above turn on no default acquaintance inference, but rather the semantics of the experiential predicate, plus either (i) the semantics of the first-person overt oblique, or (ii) the interpretation of the speaker as filling that oblique role, to fulfill the requirements of the egophor. In each case, there is a semantically-motivated reason for the direct experience requirement, which does not appear as a default.
When the oblique reading is absent, as in the first interpretation of (7), we see that the acquaintance inference is absent. There is therefore no default acquaintance inference in asserting this taste predication, despite the fact that the copula *yod* has no semantic contribution that one would expect to cancel such an inference, e.g. involving epistemic modality or indirectness. I conclude that here there is no default acquaintance inference attested.

2.2.3 The factual copula *yod.red*

The existential factual copula *yod.red* is evidentially neutral, and places no special semantic requirements on the way the origo learned about the relevant predication (though see Section 2.3 below for a complication). The generalization here is simple: the neutral *yod.red* doesn’t trigger an acquaintance inference.

\[(10)\]  
\[\text{kha.laq} \text{ } \text{‘di} \text{ } \text{bro.ba.chen.po} \text{ } \text{yod.red}\]  
\[\text{food} \text{ } \text{this} \text{ } \text{tasty} \text{ } \text{be}\]  
\[\text{‘This food is tasty.’}\]  
\[\text{→ The speaker has tasted the food.}\]

The use of *yod.red* is compatible in such a context with the speaker having learned about the food’s flavor by tasting it, by hearing about it from reports, by inferring it based on background assumptions or from specific relevant premises, etc. The matter of whether the speaker has tasted the food is left semantically open, such that interlocutors might or might not infer from this assertion that the speaker has tasted the food, depending on the context.\(^8\) This evidentially neutral assertion triggers no acquaintance inference, and so here there is no default acquaintance inference attested.

2.2.4 The perceptual copulas ‘*dug* and *red.bzhag*’

The existential perceptual copula ‘*dug*’ and the perceptual revelatory copula *red.bzhag* both require the origo to have learned about the relevant eventuality by directly perceiving it, via some sensory channel or other: what exactly this means depends on the nature of the eventuality in question. When they are used with taste predicates like *bro.ba.chen.po* ‘tasty,’ an acquaintance inference invariably results: for the examples in (11), the speaker must have tasted the food, and liked its taste.

\[(11)\]  
a. \[\text{kha.laq} \text{ } \text{‘di} \text{ } \text{bro.ba.chen.po} \text{ } \text{‘dug}\]  
\[\text{food} \text{ } \text{this} \text{ } \text{tasty} \text{ } \text{be.PER}\]  
\[\text{‘This food is tasty.’}\]  
\[\text{→ The speaker has tasted the food.}\]  
\[\text{→ The speaker liked the food’s taste.}\]  
b. \[\text{kha.laq} \text{ } \text{‘di} \text{ } \text{bro.ba.chen.po} \text{ } \text{red.bzhag}\]  
\[\text{food} \text{ } \text{this} \text{ } \text{tasty} \text{ } \text{be.PER.REV}\]  

\(^8\text{In cases where interlocutors do take the speaker to have tasted the food, a lack-of-recency effect also results, implying that the tasting happened at some distance in the past. I assume this is because a more recent learning by perception must typically be conveyed by the use of ‘*dug* or *red.bzhag*.}\)
‘(Oh,) This food is tasty.’
• The speaker has tasted the food.
• The speaker liked the food’s taste.

The only semantic difference between these two examples, as noted in Section 2.1 above, is that the use of the revelatory red.bzhag in (11b) requires extreme recency of learning, and so is best used while the speaker is learning that the food is tasty by perception, or when the speaker has just learned this (say, on trying it for the first time – the food may even still be in their mouth). The parenthesized ‘Oh,’ in the gloss is meant to represent this special learning requirement, while the perceptual requirements, and so the acquaintance inference, are identical between the two.

That this inference is semantically encoded, and does not appear as a conversational implicature, is shown by the fact that it is obligatory: it cannot be voided by considerations of conversational reasoning, and it can’t be overtly canceled.⁹

(12) a. ?kha.lag ‘di bro.ba.chen.po ‘dug yin.na’i (ngas) za ma myong
   food this tasty be.PER but (I.ERG) eat NEG EXP-PRF.EGO
   ‘This food is tasty, but I’ve never tried it.’

b. ?kha.lag ‘di bro.ba.chen.po red.bzhag yin.na’i (ngas) za ma
   food this tasty red.bzhag be.PER.REV but (I.ERG) eat NEG
   myong
   EXP-PRF.EGO
   ‘(Oh,) This food is tasty, but I’ve never tried it.’

The inference further interacts compositionally with other operators that occur alongside perceptual evidentials, as will be shown in Sections 3.2 and 3.3. The presence of a perceptual evidential therefore triggers the acquaintance inference.

From the above, we see that of the six non-modal copulas usable with adjectival predication, four of these are usable with taste predicates, and among these four, two are not perceptual evidentials, and two are. The acquaintance inference patterns exactly with the presence of one of these two perceptual evidentials, and therefore does not arise by default, but due to the semantic contribution of such an evidential.

2.3 Indirectness implications

As noted in Section 2.2.3, factual markers like yod.red semantically place no particular evidential requirement on the origo. These markers do, however, sometimes have evidential implications, due to their existing in paradigmatic contrast with egophoric and perceptual markers: use of a factual in a construction where these other two categories are paradigmatic options can result in the inference that the origo has not learned of the eventuality through either egophoric or perceptual means. The result tends to be an indirectness effect, the

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⁹In these examples, I use the verb za, lit. ‘eat,’ along with the negated experiential perfect, to express the notion of never having tried (eaten) something – this is natural when talking about kinds of food. Also possible to use, especially if you’re talking about trying a specific instance of a food, is the verb bro.ba lta ‘try / taste,’ lit. ‘see taste,’ though this is sometimes awkward in that it implies specifically sampling the food, as opposed to eating it normally.
implication being that the origo learned of what is asserted in some other, unspecified way: by inference, hearsay, guessing, encyclopedic or cultural knowledge, or whatever it might be.

In the case of taste predications, this can lead to a kind of ‘counter-acquaintance inference,’ to the effect that the content of the relevant acquaintance inference is false. (cf. Chang & Chang 1984: 619, ex. 41).

\[(13) \quad \text{kha.lag ‘di \ bro.ba.chen.po yod.red} \]
\[
\begin{array}{l}
\text{food} \\
\text{this tasty} \\
\text{be}
\end{array}
\]
\[\sim \text{‘This food is tasty.’}\]
\[\text{The speaker has not tasted the food.}\]

This effect is, on the one hand, in line with what would be expected if the acquaintance inference were an evidential effect – an independently-attested inference that perceptual evidence is lacking leads to an inference that acquaintance with the subject is lacking, showing that the two notions pattern together. On the other hand, it introduces a complication for the present account, because indirectness effects like in (13) raise the possibility that factual markers like \text{yod.red} are not evidentially neutral, but are rather indirect evidentials of some sort.

This is an issue because if it were true, it would weaken the claim made here that there is no acquaintance inference attested by default in Tibetan. This is because it might be that the absence of the acquaintance inference is due to the presence of indirect evidentiality, so the lack of an inference in using factual markers does not show that the inference is missing in an evidentially neutral environment. The indirect evidential might instead serve to cancel a default inference that might otherwise appear.

Tibetan, in other words, might cloak the status of the default inference behind its evidential system: perceptual evidentials accompany the inference, but they may be redundant on top of the default inference, rather than the cause of it, while indirect evidentials might void the default inference, rather than displaying a lack of an inference by default. So long as this is possible, and there is no other neutral testing ground for whether the inference appears, we can only make the weaker claim that there is no positive evidence in Tibetan for a default acquaintance inference, rather than the stronger claim that there is no such default inference. By itself, this worry is incomplete, since it doesn’t address the fact that egophors, which are neutral as to the classical evidential categories of directness and indirectness, also don’t trigger the inference (cf. Section 2.2.2), meaning that they still remain as a neutral testing ground. Nevertheless, the worry is worth addressing.\(^{10}\)

\(^{10}\)A reviewer asks in what sense egophors are not ‘direct’ evidentials. In brief, egophoricity and ‘direct’ evidentiality in the sense relevant here (i.e., perceptual evidentiality) are orthogonal categories. To illustrate, while egophors do require some sort of ‘direct’ involvement in an eventuality, this sort of involvement does not have to be of a perceptual kind. The first reading of the example in (7) is a case in point: the speaker has direct involvement in the making of the food, but this is not of a perceptual nature encoded by perceptual evidentials, which would involve tasting the food, whereas the knowledge in the example can be inferential, hence ‘indirect.’ Further, as Hill (2013: 49-50) alludes to, there are examples of egophors that are not ‘direct’ on any plausible construal of the term: a livestock magnate who says \text{g.yag mang.po yod} ‘I have lots of yaks’ justifies this assertion egophorically, in virtue of being the one who owns the yaks, but does not have to have seen or purchased them directly. Finally, as shown later in this section, perceptual and egophoric evidence are often in competition: it is (perhaps counterintuitively) often strange to report learning by perception of an eventuality that one takes part in, especially agentively.
Some Tibetanists, such as Denwood (1999) and Garrett (2001), have in the past claimed that Tibetan factual markers are indirectives. However, the more recent consensus, which takes into account a wider range of data, is that factual markers are not indirective, but truly evidentially neutral, as claimed in Section 2.2.3. As DeLancey (2018: 587) puts it, “The Factual verb endings are the only forms in the system which neither assert nor imply anything about the source of information [...] The category is difficult to describe explicitly precisely because it has no evidential value whatever.”

The reason for this is that factual markers, while they may imply a non-egophoric, non-perceptual source of evidence, are semantically compatible with egophoric and perceptual evidence, and may not imply that these two sources are lacking, depending on conversational concerns. For instance, a simple predication like in (14) simply states a fact about Tashi.

\[(14) \quad \text{bkra.shis gzugs.po.ring.po yod.red} \]
\[\text{Tashi tall be} \]

‘Tashi is tall.’

Depending on the context, this may be fine to say if the reason one knows about Tashi’s height is from witnessing it, and everyone knows this. Why the speaker decides to use a factual is a separate matter, that has to do with what that speaker intends to emphasize: factual markers are often used, even if the origo has egophoric or perceptual evidence, when the speaker has no reason to emphasize their own involvement in or perception of an event, but simply wants to ‘state a fact.’ As some authors have recently stressed about evidentials generally, and Tibetan evidentials in particular (cf. Hill 2013, Tournadre & La Polla 2014), the choice of an evidential form from a paradigm, when the evidence a speaker has is compatible with multiple such forms, is often a strategic matter, not a grammatically-determined one.

And so factuals may or may not have indirective effects. These effects are subject to wider reasoning about the conversation, as to why a speaker would use some evidential form when another is in competition with it, and so they are conversational implicatures. As expected of such implicatures, they are cancelable: to illustrate, there’s nothing wrong with calling a food tasty using a factual, and then confirming that one has tasted it.

\[(15) \quad \text{kha.lag ‘di bro.ba.chen.po yod.red ngas za myong} \]
\[\text{food this tasty be I.ERG eat EXP-PRF.EGO} \]

‘This food is tasty. I’ve tried it.’

Again, the speaker may simply want to state some general fact about the food. Since factuals are compatible with perceptual evidence (and with any source of evidence whatso-

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11Some other recent comments to this effect are as follows. Tournadre (2017: 104) groups factuals as a category of ‘assumed’ markers, and states of the latter: “...the source of this type of statement is normally the speaker, but the access to information is not specified.” Caplow (2017: 234) says: “the factual evidentials [...] are flexible in terms of their evidential status; [...] On the one hand, they can indicate that evidence providing verification of the proposition exists, but this evidence will not be specified by the speaker. On the other hand, they can be used when no such source of information exists...” Oisel (2017: 96) says: “The factual signals that the speaker states a specific or common fact without indicating the source and the access to information.”

