(De-)constructing evidentiality*

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Abstract: We argue that clauses that are marked with evidential morphemes are ORIGO-centered and have presentative force. Clauses with evidential marking present, but do not assert, an ORIGO-centered proposition. This ***presentative hypothesis*** makes a number of claims. **Syntactically**, clauses with presentative force are a distinct clause-type, and so contrast with declaratives, interrogatives, and imperatives. **Semantically**, clauses with presentative force contribute not-at-issue propositional content (Potts, 2007): they are independent of descriptive content, they hold of the ORIGO's utterance situation, and they are perspectival. **Pragmatically**, evidential clauses update the ORIGO GROUND, and so interact in predictable ways with the COMMON GROUND, the QUESTION SET, and the TO-DO-LIST. Because of their ORIGO index, presentative clauses overlap with indexicals (if the ORIGO is 1st/2nd person) and with logophors (if the ORIGO is a 3rd person matrix subject). We test these claims with data from English, Nuu-chah-nulth, and Plains Cree, and show that several diagnostics reveal the existence of the ORIGO GROUND, including grounds for endorsement/challengeability, ORIGO shifts, and faultless disagreement. Consequently, languages don't really differ in whether they have grammaticized evidential morphemes. Rather, they differ in default illocutionary force and perhaps in whether they have morphemes that specifically mark presentational force.

Keywords: evidential; presentation; assertion; illocutionary force; ORIGO; clause-type; English; Plains Cree; Nuu-chah-nulth

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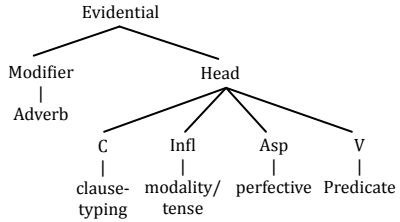
1. What's an evidential morpheme and why does it matter?

In conversation, when introducing a proposition, an interlocutor may indicate the evidence upon which it is based; linguistic expressions that do this are called *evidential morphemes*.[1] Such morphemes indicate the source of information for a proposition *p*. Most often, it is the speaker's source of information that is presented; that is, the speaker has a certain perspective on *p*.[2] While all languages express evidentiality, the form of evidential morphemes contrasts across two dimensions, as shown in (1). First, languages differ according to whether or not they have grammaticized evidentials. Second, languages with grammaticized evidentials differ according to whether evidentials constitute a homogeneous paradigm (i.e., position class), or whether they are "scattered" (Aikhenvald, 2004), in which case they are recruited from different position classes. Syntactically, the grammaticized/ungrammaticized contrast reduces to whether evidentials are introduced as adverbial modifiers versus or syntactic heads; the latter correspond to grammaticized evidentials. As for the homogeneous/scattered contrast, it reduces to whether only one, or more than one, syntactic position is available for the expression of evidentiality. The attested positions are related to clause-typing (C), Tense/Modality (Infl), Aspect, and V (Blain & Déchaine, 2006).

(1) FORMAL TYPOLOGY OF EVIDENTIALS



Although at first glance innocent, approaching the analysis of evidentials on the basis of their **form** — i.e., their morphosyntax — has profound consequences for the analysis of their (semantic and pragmatic) **function**. In this paper, we show that attending to the form of evidentials affords considerable insight into their semantics and pragmatic. In addition

[1] Abbreviations used: 0=3rd person inanimate, 1=1st person, 2= 2nd person, 3=3rd person, 3'=3rd person obviative, A=addressee, AGR=agreement, AUD=auditory, C=complementizer, CG=common ground, CONJ=conjunct mode, CONJR=conjectural, CONN=connective, CONT=continuative, DEM=demonstrative, DUBIT=dubitative, EMPH=emphatic, EV=evidential force, EVID=evidential, FUT=future, ILL=illocutionary force, IMP=imperative, IND=indicative, INDF=indefinite, INDEP=independent mode, INDIR=indirect inter=interrogative, INV=inverse, LOC=locative, MOM=momentary, NA= noun animate, NEG=negation, NUM=number, *o*=origo, OG=origo ground, *p*=at-issue proposition, *p*ⁿ=not-at-issue proposition, *P*=property, PERS=person, PL= plural, POSS=possessive, PROG=progressive, PROX=proximate, *ps*=presented set, *q*=set of propositions, Q=interrogative marker, QS=question set, QUOT=quotative, REL=relative clause, REPORT=reportative RESUM=resumptive, SINC=sincerity condition, SG=singular, TDL=to-do-list, TOP=topic, OBV=obviative, SAP=speech act participant (1st or 2nd person), SUB=subject, VAI=verb intransitive animate, VII=verb intransitive inanimate, VIS=visual, VTA=transitive verb animate VTI=transitive verb inanimate.

[2] In specific contexts (discussed below), it is possible for the perspective-holder — the ORIGO — to be someone other than the speaker.

to English, the discussion draws on data from two languages, both of which have *scattered evidentials*, namely Nuu-chah-nulth (a Wakashan language spoken on the Canadian northwest coast), and Plains Cree (an Algonquian language spoken in the northern plains of Canada). Notably, these two languages use the same three positions to express evidentiality, namely the CP-domain, the IP-domain, and the VP domain.

We adopt the hypothesis that clauses with evidential morphemes have presentative force. This *presentative hypothesis* makes two claims. First, a presentative clause contributes the ORIGO's perspective, where ORIGO is defined as the individual from whose perspective a proposition is evaluated. Second, a presentative clause introduces a proposition, without introducing a commitment to its truth-value.[3] Consider these two claims in turn. First, the ORIGO. To see the activity of the ORIGO, look at the Nuu-chah-nulth examples in (2), both of which are root clauses. In non-interrogative contexts, a presentative clause introduces the speaker's perspective (2)a. In interrogative contexts, a presentative clause introduces the addressee's perspective (2)b.

(2) NUU-CHAH-NULTH ORIGO SHIFTS

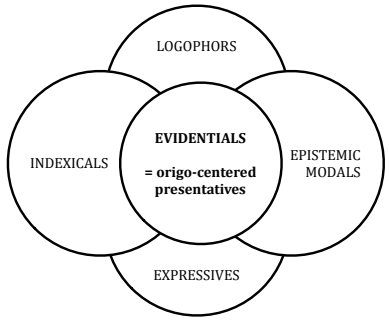
a. [[*ḿiƛ-aa*$_{IP}$]-***waʔiš***$_{CP}$]
rain-CONT-3.C.QUOTE
'It's raining, according to what I've been told'

b. [[*ḿiƛ-aa*$_{IP}$]-***ḥač***$_{CP}$]
rain-CONT-3.C.INDIR.INTER
'Is it raining, according to what you've been told?'

This perspectival shift, from speaker to addressee, is an ORIGO shift. Indeed, we argue that ORIGO shift is a hallmark of evidentiality.[4] Second, the claim that clauses with evidential morphemes have presentative force, as distinct from assertive force, accounts for the logic of "faultless disagreement" (Kölbel, 2003) that is a defining feature of the felicity conditions that govern the use of evidentials. Analyzing clauses marked by evidentials as origo-centered presentatives accounts both for their unique profile, and for the parallels that they display with other phenomena. To see this, consider (3). Recognizing the ORIGO-centeredness of evidentials accounts for their sensitivity to indexicality and to logophoricity, features that have been neglected in previous discussions of evidentiality. Recognizing the non-assertive force of clauses marked with evidentials, captures their parallels with epistemic modality on the one hand, and expressives on the other. Like epistemic modals (Kratzer 2009), evidentials reflect the knowledge state of the ORIGO. And like expressives (Kaplan, 1999; Potts, 2007; Schlenker, 2007), evidentials contribute not-at-issue content: they are independent of descriptive content, they predicate something of the (ORIGO's) utterance situation, and they are evaluated from a particular perspective.[5]

[3] None of these claims is new, but their combination is novel. For example, Garrett (2001) argues that the ORIGO is a crucial component of evidential meaning. Murray (2010) observes that evidentials contribute not-at-issue content. Portner (2006) speculates that evidentials "put forth", rather than assert, a proposition.
[4] The ORIGO index, which anchors an evidential to the utterance situation, also accounts for the viewpoint shifts associated with evidentiality. See Speas (2010) for discussion.
[5] On independent grounds, Littell & Mackie (2011) argue that at least some evidentials have expressive force.

(3) THE PRESENTATIVE HYPOTHESIS



Relatively little is known about the syntax of evidentiality. This paper aims to remedy that gap, by examining how the syntax of presentative clauses interacts with their morphology (in the form of overt or covert evidential morphemes), their semantics (relative to the not-at-issue meaning that they contribute), and their pragmatics (relative to their felicity conditions). Our syntactic toolkit provides diagnostics that afford a clearer understanding of the variation attested — both within and across languages — in how evidentiality interacts with clause-typing. The systematicity of this interaction has not been documented or analyzed before. For example, for Plains Cree, we argue that in addition to its overt evidential morphemes, this language also has morphologically unmarked root clauses with presentative force. In other words, Plains Cree has a purely syntactic clause-typing strategy to code an evidential contrast, in particular "direct experiential evidence". To our knowledge, this type of syntactic strategy has not been documented in the literature before.[6] Finally, we claim that evidentials present, rather than assert, a proposition. To recap, in our view, evidentiality is the convergence of two factors:

(i) evidentials have an ORIGO index;

(ii) evidentials present a (not-at-issue) proposition.

Before laying out our proposal in detail, we review how speakers use evidentials (§1.1), and how linguists analyze evidentials (§1.2).

1.1 How speakers use evidentials: a lesson from Plains Cree

Evidentials are deployed in conversational exchange, and are used on-line by speakers as a way to flag their knowledge state (the information they have access to), as distinct from their ontological commitments (what they believe to be true). The dynamicity of evidentials is reflected by the fact that they update an interlocutor's uptake of information as the conversation unfolds. An example of how this is achieved is given in (4), which reports an exchange between a linguist and a Plains Cree language consultant.

[6] The dedicated clause-type that is found for direct experiential evidence in Plains Cree is distinct from the "zero evidential morpheme" that Murray (2010) reports for Cheyenne.

(4) **Linguist**: *How do you say "John saw Mary"?*
Consultant: *John ês ê-wâpamât Mary-wa*

Linguist parses sentence and is unable to identify *ês*:

a. *John **ês** ê-wâpam-â-t Mary-wa*
John ?? C-see.VTA-DIR-3>3' Mary-OBV

Linguist: *Can you say "John ê-wâpamât Mary-wa"*

b. *John ê-wâpam-â-t Mary-wa*
John C-see.VTA-DIR-3>3' Mary-OBV

Consultant: *Well* [*YOU*FOCUS] *could*

Linguist is puzzled, and turns to other matters; later finds out that *ês* is the Plains Cree REPORTATIVE evidential.

c. *John **ês** ê-wâpam-â-t Mary-wa*
John REPORT C-see.VTA-DIR-3>3' Mary-OBV
'Reportedly, John saw Mary'

In (4), the linguist requests a translation of a declarative sentence, and the consultant volunteers a sentence that contains a reportative evidential. The inclusion of an evidential is appropriate, as the speaker does not have first-hand knowledge of the veracity of the proposition. The only felicitous update is one where the speaker indicates how they acquired the propositional content, in this case via hearsay. The exchange in (4) highlights that speakers deploy evidentials to indicate how they have acquired knowledge of a proposition they are presenting, as distinct from any truth-claims they might make about the proposition. This aspect of evidentiality, namely a speaker's perspective or point-of-view on a proposition, has numerous syntactic correlates.

1.2 How linguists analyze evidentials

The following factors have been identified as being relevant to the analysis of sentences containing evidential morphemes:

(i) Evidential morphemes ***contribute epistemic modal force*** by picking out possible worlds in which a proposition is true.
(Izvorski, 1997; Matthewson, 2011; Matthewson, Davis, & Rullmann, 2008)

(ii) Evidential morphemes ***contribute illocutionary or sentential force*** by introducing a speech act or sentential force.
(Déchaine, 2007; Faller, 2002; Murray, 2010; Portner, 2006)

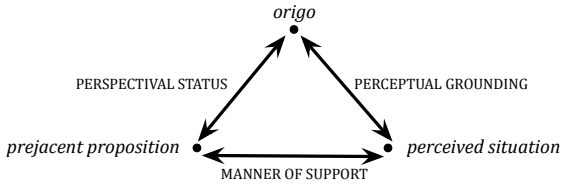
(iii) Evidential morphemes ***contribute perspectival information*** that introduces a discourse role (e.g., ORIGO) which indicates from whose point of view a proposition is evaluated .
(de Haan, 2005; Garrett, 2001; Speas, 2004; Tenny, 2006; Waldie, 2012)

(iv) Evidential morphemes ***relate a proposition to the (origo's) utterance situation***; this captures how evidentials interact with tense and aspect situation.
(Speas, 2010; Waldie, 2012)

(v) Evidential morphemes ***contribute not-at-issue content***.
(Murray, 2010; Waldie, 2012).

These factors — modal force, illocutionary force, point-of-view, relation to (ORIGO's) utterance situation, not-at-issue content — are not mutually exclusive, and some authors invoke a combination of them. With this in mind, our guiding idea, shown in (5), is that evidentiality is a relation between an ORIGO, a prejacent proposition, and a situation (Waldie, 2012). The prejacent proposition is supported by a situation; this *manner of support* can be a mediated knowledge state (e.g., reports), the ORIGO's knowledge state (e.g., inferentials), or the ORIGO's direct experience. The prejacent proposition is known or unknown to the ORIGO; this is the ORIGO's perspectival status. The ORIGO may have an experiential relation to the situation; this is the ORIGO's *perceptual grounding*. In this paper, we focus on the syntactic correlates of *perspectival status*, namely the relation between ORIGO and the prejacent proposition *p*.[7] In particular, we will be concerned with how propositions known to the ORIGO are presented for consideration and how this interacts with syntactic clause-typing and indexical person agreement.

(5) THE THREE FACTORS OF EVIDENTIALITY



2. Evidential clauses have presentative force

We claim that evidential clauses present, but do not assert, a proposition *p*. In presenting a proposition *p*, the ORIGO, usually the speaker, puts forth *p* **<u>without committing</u>** to the truth of *p*. In asserting p, the ORIGO (again, usually the speaker) presents *p*, **<u>and commits</u>** to the truth of *p*. The presentative hypothesis predicts that the ORIGO GROUND is distinct from the COMMON GROUND (§2.1) and that presentation and assertion differ in their illocutionary force (§2.2).

[7] The distinction between direct versus indirect evidence arises via *manner of support* (which relates thee perceived situation to the prejacent proposition) and *perceptual grounding* (which relates the perceived situation to ORIGO). The parallel between evidentials and epistemic modals arise from *manner of support*. Moreoever, all evidentials involve a combination of some, but not necessarily all, of these three factors. For details, see Waldie (2012).

2.1 Distinguishing the ORIGO GROUND from the COMMON GROUND

Central to our analysis of clauses with evidential morphemes are the concepts of ORIGO and ORIGO GROUND, which we introduce in turn (§2.1.1). Once this background is in place, we introduce the idea that clauses marked with evidentials update the ORIGO GROUND (§2.1.2).

2.1.1 The ORIGO and the ORIGO GROUND

The ORIGO is the individual from whose perspective a proposition is evaluated.[8] As already observed for Nuu-chah-nulth, clauses with evidential morphemes are sensitive to the value of the ORIGO. With matrix clauses, the default ORIGO is the speaker; in (6)a the speaker is the individual presenting the report that it is raining. With interrogative contexts, the default ORIGO is the hearer; in (6)b, the hearer is the individual being asked to present a report.

(6) NUU-CHAH-NULTH

a. [[*ḿiƛ-aa*$_{IP}$]-***wa?iš***$_{CP}$] ORIGO = speaker
rain-CONT-3.QUOT
'It's raining, according to what I've been told'

b. [[*ḿiƛ-aa*$_{IP}$]-***ḥač***$_{CP}$] ORIGO = hearer
rain-CONT-3.INDIR.INTER
'Is it raining, according to what you've been told?'

An ORIGO-based analysis predicts evidentiality will be sensitive to ORIGO shifts. This is not specific to evidentials, but is also seen in the contrast between declaratives and interrogatives: a declarative has a default speaker ORIGO (7)a, an interrogative a default hearer ORIGO (7)b.

(7) a. *This is Johan.* ORIGO = speaker

b. *Is this Johan?* ORIGO = hearer

This establishes that the ORIGO shift found in declarative and interrogative clauses is also attested in evidential contexts. In addition, as we discuss below, when evidentials can be embedded, the ORIGO predictably shifts. This perspectival shift is a diagnostic for the presence of an ORIGO argument (Garrett, 2001; Tenny, 2006); we return below to the precise role that the ORIGO argument plays in the syntax of evidentials.

In making an assertion, a speaker introduces a proposition into the common ground. What is asserted is *at-issue*.[9] But if a speaker fails to introduce a proposition *p* into the common ground — which we claim is what happens when *p* is presented rather then asserted — then *p* is not-at-issue. In this context, it is useful to distinguish the COMMON GROUND from the ORIGO GROUND. The COMMON GROUND is the set of at-issue propositions to which discourse participates make commitments, (8). We define the ORIGO GROUND as the set of uttered not-at-issue propositions about which the ORIGO has experientially mediated information, (9).

[8] The idea that evidentials are associated with an ORIGO is central to Garrett's (2001) analysis of Tibetan evidentials, which draws upon earlier work by Agha (1993). Our ORIGO-based analysis also converges with the notion of *deictic centre* (Fillmore, 1975), *validator* (Stirling, 1993), *perspective holder* (Kölbel, 2002; Muehlbauer, 2008), *judge argument* (Lasersohn, 2005; Stephenson, 2007) and *sentience role* (Tenny, 2006).

[9] We follow Simons et al. (2010) in defining at-issue-ness in terms of the question-under-discussion (QUD, cf. Roberts 1996).

(8) ***Common Ground***$_{DEF}$
at-issue propositions to which discourse participants make commitments

(9) ***ORIGO GROUND***$_{DEF}$
uttered not-at-issue propositions that depend on information mediated by the ORIGO's experience

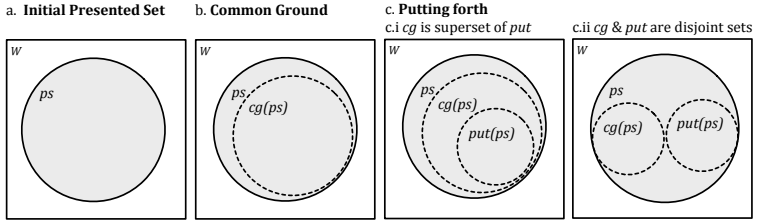
A crucial aspect of discursive practice, which our analysis is trying to capture, is that propositions introduced by evidentials are not necessarily subject to verification, i.e., no truth-claim is proferred. Rather, an experiential claim is made relating to how the ORIGO acquired information about *p*. The experiential basis for the ORIGO GROUND is neither accidential nor arbitrary. Recall that, in our view, evidentialty involves three factors: perspectival status, perceptual grounding, and manner of support. These are mediated by a three-way relation between the ORIGO (the experiencer), the perceived situation (the experience), and the prejacent proposition (the propositon presented). Regarding the latter, we emphasize that it is possible for the ORIGO to present *p* for consideration only, rather than for verification or endorsement. When this happens, we claim that a particular kind of speech act is performed, namely that of presenting *p*.

2.1.2 Presenting a proposition: updating the ORIGO GROUND

In our view, evidentials perform a type of speech act that consists simply of presenting or putting forth a proposition (Déchaine, 2007; Faller, 2002; Portner, 2006; von Fintel, 2003). *Presentation*, in this sense, has fewer commitments than does *assertion*. We take as a starting point Portner's (2006) idea that presenting is the most basic kind of conversational update. Accordingly, the simplest construct is the 'presented set' (*ps*), which is the set of propositions of which participants are mutually aware, (10)a. The common ground (*cg*) is a subset of the presented set, (10)b, and is the set of propositions to which participants have made additional commitments to; for example, they are committed to the truth-value of the proposition.[10] But other subsets are possible, in particular the set of propositions for which the participants have additional information; these are propositions that are put forward (*put*). These two subsets, *cg(ps)* and *put(ps)*, are related to each other in a number of ways. Two relations are relevant to the present discussion: when the set of propositions put forward is a subset of the common ground (10)c-i, or when the set of propositions put forward is disjoint from the common ground (10)c-ii.

[10] Portner's (2006) definition of the COMMON GROUND as a subset of the PRESENTED SET departs from the widely accepted Stalnakerian view of the COMMON GROUND which includes both background and contextually available information as well (Stalnaker, 2002). In Portner's recasting, background information — which includes the set of propositions of which participants are mutually aware — is in the PRESENTED SET. As we do not adopt Portner's specific formulation, we put this matter aside.

(10) PRESENTED SET, ASSERTING AND PUTTING FORTH (Portner 2006)



Portner (2006) adopts this type of analysis for Quechua evidentials, which he suggests exemplify (10)c-i, where the ORGIO GROUND is a subset of the COMMON GROUND. This predicts that some unmarked clauses will default to the COMMON GROUND, i.e., they will be assertive. But another logical possibility is that the ORIGO GROUND is disjoint from the COMMON GROUND. This corresponds to (10)c-ii, which is a possibility envisaged by Portner (2006:11), who conjectures that some languages might have "a grammaticalized way of presenting a proposition – of making one's interlocutors aware of this proposition, without saying anything more about it." (Portner 2006:11). Recall that the ORIGO GROUND is the set of propositions put forward by the ORIGO, and so is equivalent to *put(ps)*, which is a subset of the COMMON GROUND. This predicts that some unmarked clauses default to the ORIGO GROUND, i.e., they will be purely presentative. Thus, it should be possible to incorporate a proposition into the discourse structure without connecting it to the COMMON GROUND.

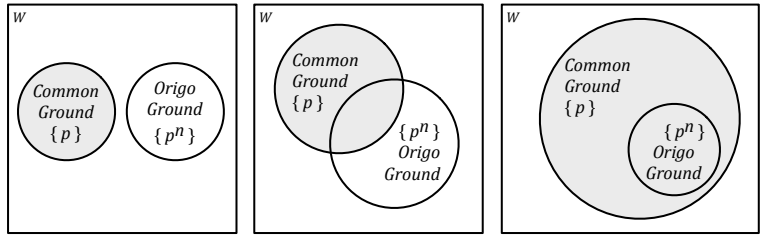
2.2 How the ORIGO GROUND interacts with the COMMON GROUND

There remains the question of how the ORIGO GROUND interacts with the COMMON GROUND. There are three logical possibilities: the ORIGO GROUND and COMMON GROUND could be disjoint (11)a, they could intersect (11)b; or the ORIGO GROUND could be a subset of the COMMON GROUND (11)c.[11] In our view, the contrast between (11)a and (11)b is key to understanding the different ways in which evidentials interact with the COMMON GROUND. Specifically, we hold that there is a class of evidentials that are felicitous only if the ORIGO GROUND and the COMMON GROUND are disjoint (11)a; we argue below that such evidentials never contribute truth-claims and lead to pervasive "faultless disagreement" in the sense of Kölbel (2003). And we further argue that some evidentials are felicitous in contexts where the ORIGO GROUND intersects with the COMMON GROUND (11)b. This captures the fact that the

[11] Although couched in different terms, these possibilities are countenanced in other analyses. The idea that the ORIGO GROUND and COMMON GROUND can be disjoint (11)a is recognized, but not exploited, by Portner (2006). Murray (2010)'s analysis of Cheyenne evidentials analyzes the ORIGO GROUND as intersecting with the COMMON GROUND (11)b. Portner (2006), in his re-analysis of Faller's (2002) treatment of Quechua evidentials, suggests that the ORIGO GROUND is a subset of the COMMON GROUND, (11)c. As far as we can determine, the contrast between (11)a and (11)b is akin to the distinction that Murray (2010) makes between "illocutionary evidentials" and "epistemic evidentials" respectively.

propositional content introduced by such evidentials can be integrated into the COMMON GROUND; that is, *p* can become at-issue. As for (11)c, where the ORIGO GROUND is a subset of the COMMON GROUND — which converges with Portner's (2006) proposal — we take this to be a special instance of (11)b, and reduces to cases where the ORIGO GROUND overlaps with COMMON GROUND. In this implementation, the ORIGO GROUND is cut from a different cloth than the COMMON GROUND: the two may interact, but they are constituted independently of each other.

(11) POSSIBLE RELATIONS BETWEEN ORIGO GROUND & COMMON GROUND



With this in place, we examine the logic of contestation and endorsement that arises in assertive contexts with COMMON GROUND updates, and contrast it to the logic of faultless disagreement that arises in presentative contexts with ORIGO GROUND updates (§2.2.1). We then turn to the question of how to diagnose presentative force (§2.2.2) and how it interacts with clause-typing (§2.2.3).

2.2.1 Negotiating COMMON GROUND and ORIGO GROUND updates

To see how the difference between the COMMON GROUND and the ORIGO GROUND plays out concretely, consider how at-issueness is negotiated with assertives. An asserted *p*, by virtue of being introduced into the COMMON GROUND, is at-issue, and so can either be challenged or endorsed. It is instructive to consider the form that challenge and endorsement takes. In English, the default illocutionary force of root clauses is assertion. In (12), in a context where the Question-Under-Discussion is the location of Barack Obama's birth, Ann introduces into the COMMON GROUND the assertion *p* (*Barack Obama was born in Kenya*). In challenging *p*, Betty rejects Ann's attempt to place *p* in the COMMON GROUND. Relevant to our concerns is the fact that the form and strength of the challenge can vary. In (12)a, which is a mild challenge, Betty does three things: (i) she indicates that, in her view, Anne's ORIGO GROUND is at odds where Betty's ORIGO GROUND (*You've got it wrong*), rejects *p* (*he wasn't born in Kenya*), and presents an alternative to *p* (*he was born in Hawaii*). In (12)b, which is a firmer challenge, Betty challenges Anne's COMMON GROUND update (*that's wrong*), rejects *p*, and presents an alternative to *p*. In (12)c, which is the strongest challenge, Betty challenges both the COMMON GROUND update and Anne's ORIGO GROUND, rejects *p*, and also presents an alternative to *p*. Finally, observe that while the attempt to put *p* into the common ground can be challenged, the act of asserting *p* cannot be, hence the infelicity of (12)d-e.

(12) [Question-Under-Discussion: Where was Barack Obama born?]

Ann: *Barack Obama was born in Kenya.*

Betty: a. *No, you've got it wrong, he wasn't born in Kenya; he was born in Hawaii.*

b. *No, that's wrong, he wasn't born in Kenya; he was born in Hawaii.*

c. *No, you're wrong, he wasn't born in Kenya; he was born in Hawaii.*

d. #*No, you didn't say that.*

e. #*No, that wasn't said.*

We take the paradigm in (12) to indicate that while a felicitous challenge always involves the rejection of *p* and the presentation of an alternative to *p*, the strength of the challenge — mild, firm, or strong — reflects whether the ORIGO GROUND, the COMMON GROUND, or both are contested. As shown in (13), the strongest challenge contests both the ORIGO and COMMON GROUND, while the mildest challenge contests only the ORIGO GROUND.

(13) STRENGTH OF CHALLENGE TO COMMON GROUND UPDATE

strength of challenge	strong	>	firm	>	mild
strategy	DISAGREE		DIVERGE		REFRAME
impact on ORIGO GROUND	reject *p*		—		reject *p*
impact on COMMON GROUND	reject *p*		reject *p*		—

Not only do challenges to COMMON GROUND updates differ in strength, but so too do endorsements. To see this, consider (14), where the Question-Under-Discussion is whether Barack Obama was born in Hawaii. Anne introduces *p* into the COMMON GROUND (*Barack Obama was born in Hawaii*.) In English at least, acceptance of *p* into the COMMON GROUND is the unmarked option in that agreement is marked by silence, (14)a. But it is also possible for an interlocutor to endorse *p* by volunteering information from their ORIGO GROUND that supports *p*, as in (14)b. In such cases, there is a convergence between the ORIGO GROUND and the COMMON GROUND. The weakest form of endorsement is acknowledgement, as in (14)c. Here the interlocutor explicitly indicates that *p* is not in their ORIGO GROUND (*That's news to me!*) and requests supporting evidence for *p* (*What's makes you say that?*). And while the attempt to put *p* into the COMMON GROUND can be endorsed, the act of asserting *p* cannot be, hence the infelicity of (14)d-e.

(14) [Question-Under-Discussion: Was Barack Obama born in Hawaii?]

Ann: *Barack Obama was born in Hawaii.*

Betty: a. [Silence]

b. *Yes that's right; I've even seen his birth certificate, and it says he was born in Hawaii.*

c. *That's news to me! What makes you say that?*

d. #*Yes, you did say that.*

e. #*Yes, that was said.*

We take the paradigm in (14) to indicate that while the felicitous endorsement of an assertion always involves accepting *p* in some fashion, the strength of the endorsement — mild, firm, or strong — reflects whether and how the ORIGO and COMMON GROUND are updated. A mild endorsement acknowledges *p* by requesting evidential support for it, (15)a. A firm endorsement provides convergent evidence for *p*, (15)b. A strong endorsement adds *p* to the ORIGO and COMMON GROUND, (15)c.

(15) STRENGTH OF ENDORSEMENT TO COMMON GROUND UPDATE

strength of endorsement	mild	<	firm	<	strong
strategy	ACKNOWLEDGE		CONVERGE		AGREE
impact on ORIGO GROUND	query *p*		volunteer *p*		add *p*
impact on COMMON GROUND					add *p*

Recognizing that both challenges and endorsements are gradient is a crucial first step to understanding the logic of assertion and presentation. To see this, consider (16), where challengeability and endorsement are put on a scale, with a [-1] value indicating disagreement with a COMMON GROUND update, and a [+1] value indicating agreement.