12In fact, the use of yod.red as opposed to ‘dug’ may come to be more preferred as the time at which the speaker perceived Tashi retreats further into the past.
ever), they cannot be semantically indirective. Two further points about the relation between factuals and indirectivity are worth noting: first, they display behavior utterly unlike any attested indirective markers cross-linguistically; and second, the mechanism that gives rise to these inferences is systematic throughout Tibetan, and has nothing to do with indirectivity or even with factual markers specifically.

As to the first point, there is no attested category of indirective evidential markers (of which I’m aware) that behave anything like Tibetan factuals. Factuals are not like classic indirective markers, like Turkish -mI¸s (cf. Şener 2011), Quechuan -sqa (cf. Faller 2004), or Bulgarian -l (cf. Koev 2017). These all require the origo to have learned about an eventuality by some specific means, and not through mere conjecture, which makes them incompatible with conjectural markers (cf. Faller 2004: 56, ex. 13c) and makes them rule out knowledge from background guessing and assumptions alone (cf. Smirnova’s 2013: §3.3 comments on the notion of ‘external’ evidence in Bulgarian indirectives). Tibetan factuals are on the contrary compatible with conjecture and a lack of any specific indirect source of information, in addition to not semantically requiring a lack of direct perception, as classical indirectives do. Factuals are also not like semantically narrower indirective markers attested cross-linguistically, such as conjecturals or reportatives. Unlike conjecturals, they are compatible with specific sources of information, and unlike reportatives, they cannot void commitment to a speech act (cf. AnderBois 2014), and do not require a reportative source of evidence specifically.

Factuals are finally not like epistemic modals, which have been argued to be inferential, and therefore indirective, markers. They display none of the typical purported properties of epistemic modals: they are not incompatible with direct perception, and do not require inferential readings (cf. von Fintel & Gilles 2010); they do not place any doubt as to whether the prejacent is known (cf. Goodhue 2017); they do not necessarily signal the presence of a salient argument for the prejacent (cf. Mandelkern 2019); and they have no implication of ‘weakness’ of commitment to the prejacent (cf. Karttunen 1972).

As to the second point, that these evidential implications don’t have to do with indirectivity specifically is shown by constructions that lack a perceptual evidential among the paradigmatic choices, and so exhibit only an egophoric-factual contrast, as in predication with nouns and future verbal constructions. In these cases, use of a factual predictably can imply that the origo lacks egophoric evidence, but indirectness effects never arise, because there is no perceptual evidential to contrast with, and so no implication that perceptual evidence is lacking. The factual remains equally evidentially neutral, but the implications it gives rise to just reflect the binary, as opposed to ternary, paradigm.

For instance, a predication with a noun and no overt subject using the factual copula red implies that the origo lacks egophoric evidence for the predication, and hence that the implicit subject is non-first-person (since a first-person subject typically accompanies egophoric marking).

(16) dge.ryan red teacher be
    ‘S/he is a teacher.’ / ‘You’re a teacher.’

However, there is no indirectness implication here – whether the speaker knows that the subject is a teacher by perception is left entirely open, because no reasoning is invoked as to
why the speaker did not use a perceptual form, since there is none available.

And just like the cases seen above, the use of red in this construction does not semantically encode a lack of egophoric evidence either, but is genuinely evidentially neutral. To illustrate, if there is an overt first-person subject used with red, this may imply that egophoric evidence is lacking.

(17) nga dge.ryan red
    I   teacher   be
    ‘I’m a teacher.’

A lack of egophoric evidence with a first-person predication here implies something semantically extraordinary, for instance that the speaker has just learned that they got a teaching job, or is saying that they were assigned a role as a teacher in a play. This is because a lack of egophoric evidence requires the speaker to know they’re a teacher not by being the subject of the property, but by some external evidential means. However, the use of (17) need not have these semantic effects: it can also be compatible with egophoric evidence being present, if for whatever reason the speaker just wants to emphasize an ‘objective’ fact about their biography. The principle is the same as the one seen above with yod.red, but has nothing to do with indirectivity here.

That these effects don’t have to do with factual markers specifically is then shown by the fact that they arise between egophoric and perceptual evidentials considered alone, without reference to factuals. The use of a perceptual evidential may imply that an origo lacks egophoric evidence for the relevant eventuality.¹³ For example, the use of the perfective perceptual song in verbal constructions tends to have semantic consequences with a first person actor.

(18) nga na la phyin song
    I   home to went pfv.per
    ‘I went home.’

(18) tends to imply that the speaker lacks egophoric evidence for the fact that they went home, which in turn implies something semantically extraordinary: that they didn’t know or forgot that they went home, and are just now learning or relearning this (maybe because they were drunk or asleep at the time), or that they are viewing a recording of themselves or a representation of themselves in a dream, etc. However, these extraordinary effects are not semantically obligatory, and song is compatible with having egophoric evidence: the use of a perceptual may just emphasize that the action was visible, as if to say, ‘Look!’ or ‘Anyone could see!’ (cf. Garrett 2001: 78, ex. 18).¹⁴

¹³Interestingly, the reverse does not hold: use of an egophor does not imply that the origo lacks perceptual evidence. The reason for this, I assume, is that there is a preferential hierarchy of evidential sources, in the vein of Faller (2012), and egophoric evidence is the default preferred source where it is available.

¹⁴The use of song here may also imply that the speaker has egophoric evidence, but that their trip home was involuntary or accidental. This only bolsters the point here: the reason for this is that the egophoric counterpart to song, which is pa yin, encodes not only egophoric evidence, but also that the origo was the agent of the eventuality: so refusing to use the form may imply not only that the origo lacks egophoric evidence, but also that the origo was not an agent. The same principle derives this result.
All the above shows that the indirective effects that markers like *yod.red* can trigger are not due to any indirectivity in the semantics of factuals themselves: rather, there is a principle that applies across the grammar of Tibetan, that the use of an evidential form, when it is in paradigmatic contrast with other preferred forms the speaker could have chosen, tends to, but need not, create implicatures to the effect that the origo lacks the kind of evidence encoded by the form not chosen.

The fact remains, however, that factuals can create indirectness implicatures in some environments. Is this any threat to using factuals as an evidentially neutral testing ground for the acquaintance inference? That is, might pragmatic concerns that tend to interpret factuals indirectly interfere to cancel a default inference that would otherwise appear? In short, no: as noted in Section 1, the default acquaintance inference that occurs in evidential-less languages is precisely one that cannot be overridden by considerations of implicature, that projects out of negation, and that is uncancelable (see Section 5 below for illustrations of how previous accounts have attempted to capture these features).

In other words, if the default acquaintance inference were to arise in a construction that is semantically evidentially neutral, like with Tibetan factuals, the very possibility of indirectness implicatures should be ruled out by the presence of this default inference. And so the reasoning runs the other way: that such indirective implicatures are possible attests to the absence of the default inference. I conclude that Tibetan factuals are semantically evidentially neutral, and the lack of an acquaintance inference accompanying their use is positive evidence that there is no default inference in Tibetan.

### 2.4 Cancellation of the inference

Work on the acquaintance inference often focuses on the cancellation the inference in certain grammatical environments: the inference may not occur if the taste predicate is beneath an epistemic modal, in the antecedent of a conditional, in the future, alongside a hedge or hearsay marker, and so on (cf. Pearson 2013, Bylinina 2017, Anand & Korotkova 2018, Willer & Kennedy 2020, Ninan 2020). Putting things this way assumes that the inference arises by default, and the semantics of some operator is invoked to explain why it disappears.

This is not a good way to describe the Tibetan data, because the inference does not occur by default. While the inference also may not arise in Tibetan in environments similar to those listed above, there is no reason to think that the semantics of those environments in particular are responsible for the absence of the inference, since that inference does not otherwise occur anyway in bare assertions, absent a perceptual evidential. So for instance, there is no acquaintance inference, as expected, using the relevant epistemic modal and conditional constructions.

(19)  
\[
\text{kha.lag 'di bro.ba.chen.po yod srid.pa.red} \\
\text{food this tasty be might} \\
\text{‘This food might be tasty.’} \\
\text{⇒ The speaker has tasted the food.}
\]

(20)  
\[
\text{kha.lag 'di bro.ba.chen.po yod na (ngas) nyo gi yin} \\
\text{food this tasty be if (I.ERG) buy IPFV EGO.AG.FUT}
\]
‘If this food is tasty, I’ll buy it.’
\(\not\rightarrow\) The speaker has tasted the food.

In both (19) and (20), the taste predication is evidentially neutral: the copula yod is the only option in these embedded environments, and here carries no evidential connotation (it is not egophoric).¹⁵

A similar point can be made with future predication. Tibetan copular clauses are intrinsically tenseless, and must be verbalized to receive futurate interpretations. One way of doing this is with the verbalizer yong (meaning ‘[be]come’ when used as a main verb). The problem is that the verbalized construction that results must use verbal morphology, not the copular forms listed above, and the Tibetan future verb form lacks a perceptual evidential in its paradigm.¹⁶ To express that the food will be tasty, one then uses the factual form gi red.

\(\text{\texttt{(21) kha.lag \textquoteleft di bro.ba.chen.po yong gi \text{'red'}}} \)
\text{food this tasty come IPFV FUT}
‘This food will be tasty.’
\(\not\rightarrow\) The speaker has tasted the food.

Again, here there is no acquaintance inference, as expected, but there is no sense in which the future is cancelling the inference: it isn’t expected to arise to begin with, since the perceptual evidential is (and must be) absent in this construction anyway. If one wants to retain the perceptual evidential with this future-looking verbalization, the best one can do is use the imperfective perceptual form gi ‘dug (or gis).

\(\text{\texttt{(22) kha.lag \textquoteleft di bro.ba.chen.po yong gi \text{'dug'}}} \)
\text{food this tasty come IPFV PER}
‘This food is becoming tasty.’
\(\rightarrow\) The speaker has tasted the food as it is becoming tasty.

But this yields the interpretation that the food is becoming tasty, and that the speaker has perceived this. The acquaintance inference survives, implying for example that the speaker has tasted the food while it is cooking. In any case, one cannot show a cancelation of the inference with any of the usual constructions.

One might then wonder what happens if certain operators occur alongside a perceptual evidential, where the inference would indeed otherwise arise, and whether these operators cancel the inference. There aren’t many such Tibetan operators that occur in the right environments, and that might be independently expected to cancel the acquaintance inference, but those that do occur in these environments do not cancel the inference. Rather, they interact compositionally with the inference in a predictable way, to shift who holds the

¹⁵That is, copulas in these environments are evidentially neutral, but retain the essential / existential distinction (cf. Section 2.1), and yod is the existential option, which is to be used with bro.ba.chen.po ‘tasty’ (cf. Section 2.2.1).

¹⁶The lack of perceptual evidentials in the future so far as I know is cross-linguistically universal, likely because perceptual evidentials, or possibly evidentials generally, cannot project learning events into the future.
relevant commitment. This will be shown, for instance, with hearsay marking in Section 3.2 below, and with certain speech and attitude verbs in Section 3.3.3.

There are therefore two reasons that speaking of the cancelation of the acquaintance inference is inappropriate for Tibetan. First, the inference does not occur by default, and so in those environments where the inference is expected to be canceled in other, evidential-less languages, there is no reason to think that there is any cancelation happening. Second, where the inference actually is expected to appear internal to Tibetan, with a perceptual evidential, co-occurring operators that might be expected to cancel the inference don’t do so.

3 The inference as a perceptual evidential effect

The facts above suggest that the acquaintance inference in Tibetan is related to grammaticized marking of perceptual evidentiality. This section bolsters this claim by adding to the basic distribution outlined above a series of Tibetan facts that show how the acquaintance inference patterns exactly with the commitment the origo makes to learning by perception. That is, a commitment to perceptual evidence in taste predications and the acquaintance inference ‘follow’ one another, showing the same semantic and pragmatic behaviors, and being modified together wherever other semantic modifiers interact with them.

Section 3.1 shows that like all evidential commitments in Tibetan, and like perceptual commitments specifically, the acquaintance inference is not-at-issue in a specific sense. Section 3.2 shows that the acquaintance inference and perceptual evidential commitments show identical scopal behavior with respect to other operators that interact with them. Finally, Section 3.3 reviews several Tibetan constructions that shift the evidential origo in the language, anchoring responsibility for the evidential source to someone in addition to the speaker or someone other than the speaker, and shows that wherever the relevant operators shift the perceptual commitment, the acquaintance inference follows, so that whoever bears the perceptual commitment also bears commitment to the inference.