(16) SCALE OF CHALLENGEABILITY AND ENDORSEMENT

[-1 0 +1]

disagree diverge reframe FAULTLESS (DIS)AGREEMENT *acknowledge converge agree*

If an interlocutor fails to challenge or endorse a COMMON GROUND update the value assigned to *p* is [0] on this scale.[12] Although this is at odds with the logic of assertion, which makes a truth-claim about a proposition, we claim that the failure to either challenge or endorse an update is precisely what happens when what is updated is the ORIGO GROUND, rather than the COMMON GROUND. This "zero" value corresponds to faultless disagreement, and arises whenever interlocutors attend to ORIGO GROUND updates to the exclusion of COMMON GROUND updates. (In English, this is found with a small class of predicates, namely evaluative predicates of personal taste. More on this below.) To see how this works, consider (17). In assertive contexts, COMMON GROUND updates can be contested or endorsed, precisely because interlocutors actively manage the contents of the COMMON GROUND, (17)a. But in presentative contexts, faultless disagreement holds sway; this reflects the fact that interlocutors manage the contents of their respective ORIGO GROUNDS, (17)b. This has consequences for how *p* and not-*p* are resolved. In an assertive context *p* and not-*p* leads to contradiction, and one (or both) propositions are eliminated from the COMMON GROUND. In a presentative context, *p* and not-*p* leads to faultless disagreement, and both propositions are sustained in their respective ORIGO GROUNDS.[13]

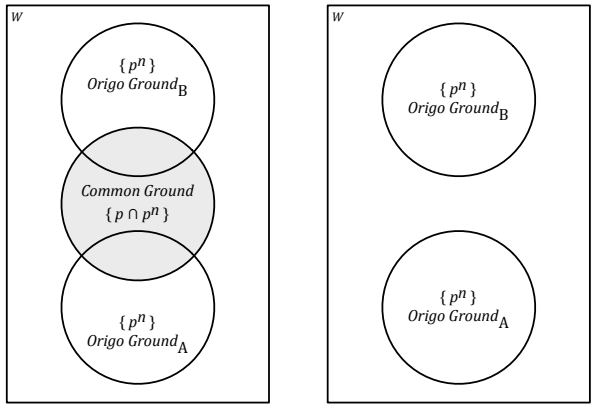
[12] The scale of challengeability/endorsement has implications for how to interpret silence. For example, most formal analyses of common ground updates assume that silence is equivalent to strong endorsement of *p*, i..e. agreement. However, this is only one analytic possibility, and is fact not universally adopted as an cultural norm. As discussed in the ethnographic literature (Braithwaite, 1990; Tannen, 1984; Thomas, 1983), in some speech communities silence, rather than signaling endorsement, signals faultless disagreement.

[13] A reviewer points out that it is possible to derive commitment to the truth of *p* from evidential commitment. But this would not be compatible with our definition of presentative force which simply requires that a speaker "present *p*". Presentative force could be strengthened to the speaker "committing to

(17)

a. assertion: the logic of contestation & endorsement

b. presentation: the logic of faultless (dis)agreement



Morpho-syntactically, faultless disagreement arises in very specific contexts. Universally, evaluative predicates denoting personal taste (e.g., *tasty*, *delicious*) and internalized states (e.g., *hungry*, *tired*), which are by definition restricted to ORIGO GROUND updates, give rise to the logic of faultless disagreement. Accordingly, in terms of the analysis developed here, evaluative predicates have lexicalized presentative force. On this view, evidential morphemes are instances of morphologized presentative force in that they explicitly mark ORIGO GROUND updates; this corresponds to Nuu-chah-nulth. In addition, in the same way that the default clause-type in English is assertive, in some languages the default clause-type is presentative. We analyze such languages as having syntacticized presentative force; this corresponds to Plains Cree.

Many sentences marked with evidentials differ from assertions in that the prejacent proposition that they introduce is not part of the COMMON GROUND.[14] Such propositions are not-at-issue, and so *p* can't be directly challenged or endorsed. Instead, the evidential basis for *p* is challenged or endorsed. This can be shown in spontaneous utterances involving grammaticized evidentials, when a clause marked by an evidential is challenged, not only do speakers present an alternative *p*, they also present an alternative source of evidence for *p*. This subtle, but systematic, difference in how evidentials can be challenged has, to our knowledge, not been addressed in previous descriptions or analyses. We take this to

having direct evidence for p", in which case it would follow that the speaker must also be committed to the truth of *p*. This correctly predicts that we would not find data of the form "*p* (direct evidence), but not *p*". Although this very cleverly maintains the normalcy of truth-commitment, in our view, it does not capture the logic of the systems that we are modeling. As far as we can determine, when speakers present *p*, they are not committed to having evidence for *p*. Rather, speakers present their experience of *p*.

[14] Murray (2010) calls such evidentials *illocutionary evidentials*.

indicate that speakers monitor the (not-at-issue content of the) ORIGO GROUND, independent of the (at-issue content of the) COMMON GROUND. Indeed, Faller (2002), one of the first to use challengeability as a diagnostic, presents a spontaneous example from Quechua which works in exactly this way. Consider (18), where the speaker begins with a reported *p*, and then offers an alternative *p* framed by an alternative (visual) source of evidence.

(18) QUECHUA

*Pay-kun-**s** noqa-man-qa* [*qulqi-ta muntu-ntin-pi saqiy-wa-n*],
3SG-PL-EVID 1sg-ILLA-TOP money-ACC lot-INCL-LOC leave-1.OBJ-3
'They reportedly left me a lot of money, …'

*mana-má riki **riku**-sqa-yki* [*ni un sol-ta centavo-ta-pis saqi-sha-wa-n-chu*]
not-SURP right see-PP-2 NEG one sol-ACC cent-ACC-ADD leave-PROG-1.OBJ-3-NEG
'… but, as you have seen, they didn't leave me one sol, not one cent'
(spontaneous; Faller 2002:191, (152))

In our own work on Plains Cree and Nuu-chah-nulth, we find the same pattern: when a speaker challenges a *p* marked with an evidential, they also present an alternative source of evidence for *p*. An example is given in (19) from Plains Cree.

(19) PLAINS CREE

Scenario: Somebody has told Ann that there are rumors that she has been given a lot of money by a recently deceased relative. In response to this, she says the following:

*mistahi sôniyas **êsa** ê-miy-kawi-yân, pêyak awa ni-cisan ê-nipi-t*
much money REPORT C-give-PASS-1SG one D.PRX.ANIM 1-blood.relative C-die-3
'Reportedly, I was left with a lot of money by a relative that passed away; '

*êkwa ôma ê-miyi-t **êsa;***
and this C-give-3 REPORT
'they left me this, reportedly'

*mâka ki-**wapâhtê**-n ma-kîkway ôta, kâ-miy-kawi-yân*
but 2-see-SAP(VTI INDEP) NEG-thing here C-give-PASS-1SG
'but as you can see here, they left me nothing'

2.2.2 Diagnosing presentative force

If presentative force is in fact distinct from assertive force, as we claim, then there should be a way of distinguishing them. On independent grounds, Faller (2002) analyzes Quechua reportative *-si* as having presentative illocutionary force: the speaker presents *p* by putting forth *p* for consideration. The sincerity condition associated with reportative *-si* is that someone (s_2) other than the current speaker or hearer asserts *p*, (20)a. But Faller analyzes the other two Quechua evidentials — conjectural *-chá* (20)b, and inferential *-mi*, (20)c — as having assertive force, with the speaker committed to the truth of the proposition. The sincerity condition for conjectural *-chá* is that the speaker believes that *p* is an epistemic possibility and that this belief is based on reasoning. The sincerity condition for the inferential evidential *-mi* is that the speaker has the best possible grounds for believing *p*, which is eyewitness evidence. Finally, in a declarative clause, with no overt marking of

evidentiality, as in (20)d, Faller argues that there is nevertheless an evidential implicature. Thus, in Faller's analysis, (20)d has assertive force (the speaker believes *p* to be true), and its evidential value arises via Gricean implicature: the speaker has the best possible evidence for *p*, namely eyewitness evidence.

(20) a. *Para-sha-n-**si***
rain-PROG-3-REPORT
p = 'It is raining'
EV = speaker was told that *p*
(Faller 2002: 3, (2c); 199 (165); 263 (229))

➔ *p* = 'It is raining'
ILL = **PRESENT(*p*)**
SINC = { $\exists s_2[Assert(s_2,p)$ & s_2 X {*h*, *s*}]}

b. *Para-sha-n-**chá***
rain-PROG-3-CONJ
p = 'It is raining'
EV = speaker conjectures that *p*
(Faller 2002: 3, (2c); 184 (146); 263 (229))

➔ *p* = 'It might/must be raining'
ILL = **ASSERT$_S$ (◊*p*)**
SINC = {*Bel*(*s*, ◊*p*, *Rea*(*s*,*Bel*(*s*, ◊p))}
STRENGTH = -1

c. *Para-sha-n-**mi***
rain-PROG-3-INFER
p = 'It is raining'
EV = speaker sees that *p*
(Faller 2002: 3, (2a); 164 (127); 263 (229))

➔ *p* = 'It is raining'
ILL = **ASSERT$_S$ (*p*)**
SINC = {*Bel*(*s*,*p*), *Bpg*(*s*, *Bel*(*s*,*p*))} }
STRENGTH = +1

d. *Para-sha-n*
rain-PROG-3
p = 'It is raining'
EV = speaker sees that *p*
(Faller 2002: 122, (88d)); 162 (125))

➔ *p* = 'It is raining'
ILL = **ASSERT(*p*)**
SINC = {*Bel*(*s*,*p*) }
STRENGTH = 0

Relevant to our concerns is Faller's claim that the Quechua reportative has presentative force, while the conjectural and visual evidential have assertive force. What's the empirical basis for the presentative/assertive contrast in Quechua? On the one hand, evidentials with presentative force (reportative *-sí*) can be denied (21)a. On the other hand, evidentials with assertive force — conjectural *-cha*, the visual evidential *-mi*, and the unmarked declarative — can't be denied, (21)b-d.

(21) a. REPORTATIVE ***-si***
*Para-sha-n-**si**,* *ichaqa mana crei-ni-chu.*
rain-PROG-3-REPORT but not believe-1-NEG
p = 'It is raining, but I don't believe it'
EV = speaker is/was told that it is raining' (Faller 2002:194 (158))

b. CONJECTURAL ***-cha***
#*Llave-qa muchila-y-pi-**chá*** *ka-sha-n, ichaqa mana-n aqhay-pi-chu*
key-TOP backpack-1-LOC-CONJR be-PROG-3 but not-VIS.EVID there-LOC-NEG
#'The keys may be/are possibly/probably in my backpack, but they are not there' (Faller 2002:178 (138))

c. VISUAL EVIDENTIAL ***-mi***
#*Para-sha-n-**mi*** *ichaqa mana crei-ni-chu.*
rain-PROG-3-VIS.EVID but not believe-1-NEG
#'It's raining, but I don't believe it' (Faller 2002:163 (126b))

d. UNMARKED
#*Para-sha-n* *ichaqa mana crei-ni-chu.*
rain-PROG-3 but not believe-1-NEG
#'It's raining, but I don't believe it' (Faller 2002:160 (120))

The deniability diagnostic follows from Moore's paradox: to simultaneously perform an illocutionary act and deny one of its sincerity conditions is paradoxical. The oddness of sentences in (21)b-d reflects the analytic failure of their utterances (Vanderveken 1990:118; Faller 2002:159*f.*). In (21)a, in presenting a proposition, the speaker makes no commitment to its truth-value; this correctly predicts that a proposition presented by the reportative evidential can be denied.

The deniability diagnostic applies not only to grammaticized evidentials, but also to lexically marked evidentials. For example, the English adverb *reportedly* is compatible with denial (22)a. However, epistemic modal *must* — treated as an evidential in some analyses (von Fintel & Gillies, 2011; Westmoreland, 1995, 1998) — does not support denial (22)b, nor does the visual inferential *look like* (22)c. And of course, with declaratives, denial yields contradiction, (22)d.

(22) a. ***Reportedly**, it's raining, but I don't believe it.*
b. *#The keys **must** be in my backpack, but they're not there.*
c. *#It **looks like** it's raining, but I don't believe it.*
d. *#It's raining, but I don't believe it.*

This establishes that at least some evidentials, such as the reportative, introduce not-at-issue propositional content, which we here identify as being a characteristic feature of the ORIGO GROUND.

2.2.3 Clause-typing and illocutionary force

We assume a closed universal set of clause-types (Portner, 2004). Syntactically, clause-types correspond to the clause-typing system, where C stands for complementizer. Each clause-type has a conventional denotation, updates a discourse component, and contributes a sentential force. In addition to declaratives, interrogatives, and imperative clause-types, we take presentatives to be a distinct clause-type. In addition to the discourse components of the COMMON GROUND, QUESTION SET, and TO-DO-LIST, we also posit an ORIGO GROUND. Besides asserting, asking, and requesting, we claim that presenting is a distinct sentential force. Presentative clauses — which include clauses with overt and covert evidential morphemes, as well as certain unmarked clauses — are ORIGO-centered and have presentative force. This *presentative hypothesis* makes the claim that form-force pairings must be enriched to include clause-types whose discourse function is to update the ORIGO GROUND, and whose sentential force is that of presenting a proposition for consideration, without making a truth-claim about it.

The presentative hypothesis enriches the set of clause-types, of discourse components and of sentential force. We argue that such enrichment is empirically and conceptually necessary. The presentative hypothesis also affords a more nuanced morpho-syntactic analysis of evidentials. Different languages use different morpho-syntactic strategies to mark evidentiality. Recognizing this, many analysts distinguish lexical evidentials from grammaticized evidentials (Aikhenvald, 2004). On this view, languages such as English and German are described as having lexical evidentials in the form of open-class formatives such as verbs, verbal auxiliaries and adverbs. In contrast, languages such as Quechua and Tibetan have grammaticized evidentials; these are drawn from a closed-class set of dedicated bound morphemes that are in paradigmatic contrast with other functional elements. However, the distinction between lexical versus grammaticized evidentials fails to capture the fact that some languages exploit a purely syntactic strategy to code evidentiality. In such languages, there is a dedicated root clause that has inherent evidential force, even though it lacks evidential marking. We argue that Plains Cree is such a language, and that if the relevant syntactic diagnostics are deployed, such syntactically conditioned evidentials are discernible in all languages. We take the universality of syntactically conditioned root-clause evidentials as support for the claim that propositions with presentative force are part of the core set of clause-types specified by UG.

Consider (23), which lists the association between clause-type, denotation, discourse component and sentential force. Relevant to the presentative hypothesis is the first row, shaded in gray. The presentative hypothesis predicts the existence of clauses whose propositional content is not-at-issue, whose discourse component is the ORIGO GROUND, and whose sentential force is that of presentation. We claim that evidentials represent the convergence of these properties. Specifically, in our analysis, languages don't differ in whether they have grammaticized evidential morphemes. Rather, they differ in default illocutionary force and perhaps in whether they have morphemes that specifically mark presentational force. The main point is that unmarked sentences in some languages have presentative rather than assertive force. We depart from Portner (2004) relative to one specific claim that he makes. Although he acknowledges that morpho-syntax can contribute to meaning in a compositional way, he claims that illocutionary force is not one of the aspects of meaning they contribute. We shall argue at length below that both Nuu-chah-nulth and Plains Cree challenge this claim, as in these two languages, morpho-syntax does indeed determine illocutionary force.