3.1 At-issueness

Tibetan evidentials contribute semantic content that has a certain not-at-issue discourse status, as is common for evidentials cross-linguistically (cf. Murray 2017). They roughly have the status of conventional implicatures, in the sense of Potts (2005): they typically convey discourse-new information, and this information is semantically encoded rather than conversationally implied, but it is not ‘put on the table’ as proffered content. Thus, evidential content is typically not an appropriate target for echoic denial, and cannot serve as the immediate antecedent to propositional anaphora or ellipsis sites (this corresponds to Koev’s 2018 notion of ‘P-at-issueness’). This can be briefly illustrated using echoic denial, which in Tibetan involves repeating the inflection of a verb, accompanied by negation.

(23) a. bkra.shis gzugs.po.ring.po ’dug
   Tashi  tall  be.PER
   ‘Tashi is tall.’

b. mi ’dug
   not be.PER
‘No, he’s not.’

\(\rightarrow\) The original speaker didn’t perceive what was asserted.

Where (23) is read as an exchange, with (23b) directly answering (23a), the echoic denial can only be used to deny that Tashi is tall, and cannot be used to deny (merely) that the original speaker perceived this. The proffered at-issue proposition is that Tashi is tall: the evidential content, that the speaker learned this by perception, is not proffered in such a way as to be targeted by this denial.

The acquaintance inference behaves the same way: echoic denial of a claim that the food is tasty can only be read as targeting the proffered claim that it is tasty, and not the claim that the original speaker tasted it (or liked its taste).

\begin{enumerate}
  \item a. \(kha.lag\ 'di\ bro.ba.chen.po\ 'dug\)
    \begin{align*}
      \text{food} & \quad \text{this} & \quad \text{tasty} & \quad \text{be.PER} \\
      \text{‘This food is tasty.’}
    \end{align*}
  \item b. \(mi\ 'dug\)
    \begin{align*}
      \text{not} & \quad \text{be.PER} \\
      \text{‘No, it’s not.’}
    \end{align*}
\end{enumerate}

\(\rightarrow\) The original speaker hasn’t tasted the food.

The exchange in (24) is simply a classic taste dispute, with both speakers making opposing claims about the taste of the food, and both making this claim on the basis of their own perceptual evidence (the speaker of (24b), in using ‘\(dug\), places a fresh commitment on themselves, that they have tasted the food as well, rather than denying that the original speaker has). Again, only the at-issue content about the tastiness of the food is denied, while the not-at-issue content about the speaker having tasted it is not. Hence, the at-issueness behavior of the acquaintance inference mirrors that of the perceptual evidential.

### 3.2 Scopal behavior

There are some operators in Tibetan that can occur in clauses marked by perceptual evidentials, and when they do, the evidential has a determined scopal relation to them. In particular, the evidential scopes over the negation \(mi\), but scopes beneath the hearsay marker \(za\). In both cases, the acquaintance inference follows the scopal behavior of the evidential, and what happens to the inference is semantically predictable based on the relative scope of the operator and evidential.

Tibetan evidentials scope out of clausemate negation, as is typical for evidentials generally (cf. Murray 2017: §2.2.1). This means that a negated predication with a perceptual evidential must have the interpretation that the origo perceived that the predication is not true \((EV > \neg)\), and not the interpretation that the origo did not perceive that the predication is true \((\neg > EV)\).

\begin{align*}
  (25) & \quad \text{bkra.shis gzugs.po.ring.po\ mi\ ‘dug} \\
  & \quad \text{Tashi\ tall\ not\ be.PER} \\
  & \quad \vee\text{‘Tashi is not tall(, as I’ve perceived).’ \(EV > \neg\)} \\
  & \quad \neg\text{‘(I haven’t perceived that) Tashi is tall.’ \(\neg > EV\)}
\end{align*}
The same relation holds for a negated perceptual taste predication. In (26), the interpretation is that the speaker perceived that the food is not tasty, not that the speaker didn’t perceive that the food is tasty. The acquaintance inference follows this scopal relation: the speaker must have tasted the food, and not liked its taste. Thus, the first part of the acquaintance inference is preserved, while the second is negated. This makes sense if the evidential commitment and acquaintance inference pattern together: the speaker must still have perceived the truth of the proposition about the food’s tastiness, and so tasted the food, but the truth perceived is the relevant negated proposition.

(26)  
\[
\text{kha.lag} \ 'di \ \text{bro.ba.chen.po} \ \text{mi} \ \text{‘dug} \\
\text{food} \ \text{this tasty} \ \text{not be.PER} \\
\text{‘This food isn’t tasty.’} \\
\rightarrow \text{The speaker has tasted the food.} \\
\rightarrow \text{The speaker didn’t like the taste of the food.}
\]

The hearsay marker \(za\), by contrast, scopes over evidentials. So in an adjectival predication with a perceptual evidential and a hearsay marker, the interpretation is that someone said that the predication is true, on the basis of perceptual evidence (\(hrs > ev\)), and not for instance that the speaker perceived that someone said this (\(ev > hrs\)).

(27)  
\[
\text{bkra.shis} \ \text{gzugs.po.ring.po} \ \text{‘dug} \ \text{za} \\
\text{Tashi tall be.PER HRS} \\
\checkmark \text{‘Tashi is tall, someone claimed (on the basis of perceiving this).’} \ [hrs > ev] \\
\xmark \text{‘(I’ve perceived that) someone claimed that Tashi is tall.’} \ [ev > hrs]
\]

With a taste predication, the interpretation is the same: in (28), the meaning is that someone claimed, on the basis of perceptual evidence, that the food is tasty. The acquaintance inference patterns as expected: the commitment to the inference is anchored, along with the evidential commitment, to the one who made the previous claim, not to the present speaker.

(28)  
\[
\text{kha.lag} \ ‘di \ \text{bro.ba.chen.po} \ \text{‘dug} \ \text{za} \\
\text{food this tasty be.PER HRS} \\
\text{‘This food is tasty, someone claimed.’} \\
\rightarrow \text{The one who said this committed to having tasted the food.}
\]

The scopal behavior of the evidential commitment and the acquaintance inference are identical, suggesting that the former is the cause of the latter.

### 3.3 Origo shift

While the Tibetan evidential origo is the speaker for assertions made with evidentials in matrix clauses, there are other speech acts in the language that split or shift the origo, placing evidential commitments on individuals other than the speaker. Here it’s demonstrated that where the origo shifts the commitments of a perceptual evidential, the acquaintance inference inevitably follows, anchoring to whoever incurs that evidential commitment. Section 3.3.1 shows this with interrogative flip, where the origo is the addressee; Section 3.3.2 shows this
with a confirmatory particle, where the origo is shared between the speaker and addressee; and Section 3.3.3 shows this with certain attitude verbs, which shift the origo of an embedded clause to the subject of its matrix clause.

### 3.3.1 Addressee origo with interrogative flip

As in many languages (cf. Aikhenvald 2004: 245-249; Murray 2017: §2.3), evidentials in Tibetan undergo interrogative flip: the evidential origo is by default the addressee in questions, so long as the question is a good-faith request for information from the addressee (that is, where the question is not rhetorical, the speaker is presumed not to know the answer, and the addressee is expected to provide the answer).

This flip can be seen using perceptual evidentials. In (29), for instance, the speaker presupposes that the addressee can answer the question based on witnessing Tashi’s height.

(29) **bkra.shis gzugs.po.ring.po ‘duq gas**
    Tashi tall be.PER ?
    ‘Is Tashi tall?’
    → The addressee knows whether this is true by perception.

In a taste question with a perceptual evidential, the effect is the same: the addressee is expected to have perceived, for instance, whether the food is tasty. The acquaintance inference shifts in tandem with this commitment: whether in a polar question (30a) or a content question (30b), questioning a predication of **bro.ba.chen.po ‘tasty’** implies that the addressee, and not the speaker, has tasted the food.

(30) a. **kha.lag ‘di bro.ba.chen.po ‘duq gas**
    food this tasty be.PER ?
    ‘Is this food tasty?’
    → The addressee has tasted the food.

b. **kha.lag ga.gi bro.ba.chen.po ‘duq**
    food which tasty be.PER
    ‘Which food is tasty?’
    → The addressee has tasted the food(s).

That this requirement is triggered by the presence of the perceptual ‘*duq*, and is not a general requirement on questions of taste predications generally, is shown by the fact that the addressee-oriented inference disappears when the factual **yod.red** is used instead.

(31) **kha.laq ‘di bro.ba.chen.po yod.red pas**
    food this tasty be ?
    ‘Is this food tasty?’
    ⊳ The addressee has tasted the food.

The flip of the evidential origo to the addressee in questions accompanies the flip of the acquaintance inference to the addressee, so here again the perceptual evidential commitment and acquaintance inference pattern together.

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3.3.2 Split origo with mixed speech acts

The Tibetan confirmation particle *pa* has the force of committing the speaker to an asserted proposition, while also asking for confirmation of its truth from the addressee. It therefore signals a mixed speech act, for which both the speaker and addressee are responsible, similar to a tag question, or an English particle like *eh?* or *huh?*. When these mixed acts occur with an evidential, both the speaker and the addressee act as origo: that is, the speaker is committed to having the relevant evidential source for the claim, and presupposes that the addressee has that same source for knowing whether the same claim is true.

With a perceptual evidential, the speaker commits to knowing that the relevant proposition is true by perception, and presupposes that the addressee knows whether it is true by perception as well. (32) would be appropriate, for example, if both the speaker and addressee were outside in the heat, and could feel whether the sun was hot (*ga* is a phonological variant of *pa*).

(32) *de.ring nyi.ma tsha.po zhe.drags ‘dug ga*
    today sun hot really be.PER CONF
    ‘The sun’s really hot today, huh?’
    → The speaker knows this is true by perception.
    → The addressee knows whether this is true by perception.

A taste predication occurring with *pa* and a perceptual evidential then shares the acquaintance inference among both the speaker and addressee.

(33) *kha.lag ‘di bro.ba.chen.po ‘dug ga*
    food this tasty be.PER CONF
    ‘This food is tasty, huh?’
    → The speaker has tasted the food.
    → The addressee has tasted the food.

That this is triggered by the perceptual evidential specifically is shown by the fact that this requirement is placed on neither participant by a factual copula like *yod.red*.

(34) *kha.lag ‘di bro.ba.chen.po yod.red pa*
    food this tasty be CONF
    ‘This food is tasty, isn’t it?’
    ↔ The speaker has tasted the food.
    ↔ The addressee has tasted the food.

The distribution of the evidential origo across the speaker and the addressee with confirmatory speech acts therefore accompanies the distribution of the acquaintance inference with perceptual evidentials and taste predicates.

3.3.3 Subject origo with embedded evidentials

While Tibetan matrix finite clauses obligatorily encode evidential distinctions, most embedded clauses in the language are evidentially neutral, either because they lack the appropriate auxiliary marking to encode evidentiality, or because while this marking is preserved, the
relevant evidential paradigm is collapsed into a single evidentially neutral option. As Garrett (2001: Ch. 5) notes, however, there are two major exceptions to this tendency: Tibetan verbs of speech and thought can embed clauses with evidential distinctions. When they do, the origo of the lower clause obligatorily shifts to the subject of its matrix verb.

This can be shown with the verb of speech lab ‘say’ and the verb of thought bsam ‘think.’ While the effect occurs with any embedded clause that marks evidential distinctions, for the present it suffices to show it with embedded adjectival predications using the perceptual ‘dug.

In each case, the interpretation is that the speaker or thinker says or thinks the content of the embedded clause on a perceptual basis. Where a factual marker like yod.red is used in the embedded clause instead, no such commitment attaches to the subject. Note also that the matrix clause can be marked for evidentiality, and this marks the evidence the speaker has for the claim that the subject says or thinks something. In (35) and (36) below, the matrix markers are factuals, meaning the speaker incurs no particular commitment.17

(35) a. bkra.shis kyis nyi.ma gzugs.po.ring.po ‘dug ze lab pa.red
   Tashi ERG Nyima tall be.PER QUOT say PFV
   ‘Tashi said that Nyima is tall.’
   ↪ Tashi said this on the basis of a perceptual evidential commitment.

b. bkra.shis kyis nyi.ma gzugs.po.ring.po yod.red ze lab pa.red
   Tashi ERG Nyima tall be QUOT say PFV
   ‘Tashi said that Nyima is tall.’

(36) a. bkra.shis kyis nyi.ma gzugs.po.ring.po ‘dug bsam gyi.yod.red
   Tashi ERG Nyima tall be.PER think IPFV
   ‘Tashi thinks that Nyima is tall.’
   ↪ Tashi thinks this on the basis of a perceptual evidential commitment.

b. bkra.shis kyis nyi.ma gzugs.po.ring.po yod.red bsam gyi.yod.red
   Tashi ERG Nyima tall be think IPFV
   ‘Tashi thinks that Nyima is tall.’

What the perceptual commitments placed on the subject in (35a) and (36a) amount to is tricky to paraphrase. For the speech report, the idea is that the subject, Tashi, said that Nyima is tall in such a way that committed him to having learned this by perception. Typically, this means that in his original report he used a perceptual evidential, and so incurred a speaker-oriented evidential commitment. For the thought report, the idea is that, in addition to thinking Nyima is tall, Tashi thinks he has learned this on the basis of

17Note that Tibetan includes both direct and indirect speech reports. The examples in the text don’t demonstrate this distinction, but the relevant evidential commitments for the subject speaker remain in indirect reports, meaning that the evidential effect isn’t the result of the speech report merely quoting whatever evidential the speaker used during their own report. For an illustration of these points, see e.g. Tournadre & Dorje (2003: 214 ff.). As a reviewer notes, if such reports were merely quotes, then the evidential that the speaker previously used should be expected to appear in the quoted material; but this evidential commitment survives in all speech reports.
perception.\textsuperscript{18}

Switching over to a taste predication, the perceptual commitment attaching to the speaker or thinker subject comes along with an acquaintance commitment, anchored to the subject and not to the speaker. And so in (37a) and (38a), the subjects are said to have claimed to taste the food, in saying it’s tasty, and to think that the food is tasty on the basis of having tasted it. These commitments disappear with an embedded factual marker.

(37)  
\begin{itemize}
\item a. \texttt{bkra.shis kyis kha.lag ‘di bro.ba.chen.po ‘duq ze lab pa.red}  
Tashi ERG food this tall be.PER QUOT say PFV  
‘Tashi said that this food is tasty.’  
\rightarrow Tashi committed to having tasted the food and liked its taste in saying this.
\item b. \texttt{bkra.shis kyis kha.lag ‘di bro.ba.chen.po yod.red ze lab pa.red}  
Tashi ERG food this tasty be QUOT say PFV  
‘Tashi said that this food is tasty.’
\end{itemize}

(38)  
\begin{itemize}
\item a. \texttt{bkra.shis kyis kha.lag ‘di bro.ba.chen.po ‘duq bsam gyi.yod.red}  
Tashi ERG food this tasty be.PER think IPFV  
‘Tashi thinks that this food is tasty.’  
\rightarrow Tashi thinks that he has tasted the food, and liked its taste.
\item b. \texttt{bkra.shis kyis kha.lag ‘di bro.ba.chen.po yod.red bsam gyi.yod.red}  
Tashi ERG food this tasty be think IPFV  
‘Tashi thinks that this food is tasty.’
\end{itemize}

Here again, the perceptual commitment tracks the acquaintance inference: whoever is responsible for the former is predictably responsible for the latter, including when this is the subject of a clause rather than the speaker. That the perceptual evidential commitment and acquaintance inference continually pattern together in all of the above ways makes a strong case for the inference being the result of that evidential commitment.

4 Deriving the inference

This section provides a formal account of how the acquaintance inference is derived in Tibetan through the combined semantics of the taste predicate and the perceptual evidential, given the conclusion above that the inference is an evidential effect. The account is given with enough detail to make explicit all of the crucial components needed for it to work, but so long

\textsuperscript{18}The judgments here are tricky, but my current (highly fallible) understanding of the projective properties of these attitudes are as follows. For the report in (36a), the fact that the subject had a certain perception projects: that is, the speaker also commits to Tashi having perceived something relevant. However, Tashi may be mistaken about what he thinks, such that he has not really learned the relevant proposition by perception, but only \textit{thinks} he has, and so that this is an event of learning in the appropriate sense does not project. So the total commitment that the speaker incurs as to what happened to Tashi is that (i) he perceived something (e.g. he saw Nyima), and on this basis thought (perhaps mistakenly) that he learned that she was tall.
as each of these steps is present, it can be adopted to many formal frameworks or specific accounts of these predicates and evidentials.

What is necessary are the following three components, each of which corresponds to a section to follow. First, the semantics of the taste predicate has a certain kind of dispositional experiential meaning, as laid out in Section 4.1, which does not in of itself, or in combination with ordinary norms of assertion, trigger any acquaintance inference. Second, the semantics of the perceptual evidential commits the origo not-at-issue to having perceived the relevant eventuality in the right way, as laid out in Section 4.2. Finally, as the perception of a disposition requires the perception of one of its manifestations, as laid out in Section 4.3, and as learning by perception is factive, the result is a commitment by the origo that the relevant sort of experience encoded by the taste predicate has actually occurred in the origo. This amounts to the acquaintance inference: so for instance, in virtue of asserting that an individual is tasty on perceptual grounds, the speaker incurs a not-at-issue commitment, whose truth requires that individual to have produced gustatory pleasure in that very speaker.

4.1 Lexical semantics of the taste predicate

I start by assuming, following Pearson (2013), Anthony (2016), and Bylinina (2017) a.o., that bro.ba.chen.po ‘tasty’ is an experiential predicate, and that its lexical semantics pertains to the production of gustatory pleasure by a stimulus (thing tasted) in an experiencer (taster). I further identify the semantic role played by the experiencer with that of the evidential origo, in a way that will matter in the treatment below.

Let $[\alpha]^{w,\circ}$ be the extension of expression $\alpha$ at world $w$ and origo individual $\circ$, and let $\lambda w_s. \lambda x_e. [\alpha]^{w,x}$ be the intension of $\alpha$. Then as in (39), the extension of bro.ba.chen.po ‘tasty’ composes with a stimulus individual $x$, and returns true just in case in $w$, $x$ is normally disposed to stimulate gustatory pleasure in $\circ$. That is, where the stimulus would come into contact with the origo as experiencer in a way appropriate to the production of gustatory experience (presumably involving contact with the taste receptors), that experience is pleasant under normal conditions. We write this latter truth value \textquoteleft gus''$_d$(\circ)(x)(w).'\textquoteleft

(39) $[\text{bro.ba.chen.po}]^{w,\circ} = \lambda x_e. \text{gus''$_d$(\circ)(x)(w)}$

This denotation has the predicate compose with a stimulus argument, but not an experiencer: for present purposes this is not a crucial decision, and the entry could be rewritten so that the predicate is extensionally dyadic instead, composing with both an experiencer and stimulus.\textquoteleft

\textquoteleft

I have the dispositional meaning baked into the predicate here, but it’s possible that the predicate’s deepest semantic layer simply refers to the production of actual experiential episodes of gustatory pleasure, and something about its use in predication introduces a dispositional reading: cf. Pearson (2013), Snyder (2013), Anthony (2016), a.o., who adapt a generic treatment of individual-level predicates in the vein of Chierchia (1995) to tasty. I ignore this complication here, and am not sure whether treatments of Tibetan predicates as ‘individual-level’ or not is applicable. What matters for present purposes is just the dispositional meaning of the predicate, when used in predication.\textquoteleft

\textquoteleft

That is, we could also write: $[\text{bro.ba.chen.po}]^{w,\circ} = \lambda x_e. \lambda y_e. \text{gus''$_d$(x)(y)(w)}$. Everything to follow could then be appropriately translated without loss to the structure of the treatment, so long as the predicate can
Before showing how a taste predication composes with a perceptual evidential to yield the acquaintance inference, it’s worth demonstrating how the inference doesn’t arise by default in its absence. In line with the claim above (cf. Sections 2.2.3 and 2.3) that a copula like \textit{yod.red} is evidentially neutral, we can treat it as vacuous, as in (40).

\[(40) \quad \text{\texttt{yod.red}}^w_{\circ} = \lambda p_t.p\]

This is a simplification, in that \textit{yod.red} is an existential copula, and so semantically differs somehow e.g. from the essential copula \textit{red}, which is likewise evidentially neutral – we leave this issue to the side. On composing with the stimulus subject \textit{kha.lag ‘di} ‘this food,’ which we can for simplicity assume denotes an individual \textit{f}, the result is as follows.

\[(41) \quad \text{\texttt{kha.lag ‘di bro.ba.chen.po yod.red}}^w_{\circ} = \text{\texttt{yod.red}}^w_{\circ}(\text{\texttt{bro.ba.chen.po}}^w_{\circ}(\text{\texttt{kha.lag ‘di}}^w_{\circ})) = \text{\texttt{gus}}''(\circ)(f)(w)\]

And so the extension of \textit{kha.lag ‘di bro.ba.chen.po yod.red} ‘This food is tasty’ at \textit{w} and \textit{\circ} is just true iff in \textit{w}, \textit{f} is normally disposed to stimulate gustatory pleasure in \textit{\circ}.

This is then compatible with any standard metasemantics of taste predicates one cares to adopt, which sets values for the world and origo to determine the content of an expression in a context of utterance \textit{c}. A standard contextualist metasemantics, for example, might be as in (42), where the content of the clause is a classical proposition, mapping worlds to truth values, with the value for \textit{\circ} set to the origo determined by the context of utterance \textit{\circ}_c, whatever that is. A standard relativist metasemantics, by contrast, might be as in (43), where the content of the clause takes an individual as well as a world into a truth value, so that the content is not a classical proposition, but an ‘origo-neutral’ object with an open value for the experiencer, such that the origo, in addition to its evidential role, serves the function of Lasersohn’s (2005) judge parameter.

\[(42) \quad \text{\textbf{Contextualist metasemantics}}\]
\[\begin{align*}
\text{a.}\quad \langle \alpha \rangle^c & = \lambda w_s.\langle \alpha \rangle^w_{\circ_c} \\
\text{b.}\quad \langle \text{\texttt{kha.lag ‘di bro.ba.chen.po yod.red}} \rangle^c & = \lambda w_s.\text{\texttt{gus}}''(\circ_c)(f)(w)
\end{align*}\]

\[(43) \quad \text{\textbf{Relativist metasemantics}}\]
\[\begin{align*}
\text{a.}\quad \langle \alpha \rangle^c & = \lambda w_s.\lambda x_e.\langle \alpha \rangle^w_{x} \\
\text{b.}\quad \langle \text{\texttt{kha.lag ‘di bro.ba.chen.po yod.red}} \rangle^c & = \lambda w_s.\lambda x_e.\text{\texttt{gus}}''(x)(f)(w)
\end{align*}\]

These principles can be supplemented as needed, e.g. with auxiliary assumptions on a contextualist picture as to how the value of \textit{\circ}_c is determined in a context \textit{c}, or with auxiliary assumptions on a relativist picture as to how agents assess origo-neutral contents like those in (43) for truth given their contexts of assessment.

I leave this to the interested reader. I prefer the monadic treatment, as (to my surprise) I have been unable to elicit exocentric readings of taste predicates in Tibetan, no matter how rich the extralinguistic context, suggesting that these predicates don’t freely take implicit individual arguments. On the present treatment, explicit obliques that serve as experiencers are presumably intensional operators that shift the origo, as in Lasersohn (2005), and not internal arguments to the predicate.
In either case, the point remains the same: the content of the expression, and so what is asserted in $c$ by uttering it, is simply that $f$ is normally disposed to stimulate gustatory pleasure, either in some contextually determined origo, or in the origo parameter *simpliciter*. The lexical semantics of the predicate itself requires no one, including the speaker, to have tasted the food in principle, and *yod.red* makes no evidential contribution that would enforce such a restriction.