(23) ASSOCIATION OF CLAUSE-TYPE, DENOTATION, DISCOURSE COMPONENT AND SENTENTIAL FORCE (adapted from Portner 2004:238)

TYPE	DENOTATION	DISCOURSE COMPONENT	FORCE
Presentative	not-at-issue propositions (p^n)	ORIGO GROUND: set of not-at-issue propositions	Presenting$_O$ OG ∪ (p^n)
Declaratives	at-issue propositions (p)	COMMON GROUND: set of at-issue propositions	Asserting CG ∪ {p}
Interrogatives	set of propositions (q)	QUESTION SET: set of sets of propositions	Asking QS ∪ {q}
Imperatives	property P	TO-DO LIST FUNCTION: function from individuals to sets of properties	Requiring TDL(A) ∪ {P}

To be more precise, in Portner (2004), each clause type is associated with a different semantic type. For example, imperatives denote properties, and the TO-DO-LIST is a (function from an individual to a) set of properties. But it is not part of the semantics of imperatives to add a property to this set; rather, imperative force is deduced from its semantic type via pragmatic implicature. Similarly, according to Portner, the illocutionary assertive force of declaratives is deduced from the fact that they denote at-issue propositions, "and thus are suitable for being added to the Common Ground by the universal update function F." (Portner 2004:238*f.*). Extending this approach, this means that that the presentative illocutionary force of evidential clauses is deduced from the fact that they denote not-at-issue propositions, and so are suitable for being added to the ORIGO GROUND.[15]

The presentative hypothesis makes a number of testable predictions about evidential expressions. **Syntactically**, evidential morphemes mark a distinct clause-type, and so interact with the C-layer of the clause. In some languages, they even constitute distinct clause-types, and can be distinguished from declaratives, interrogatives, and imperatives. **Semantically**, evidential expressions contribute not-at-issue propositional content (p^n). **Pragmatically**, evidentials update the ORIGO GROUND, and interact with the COMMON GROUND, the QUESTION SET, and the TO-DO-LIST. Evidentials have presentative force: they put forth an ORIGO-centered proposition without making a truth-claim about it. Because of their ORIGO index, evidentials overlap with indexicals (when the ORIGO is the 1st or 2nd person[16]) and with logophors (when the ORIGO is the speaker, and the speaker is the matrix subject).

[15] Another way of analyzing form-force pairings is found in Murray (2010), where clause types are assigned a semantics, and structure the context in a particular way so as to constrain (but not determine) the force of an utterance. For concreteness, we adopt a Portner-style analysis.

[16] The sensitivity of ORIGO to 1st and 2nd person is sometimes analyzed in terms of egophoricicity. Some analysts take egophoricity to be a by-product of evidentiality (DeLancey, 2001; Garrett, 2001; Loughnane, 2009; Tournadre, 2008). Others take it to be a form of person-marking that is orthogonal to evidentiality (Aikhenvald, 2004; Bickel & Nichols, 2007; Dixon, 2010). And others view it as the intersection of evidentiality and person-marking (Creissels, 2008); we adopt the latter view. For a review of the literature, see San Roque et al. (2012).

The story unfolds as follows. Accepting the postulate that some clauses have presentative force, the question then becomes how one diagnoses such a clause type. In other words, what **form** does presentative force take in a given language? We consider three logical possibilities, according to whether presentative force is restricted to a certain class of predicates (*lexicalized presentatives*), to a certain class of morphologically marked clause-types (*morphologized presentatives*), or to a certain syntactic context (*syntacticized presentatives*). First, in all languages, presentative force is found with a particular class of lexical predicates, namely evaluatives. Moreover, in some languages, this is the only context where presentative force is obligatory; we suggest this is found in English. Second, in some languages, presentative force is also found with root clauses that are marked with clause-typing evidential morphemes; this is found in Nuu-chah-nulth. Third, in some languages, presentative force is found with root clauses that are utterance-bound indexical clauses, but which lack overt evidential morphology; this is found in Plains Cree.

It could be objected that the assertive/presentative distinction that we make here is semantic, rather than syntactic, in nature. As we shall show, the primary motivation for positing a distinct presentative clause-type comes from languages where presentative illocutionary force is associated with a specific kind of syntactic clause-typing. Although lexicalized presentatives, discussed in §3, do not (necessarily) require a distinct syntactic clause-type, the clause-typing evidentials found in Nuu-chah-nulth (§4) and Plains Cree (§6) do. Our claim is that all languages have propositions with presentative illocutionary force, and in some languages (e.g., Plains Cree and Nuu-chah-nulth) these presentatives are a distinct syntactic clause-type. With these preliminaries in place, we discuss in turn lexicalized, morphologized, and syntacticized presentatives as they present themselves in English (§3), Nuu-chah-nulth (§4), and Plains Cree (§5) respectively.

3. English evaluative predicates as lexicalized presentatives

Consider the conventional form-force pairings of English, illustrated in (24). In English, presentative force is lexically encoded with evaluative predicates such as *tasty*, *hungry*, or *tired* which update the ORIGO GROUND, (24)a. One indication that such predicates are ORIGO-centered is the fact that, when they occur in root clauses, they are egocentric and so are restricted to a 1st person subject (more on this immediately below). Treating such predicates as having lexicalized presentative force captures the obligatory ORIGO effects that characterize them (Kölbel, 2003; Lasersohn, 2005; Stephenson, 2007; Tenny, 2006). Elsewhere, English root clauses are declarative, have assertive force, and update the COMMON GROUND, (24)b. As for interrogative clauses, they update the QUESTION SET (24)c, while imperative clauses update the TO-DO-LIST (24)d.

(24) ENGLISH CONVENTIONAL FORM-FORCE PAIRING

a.	*I am tired.*	OG ∪ (p^n)
b.	*Lucy watched the football game.*	CG ∪ {p}
c.	*Did you see the football game?*	QS ∪ {q}
d.	*Close the door!*	TDL(A) ∪ {P}

Based on data from English, we show that evaluative predicates are subject to felicity conditions that reflect that fact that, as lexicalized presentatives, they update the ORIGO

GROUND (§3.1). We then consider the implications this has for how English clause-typing relates to the ORIGO GROUND (§3.2).

3.1 English evaluative predicates and their felicity conditions

The activity of the ORIGO GROUND with evaluative predicates is revealed by a set of diagnostics which include the grounds for endorsement or challenge (§3.1.1), ORIGO shifts (§3.1.2), and faultless disagreement (§3.1.3).

3.1.1 Grounds for endorsing or challenging an evaluative predicate

A distinction is often drawn between lexical versus grammaticized evidentials with only the latter being accorded the status of authentic evidentials. There are reasons to be skeptical about this. For example, English evaluative predicates show all of the hallmark properties of evidentials. This can be illustrated with predicates of internal state such as *tired*. First, as already mentioned above, they introduce the ORIGO's perspective. For example, in volunteering information about her internal state, as in (25), Anna updates her ORIGO GROUND.

(25) Anna: *I'm tired.* OG ∪ (p^n)

That an utterance such as *I'm tired* constitutes an ORIGO GROUND update, rather than a COMMON GROUND update, is confirmed by the fact that Beth's endorsement of Anna's contribution cannot take the form of an assertion (26)a, but must instead be modalized (26)b or relativized to some form of sensory perception (26)c. Recall that when the ORIGO GROUND is challenged, while p cannot be challenged (as it is not at-issue), the challenge may be to the ORIGO of p, or to the evidential basis for p. We observe a similar logic for endorsement, with (26)b endorsing the ORIGO as a perspective-holder, and (26)c endorsing the manner of support for p.

(26) Beth: a. #*Well, you're tired, but I'm not.*
b. *Well* [**YOU** FOC] *might be tired, but* [***I*** FOC] *most certainly am not.*
c. *Well you certainly* [{**LOOK, SOUND, SEEM**}FOC] *tired.*

Consistent with an ORIGO GROUND update, the propositional content of evaluative predicates of internal state is not-at-issue, and so can't be challenged, (27). This contrasts with the at-issue propositional content of non-evaluative predicates, which can be challenged, (28). This difference reflects the distinction between propositions with presentative force (which are added to the ORIGO GROUND), and propositions with assertive force (which are added to the COMMON GROUND).[17]

(27) a. Anna: *I'm tired.* OG ∪ {p^n}
b. Beth: *#No, you're not!*

(28) a. Anna: *Lucy watched the football game.* CG ∪ {p}
b. Beth: *No, she didn't!*

[17] For a different view of the challengeability of evaluative predicates, see Stephenson (2007).

3.1.2 Default ORIGO can shift

The ORIGO of evaluative predicates is determined by the syntactic context, according to whether the clause-type that the predicate occurs in (affirmative, imperative, interrogative, or embedded), and whether an an adverbial modifier is present. We consider each in turn.

With unmarked affirmative root clauses, the default ORIGO with evaluative predicates is the speaker. Thus, a 2nd person subject is unfelicitous (29)a. But this an be repaired with an evidential (29)b, which is a diagnostic for egocentric evidentiality.

(29) a. #*You're tired.* OG ∪ (p^n)

b. *You look tired.*
You sound tired.
You seem tired.
= 'Given the sensory evidence available to me, You're tired'

That this "2nd person effect" reflects how the ORIGO GROUND can be updated is confirmed by the fact that imperatives, which are inherently 2nd person, pattern in the same way. Thus, an evaluative predicate is unfelicitous with an imperative (30)a, but can be repaired with an evidential, (30)b.[18]

(30) a. #*Quick, be tired!*

b. *Quick, look tired!*
= 'Given the visual evidence available to me, TDL_A {*tired*}

With interrogative clauses, the ORIGO of an evaluative predicate is the addressee. This means that a 1st person subject is predictably unfelicitous, but can be repaired with overt evidential marking (31).

(31) a. #*Am I tired?*

b. *Do I look tired? / Do I sound tired? / Do I seem tired?*
= 'Given the sensory evidence available to you, QS {*I am tired; I am not tired*}

With embedded clauses the ORIGO is the closest subject. As already established, in root clauses, the ORIGO of an evaluative predicate is the speaker (32)a. But if an evaluative predicates is in an embedded clause, then the subject of the matrix cause, and not the speaker, is the ORIGO, (32)b-c. (We adopt Stephenson's (2007) convention of indicating a link between the evaluative predicate and the ORIGO by underlining.)

(32) a. [Speaker$_{ORIGO}$] *The roller coaster was fun.*

b. [*Sam*$_{ORIGO}$] *thinks that the roller coaster was fun.*

c. *Mary thinks that* [*Sam*$_{ORIGO}$] *thinks that the roller coaster was fun.*
(adapted from Stephenson 2007:24*f.*)

[18] The infelicity of #*Quick, be tired!* cannot be attributed to a ban on stative imperatives *Quick, be rude!*

Finally, evaluative predicates can be accompanied by an overt ORIGO index (Lasersohn, 2005; Stephenson, 2007). In English, this takes the form of a PP modifier (.e.g, *for x*, *to x*) that introduces a 1st, 2nd or 3rd person argument. Relevant to our concerns are the contexts where explicit ORIGO indices are introduced: it is always possible to introduce a 1st person ORIGO (33), but a 2nd person ORIGO requires modalization and contrast (34), and a 3rd person ORIGO requires an external information source (35). As we shall see, languages with a grammaticized ORIGO index — like Plains Cree and Nuu-chah-nulth — regiment such contrasts in the syntax.

(33) ADJUNCT PP CODES 1ST PERSON ORIGO

a. That ice-cream tasted good (to me).

b That hike was easy (for me).

(34) ADJUNCT PP CODES 2ND PERSON ORIGO

a. That ice-cream might have tasted good to you, but to me it tasted awful.

b That hike might have been easy for you, but for me it was a nightmare.

(35) ADJUNCT PP CODES 3RD PERSON ORIGO

a. According to Beth, the ice-cream tasted good to Anne.

b. According to Beth, the hike was easy for Anne.

The possibility of introducing an overt ORIGO index is crucial, as it is the basis for the expression of faultless disagreement, to which we now turn.

3.1.3 Faultless disagreement with evaluative predicates

Evaluative predicates are the locus of faultless disagreement, which we take to be a diagnostic for ORIGO GROUND updates. Consider the following examples, adapted from Stephenson (2007:27). In (36), Betty adds *p* (*The cake tastes good*) to her ORIGO GROUND. Cathy refrains from endorsing *p* as a COMMON GROUND update; instead, she updates her ORIGO GROUND with an alternative *p* (*The cake is too sweet*). In this way, the interlocutors can sustain (potentially incompatible) *p*s in their respective ORIGO GROUNDS. This is more dramatic in (37), where Betty presents *p* (*The party was fun*), and Cathy presents not-*p* (*The party wasn't fun*). Rather than leading to contradiction, this leads to faultless disagreement, with Betty maintaining *p* in her ORIGO GROUND, and Cathy maintaining not-*p* in her ORIGO GROUND.

(36) a. Ann: *How's the cake?*

b. Betty: *It tastes good to me.*

c. Cathy: *It's a bit too sweet for my taste.*

(37) a. Ann: *How was the party?*

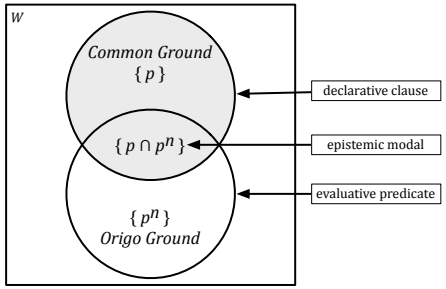
b. Betty: *It was fun for me, because I was able to catch up with old friends.*

c. Cathy: *Well it may have been fun for you, but for me, it wasn't fun at all!*
In fact, it was boring because I didn't know anyone there.

3.2 English clause-typing and the ORIGO GROUND

We understand the patterning of evaluative predicates to indicate the universally available possibility of presenting, but not asserting, a proposition. We suggest that the distinction that is commonly drawn between "lexical evidentials" and "grammaticized evidentials" is in fact a difference in the default illocutionary force that a proposition has. In a language such as English, the default force is assertive, with the proviso that predicates that require the speaker to be the ORIGO (namely evaluative predicates) are lexically specified as introducing propositions with presentative force. Relative to the interaction of the ORIGO GROUND with the COMMON GROUND, one can model an English-type system as in (38), with unmarked clauses having a default assertive force (i.e., contribute updates to the COMMON GROUND), evaluative predicates having default presentative force (i.e., contribute updates to the ORIGO GROUND). In principle, it is possible for a proposition to update both the COMMON GROUND and the ORIGO GROUND. Following Portner (2006), we treat epistemic modals — and their corresponding evidential counterparts, namely inferential evidentials — as a "double update" of the ORIGO GROUND and the COMMON GROUND. In precisely these cases, *p* is both asserted (i.e., a truth-claim is made) and presented (i.e., an experiential claim is made).