### 4.2 Semantics of the perceptual copula

Perceptual evidentials impose a commitment on what we can call, following Coppock & Wechsler (2018), the ‘authority’ of the context of utterance, or the agent responsible for the information associated with a speech act made in that context. They compose with the intension of a clause, and introduce a requirement that the authority perceives that this intension is true in some distinguished way. The semantics of an evidential like Tibetan ‘*dug*’ can therefore be thought of as introducing a requirement that the origo has had such a perception: in a context, the value of the origo can then be set to the authority, effectively placing a perceptual commitment on the authority of the context.

There are two features of this perceptual requirement that any treatment of the evidential must capture. First, as Korotkova (2016) notes, in assertive contexts, evidential commitments generally are hard-anchored to the speaker, and cannot shift: the speaker is therefore the authority, and must be used for the value of the origo. In the case of ‘*dug*’, this effectively means imposing a commitment on the speaker to having perceived whatever the associated clause denotes. Second, these sorts of commitments are not-at-issue, as noted specifically for ‘*dug*’ in Section 3.1, and noted generally in previous treatments of the semantics of evidentials, for instance in Murray (2017) and Koev (2017).

To represent the not-at-issue commitment on the origo, we can write an entry for the copula ‘*dug*’ that has it compose with the intension of a clause, and return that same object, coupled with the not-at-issue commitment that the origo perceives that it is true. Adopting a method of not-at-issue composition similar Potts’ (2005) CI application, we can say that ‘*dug*’ composes with the intension of a clause $p$, and extensionally returns a pair of objects, including (i) the truth value of $p$ itself at the index of evaluation, which remains unchanged and at-issue; and (ii) a new not-at-issue truth value, true just in case the origo perceives that $p$.

We separate the at-issue and not-at-issue objects conventionally with a bullet, with the at-issue meaning on the left, and the not-at-issue meaning on the right, and we read ‘perceive($p$)(⊙)(w)’ as ‘in $w$, ⊗ perceives that $p$.’

\[
\text{(44) \hspace{1cm} } \left[ \text{dug} \right]_{w, \odot} = \lambda p_{st}.p(w)(\odot) \bullet \text{perceive}(p)(\odot)(w)
\]

---

21 There are several terms for this notion used in the wider evidentiality and egophoricity literature. I take the idea of the authority here to be the same as, for instance, that of the ‘epistemic source’ in Hargreaves (2018).

22 That is, in Potts’ (2005) formalism, the evidential is of type $\langle \langle s^a, t^a \rangle, \langle s^a, t^c \rangle \rangle$, taking an at-issue proposition into a proposition that, on taking an at-issue point of evaluation, returns a truth value of a conventional implicature type, much like a proposition-level CI adverb. I’m not concerned with implementing this formalism specifically: anything that assigns the evidential a similar not-at-issue status in a similar way will do. What I write in the text above doesn’t quite match up with how Potts’ rule of CI application works, but I simplify for perspicuity.
To take a simple example of a non-taste adjectival predication, we can see how the semantics of a sentence meaning that Tashi is tall would work with ‘dug,’ using the predicate gzugs.po.ring.po ‘tall,’ assuming that bkra.shis ‘Tashi’ just denotes the individual t:

\[(45) \text{bkra.shis gzugs.po.ring.po 'dug}\]

\[\text{Tashi tall be.PER} \]

‘Tashi is tall.’

\[(46) \]

a. \[\text{gzugs.po.ring.po}\] \[w,\odot = \lambda x.e.tall'(x)(w)\]

b. \[\text{bkra.shis gzugs.po.ring.po 'dug}\] \[w,\odot = [\text{dug}](\lambda w_s.\lambda x.e.[\text{gzugs.po.ring.po}]^w,x([\text{bkra.shis}]^w,x))\]

\[= \text{tall}'(t)(w) \bullet \text{perceive}(\lambda w_s'.\lambda x.e.tall'(t)(w'))(\odot)(w)\]

The at-issue extension of (45) is true iff Tashi is tall in \(w\); the not-at-issue extension is true just in case in \(w\), \(\odot\) perceives that Tashi is tall. The notion of perception here is factive, such that in \(w\), \(\odot\) perceives \(p\) to be true only if \(p\) is true at \(w\) and \(\odot\), which together constitute the index of evaluation. This reflects the factivity of the perceptual evidential, which always carries the commitment that what is perceived actually happened.

\[(47) \text{perceive}(p)(\odot)(w) \rightarrow p(w)(\odot)\]

Crucially, this means that to commit to perceiving \(p\) is to commit to it being true, not just with respect to the world one inhabits, but also with respect to oneself as origo. This will be important for when ‘dug’ scopes over origo-sensitive denotations introduced by taste predicates.

We then provide a metasemantics for the not-at-issue content, which again provides values for the relevant parameters, to yield a content for expressions in a context of utterance \(c\). In particular, we say that where an expression \(\alpha\) has as its extension a pair of at-issue and not-at-issue objects, the at-issue content is derived from the left side as in Section 4.1 above (48a), and the not-at-issue content is derived from the right side by requiring that the value of the origo be set to \(a_c\), the authority of the context (48b), which for simplicity we equate with the speaker, since we’re only dealing with assertive contexts. We say that LEFT(\(\pi\)) takes the left member of a bulleted pair \(\pi\), and RIGHT(\(\pi\)) the right member.

\[(48) \text{Metasemantics for not-at-issue content}\]

Where for any \(w\) and \(\odot\), \([\alpha]^{w,\odot} = \beta \bullet \gamma:\]

a. \([\alpha]^{c}_{a.i.} = \]

i. \(\lambda w_s.\text{LEFT}(\[\alpha\]^{w,c})\) [contextualist metasemantics], or

ii. \(\lambda w_e.\lambda x.e.\text{LEFT}(\[\alpha\]^{w,x})\) [relativist metasemantics]

b. \([\alpha]^{c}_{n.a.i.} = \lambda w_s.\text{RIGHT}(\[\alpha\]^{w,a_c})\]

This can then feed into one’s preferred treatment of at-issue and not-at-issue content at the semantics-pragmatics interface: for instance, one can say that the speaker automatically commits to the truth of both the at-issue and not-at-issue contents, while proffering the
former explicitly for acceptance into the common ground in a certain way.\footnote{I leave it open what happens to the not-at-issue content discursively: my concern is only with the speaker’s acceptance of it, on which the acquaintance inference depends. Murray (2017) suggests that not-at-issue evidential content updates the common ground automatically, without interlocutors being able to intervene to stop it.} Note that the not-at-issue content, which will be responsible for the acquaintance inference, is the same whether one adopts a contextualist or relativist metasemantics for the at-issue content: and so the treatment of the acquaintance inference is orthogonal to one’s preferred treatment of the metasemantics of taste predicates more generally.

Returning to the example in (45), the contents of a clause meaning that Tashi is tall, accompanied by a perceptual evidential commitment, are as follows.

\begin{equation}
(49) \begin{aligned}
a. \{ bkra.shis gzugs.po ring.po ‘dug\}^c_{a,i} &= \\
i. \lambda w_s. tall'(t)(w) [\text{contextualist}], \text{or} \\
ii. \lambda w_s. \lambda x_e. tall'(t)(w) [\text{relativist}] \\
b. \{ bkra.shis gzugs.po ring.po ‘dug\}^c_{n,a,i} &= \\
\lambda w_s. perceive(\lambda w'_s. \lambda x_e. tall'(t)(w'))(a_c)(w)
\end{aligned}
\end{equation}

The crucial effect of the evidential comes in the not-at-issue content: where the speaker-authority of the context \( a_c \) commits to its truth, they commit to the authority \( a_c \) (that is, they themselves) perceiving that Tashi is tall. The truth of this commitment in turn requires them to have perceived Tashi’s height directly in some relevant way, such as by seeing Tashi himself.

With the above said, we can now see how the composition works using ‘dug and a taste predicate like \( \text{bro.ba.chen.po ‘tasty.’} \) The result is as in (50), for \( \text{kha.lag ‘di bro.ba.chen.po ‘dug ‘This food is tasty.’} \)

\begin{equation}
(50) \begin{aligned}
\{ \text{kha.lag ‘di bro.ba.chen.po ‘dug\}^w_{w,\odot} &= [‘dug]^w_{w,\odot} (\lambda w_s. \lambda x_e.[\text{bro.ba.chen.po}]^w_{w,x}([\text{kha.lag ‘di}]^w_{w,x})) \\
&= gus^g_{\odot}(\odot)(f)(w) \bullet \lambda w_s. perceive(\lambda w'_s. \lambda x_e. gus^g_{\odot}(x)(f)(w'))(\odot)(w)
\end{aligned}
\end{equation}

The at-issue and not-at-issue contents of this expression are then as follows:

\begin{equation}
(51) \begin{aligned}
a. \{ \text{kha.lag ‘di bro.ba.chen.po ‘dug\}^c_{a,i} &= \\
i. \lambda w_s. gus^g_{\odot}(\odot_c)(f)(w) [\text{contextualist}], \text{or} \\
ii. \lambda w_s. \lambda x_e. gus^g_{\odot}(x)(f)(w) [\text{relativist}] \\
b. \{ \text{kha.lag ‘di bro.ba.chen.po ‘dug\}^c_{n,a,i} &= \\
\lambda w_s. perceive(\lambda w'_s. \lambda x_e. gus^g_{\odot}(x)(f)(w'))(a_c)(w)
\end{aligned}
\end{equation}

That is, what the speaker asserts at-issue is just that the food is normally disposed to stimulate gustatory pleasure in the origo (in whichever origo is contextually determined, for the contextualist, and in the unsaturated origo parameter, for the relativist).

The not-at-issue content to which the speaker commits in virtue of asserting this is the important part, for our purposes: this is the proposition that \( a_c \), the speaker-authority, perceives that the food is disposed in this way. From the factivity of perception (47) and the origo-sensitivity of the perceived intension, it follows that in virtue of committing to
the truth of this proposition, the speaker commits to the food being normally disposed to stimulate gustatory pleasure in themselves.

(52) \textit{perceive}(\lambda w'.\lambda x.e.gus''(x)(f)(w'))(a_c)(w) \rightarrow gus''(a_c)(f)(w)

This on its own is just partway to the full acquaintance inference: it is a speaker-oriented commitment about the taste of the food, but it is merely dispositional, and does not require that the speaker actually taste the food, or be pleased by its taste. The move to an actualized inference requires a final, independently-motivated step: use of a perceptual evidential in Tibetan with dispositional predications generally requires the authority to perceive some instance of the disposition being actualized.

4.3 Specificity and actual experience

The perceptual copula ‘\textit{dug}’ exhibits what Goldstein & Nornang (1984) call specificity (cf. Garrett 2001: §3.5, who also quotes the relevant passage from this work): it requires perception of some particular episodic event. This is characteristic of the category of perceptual evidentiality as a whole in Tibetan, not just this copula, and the requirement is obvious enough in constructions that report episodic truths to begin with. It holds, for instance, with the perfective perceptual evidential \textit{song}, which is used in verbal constructions.

(53) \textit{zla.ba gis khrom la phyin song}

Dawa ERG market to went PFV.PER

‘Dawa went to the market.’