(38) ENGLISH CLAUSE TYPES RELATIVE TO COMMON GROUND AND ORIGO GROUND



The idea that inferential evidentials *qua* epistemic modals contribute a double update converges with analyses such as Matthewson (2011) who speculates that inferential evidentials always reduce to epistemic modality. And certainly, in languages where evidentials always perform a double update of the COMMON GROUND and the ORIGO GROUND, then "evidentiality" and "epistemic modality" are indistinguishable, as seems to be the case in St'atimcet's (Matthewson, 2011; Matthewson, et al., 2008). The double update analysis, which we take from Portner (2006), replicates Kratzer's (2012) insight that epistemic modals have an evidential base. The double update approach also captures the contrast made between "objective" versus "subjective" uses of epistemic modals (Papafragou, 2006); in the present analysis, the latter update both the ORIGO GROUND (contributing subjectivity) and the COMMON GROUND (contributing a truth-claim). More broadly, we draw attention to the fact that evidentials include not only inferential evidentials (which behave like epistemic modals), but also include evidentials that contrast direct and indirect experience. In this regard, the presentative hypothesis — which claims that all evidentials

update the ORIGO GROUND, and that some evidentials **only** do this — provides insights into how evidential marking is integrated into the syntactic clause-typing system, an issue generally not addressed in semantic treatments.

A novel property of our analysis is the claim that evaluative predicates are lexicalized presentatives. This has a number of virtues, of which we highlight two. First, it predicts that all natural languages will show the effects of the ORIGO GROUND with this class of predicates; to our knowledge, this is the case. Second, it predicts that some languages will exploit the ORIGO GROUND in a more systematic fashion. When this happens, we observe The emergence of what typologists (Aikhenvald, 2004) call "grammaticized evidentiality". With this in mind, we explore this possibility in the next two sections, looking first at Nuu-chah-nulth (§4), and then at Plains Cree (§5).

4. Nuu-chah-nulth clause-typing evidentials are morphologized presentatives

By hypothesis, in all languages, evaluative predicates update the ORIGO GROUND. In addition, some languages have dedicated evidential morphemes whose primary function is to update the ORIGO GROUND. We predict that evidentials will fall into two sub-classes according to whether they update the ORIGO GROUND only, or whether they perform a double update, and contribute to both the ORIGO GROUND and the COMMON GROUND. After showing that Nuu-chah-nulth has a "scattered" evidentials that are drawn from different morpho-syntactic classes (§4.1), we argue that Nuu-chah-nulth clause-typing evidentials have presentative force and update the ORIGO GROUND; as such, they cannot be directly challenged (§4.2). This analysis also makes specific claims about how ORIGO shifts are monitored, and here we (predictably) observe the same effects as for evaluative predicates (§4.3).

4.1 The morpho-syntax of Nuu-chah-nulth evidentials

Nuu-chah-nulth evidentials partition into two classes, according to whether they are clause-typing or not. Clause-typing evidentials have the following properties: they are part of the mood paradigm (§4.1.1), they are formed with additive morphology (§4.1.2), and though they are restricted to root clauses they do co-occur with other non-clause-typing evidentials (§4.1.3). We illustrate each of these properties in turn.

4.1.1 Clause-typing evidentials are part of the mood paradigm

Nuu-chah-nulth evidentials are drawn from three morphological classes, according to whether they are inflectional clause-typing suffixes, inflectional modality suffixes, or predicative. These three classes correspond to three distinct syntactic domains (Waldie, 2012): CP-domain, IP-domain, and VP-domain. Relevant to the present discussion is the fact that the CP-domain evidential morphemes — which include quotative -***wa-ʔiš*** (39)a, the indirect interrogative -***ḥ-aƛ̓*** (39)b, and dubitative -***q-aƛ̓a*** (39)c — are all bi-morphemic (more on this below) and part of the clause-typing mood paradigm.[19]

[19] We analyze Nuu-chah-nulth clause-typing suffixes as C. One possible objection to this is that Nuu-chah-nulth has a non-affixal C in the form of ***ʔin***, and that this might be the only authentic C in the language. However, this non-affixal C is in complementary distribution with suffixal clause-typing morphology; this is predicted if these suffixes are C-heads. While suffixal C is found only in root clauses, non-affixal C is found in two contexts: (i) in matrix clauses that lack suffixal clause-typing, namely with the zero-marked absolutive mood; (ii) in complement clauses, again with zero-marked absolutive mood. For these reasons, we are confident that clause-typing suffixes are C. The integration of evidential morphemes into the clause-typing

(39) NUU-CHAH-NULTH CP-DOMAIN EVIDENTIALS

a. [[*ḿiλ-aa* IP]-***wa-ʔiš*** CP]
rain-CONT-SAY-3.INDIC
'It's raining, according to what I've been told'

b. [[*ḿiλ-aa* IP]-***ḥ-ač*** CP]
rain-CONT-3.Q-INDIR.INTER
'Is it raining, according to what you've been told?'

c. [[*ḿiλ-aa* IP]-***q-ačča*** CP]
rain-CONT-3.C-DUBIT
'It must be raining'

While some Nuu-chah-nulth evidential morphemes function as complementizers in the CP-domain, others are found in the IP-domain; this includes inferential ***-matak*** (40)a and past inferential ***-ckʷi*** (40)b. These IP-domain evidentials are part of the mode paradigm; as such, they are part of the modality/tense system, and instantiate the syntactic category of Infl. These IP-domain evidential morphemes are tucked into the verbal complex in that they occur to the left of the clause-typing C suffixes.

(40) NUU-CHAH-NULTH IP-DOMAIN EVIDENTIALS

a. [[*ḿiλ-aa-****matak*** IP]-*ʔiš* CP] ***š***
rain-CONT-INFL.IND.EVID-C.INDIC.3
'Maybe it's raining'

b. [[*ḿiλ-aa-****ckʷi*** IP]-*ʔiš* CP]
rain-CONT-INFL.IND.PST.EVID.C.INDIC.3
'It must have rained'

The third position class recruited by Nuu-chah-nulth evidentials is the VP-domain. This is found with the sensory percept evidentials which include the visual evidential ***-ḱuk***, and the auditory evidential ***naʔaat*** (41)b, which is an uninflected predicative particle.

(41) NUU-CHAH-NULTH VP-DOMAIN EVIDENTIALS

a. [[*ḿiλ-aa-****ḱuk*** IP]-*ʔiš* CP]
rain-CONT-PRED.VIS.EVID-C.INDIC.3
'It looks like it's raining'

b. [*ḿiλ-aa-ʔiš* CP] ***naʔaat***
rain-CONT-C.INDIC.3 PRED.AUD.EVID
'It sounds like it's raining'

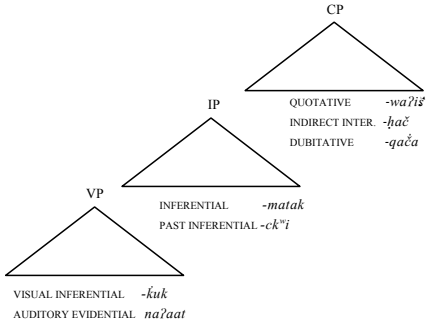
system is not unique to Nuu-chah-nulth; for example, Cheyenne evidentials are part of the clause-typing mode paradigm (Murray, 2010).

(i) … ***ʔin*** *ḱʷaḥsit*
… *ʔin* *inḱʷ-aːḥs-(m)it*
C fire-in.vessel-PAST
'(Because) his lights were on'
(Waldie 2012:41, (68b))

(ii) *huḥtaks* [***ʔin*** *wiksuuk* *ʔunaak* *ʕiniiλ*]
huḥtak-s *ʔin* *wik-suːk* *ʔu-naːk* *ʕiniiλ*
know-1SG C NEG-2SG TRANS-have dog
'I know you don't own a dog'
(Waldie 2012:42, (69))

Nuu-chah-nulth evidentials occupy different syntactic positions, as shown in (42). CP-domain evidentials have the distribution of Functional heads: they are integrated into the clause-typing system, are part of the mood paradigm, and don't co-occur with each other. As for IP-domain evidentials, they have the distribution of adverbs: they co-occur with each other, and they co-occur with CP-domain evidentials. And VP-domain evidentials have the distribution of verbs, and can co-occur with both IP- and CP-domain evidentials.[20]

(42) NUU-CHAH-NULTH SYNTACTIC DOMAINS FOR EVIDENTIALS



4.1.2 Nuu-chah-nulth clause-typing evidential morphology is additive

Careful examination of Nuu-chah-nulth clause-typing evidential morphemes — quotative ***-waʔiš***, the indirect interrogative ***-ḥač***, and dubitative ***-qačča*** — reveals they all involve additive morphology. To see this, consider the paradigms in (43).

(43) ADDITIVE EVIDENTIAL MORPHOLOGY IN AHOUSAHT NUU-CHAH-NULTH
(from Nakayama 2001 and Waldie 2012)

	a.		b.		c.	
	NON-INTERROGATIVE		INTERROGATIVE		SUBORD.	DUBITATIVE
	[−EVID]	[+EVID]	[−EVID]	[+EVID]	[−EVID]	[+EVID]
	-AGR-[C]-AGR	-[**QUOTE**-C]-AGR	-[Q]-AGR	-[Q-**INDR**]-AGR	-[C]-AGR	-[C-**INDR**]-AGR
1SG	*-s-*[*iš*]	-[***waˑ***-*ʔičˇ*]-*ʼas*	-[*ḥ*]-*s*	-[*ḥ*-***aˑčˇ***]-*ʼas*	-[*q*]-*s*	-[*q*-***aˑčˇ***]-*ʼas*
1PL	*-n-*[*iš*]	-[***waˑ***-*ʔičˇ*]-*ʼin*	-[*ḥ*]-*in*	-[*ḥ*-***aˑčˇ***]-*ʼin*	-[*q*]-*in*	-[*q*-***aˑčˇ***]-*ʼina*
2SG	-[*ʔic*]-*k*	-[***waˑ***-*ʔic*]-*k*	-[∅]-*k*	-[*ḥ*-***aˑčˇ***]-*k*	-[∅]-*k*	-[*q*-***aˑčˇ***]-*ʼka*
2PL	-[*ʔic*]-*uːš*	-[***waˑ***-*ʔičˇ*]-*uːš*	-[*ḥ*]-*suː*	-[*ḥ*-***aˑc***]-*suː*	-[*q*]-*suː*	-[*q*-***aˑčˇ***]-*uːwa*
3	-[*ʔiš*]-∅	-[***waˑ***-*ʔiš*]-∅	-[*ḥ*]-∅	-[*ḥ*-***aˑčˇ***]-∅	-[*q*]-∅	-[*q*-***aˑčˇ***]-*a*
	INDICATIVE	QUOTATIVE	INTERR.	INDIRECT INTERR.	SUB.	DUBITATIVE

[20] Nuu-chah-nulth visual and auditory evidentials differ in how they interact with other evidential classes. The visual inferential doesn't co-occur with IP-domain evidentials, and doesn't co-occur with dubitative CP-domain evidential. And the auditory evidential is lexically specified as having an ORIGO$_{SPEAKER}$, and doesn't occur with past inferential IP-domain evidential, or with the indirect interrogative CP-domain evidential. See Waldie (2012) for details.

Remarkably, in Nuu-chah-nulth, each of the clause-typing evidential morphemes is derived by the addition of a morpheme to an already existing mood suffix. Thus, the quotative evidential in (43)a is derived by adding *-wa* 'say' to the indicative suffix ***-ʔiš***, to derive ***-wa-ʔiš***. And the indirect interrogative evidential in (43)b is derived by supplementing the interrogative suffix suffix ***-ḥ*** with ***-a·č*** to form ***-ḥ-a·č***. As for the dubitative evidential in (43)c, it is likewise derived by supplementing the subordinative suffix ***-q*** with ***-a·č***, to form ***q-a·č-***.[21]

The fact that Nuu-chah-nulth clause-typing evidentials are bi-morphemic is not just a fortuitous accident of morphology. Rather, it provides a vital clue to the underlying logic of the clause-typing system. Recall that it is possible to update the ORIGO GROUND independently of the COMMON GROUND. We suggest that the additive morphology found with Nuu-chah-nulth clause-typing evidentials codes exactly this possibility. For example, as shown in (44), while the 'indicative' updates the COMMON GROUND, the 'quotative' from which it is derived updates the ORIGO GROUND. As for the morpheme *-a·č,* which is found with both the indirect interrogative (45) and the dubitative (46), we take it to instantiate a double update, along the lines of Portner (2006). In an interrogative context, it updates both the QUESTION SET and the ORIGO GROUND, (45)b; this captures the fact that the ORIGO is construed as the addressee. And with ordinary clause-typing, it updates the COMMON GROUND and the ORIGO GROUND (46)b. Recall from above that, on independent grounds, a double update of the ORIGO and COMMON GROUND yields an epistemic modal, and this is exactly what happens in Nuu-chah-nulth.

(44) NUU-CHAH-NULTH QUOTATIVE IS DERIVED FROM INDICATIVE

a.	*-ʔiš*	CG ∪ {*p*}	'indicative'
b.	*-wa-ʔiš*	OG ∪ (p^n}	'quotative'

(45) NUU-CHAH-NULTH INDIRECT INTERROGATIVE IS DERIVED FROM INTERROGATIVE

a.	*-ḥ*	QS ∪ {*q*}	'interrogative'
b.	*-ḥ-a·č*	QS ∪ {*q*} + OG ∪ (p^n}	'indirect interrogative'

(46) NUU-CHAH-NULTH DUBITATIVE IS DERIVED FROM SUBORDINATIVE

a.	*-q*		'subordinative'
b.	*-q-a·č-a*	CG ∪ {*p*} + OG ∪ (p^n}	'dubitative'

Thus, close scrutiny of the morphology of Nuu-chah-nulth clause-typing evidentials indicates that evidentiality supplements the basic clause-typing system. We take this to indicate that Nuu-chah-nulth defaults to the COMMON GROUND, and uses clause-typing evidential morphology to signal ORIGO GROUND updates. Just as a careful look at the internal syntax (i.e., morpho-syntax) of Nuu-chah-nulth clause-typing evidentials is rewarding, so too is a careful look at their external syntax (i.e., syntactic distribution). This is what we turn to next.

[21] The surface form of the dubitative evidential is irregular in that it contains a supplementary final vowel; so instead of the expected *-q-a·č-* we get *-q-a·č-**a***. Nevertheless, the basic generalization — that Nuu-chah-nulth clause-typing evidential morphemes are all minimally bi-morphemic — still holds.

4.1.3 Nuu-chah-nulth clause-typing evidentials are restricted to root clauses

One sign that the Nuu-chah-nulth clause-type evidentials update the ORIGO GROUND is the fact that they are restricted to occurring in matrix clauses. In this regard, they contrast with the IP-domain evidentials, which occur in both matrix and embedded clauses. Moreover, it is sometimes claimed that only one evidential marker can be introduced per clause (Nuyts, 2009). Nuu-chah-nulth provides a counter-example to this claim, as its evidentials can stack.[22] Representative examples are given immediately below, which show that quotative ***wa-ʔiš***, a CP-domain evidential, can combine with IP-domain evidentials (47), or VP-domain evidentials (48).