The evidential in (53) commits the speaker not just to perceiving something or other, but perceiving some specific episodic event of Dawa going to the store, the very event reported in the assertion.\footnote{Or rather, it commits the speaker to having perceived a part of that event. The requirements on the timespan of temporally extended events, and what portions of them must be perceived in order for perceptual evidentiality to be licensed are as far as I know still poorly-understood, though see Kalsang et al. (2013) for some comments on this subject, in particular with respect to the Tibetan perfect-perceptual evidential \textit{bzhag}.} Not only must perceiving that specific event be the evidential grounds for the assertion, but this event must also be perceived ‘directly,’ in the sense that what is witnessed must be \textit{Dawa’s going to the store}, and not something else from which her going to the store is inferred. Matthewson (2011: 350) notes that evidentials may be ‘direct’ in two ways: (i) they may require learning by perception of something (as opposed to e.g. hearsay), and (ii) where perceptual, they may require that what is perceived is the reported event itself. Tibetan perceptual evidentiality is always direct in both these ways, in the aspectual constructions relevant here.\footnote{I make the caveat about aspect because Tibetan perceptual evidentials can occur in the perfect, in which case the interpretation is typically not that the authority has perceived the reported event itself, but rather that they have perceived some end-state or result of that event after the fact, sometimes with mirative connotations. That is, in the perfect, these markers act like typical ‘percepts of evidentiality.’ Presumably, the interaction between perceptual evidentiality and the perfect yields this result. All perfective, imperfective, and aspectless constructions with perceptual evidentials require perception of the event itself.}

But the requirement also applies to constructions that aren’t in themselves episodic. It is not possible to use ‘\textit{dug}’ to claim to perceive habitual or dispositional truths, unless one
commits to perceiving some particular instantiation of the habit or disposition on some particular occasion. In some constructions, this requirement is prohibitively strong, making the use of perceptual evidentials pragmatically unwieldy. For instance, with the imperfective perceptual gi ‘dug in verbal constructions, coercion of a habitual reading using a temporal modifier like deng.sang ‘these days’ yields the odd interpretation that one has perceived the habit being instantiated repeatedly, such that e.g. in (54), the speaker is required to have actually witnessed Tashi writing letters to his younger brother multiple times.26

(54) deng.sang bkra.shis kyis khong gi ‘og.ma la yi.ge ‘bris kyi ‘dug
these-days Tashi ERG 3 GEN little-brother to letter write IPFV PER
‘These days, Trashi writes letters to his younger brother.’

In aspectless copular constructions, the perceptual requirements are less stringent, but still obligatory: to claim using ‘dug that a subject has some dispositional property denoted by an individual-level predicate requires witnessing some instantiation of that disposition. This can be shown with examples including a non-taste-predicate like spyang.po ‘clever.’

(55) a. (nga) spyang.po yod
   (I) clever be.EGO
   ‘I’m clever.’

b. bkra.shis spyang.po yod.red
   Tashi clever be
   ‘Tashi is clever.’

c. bkra.shis spyang.po ‘dug
   Tashi clever be.PER
   ‘Tashi is clever.’

→ The speaker has witnessed Tashi doing something clever.

With egophoric and factual copulas like yod and yod.red, there is no episodic requirement: a speaker can claim to be clever themselves just on grounds of being familiar through identity with their own personality or capabilities, and a speaker can claim someone is clever on evidentially neutral grounds for an open-ended variety of reasons. With ‘dug, however, things are different: its use is only licensed with spyang.po ‘clever’ if the speaker has actually witnessed the subject doing something clever. And it is the perception of this clever behavior that justifies the use of the evidential in the assertion.

So for instance, (55c) cannot imply that the speaker infers that Tashi is clever from seeing a machine he built or a math problem he solved, nor from meeting Tashi himself and seeing that he has some perceptible quality indicating he is clever. Rather, the speaker must commit to witnessing Tashi building a machine, or tricking someone, or answering a math problem, or something of that sort, which the speaker considers clever behavior.

If we take the predicate spyang.po ‘clever’ to encode this disposition to clever behavior, then we might give it an entry like in (56), again marking the dispositional nature of the

26I have to stress: the speaker has to see the letter-writing, not just the letters, not just Tashi’s younger brother receiving the letters, etc. How many times one must witness this for the evidential to be felicitous is imprecise.

30
metalanguage predicate with a subscripted ‘δ.’ We say that \( \text{clever}'_\delta(x)(w) \) just in case \( x \) is normally disposed to clever behavior in \( w \).

\[
(56) \ [\text{spyang.po}]^{w,\odot} = \lambda x_c.\text{clever}'_\delta(x)(w)
\]

If we then place a specificity requirement on \textit{perceive}, to the effect that perception that a disposition holds entails perception of an actualization of that disposition, we can make it so that committing to perceiving that Tashi is clever requires witnessing his clever behavior. We can write this as follows, where \( \text{clever}'_\alpha(x)(w) \) is the actualized counterpart to the dispositional term, and is true just in case the relevant behavior that \( x \) actually manifests in \( w \) is clever.

\[
(57) \ \text{perceive}(\lambda w'_s.\lambda x_e.\epsilon_\delta(y)(w'))(x)(w) \rightarrow \text{perceive}(\lambda w'_s.\lambda x_e.\epsilon_\alpha(y)(w'))(x)(w)
\]

In other words, perception of the dispositional property entails perception of the corresponding actualized property, ‘\( \epsilon \)’ being a metavariable over relevant symbols representing these properties, like ‘clever’” and “gus” (allowing the corresponding principle to hold \textit{mutatis mutandis} for metalanguage predicates of any arity). Composition of \textit{bkra.shis spyang.po} ‘dug’ ‘Tashi is clever’ then results in the not-at-issue content in (58a). Commitment to this by the speaker-authority then by (57) entails commitment to its actualized counterpart (58b), and so the factivity of perception requires the speaker to commit to (58c) being true, where \( w_c \) is the world of the context.

\[
(58) \ a. \ [\text{bkra.shis spyang.po} \ 'dug]'^{c}_{n.a.i} = \\
\lambda w_s.\text{perceive}(\lambda w'_s.\lambda x_e.\epsilon_\delta(y)(w'))(a_c)(w) \\
b. \ \lambda w_s.\text{perceive}(\lambda w'_s.\lambda x_e.\epsilon_\delta(y)(w'))(a_c)(w) \\
c. \ \text{clever}'_\delta(t)(w_c)
\]

And so the speaker effectively commits to perceiving that Tashi actually behaves cleverly, and therefore that Tashi actually behaves cleverly in the world of the context.

With a taste predicate, the story is the same: what is actualized is the disposition to stimulate gustatory pleasure in the origo, and so with the use of ‘dug, asserting that the food is tasty commits the speaker to perceiving that the food actually stimulated that pleasure. For \textit{kha.lag} ‘di bro.ba.chen.po ‘dug ‘This food is tasty,’ we have (59a) for the not-at-issue content of the expression. This yields the corresponding actualized commitment in (59b), which in turn, by the factivity of perception and plugging in the speaker-authority for the origo, requires the truth of (59c).

\[
(59) \ a. \ [\text{kha.lag} \ 'di bro.ba.chen.po} \ 'dug]'^{c}_{n.a.i} = \\
\lambda w_s.\text{perceive}(\lambda w'_s.\lambda x_e.\epsilon_\delta(y)(w'))(a_c)(w) \\
b. \ \lambda w_s.\text{perceive}(\lambda w'_s.\lambda x_e.\epsilon_\delta(y)(w'))(a_c)(w) \\
c. \ \epsilon_\alpha(t)(a_c)(f)(w_c)
\]

\footnote{See fn. 19 above: the same caveats apply here for the genericity introduced into the predicate, and whether it is actually encoded into the bottom layer of its lexical semantics. The notion of ‘normal disposition’ here also does a lot of work: presumably one can be clever without ever deigning to show it, which would require that only in particular circumstances, that might never arise, does the disposition actualize.}
But since $gus^α(x)(y)(w)$ is true just in case in $w$, the actual gustatory experience that $y$ stimulates in $x$ is pleasant, this yields the acquaintance inference. (59c) requires that: (i) there be actual gustatory experience stimulated by the food in the speaker (and so that the speaker taste the food); and (ii) that this experience be pleasant. These are the two parts to the inference introduced in Section 1.

That, then, is how the inference is derived. One would ultimately want to take this picture, and combine it with treatments of a range of other semantic operators, to derive all of the effects explored in Sections 3.2 and 3.3. This would require a number of independent commitments regarding negation, hearsay markers, attitude verbs, questions, and so on, along with commitments about the relation between dispositional predicates and genericity, and how these relate scopally to these various other operators. But the above, I take it, provides a solid way of deriving the inference in the canonical assertive case, and plausible blueprint for how to get started on the other semantic interactions.

A few closing comments on the derivation might be in order. I take all the principles appealed to above to be independently plausible, and take them all, with one exception, to have been suggested previously in the literature for independent reasons. The treatment of taste predicates as having a dispositional experiential semantics is common in the authors cited at the beginning of Section 4.1; the use of a parameter playing the role of experiencer in their lexical semantics is standard throughout the literature on taste predicates, for both contextualists and relativists; the suggestion that the same parameter performs judge-like functions and controls commitment for evidentials has been made by McCready (2007); the treatment of evidentials generally as imposing not-at-issue commitments individuated by information source is essentially what Murray (2017) proposes; and the idea that factivity entails commitment to truth with oneself as origo I take just to fall out of the idea in Stephenson (2007) that truth assessment is intrinsically autocentric.

The one exception noted above is the principle adduced in this section, that perceiving a disposition requires perceiving one of its manifestations. I appealed to this notion in (57) above only as a sort of postulate, without explaining why it holds or how it works mechanically. The appeal is justified because this principle just reflects an observable fact about Tibetan, and I hypothesize it is a feature of perceptual evidentiality generally. But the postulate above is just an abbreviation for whatever ultimately explains this grammatical effect. Though I don’t know what such an explanation would look like, I am intrigued by the idea proposed by Speas (2010), and applied in Kalsang et al. (2013), that evidentials encode mereological relations between situations: it may be, for instance, that learning by perception requires the origo to inhabit a situation or eventuality related to a disposition in a way that is impossible unless that disposition is being actualized. Whether this is right will have to await a deeper understanding of the nature of learning by perception and how it interacts with dispositions or genericity.

5 Problems with previous approaches

With the positive account of how the acquaintance inference arises in Tibetan given, it’s possible to compare this account to previous approaches to the inference, and explain why these approaches are inappropriate for Tibetan. Section 5.1 examines the most prominent
approach in the literature, the ‘default plus obviation’ approach, according to which: (i) the acquaintance inference is a default that arises due to the lexical semantics of the taste predicate combined with principles concerning the predicate’s interpretation; and (ii) that this default is cancelled in numerous grammatical environments, due to the semantics of various operators. Section 5.2 then examines a slightly different approach, according to which the acquaintance inference is the result of two interacting epistemic principles.

5.1 Lexical semantic accounts

A number of recent approaches to the acquaintance inference have treated it as resulting from the intrinsic lexical semantics of the taste predicate, combined with some auxiliary principles governing the predicate’s interpretation. These approaches are carried out in two steps. First, a lexical entry for \textit{tasty} is written that triggers the inference by default in bare experiential predications, given the auxiliary principles. Second, a semantics for some class of operators that cancel the inference is stipulated in such a way that on composing with the predicate, they override this default tendency. Ninan (2020) can serve as an exemplar of this approach, and it is worth working through it in some detail to show why it is not appropriate for Tibetan. Other examples of this approach include Bylinina (2017), Anand & Korotkova (2018), and Willer & Kennedy (2020), and while crucial matters of motivation and implementation differ among these accounts, the basic strategy is similar.

Ninan (2020) evaluates the extension of an expression relative to a world \(w\), judge individual \(j\), and standard of taste generator \(\sigma\). The denotation for \textit{tasty} is then as follows.

\[
\text{[tasty]}^{w,j,\sigma} = \lambda x. \sigma(w,j)(x)
\]

\(\sigma(w,j)\) is a standard of taste determined by \(j\) in \(w\): it maps an individual \(x\) to true just in case that standard evaluates the taste of \(x\) in \(w\) positively, and to false just in case it does not evaluate the taste of \(x\) in \(w\) positively.