(47) a. [[[*haẇiiqλ*$_{VP}$]-*matak*$_{IP}$]-***waʔiš***$_{CP}$]
hungry -IND.EVID -3.QUOT
'It is said that he must be hungry'
(adapted from Waldie 2012:76 (116a))

b. [[[*haẇiiqλ*$_{VP}$]-*ck*^{w}*i*$_{IP}$]-***waʔiš***$_{CP}$]
hungry -PAST.EVID-3.QUOT
'It is said that he must have been hungry'
(adapted from Waldie 2012:77, (117a))

(48) a. [[[*haẇiiqλ*$_{VP}$]-*ḱuk*$_{IP}$]-***waʔiš***$_{CP}$]
hungry VIS.EVID-3.QUOT
'It is said that he looks hungry'
(adapted from Waldie 2012:80, (124b))

b. [[[*ʔuḥ*$_{VP}$]-*it*$_{IP}$]-*waʔiš*$_{CP}$] *Ken naƛaat* *maλ-piλ*
FOC-PAST-3.QUOT Ken AUD.EVID tied-in.house.MOM
'It is said it was Ken who ended up in jail'
(Waldie 2012:83, (131))

In Nuu-chah-nulth, the possibility of combining evidentials with each other is subject to two constraints. First, evidentials from the mood paradigm (i.e., the CP-domain) don't co-occur. We take this to be not only a paradigmatic constraint, but also a hallmark of evidentials that have a specified origo. (We return to this point in §4.3). Second, specific combinations of evidentials are blocked; for example the visual inferential *ḱuk* (introduced in the VP-domain) doesn't co-occur with other inferentials; we take this to be a semantically conditioned blocking effect. Other than these paradigmatic and semantic constraints, it is generally the case that Nuu-chah-nulth evidentials can combine with each other. As discussed by Waldie (2012), the possibility of combining two evidentials with the same proposition automatically follows if evidentials contribute not-at-issue content. This captures the fact that two evidentials can jointly restrict the same proposition.

The possibility of stacking Nuu-chah-nulth evidentials provides a way of testing Murray's (2010) claim that evidentials divide into two semantic classes according to whether they have "illocutionary force" or "epistemic force". All things being equal, one might expect illocutionary evidentials to be introduced in the CP-domain, and epistemic force evidentials to be introduced in the IP-domain. The Nuu-chah-nulth data shows that

[22] Also see Cornillie (2009) for a challenge to the claim that there is only one evidential per clause.

the syntactic position of an evidential is not reducible to the semantic distinction between illocutionary versus epistemic force. Nuu-chah-nulth has several evidentials with epistemic force, but they are not restricted to the IP-domain. Rather, they occur in two distinct positions: dubitative *-qačča* is a CP-domain evidential (49)a; inferential *-matak* and the past inferential *-cḵʷiʔ* are IP-domain evidentials (49)b-c.

(49) a. [[[*haẇiiqλ*$_{VP}$]$_{IP}$]-***qačča***$_{CP}$] *Ken*
hungry -3.DUBIT Ken
'Ken must be hungry' (adapted from Waldie 2012:68 (96))

b. [[[*haẇiiqλ*$_{VP}$]-***matak***$_{IP}$]-***ʔiš***$_{CP}$] *Ken*
hungry -IND.EVID -3.IND
'Ken must be hungry' (adapted from Waldie 2012:72, (105))

c. [[[*haẇiiqλ*$_{VP}$]-***cḵʷi***$_{IP}$]-***ʔiš***$_{CP}$] *Ken*
hungry -PAST.EVID -3.IND
'Ken must have been hungry' (adapted from Waldie 2012:73, (109))

Not only do IP-domain epistemic evidentials co-occur with CP-domain clause-typing evidentials, all epistemic evidentials all compatible with each other. For example, the CP-domain dubitative *-qačča* can co-occur with the IP-domain inferential *-matak* can co-occur with (50)a, or the past inferential *-cḵʷiʔ* (50)b. And the two IP-domain inferentials can co-occur with each other,(50)c. This is consistent with our claim that evidentials contribute not-at-issue content and so can be iterated within the same proposition. Also observe that, with inferentials, such "evidential doubling" is concordial rather than scopal in nature, indicating that the evidentials themselves are not-at-issue. (We thank a reviewer for drawing our attention to the significance of this fact.)

(50) a. [[[*ʔuḥ*$_{VP}$]-***matak***$_{IP}$]-***qačča***$_{CP}$] *Ken taana*
FOCUS-IND.EVID -3.DUBIT steal-BEN Ken money
'I guess Ken is probably hungry'
(adapted from Waldie 2012:73 (108); 77 (116c))

b. [[[*haẇiiqλ*$_{VP}$]-***cḵʷi***$_{IP}$]-***qačča***$_{CP}$] *Ken*
hungry -PAST.EVID -3.DUBIT Ken
'I guess Ken was probably hungry'
(adapted from Waldie 2012:73 (108); 77 (117c))

c. [[[*waʔič*$_{VP}$]-***cḵʷi-matak***$_{IP}$]-***ʔiš***$_{CP}$] *Ken*
sleep -PAST.EVID-IND.EVID -3.IND
'Ken must have been hungry (Waldie 2012:76, (114))

4.2 Nuu-chah-nulth clause-typing, the ORIGO GOUND, and the COMMON GOUND

Although Nuu-chah-nulth has seven evidential morphemes, only three are part of the clause-typing system, namely reportative ***-wa-ʔiš*** interrogative ***-ḥ-ač***, and dubitative ***-q-ačča***. As discussed above, these three evidentials are all bi-morphemic; in particular, they supplement already existing forms from the mood paradigm. As such, they enter into pair-wise contrasts with the morphemes upon which they are based. We take this to indicate that Nuu-chah-nulth, like English, defaults to the COMMON GROUND, and it is only in the

presence of overt evidential marking that it updates the ORIGO GROUND. This provides some insight into the regular morphological relationships that exists between clause-typing evidential suffixes and their non-evidential counterparts. Thus, while indicative ***-ʔiš***, (51)a, has assertive force and updates the COMMON GROUND, its evidential counterpart, reportative ***-wa-ʔiš***, (51)a, has presentative force and updates the ORIGO GROUND. As for subordinative ***-q***, (52)a, it is a default clause-typing element that only appears in subordinate clauses; its evidential counterpart, dubitative ***-q-ačča***, (52)b, does a double update of the COMMON GROUND and the ORIGO GROUND. And just as interrogative ***-ḥ*** (53)a updates the QUESTION SET, the indirect interrogative ***-ḥ-ač*** does a double update of the QUESTION SET and the ORIGO GROUND. *š*

(51) NUU-CHAH-NULTH INDICATIVE/QUOTATIVE CONTRAST

a. *hiλ-aayiλ-**ʔiš*** — CG ∪ {*p*}
be.there-upstairs-3.IND
'He's upstairs' (W355)

b. *ṁiλ-aa-**wa-ʔiš*** — OG ∪ (p^n)
rain-CONT-say-IND
'It's raining, according to what I've been told' (ORIGO = speaker)

(52) NUU-CHAH-NULTH SUBORDINATIVE/DUBITATIVE CONTRAST

a. *ʔuqɬaap-ʔiš* [$_{CP}$ *ʔuuc-**q***]
think-IND own-C.SUBORD
'He thinks it's his'

b. *ṁiλ-aa-**q-ačča*** — CG ∪ {*p*} + OG ∪ (p^n}
rain-CONT-C-ORIGO.GND
'It must be raining' (ORIGO = speaker)

(53) NUU-CHAH-NULTH INTERROGATIVE/INDIRECT INTERROGATIVE CONTRAST

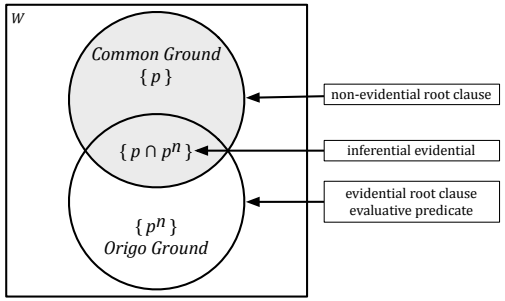
a. *hiλ-aayiλ-**ḥ*** — QS ∪ {*q*}
be.there-upstairs-3.INT
'Is he upstairs?'

b. *ṁiλ-aa-**ḥ-ač*** — QS ∪ {*q*} + OG ∪ (p^n}
rain-CONT-Q-ORIGO.GND
'Is it raining, according to what you've been told?' (ORIGO = hearer)

Consider (54), which shows how how Nuu-chah-nulth clause-typing connects to the COMMON GROUND and the ORIGO GOUND. In Nuu-chah-nulth, non-evidential root clauses provide updates to the COMMON GROUND. In this regard, Nuu-chah-nulthh (non-evidential) root clauses resemble their English declarative counterparts: they both introduce assertions that update the COMMON GROUND. In addition, Nuu-chah-nulth has dedicated clause-typing morphology for ORIGO GROUND updates. Such updates may update the ORIGO GROUND only, as with quotative ***-wa-ʔiš*** which presents a not-at-issue proposition (p^n). But it is also possible for an evidential to update both the COMMON and the ORIGO ground, as with

dubitative ***-q-aǰa***; such double updates are inferential in nature and have the force of epistemic modals.

(54) NUU-CHAH-NULTH CLAUSE TYPES RELATIVE TO COMMON GROUND AND ORIGO GROUND



By hypothesis, Nuu-chah-nulth evidentials introduce not-at-issue propositions (p^n). As discussed above for Quechua the most felicitous way of challenging p^n is to present an alternative *p* with an accompanying source of evidence. The same holds of Nuu-chah-nulth. This is illustrated for quotative ***wa-ʔiš*** in (55), for the inferential evidentials ***-q-aǰa*** (dubitative) and ***-matak*** (indirect evidence) in (56), and for the past evidential ***-čkʷi*** in (57). In each case, the interlocutor challenges the presented *p* by providing an alternative source of (visual) evidence for not-*p*.

(55) Scenario: Ken was out walking with Kay, but he is trying to make it sound like he wasn't.

Ken: *yaacpanačitwaʔiš Kay*
yac-panač-(m)it-wa-ʔiš Kay
walk-randomly-PAST-say-3.IND Kay
'(Reportedly) Kay went for a walk'

Ann: *wikʔiick ɬaaquaḥɬi ʔin ńaacsamitsa suẇa ʔukʷink Kay*
wik-ʔi·ck ɬaqu-(q)ḥɬi[L] *ʔin ńa:csa-(m)it-sa suẇa ʔu-činkʷ*[R] *Kay*
NEG-2SG.IND truth-tell C see-PAST-1SG.ABS 2SG.PRO TRANS-with
'You're not telling the truth, I saw you with Kay'

(56) Scenario: Ken doesn't want anyone to know that he was at home, although he had been there earlier playing with Kay. He pretends to not know whether Kay is at home.

Ken: *waɬyuuqaǰa Kay* OR *waɬyuumatakʔiš Kay*
waɬyu:-qaǰa Kay *waɬyu:-matak-ʔiš Kay*
home-DUB Kay home-IND.EVID-IND Kay
'Kay must be at home' 'Kay must be at home'

Ann: *wikʔiick ɬaaquaḥɬi ʔin ńaacsamitsa suẇa waɬaak*
wik-ʔi·ck ɬaqu-(q)ḥɬi[L] *ʔin ńa:csa-(m)it-sa suẇa waɬ-a·kʷ*
NEG-2SG.IND truth-tell C see-PAST-1SG.ABS 2SG.PRO go-DUR
'You're not telling the truth, I saw you go over there'

(57) Scenario: Ken is supposed to be in his room, but he snuck out and watched from the top of the stairs while Kay was arguing with her younger brother. He pretends to not know what happened during the argument.

Ken: *yaacwaasckʷiʔiš Kay qʷiyuuyii ńiƛaak*
yac-wa:s-čkʷi-ʔiš kay qʷiyu:-(y)ii ńiƛaak
walk-go.out-PAST.EVID-3.IND Kay when-3.INDF fight younger.sibling-KIN-KIN.POSS
'Kay must have walked out when she was arguing with her younger sibling'

Ann: *wikʔiick ɬaaquaḥɬi ʔin ńaacsamitsa suẇa yaaʔaɬ*
wik-ʔi·ck ɬaqu-(q)ḥɬi[L] *ʔin ńa:csa-(m)it-sa suẇa yaʔaɬ*-[L]
NEG-2SG.IND truth-tell C see-PAST-1SG.ABS 2SG.PRO watch-GRAD
'You're not telling the truth, I saw you watching'

4.3 Tracking ORIGO shifts in Nuu-chah-nulth

In the present analysis, evidentials reflect the convergence of two factors: they have an ORIGO index and present a proposition. The data from Nuu-chah-nulth evidentials establishes that, at least in some languages, the ORIGO index not only constrains the anchoring conditions of root clauses, but also regulates the relationship between matrix clauses and embedded clauses. In particular, the Nuu-chah-nulth data shows that ORIGO shifts are syntactically conditioned. On the one hand, clause-typing evidentials are restricted to root clauses and have a specified ORIGO; we take these to be hallmark properties of presentative force. In contrast, non-clause-typing evidentials can be embedded. With the latter, it is possible to detect the activity of the ORIGO argument. To assess the implications of the embedding diagnostic, one needs to take into account the fact that evidentials differ in their ORIGO index. This is summarized in (58). Waldie (2012) shows that while some evidentials specify the speaker as ORIGO (e.g., the dubitative, the quotative, and the auditory evidential), others specify the hearer as ORIGO (the indirect interrogative), and yet others do not specify their ORIGO (the inferentials).

(58) ORIGO ASSIGNMENT AND EVIDENTIALITY IN NUU-CHAH-NULTH (from Waldie 2012)

	MORPHEME	GLOSS	ORIGO	EVIDENTIALITY
CP	*-qaǰa*	dubitative	SPEAKER	contingent.inference(o)(q)(p)
	-waʔiš	quotative	SPEAKER	report(o)(p)
	-ḥa·č	indirect interrogative	ADDRESSEE	report(o)(p)
IP	*-matak*	inference	—	contingent.inference (o)(q)(p)
	-čkʷi	past inference	—	contingent.inference (o)(q)(p)
VP	*-ḱuk*	visual inference	—	contingent.inference (o)(q)(p)∧ grounding$_{VIS}$
	naʔaat	auditory evidence	SPEAKER	grounding$_{AUD}$

(*o* = ORIGO, *p* = *proposition*, *q* = *proposition*, VIS = *visual*, AUD = *auditory*)

If an evidential lacks a lexically specified ORIGO, then we observe syntactically conditioned ORIGO shifts. In Nuu-chah-nulth, this is found with all inferential evidentials,

namely, the general inferential *-matak*, the past inferential *-cḵʷi*, and the visual evidential *-ḱuk*. The logic of the argument is as follows. With evidentials whose ORIGO is not specified, we predict that the value of the ORIGO is conditioned by syntactic environment. In matrix clauses, the default ORIGO is the speaker; in dependent clauses, the default ORIGO is the subject of the matrix clause. We illustrate this with the visual inferential *-cḵʷi.* Consider (59), where Kay (the speaker) presents *p* ('Ken is at home') to Bill on the basis of visual inference. As expected, the ORIGO for the not-at-issue proposition p^n is the speaker (Kay). As before, we use underling to indicate a link between the ORIGO and evidential.