There is then a postsemantic principle, which provides the conditions under which a truth-apt expression is true or false in a context of utterance \(c\). This principle crucially invokes the special generator \(\chi\), which given a world \(w\) and judge \(j\) returns a function with only objects that \(j\) has tasted in \(w\) in its domain. Thus, \(\chi(w,j)\) maps to 1 any object that \(j\) has tasted in \(w\) and liked; it maps to 0 any object that \(j\) has tasted in \(w\) and not liked; and any object that \(j\) has not tasted in \(w\) is not in its domain. The postsemantic clause for a truth-apt expression \(\alpha\) is then as follows.

\[28\]The first suggestion that the acquaintance inference derives more or less directly from the lexical semantics of \textit{tasty}, so far as I know, is contained in Pearson (2013: 122). She suggests that \textit{tasty} takes an internal experiencer argument, which enforces a presupposition that the experiencer has tasted the subject stimulus, which is meant to account for why e.g. \textit{tasty to John} enforces a presupposition that John has tasted its subject. Where the implicit experiencer is (or includes) the speaker, as in autocentric taste predications, the result is that the speaker is required to have tasted the subject of predication. I leave Pearson’s approach to the side, because her account of the cancellation of the inference differs from the accounts I discuss in the text (cf. Pearson 2013: §4.4), and I don’t think that the account captures the datum it’s meant to address. See Ninan (2014: 300-301) and Anand & Korotkova (2018: 63-64) for some criticisms of the treatment.

\[29\]I change some incidental details of Ninan’s account here: see Ninan (2020) for the original technical details. In particular, I write non-syncategorematic denotations for \textit{tasty} and \textit{must}, and exclude his variable assignment parameter for simplicity. All other changes from the original are cosmetic.
The postsemantic clause quantifies over all those generators that are complete extensions of $\chi$, i.e. all $\sigma$ such that $\sigma \geq \chi$. A complete extension of $\chi$ is a generator that (i) returns a total function over individuals given any world and judge; and (ii) for any world $w$ and judge $j$, if $x$ is in the domain of $\chi(w,j)$, then $\sigma(w,j)(x) = \chi(w,j)(x)$. In short, a complete extension of $\chi$ returns a verdict of true or false on all individuals, and agrees with $\chi$ on all individuals that $\chi$ gives a verdict on.

Given the above, the truth conditions of This food is tasty (taking this food to denote $f$, and letting the copula be vacuous) in $c$ are as follows.

\begin{align}
(61) & \quad \langle \alpha \rangle^c = 1 \text{ iff for all } \sigma \geq \chi, \llbracket \alpha \rrbracket^{w_c,j_c,\sigma} = 1 \\
& \quad \langle \alpha \rangle^c = 0 \text{ iff for all } \sigma \geq \chi, \llbracket \alpha \rrbracket^{w_c,j_c,\sigma} = 0
\end{align}

$w_c$ and $j_c$ are the world of the context and judge of the context, respectively. The postsemantic clause quantifies over generators $\sigma$, and says that $\alpha$ is true in $c$ just in case it is true with respect to $w_c, j_c$, and all of these generators, and that $\alpha$ is false in $c$ just in case it is false with respect to $w_c, j_c$, and all of these generators. If neither of these conditions hold, then $\alpha$ is neither true nor false in $c$.

The postsemantic clause quantifies over all those generators that are complete extensions of $\chi$, i.e. all $\sigma$ such that $\sigma \geq \chi$. A complete extension of $\chi$ is a generator that (i) returns a total function over individuals given any world and judge; and (ii) for any world $w$ and judge $j$, if $x$ is in the domain of $\chi(w,j)$, then $\sigma(w,j)(x) = \chi(w,j)(x)$. In short, a complete extension of $\chi$ returns a verdict of true or false on all individuals, and agrees with $\chi$ on all individuals that $\chi$ gives a verdict on.

Given the above, the truth conditions of This food is tasty (taking this food to denote $f$, and letting the copula be vacuous) in $c$ are as follows.

\begin{align}
(62) & \quad \llbracket \text{this food is tasty} \rrbracket^{w_c,j_c,\sigma} = \sigma(w,j)(f) \\
& \quad \langle \text{this food is tasty} \rangle^c \\
& \quad \quad = 1 \text{ iff for all } \sigma \geq \chi, \sigma(w_c,j_c)(f) = 1 \\
& \quad \quad = 0 \text{ iff for all } \sigma \geq \chi, \sigma(w_c,j_c)(f) = 0
\end{align}

From this it can be seen how the acquaintance inference is secured with bare taste predications. There are three options for what has happened in $w_c$: either (i) the judge tasted the food and liked it; or (ii) the judge tasted the food and didn’t like it; or (iii) the judge never tasted the food. In the first case, the sentence is true, since then $\chi(w_c,j_c)(f) = 1$, and the same holds trivially for any complete extension of $\chi$. Likewise, in the second case, $\chi(w_c,j_c)(f) = 0$, and the same trivially holds for any complete extension of $\chi$. In the final case, $\chi(w_c,j_c)(f)$ is undefined, since $f$ is not in the domain of $\chi(w_c,j_c)$. This means that some complete extensions of $\chi$ will output 1 for $f$ relative to $w_c$ and $j_c$, and others will output 0: therefore, the sentence as a whole is neither true nor false.

The sentence is therefore only true or false in cases (i) or (ii), where the judge has tasted the food. Where $j_c$ is the speaker, this requires the speaker to have tasted the food to yield a truth value. This secures the inference, insofar as committing to the claim’s truth commits the judge of the context having tasted the food. This is all guaranteed by the way the lexical semantics of tasty invokes the $\sigma$ parameter, combined with how the postsemantic clause invokes $\chi$, which is defined in terms of which things have been tasted.

The next step is to cancel this intrinsically-arising inference in the scope of certain operators. To do this, Ninan has all intensional operators, including the epistemic modal must, compose with the intension of a clause, and set the value of the generator parameter to $\delta$, which is a kind of ‘dispositional’ generator. Rather than tracking what a judge has tasted, $\delta$ tracks only what that judge is disposed to like the taste of, if they were to taste it. Thus, for any $w$ and $j$, $\delta(w,j)$ is a total function on individuals, such that $\delta(w,j)(x) = 1$ iff $j$ is disposed to like the taste of $x$ in $w$, and $\delta(w,j)(x) = 0$ iff $j$ is disposed not to like the taste of $x$ in $w$. The denotation of must is as follows, where $w' \in R(w)$ iff $w'$ is epistemically accessible from $w$. 

34
Plugging this into the semantics and postsemantics, we get the following for the truth conditions of *This food must be tasty*:

\[(64)\]

a. \[[this food must be tasty]^{w,j,σ} = \forall w' \in R(w)[δ(w', j)(f)]\]

b. \{this food must be tasty\}^c
   
   - = 1 if for all σ ≥ χ, \(∀ w' \in R(w_c)[δ(w', j_c)(f)] = 1\)
   - = 0 if for all σ ≥ χ, \(∀ w' \in R(w_c)[δ(w', j_c)(f)] = 0\)

Because the generator parameter has been overwritten with the constant ‘δ,’ the quantification over generators in the postsemantics clause is vacuous, and so effectively the only function of that clause is to plug in \(w_c\) and \(j_c\). Since \(δ(w, j)\) is a total function for any \(w\) and \(j\), and the quantification serves no non-trivial function, it follows that a value of 1 or 0 will always be returned for the truth value of the expression in \(c\), depending on whether in all worlds accessible from \(w_c\) \(j_c\) is merely disposed to like the taste of the food.

The above account showcases the two steps clearly: first, the lexical semantics and the postsemantic clause ensure that taste predications ‘intrinsically’ give rise to the acquaintance inference, in the absence of any intervention; and second, a class of operators is taken to have a semantics that creates precisely such an intervention, by overwriting the very parameter designed to be responsible for the acquaintance inference. It also shows clearly that in order to stop acquaintance inferences from arising, given the way the postsemantics clause works, one must either introduce something that overwrites the generator parameter, or use predicates that do not relevantly appeal to it.

In the case of Tibetan, the use of this lexical entry and postsemantic clause would overgenerate, creating acquaintance inferences in environments where they don’t occur, such as with taste predications using egophors and factual markers. Since as shown in Section 2, these constructions do not by default generate such an inference, something would have to be changed to fit the Tibetan data. A different sort of lexical entry for predicates like *bro.ba.chen.po* ‘tasty’ would have to be proposed, or markers like *yod.red* would have to be intensionalized, but both of these moves are so far as I know entirely unmotivated. The postsemantic clause could also be modified or removed, but this would entail assigning fundamentally different semantic machinery to different languages, threatening the generality of the account. The treatment therefore appears to be a non-starter for Tibetan.

The structure of the strategy is the same for Bylinina (2017: 315 ff.), who (i) posits that *tasty* introduces an experiential eventuality with an experiencer role, requiring the experiencer to have undergone the relevant tasting experience; (ii) places a presupposition in the lexical semantics of *tasty* to the effect that the experiencer role must be occupied by the judge individual in the index of evaluation; and (iii) assumes that by default, the value of the judge in context (and so the experiencer) is set to the speaker of the context. The inference is then voided by operators that shift the judge parameter, resulting only in a requirement that this shifted judge, not the speaker, is identical to the experiencer.

\[30\] Garrett (2001: Ch. 2) does surprisingly treat factual markers as epistemic modals of a special sort, but this just cannot be right: as noted in Section 2.3, they do not display any of the canonical features associated with epistemic modals, and I am not aware of them having any independently-attested intensional effects.
Anand & Korotkova (2018) derive the inference in a similar way, by (i) giving a lexical semantics to *tasty* that appeals to a kernel parameter (cf. von Fintel & Gilles 2010) in such a way that direct contact with a stimulus is required for the speaker with bare taste predications, and then (ii) letting the semantics of operators like *must* overwrite this parameter, in such a way that it tracks knowledge in general, without any direct experience requirement. Likewise, Willer & Kennedy (2020), working in a dynamic framework, (i) effectively place an update condition in the lexical semantics of *tasty*, which requires the speaker to be in a certain experiential state in order for conversational update using taste predications to be well-formed, and then (ii) have certain operators perform dynamic tests on the contents of lower clauses containing taste predications, with respect to overwritten update requirements that do not reference these experiential attitudes.

In each case, the semantics is designed purposefully to yield the inference by default, and the operators are designed purposefully to void this default. Ninan (2020) proposes that this inference-overwriting is a general feature of intensional operators, and Bylinina (2017) apparently relegates the effect more specifically to judge-shifting operators. Anand & Korotkova (2018) and Willer & Kennedy (2020) instead give a few examples of operators that cancel the inference, with a promissory note that other operators that do the same could receive a similar treatment.

Whatever the specifics or motivation, this is not a plausible picture of the way the acquaintance inference functions in Tibetan. The inference doesn’t arise by default, but only where there is specific semantic motivation, due to the presence of a perceptual evidential. This sort of default-then-cancel approach would require every relevant construction except for those with perceptual evidentials in Tibetan to cancel the acquaintance inference. This is distributionally implausible, and as noted above, it forces us to attribute *ad hoc* operator-shifting semantics to markers that have no independent indication that they function in this way, such as egophors and factuals.

Such an approach flies in the face of the more powerful and obvious reverse approach, which is to suppose that the semantics of perceptual evidentiality combines with taste predications to yield the inference: it is plausible that markers requiring direct perception of episodic events compose with predicates dealing with a disposition to stimulate experience, to yield a requirement that one has actually had that experience. It would be odd to suggest that where such perceptual effects arise only in tandem with perceptual markers, the markers themselves are not responsible for them.

That the acquaintance inference is a hard-coded ‘default’ is often treated as a virtue of the above accounts: for instance, Willer & Kennedy (2020: 2) suggest that expressions like taste predicates are ‘designed to express’ experiential mental states in this way. The view from Tibetan cautions against such an approach. The acquaintance inference is not universally a default, and in Tibetan it is an effect that appears due to the contribution of grammaticized evidentiality. The account in Section 4 is meant to offer an alternative that reflects these facts.

### 5.2 Epistemic accounts

Ninan (2014) has proposed that the acquaintance inference arises from the interaction of two epistemic principles. The first is that one can only know whether something bears a property
denoted by a taste predicate (for instance, whether it is tasty) if one has the relevant direct contact with it (for instance, tasting it). The second is the classical knowledge requirement on assertion, to the effect that speakers are committed to knowing propositions that they assert (unmodalized and unhedged). To assert, for example, that something is (or is not) tasty then implies that the speaker knows this, which in turn implies that the speaker has tasted that thing, resulting in the inference.