(59) Scenario: Ken had been out of town, and one day Kay was walking by his house and saw his lights on. Later Kay said this to Bill.

[$_{CP}$ *wałyuu-**ḱuk**-ʔiš* Ken]]
be.home-VIS.EVID-3.IND Ken
'It looks like Ken is at home' (Waldie 2012:147 (243b))

p^n	Ken is at home
MANNER OF SUPPORT	visual inference
ORIGO	Kay$_{SPEAKER}$

That the speaker is the default ORIGO is confirmed by the fact that if a syntactic antecedent is available — in the form of the subject of a matrix clause — the ORIGO is the subject rather than the speaker. This is illustrated in (60) and (61), where the presented p^n ('Ken is at home') is embedded under the propositional attitude verbs 'think' and 'say' respectively. Crucially, the ORIGO of p^n is the subject of the matrix clause (Linda). In such contexts, the ORIGO cannot the speaker (Kay).[23]

(60) Scenario: Linda saw lights on at Ken's place after he had been out of town for a few days, and Linda told Kay that it looked like Ken was at home. Later, Kay reported to Bill what Linda had thought.

[$_{CP}$ *ʔuqɬaa-mit-ʔiš* Linda [$_{CP}$ *wałyuu-**ḱuk**-q* Ken]]
think-PAST-3.IND Linda be.home-VIS.EVID-3.SUB Ken
'Linda thought that it looks like Ken as at home' (Waldie 2012:147 (243a))

p^n	Ken is at home
MANNER OF SUPPORT	visual inference
ORIGO	*Kay$_{SPEAKER}$; Linda$_{SUBJECT}$

[23] Embedded evidentials are generally introduced by propositional attitude verbs whose subject is the ORIGO of the presented *p* in the embedded clause, so the evidential holds of the embedded utterance situation. This is not specific to our analysis of evidentials, as some such mechanism must be invoked for the analysis of any embedded indexical, of which the ORIGO is a special case. For related discussion on shifted indexicals, see Anand & Nevins (2004).

(61) Scenario: Kay and Bill knew that Ken had gone to Vancouver, and was not home, but Linda told Kay that it looked like Ken was home when she walked by his house. Kay told Bill what Linda had said.

[$_{CP}$ *wawaa-mit-ʔiš* Linda [$_{CP}$ *ʔin wałyuu-**ḱuk*** Ken]]
say-PAST-3.IND Linda COMP be.home-VIS.EVID Ken
'Linda said that it looks like Ken is home' (Waldie 2012:149 (246))

p^n	Ken is at home
MANNER OF SUPPORT	visual inference
ORIGO	*Kay$_{SPEAKER}$; Linda$_{SUBJECT}$

Crucially, for evidentials that lack a specified ORIGO, whenever they occur in a non-matrix clause, the ORIGO of the presented p^n is never the speaker. This holds not only of complement clauses, but also of adjunct clauses. Consider (62), where the visual inferential occurs in an adjunct reason clause; again the ORIGO of the presented p^n (Linda's daughter knows how to make bread now) is the subject (Linda), and not the speaker (Kay).

(62) Scenario: Linda tried to teach her daughter how to make bread before, but her daughter said it kept failing. Linda hadn't seen her for a while, then went over and saw a bunch of loaves of bread on the counter. Linda told Kay that she was proud that it appeared her daughter knew how to make bread. Kay then reported to Bill how Linda felt.

[$_{CP}$ *nučḥak-ʔiš* Linda [$_{CP}$ *ʔin ʕaćik-**ḱuk**-ʾaƛ-uk ɬaṅa saapn-q-iiɬ*]]
proud-3.IND Linda C know.how-VIS.EVID-now-POSS child bread-STEM-make
''Linda is proud that it appears her daughter knows how to make bread now'
(Waldie 2012:152 (251))

p^n	Linda's daughter knows how to make bread now
MANNER OF SUPPORT	visual inference
ORIGO	*Kay$_{SPEAKER}$; Linda$_{SUBJECT}$

Similarly, if the visual inferential *-**ḱuk*** occurs in a relative clause, as illustrated in (63), we observe that the ORIGO of the presented p^n ('They are broke') is the subject of the matrix clause (Linda) rather than the speaker (Kay).

(63) Scenario: Linda was out on a field trip with a group of students, and some of them were spending much more than they were supposed to bring with them. A couple were not spending anything, so Linda gave them some money. She told Kay about it, and later Kay told Bill about who Linda had given money to.

[CP ʔan-aḥta-mit-ᵖiš Linda taana-q-ayi [CP yaq-**ƙuk**-ii ƛ̓icx̣-ʔakƛi]]
only-do.to-PAST-3.IND Linda money-STEM-give REL-VIS.EVID-3.INDF faded-buttocks
'Linda only gave money to those that appeared broke'

p^n	The students were broke
MANNER OF SUPPORT	visual inference
ORIGO	*Kay$_{SPEAKER}$; Linda$_{SUBJECT}$

In sum, Nuu-chah-nulth, clauses marked with evidentials pattern differently according to whether they occur in matrix or embedded clauses. Three factors govern their distribution: whether they are clause-typing evidentials, whether they are restricted to root clauses, and whether they have a lexically specified ORIGO. Regarding the latter, we observe that the same factors that determine ORIGO resolution with evaluative predicates — which we analyze as lexicalized presentatives — also obtain with grammaticized evidentials. We take this to confirm of our hypothesis that evidentiality is first and foremost a mechanism for updating the ORIGO GROUND.

5. Plains Cree indexical clauses are syntacticized presentatives

The presentative hypothesis predicts that, in some languages, zero-marked clauses will have presentative, rather than assertive, force. We claim Plains Cree is such a language: it has root clauses with presentative force that update the ORIGO GROUND and introduce the direct experience of the ORIGO. Thus, while Nuu-chah-nulth exemplifies "morphologized evidentiality", in that evidential contrasts are marked by overt morphemes, Plains Cree exemplifies "syntacticized evidentiality", where a clause that is otherwise unmarked is construed as having presentative, rather than assertive, force. This is of some interest, both typologically and theoretically, because it challenges the assumption that the default illocutionary force in all languages is assertion. Before delving into the details of Plains Cree clause-typing, and its interaction with evidentiality, it is necessary to introduce some nomenclature relating to the morphology, the syntax, and the context-of-use of Plains Cree clauses. Consider (64). Morphologically, Plains Cree (and indeed all Algonquian languages), distinguishes two clause-types in terms of the pronominal agreement paradigms they introduce; the traditional descriptors for these two verbal paradigms are the *independent mode* and the *conjunct mode*, (64)a. In addition, these two morphological paradigms show a very strict syntactic partition in Plains Cree (Cook, 2008): forms in the independent mode are *indexical clauses* (restricted to root contexts), and forms in the conjunct mode are *anaphoric clauses*, and appear in a wide range of syntactic context. And in terms of context-of-use, as we shall argue, while the default illocutionary force of indexical clauses is presentative force, that of anaphoric clauses is (weakly) assertive (64)c. [24]

[24] Plains Cree discourse-linked indexicals are only found in root clauses; elsewhere they are anaphoric. This has consequences for the deployment of 1st and 2nd person pronominal agreement. English has no (surface contrast) between a discourse-initial indexical mention of a first person: the same form occurs in root clause and embedded clauses; e.g., ***I** said that **I** like beans*. In Plains Cree, the independent mode only ever introduces a truly indexical 1st person; an anaphoric 1st person is introduced by the conjunct mode. (Same thing for 2nd person.) This is the motivation for Cook's (2008) characterization of these clause types as indexical versus anaphora. For discussion and analysis of how the indexical/anaphoric contrast plays out in other areas of the grammar, see Cook (2008) and Déchaine & Wiltschko (2009).

(64) MORPHOLOGY, SYNTAX, AND ILLOCUTIONARY FORCE OF PLAINS CREE ROOT CLAUSES

MORPHOLOGY	SYNTAX	ILLOCUTIONARY FORCE
independent mode	indexical	presentative
conjunct mode	anaphoric	assertive

With this background information in place, we now introduce the evidential morphemes that are attested in Plains Cree (§5.1), examine the special properties of Plains Cree unmarked root clauses (§5.2), and then discuss the broader implications that the presentative force hypothesis has for Plains Cree (§5.3).

5.1 Plains Cree evidentials and their morpho-syntax

Although Plains Cree has a more modest inventory of evidential morphemes than does Nuu-chah-nulth, it exploits the same three syntactic domains, namely the CP-domain, the IP-domain, and the predicative domain. On independent grounds, Blain & Déchaine (2007) establish that Plains Cree quotative *itwê* (65)a and reportative *êsa* (65)b are CP-domain evidentials, while dubitative *êtokwê* (66) is an IP-domain evidential. In addition, Plains Cree has VP-level evidentials (67) that introduce inference on the basis of visual and auditory sensory percepts.[25]

(65) PLAINS CREE CP-DOMAIN EVIDENTIALS

a. *ê-kimowah* ***twêw***
ê-kimiw-ah-k itw-ê-w
C-rain-VII-3(CONJ) thus-VTA-3(INDEP)
'S/he said it's raining'

b. *ôkimâhkan* *ê-kîpikskwâtât* *Jeff-a,* ***êsa***
ôkimâhkan *ê-kî-pikskwâtâ-t* *Jeff-a,* ***êsa***
chief C-PAST-speak-3(VTA CONJ) Jeff-OBV REPORT
'Reportedly the chief spoke to Jeff'

(66) PLAINS CREE IP-DOMAIN EVIDENTIAL

êtokwê	*môy*	*ê-kimowah*	*Vancouver-ih*
êtokwê	môy	ê-kimiw-ah-k	Vancouver-ihk
DUBIT	NEG	C-rain-VII-3(CONJ)	Vancouver-LOC

'Apparently it's not raining in Vancouver.'

(67) PLAINS CREE VP-DOMAIN EVIDENTIALS

a. *s**nâ**kwan* *ê-kimowah*
isi-nâ-kw-an ê-kimiw-ah-k
thus-by.vision-INV-VII(INDEP) C-rain-VII-3(CONJ)
'It looks like it's raining.'

[25] Although Plains Cree ***êsa*** is described as a reportative in the literature, in addition to functioning as a reportative, in some contexts it also functions as an inferential or as a mirative. Relevant to the present analysis is the fact that the construal of ***êsa*** is sensitive to clause-typing, in particular to the contrast between independent and conjunct mode clauses. Space considerations preclude further elaboration of this here; see Cook (2008) for relevant discussion.

b. ***iht***âkwan ê-kimowah
it-ihtâ-kw-an ê-kimow-ah-k
thus-by.hearing-INV-VII(INDEP) C-rain-VII-3(CONJ)
'It sounds likes it's raining.'

5.2 Plains Cree clause-typing and the ORIGO GROUND

In addition to overt evidential marking, Plains Cree also has zero-marked clauses that have presentative force. In other words, Plains Cree codes some evidential contrasts — in particular direct evidence — purely syntactically, via clause-typing. Applying the criteria of form-force pairing leads to the conclusion there are two syntactically and semantically distinct root clauses in Plains Cree. This finding converges with previous morpho-syntactic analyses, which recognize two clause-types, namely the independent mode and the conjunct mode (Cook, 2008; Wolfart, 1973). One clause-type, the independent mode, presents the direct unmediated experience of the ORIGO, and is felicitous only in contexts where the ORIGO GROUND is updated, (68)a. The other clause-type, the conjunct mode, asserts the propositional content of clause that it introduces and so (by default) updates the COMMON GROUND, (68)b. Thus, Plains Cree is a language that distinguishes presentative and assertive force via syntactic clause-typing. In addition, in accordance with the typology of form-force pairings, interrogative clauses are marked by a yes/no question particle *cî*, and have the force of questioning (68)c. Notably, such yes/no questions are formed with the independent mode. We take this to indicate that the speaker is requesting that the hearer present a proposition from their ORIGO GROUND, and that this proposition be based on direct experience. Finally, imperative clauses, with the force of requiring, are marked by a distinct morpho-syntactic paradigm (68)d.

(68) PLAINS CREE CONVENTIONAL FORM-FORCE PAIRING

a. *Clare kîwê-pimohtê-w* — OG ∪ (p^n)
Clare home-walk-3(VAI INDEP)
'Clare walked home'
[speaker has direct unmediated experience (usually visual) of the event]

b. *Clare ê-kîwê-pimohtê-t* — CG ∪ {p}
Clare c-home-walk-3(VAI INDEP)
'… Clare walked home'

c. *Clare cî kîwê-pimohtê-w* — QS ∪ {q} + OG ∪ (p^n)
Clare Q home-walk-3(VAI INDEP)
'Did Clare walk home?'
[hearer is requested to provide direct unmediated experience of the event]

d. *pês-îhk-ok* — TDL(A) ∪ {P}
bring-2PL>3-PL(IMP)
'Bring them!' (W1973:81b)

Plains Cree strictly monitors the ORIGO GROUND, which is the primary locus of a clause-typing partition. In cases where the ORIGO GROUND is disjoint from the COMMON GROUND, a special clause type, the "independent mode", is used. As we shall see, this clause

type has a very restricted use in Plains Cree, and is essentially an utterance-bound indexical clause (Cook, 2008). Relative to its interaction with evidentiality, even in the absence of overt evidential marking, Plains Cree indexical clauses have evidential force as they always present the ORIGO's perspective on the proposition. In Plains Cree, such root clauses are in the independent mode. In contrast, root clauses with assertive force, which update the COMMON GROUND, are in the conjunct mode. Several diagnostics support our claim that the Plains Cree independent mode is a root clause with presentative force and a speaker-ORIGO. We show that Plains Cree "declarative" root clauses contrast according to syntactic clause-type (§5.2.1), and we argue that one clause-type — namely indexical clauses — has presentative force. This is consistent with the fact that Plains Cree indexical clauses are utterance-bound (§5.2.2), are always and only root clauses (§5.2.3), and don't support anaphoric dependencies (§5.2.4).

5.2.1 Plains Cree root clauses come in two flavors: indexical versus anaphoric

Plains Cree has two distinct morphological clause types — called the *independent mode* and the *conjunct mode* in the Algonquianist literature — which are associated with distinct pronominal agreement paradigms. For illustrative purposes, the paradigm for intransitive verbs is given in (69). Observe that while the independent mode has a combination of prefixal and suffixal agreement, the conjunct mode has only suffixal agreement. In addition, the conjunct mode, instead of having prefixal person agreement, has prefixal clause-typing morphology (which may be null, ***ê-***, or ***kâ-***).