This account cannot plausibly capture the behavior of the acquaintance inference in Tibetan, because as the language encodes them, knowledge of taste attributions and direct contact with a stimulus don’t pattern together in this way. It is, for example, possible to commit to knowing that something is tasty, unmodalized and unhedged, without committing to having tasted it. Direct contact with an individual is therefore not a requirement for having knowledge of whether it has taste properties, meaning that the first proposed principle does not hold.

Tibetan assertions made using factual constructions in no way void the ordinary commitments to knowledge placed on the speaker. As Tournadre & Dorje (2003: 110) put it, what is asserted using a factual marker ‘...is something that is considered by the speaker to be certain’ (emphasis in original). Factual assertions are in no way hedged or modalized, and despite committing the speaker to being tasty, unmodalized and unhedged, without committing to having tasted it. Direct contact with an individual is therefore not a requirement for having knowledge of whether it has taste properties, meaning that the first proposed principle does not hold.

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Conversely, there’s no issue with claiming that a food is tasty using \textit{yod.red}, and then insisting that one knows this, with no commitment to the speaker having tasted the food arising from this affirmation of knowledge.

\begin{align*}
\text{(68)} & \quad \text{kha.lag } \text{'di } \text{bro.ba.chen.po } \text{yod.'gro } \text{ngas } \text{shes } \text{kyi } \text{med} \\
& \quad \text{food } \text{this tasty } \text{be-probably I.ERG know IPFV NEG.EGO} \\
& \quad \text{‘This food is probably tasty; I don’t know.’}
\end{align*}

\begin{align*}
\text{‘This food is probably tasty; I don’t know.’}
\end{align*}

The speaker has tasted the food.

This is the opposite of what the knowledge-based account predicts: where the acquaintance inference is absent, disavowals of knowledge are invariably bad, yet commitment to knowledge is fine. The epistemic account would predict instead that where the inference is absent, disavowals of knowledge may be felicitous in some cases, and that commitment to knowledge should trigger a commitment to having tasted the food.

There is also no problem with knowledge attributions of taste predications, which also don’t have to imply that the subject tasted the relevant food. In (69), the embedded copular \textit{yod} is evidentially neutral, since verbs of knowledge do not embed clauses with evidential distinctions; \textit{pa} serves as a nominalizer or complementizer for the non-evidential embedded clause.

\begin{align*}
\text{(69)} & \quad \text{kha.lag } \text{'di } \text{bro.ba.chen.po } \text{yod } \text{pa } \text{shes } \text{kyi } \text{yod} \\
& \quad \text{food } \text{this tasty } \text{be } \text{NMLZ know IPFV EGO} \\
& \quad \text{‘I know this food is tasty.’}
\end{align*}

\begin{align*}
\text{‘I know this food is tasty.’}
\end{align*}

\begin{align*}
\text{The speaker has tasted the food.}
\end{align*}

It is open-ended how the subject might know this according to the knowledge attribution (though of course, tasting the food is one possible way). There is further no issue with explicitly providing a grounds for knowing that the food is tasty besides tasting it, using a justification clause.\footnote{I think these facts hold even in English: my judgment is that \textit{I know this food is tasty} does not commit the speaker to an acquaintance inference, and there is no issue with \textit{Since Tashi made this food, I know it’s tasty}, either. The behavior of knowledge attributions for the knowledge-based account is thus puzzling in general, not just in Tibetan.}

\begin{align*}
\text{(70)} & \quad \text{bkra.shis } \text{kyis kha.lag } \text{'di } \text{bzos } \text{tsang } \text{bro.ba.chen.po } \text{yod } \text{pa } \text{shes } \text{kyi } \text{yod} \\
& \quad \text{Tashi } \text{ERG food } \text{this made since tasty } \text{be } \text{NMLZ know IPFV EGO} \\
& \quad \text{‘Since Tashi made this food, I know it’s tasty.’}
\end{align*}

I conclude from the above that in Tibetan, knowledge and acquaintance in taste predications pattern apart: it is not required that an agent taste a food to be able to know whether it’s tasty. The acquaintance inference is an evidential matter, and not an epistemic one.\footnote{Note finally that although Ninan (2014: 302, fn. 19) allows that the acquaintance inference might be driven by some attitude incurred by assertion other than knowledge, such as justified belief or belief alone, this will not help the account, since assertion with factual markers also commits the speaker to these attitudes, while not triggering an inference, and the structure of the criticism would be the same.}
6 Conclusion

In the foregoing, I’ve offered an account of how the acquaintance inference works in Tibetan, given the way its distribution patterns with perceptual evidentials. This account has a positive and a negative component. Positively, I’ve proposed that the inference is an evidential effect, and arises due to the interaction between the semantics of the perceptual evidential and the experiential semantics of the taste predicate. Negatively, I’ve proposed that the inference does not appear as a default, but requires overt semantic motivation. This in turn means that previous accounts of the inference in evidential-less languages, which treat it as a default derivable from some combination of the nature of the taste predicate and the ordinary requirements on assertion, are not appropriate for Tibetan.

Though this claim about Tibetan is interesting in its own right, this result is not just a parochial matter pertaining to Tibetan alone, or to languages with Tibetan-like evidential systems. If it is correct, it means that previous accounts of the acquaintance inference that have attempted to derive it as a default cannot be universally applicable. At best, there is some sort of cross-linguistic variation in why the inference arises, and it is not possible to understand the phenomenon in its full generality without an explanation for why languages might differ in this way.

The foregoing does not answer the question of how the acquaintance inference arises in languages like English, but I’d like to propose that it offers a way to move forward in doing so, by reframing the nature of the phenomenon. The culprit as to the difference between Tibetan and English on this matter, I claim, is that Tibetan grammaticizes perceptual evidentiality, while English does not. The acquaintance inference is a reflex of perceptual evidentiality, and the grammaticization of this category causes the inference to become grammatically marked as opposed to surfacing as a default. Here, then, is the move to be made with respect to evidential-less languages: the default acquaintance inference is an evidential effect there as well, and a reflex of the semantic category of learning by perception. The difference is that in some languages it appears as grammatically marked, and in others it surfaces as a reflex of a semantic category that, while always accessible, is not marked.

This, I take it, is just an old cross-linguistic methodology applied to an evidential category. The idea is that languages have more or less a common stock of semantic categories, among which are categories encoding learning by various means: where they differ is in whether and how these categories are encoded by obligatory grammatical markings. Perceptual evidentiality (and, I take it, evidentiality generally) is not a minority phenomenon: only its grammaticization is in the cross-linguistic minority. Sometimes, things align grammatically in evidential-less languages to make this category rear its head.

The sketch of the phenomenon as a whole is therefore as follows. Languages in general tend to have: (i) predicates with an experiential semantics of a certain sort, and (ii) a notion of learning by perception. Because of the formal features of these categories, putting them together in the right way yields the acquaintance inference. How and when they come together is then subject to cross-linguistic variation, depending on the grammaticization of evidentiality: there is, for some reason, a semantic principle that takes learning of a predication involving such experiential semantics to be perceptual by default. The grammaticization of a marker of perceptual learning voids this default, so that a marker of the perceptual source of evidence is required for the inference to trigger. This is not an unfamiliar pattern:
for instance, a tenseless language might place accomplishments in the past by default (cf. Matthewson 2006: §2), but this default is voided by the grammaticization of tense, so that tensed languages require an overt past marker to place accomplishments in the past.

But why think all this? There are two reasons, one methodological, and the other empirical. As to the first reason, it’s sound methodology to use the clearer case to try to treat the less clear case. The case that the acquaintance inference is an evidential effect in Tibetan is strong, while the nature of the inference in evidential-less languages is mysterious. We know now from Tibetan that the acquaintance inference is sometimes an evidential effect, and it’s reasonable to see how far this explanation can extend to other cases.

As to the second reason, the data surrounding the inference in languages like English is not actually all that different from the Tibetan data in some key respects. If one sees the inference as an evidential phenomenon, many of its strange properties come to seem less strange: when the inference triggers, it behaves like an evidential effect. To catalogue some properties of the English case, now familiar from the Tibetan case with the evidential: it cannot be canceled by denial (2); it projects out of negation (3); it is not-at-issue in the same way that evidential commitments are (71); it is obligatorily speaker-oriented in assertions (1), but undergoes origo shift to the addressee in questions (72) and to the subject of speech and thought verbs (73).33

(71) A: This food is tasty.
B: No, it’s not.
\(\Leftrightarrow\) A has not tasted the food.

(72) Is this food tasty?
\(\Leftrightarrow\) The addressee has tasted the food.

(73) a. John said this food is tasty.
\(\Leftrightarrow\) John committed to having tasted the food in saying this.

b. John thinks this food is tasty.
\(\Leftrightarrow\) John thinks that he has tasted the food, and liked its taste.

In the English case, it is as if there were a perceptual evidential present when the inference triggers. It looks like the same semantic operation is being enacted, just for different reasons.

What is then incumbent on the semanticist is to map out the relations between the inference and perceptual evidentiality, to see what generalizations hold cross-linguistically. Perceptual evidentiality is a robustly attested category, which carries a recognizable suite of features cross-linguistically, and it is an open question how the acquaintance inference behaves in languages that grammaticize it in ways different from Tibetan. For instance, Korean has a retrospective perceptual marker -te that is not part of a closed obligatory evidential paradigm, but rather occurs optionally to encode secondary tense as part of the rich temporal inflection on the verb (cf. Lee 2011); this, along with the fact that Korean sometimes has a bias toward direct perception in assertion generally that Tibetan lacks (cf. Lee 2012), may mean that the inference behaves differently in Korean than in Tibetan.

33These latter judgments may be more controversial, but this is how I hear the examples by default, when normally intoned. Note that for (73b), the verb has to be something like think, not something like believe, which encodes a kind of indirectivity, and one must resist the urge to ‘fix’ the lower clause with futurates, epistemic modals, etc.
Likewise, the inference may behave differently in languages like Tariana, which grammaticize perceptual evidentiality in a different sort of paradigm from Tibetan, placing it alongside other ‘direct’ evidentials that take on visual and participatory meanings (cf. Aikhenvald 2003).

It would also be fruitful to see if the behavior of the inference is really uniform in evidential-less languages, and if it is not, whether there are any features of the grammar that might explain the differences. With a better understanding of how these notions tend to interact, and how they’re influenced by the surrounding grammar, we may be in a position to see how grammaticization affects or doesn’t affect the default. We would then ultimately want to know what it is about experiential semantics and perceptual evidence that motivates this default to begin with, such that the two are connected firmly, but not unavoidably, should the grammar intervene.

One final point before closing. What I’ve outlined here suggests that the acquaintance inference is not just the recondite obsession of a few formal semanticists, or a back alley of the literature on ‘taste’ predicates. If anything like the above holds, then the inference has a greater semantic significance, as a window into perceptual evidentiality as a wider semantic category. This in turn suggests, for consideration farther into the future, that reflexes of evidentiality generally might be found in evidential-less languages that do not grammaticize these notions. In other words, there may be in evidential-less languages other predictable defaults that trigger evidential effects, which are in turn the same evidential effects that are grammaticized in other languages. I suspect this is so.34

References


34Here are two examples of the sort of thing I have in mind. First, Japanese notoriously triggers so-called endopathic effects, which make commenting on another person’s internal experiential state infelicitous (cf. Tournadre & La Polla 2014: 241 ff.), even in apparently evidentially neutral constructions (cf. Tenny 2006). But endopathic effects are reliably triggered by perceptual evidentiality, as is known from studies of Korean (cf. Lee 2012) and Tibetan (cf. Garrett 2001: §3.4). It may therefore be that Japanese perceptual evidentiality surfaces for some reason in these environments. Second, Ninan (m.s.) has recently noted that it’s infelicitous to make assertions in English about past episodic events without some external justification or other. While Ninan frames this as an epistemic matter, it could very well be given an evidential gloss, to the effect that such episodic reports cannot be evidentially conjectural, that is, they cannot be claimed on the basis of no specific learning event whatsoever. The notion of conjectural evidence invoked in such a gloss would in turn be the one grammaticized by languages with rich evidentiality systems (cf. the taxonomy in Aikhenvald 2004, who calls these ‘assumed’ evidentials).