(69) PLAINS CREE INTRANSITIVE VERB PARADIGM (cf. (Wolfart, 1973)

	INDEPENDENT MODE (INDEXICAL)			CONJUNCT MODE (ANAPHORIC)		
	AGR-STEM-AGR			C-	-STEM-AGR	
1	***ni***	…	*n*	{∅, ***ê-***, ***kâ-*** }	…	*yân*
1PL	***ni***	…	*nân*	{∅, ***ê-***, ***kâ-*** }	…	*yâhk*
2	***ki***	…	*n*	{∅, ***ê-***, ***kâ-*** }	…	*yan*
21	***ki***	…	*nânaw*	{∅, ***ê-***, ***kâ-*** }	…	*yahk*
2PL	***ki***	…	*nâwâw*	{∅, ***ê-***, ***kâ-*** }	…	*yêk*
3		…	*w*	{∅, ***ê-***, ***kâ-*** }	…	*t*
3PL		…	*wak*	{∅, ***ê-***, ***kâ-*** }	…	*cik*
3OBV		…	*yiwa*	{∅, ***ê-***, ***kâ-*** }	…	*êyit*

The distribution of these two morphological paradigms is conditioned by a combination of syntactic, semantic, and pragmatic factors. While the independent mode is restricted to root clauses, the independent mode is found in both root and embedded clauses (Wolfart, 1996). This means that Plains Cree has two kinds of root clauses. This immediately raises the question of what distinguishes them from each other. On independent grounds, we know that the contrast between indexical clauses (in the independent mode) and anaphoric clauses (in the conjunct mode) reflects a structural difference in the CP-domain (Cook, 2008; Déchaine & Wiltschko, in press). While indexical clauses introduce the indexical 1st and 2nd person agreement in Spec,CP (70), anaphoric clauses introduce a null operator in Spec,CP and clause-typing elements in C, (71).

(70) INDEPENDENT MODE [$_{CP}$ PERSON- ***ni-*** ***ki-*** [C$_{\varnothing}$ VSTEM…] -AGR$_{PERS/NUM}$ -AGR$_{NUM}$]

(71) CONJUNCT MODE [$_{CP}$ OP [C- ***∅*** ***ê-*** ***kâ-*** [$_{VSTEM}$…] -AGR$_{PERS/NUM}$ -AGR$_{NUM}$]

Although both the independent and conjunct mode occur in root-clauses, Cook (2008) shows that they differ with respect to the syntactic contexts that host them: the independent mode corresponds to indexical clauses, while the conjunct mode corresponds to anaphoric clauses. We take the indexical/anaphoric contrast uncovered by Cook (2008) to reflect a general contrast between clauses with presentative versus assertive force. Plains Cree is instructive in this regard, as it distinguishes these two clauses-types via dedicated morphology. Anaphoric clauses, *qua* the conjunct mode, are not indexed to the utterance situation, can be subordinated, and do support anaphoric dependencies. Indexical clauses, *qua* the independent mode, anchor to the utterance situation (§5.2.2), are restricted to root clauses (§5.2.3), and do not support anaphoric dependencies (§5.2.3). Extending Cook's original proposal, we take this cluster of properties to be characteristic of root clauses with presentative force.

5.2.2 Plains Cree indexical clauses anchor to the utterance situation

Indexical clauses anchor to the utterance situation: such clauses are evaluated relative to the utterance time, the utterance location, and the speaker. In the following data sets, the (a) example is an indexical clause in the independent mode, and the (b) example is an anaphoric clause in the conjunct mode. In each example, the target clause is bold-faced.

Consider first the interaction with utterance time. The temporal resolution of root clauses that are not overtly marked for tense differs according to whether they are indexical or anaphoric. As shown in (72), indexical clauses index the utterance time ("now"), while anaphoric clauses may index the utterance time, or a time preceding the utterance time.

(72) a. ***ni-pêhtawâ-w*** *nisîmis* *wayawihtam-ihk* *ê-mêtawêt*
1-hear-3 (VTA INDEP) 1-sibling outside-LOC C-play-3 (VAI CONJ)
= (i) 'I hear my little brother playing outside'
≠ (ii) 'I heard my little brother playing outside'
COMMENT: …like I'm on the phone with you, and he's making noise, and I'm telling you about it (Cook 2008:95, (71a))

b. &***ê-pêhtaw-ak*** *nisîmis* *wayawihtam-ihk* *ê-mêtawêt*
1-hear-1>3 (VTA CONJ) 1-sibling outside-LOC C-play-3 (VAI CONJ)
= (i) 'I hear my little brother playing outside'
= (ii) 'I heard my little brother playing outside'
COMMENT: This one could mean any time; it could mean before, or it could mean I'm hearing him now (Cook 2008:95, (71a))

A similar contrast holds for anchoring to the utterance location. Indexical clauses anchor to the utterance location; as such they compatible with deictic locatives like *êkotê* 'there' (73)a, but not with the indefinite locatives such as *ita* 'where' (73)b. In contrast, anaphoric clauses are compatible with both deictic locatives (74)a, and indefinite locatives,(74)b.

(73) a. ***itohtê-w*** *êkotê*
go-3 (VAI INDEP) there
'S/he went over there' (cf. Cook 2008:75, (33a)

b. **ita* ***itohtê-w***
LOC go-3 (VAI INDEP)
[INTENDED: where s/he went']

(74) a. ***ê-itohtê-t*** *êkotê*
C-go-3 (VAI CONJ) there
'S/he went over there'

b. *ita* ***kâ-itohtê-t***
LOC C-go-3 (VAI CONJ)
'where s/he went'

In addition to anchoring to the utterance time and utterance location, indexical clauses also anchor to the utterance speaker. Because the role of the utterance speaker is grammaticized by 1st person agreement, this gives rises to a number of subtle, but systematic, ORIGO-centered effects. There are three cases to consider: predicates whose lexical semantics require the inclusion of the ORIGO's perspective, those that exclude the ORIGO's perspective, and those that are neutral with respect to the ORIGO's perspective. In each case, there is a contrast in the deployment of indexical versus anaphoric clauses.

Recall that we analyze evaluative predicates — which include predicates of internal state such as *hungry* and *tired* — as lexicalized presentatives that provide an ORIGO GROUND update. Consequently, in the present analysis, in English, the contrast between (75)a and (75)b is a difference between an ORIGO GROUND update and a COMMON GROUND update.

(75) a. *I'm tired.* OG ∪ (p^n)

b. *I'm the first speaker tomorrow.* CG ∪ {p}

For each of (75)a and (75)b, Plains Cree has two distinct forms, according to whether the clause is indexical or anaphoric. For example, the Plains Cree counterparts of (75)a, with has a predicate of internal state such as 'tired', can in principle be either an indexical clause (in the independent mode) or an anaphoric clause (in the conjunct mode). By hypothesis, a predicate of internal state such as *nêstosi-* 'be tired' presents the ORIGO's perspective, and in particular can only be uttered by a conscious participant. As shown in (76), with a clause that is inflected with 1st person agreement, predicates of internal state are felicitous only with indexical clauses. This is consistent with our claim that indexical clauses have presentative force and present the direct experience of the speaker.

(76) a. ***ni-nêstosi-n***
1-tired-SAP(VAI INDEP)
'I'm tired.' (i.e., ME, HERE, NOW)

b. #***ê-nêstosi-yân***
C-tired-1 (VAI INDEP)
≠ 'I'm tired.'
= ' I was tired at that time.'
COMMENT: It's referring to *when* you were tired. It seems like if you were talking about it, and not being tired. ' (Cook 2007, (1))

As for the Plains Cree counterpart to English (75)b, ('I'll be the first speaker tomorrow'), again we observe a sensitivity to clause-typing. An indexical clause (in the independent mode) is felicitous in a context where the speaker is co-present in the situation upon which the proposition being presented is grounded, (77)a. And an anaphoric clause (in the conjunct mode) can be felicitously uttered if the speaker presents a proposition that is grounded on a situation where she was not co-present, (77)b.

(77) a. Scenario: With everyone present, the organizing group meeting decides who is speaking when. Ann agrees to be the first one to speak tomorrow, and says the following.

n-îya,	*nîkân*	***n**-ka-pikswâ-**n***	*wâpahk-i*
1-PRO	first	1-IRR-speak-SAP(VAI INDEP)	be.next.day-C(VII SUBJUNCTIVE)

'I will be speaking first tomorrow'

b. Scenario: There is a meeting of the organizing committee, of which Ann is a member. However, she has to step outside of the meeting to take a phone call, and in her absence they decide on the order of speakers tomorrow. When she returns toe the meeting, she sees a list of speakers on the board with her name on it, realizes that she will be speaking first tomorrow, and says:

n-îya,	*nîkân*	***ê**-wî-pikswa-**yân***	*wapahk-i*
1-PRO	first	1-FUT-speak-1SG(VAI CONI)	be.next.day-C(VII SUBJUNCTIVE)

'I will be speaking first tomorrow'

If indexical clauses present the direct experience of the speaker as ORIGO, then they should be unfelicitous with predicates that exclude the ORIGO's perspective. This is confirmed by looking at the interaction of clause-typing with a predicate such as *wantipskinê-* 'lose consciousness', which requires that the speaker not be conscious. The lexical semantics of such predicates requires that the ORIGO not be the speaker. If indexical clauses anchor to the utterance situation, and in particular, to the utterance speaker, this predicts that indexical clauses will not be felicitous with this class of predicates. As shown in (78), this prediction is confirmed.

(78) a. #***ni-wantipskinê-n***
1- lose.consciousness-SAP(VTI INDEP)

b. ***ê-wantipskinam-ân***
C-lose.consciousness-1(VTI CONI)
'I lost consciousness.' (Cook 2007, (4))

The third case to consider are predicates that are neutral with respect to the value of the ORIGO, for example, *pahksini-* 'fall'. As shown in (79), with 1st person agreement, such predicates are felicitous with either indexical or anaphoric clauses. However, their context-of-use differs. With an indexical clause, as in (79)a, the speaker, as a conscious participant, presents their direct experience. With anaphoric clauses, as in (79)b, the speaker is not a conscious participant, and so makes no claim about direct experience.[26] The context-of-use contrast also shows up in the 3rd person: indexical clauses are felicitous if the speaker is co-present (e.g., as an eyewitness) (80)a, while anaphoric clauses are felicitous if the speaker is not co-present (80)b.

(79) a. <CONTEXT*:* speaker tripped over a chair, and fell to the floor>
ni-pahksini-n
1-fall-SAP (VAI INDEP)
'I fell.'

b. <CONTEXT*:* speaker blacked out and fell, woke up on the floor with a cut>
ê-pahksini-yân
C-fall-1 (VAI CNI)
'I fell.'

(80) a. *miyomâciho-**w*** *Anna*
feel.well-3(VAI INDEP) Anna
'Anna's feeling well.'
COMMENT*:* seems like you're getting that from seeing her and looking at her

b. ***ê**-miyomâciho-**t*** *Anna* .
c-feel.well-3(VAI CONI 3) Anna
'Anna's feeling well.'
COMMENT*: ê-miyomâcihot* is more like you're hearing about it (Cook 2007, (8))

5.2.3 Plains Cree indexical clauses are always and only root clauses

If independent mode clauses are indexical, and if their indexicality requires them to anchor to the utterance situation, this predicts that they will occur only in root clauses. To see why, consider (81). An indexical clause anchors to the utterance context (C) (81)a, while an anaphoric clause is anaphoric relative to another clause (81)b. If a language has dedicated root-clause morphology, as we claim Plains Cree does, then we expect to find a "root-bound" clause-type; that is, a clause-type that is licit only as a root clause.

[26] Blain & Déchaine (2006) discuss such effects in terms of "accessibility to consciousness".

(81) a. C_i [CP_i …]
b. C_i [CP_i … [CP_i …]

Indeed, the independent mode, as an indexical clause, is "root-bound": it can be a root clause (82)a, but not a subordinate clause (82)b. This contrasts with the conjunct mode, which occurs as a root clause (83), or as a subordinate clause (83)b.

(82) INDEXICAL CLAUSE (INDEPENDENT MODE)

a. [CP *kimiwan*] — ROOT CLAUSE
rain.3 (VII INDEP)
'It's raining'

b. **ni-wîhtamawâ-w* [CP ***ni**-cihkêyihtê-**n***] — SUBORDINATE CLAUSE
1-tell-3(VTA INDEP) 1-happy-SAP(VTI INDEP)
[INTENDED: 'I told him/her I'm happy']

(83) ANAPHORIC CLAUSE (CONJUNCT MODE)

a. [CP ***ê**-kimiwah-**k***] — ROOT CLAUSE
C-rain-3 (VII CONJ)
'It's raining'

b. *ni-wîhtamawâ-w* [CP ***ê**-cihkêyihtam-**ân*** }] — SUBORDINATE CLAUSE
1-tell-3(VTA INDEP) C -happy-1 (VTI CONJ)
'I told him/her I'm happy' (Cook 2008:58, (7))

5.2.4 Plains Cree indexical clauses don't support anaphoric dependencies

As indexical clauses, independent mode clauses anchor to a discourse referent in the utterance situation. This predicts that they cannot support anaphora of any sort, and this is confirmed by the interaction of clause-typing with A'-binding and bound variable anaphora. First, as established by Blain (1997), while indexical (independent mode) clauses don't support A'-binding (84)a, anaphoric (conjunct mode) clauses do (84). Second, as established by Cook (2008), while indexical clauses don't support bound variable anaphora (85)a, anaphoric clauses do (85)b.

(84) A'-BINDING

a. **awîna ana ocêmê-**w** John-a*
who DEM.NA kiss-3(VTA INDEP)) John-OBV
[INTENDED: 'Who is it that kissed John']

b. *awîna ana kâ-ocêmâ-**t** John-a*
who DEM.NA C-kiss-3(VTA CONJ)) John-OBV
'Who is it that kissed John' (Blain 1997:68)

(85) BOUND VARIABLE ANAPHORA

a. **niya ni-wâpamâ-w atim* [CP ***ni**-nitonâ-**w***], *mâka môya Jeff*
1.EMPH 1-see-3 (VTA INDEP) dog 1-look.for-3(VTA INDEP) but NEG Jeff
[INTENDED: '**I** saw the dog I was looking for, but Jeff didn't see the dog **he** was looking for] (Cook 2008:79, (41b))

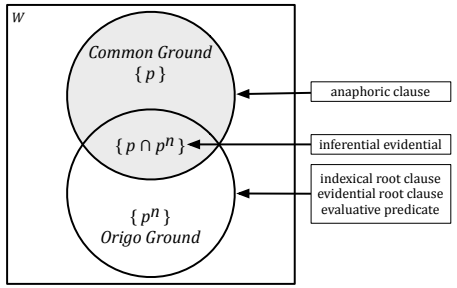
b. *niya ni-wâpamâ-w atim* [CP ***kâ**-nitona-**k***], *mâka môya Jeff*
1.EMPH 1-see-3 (VTA INDEP) dog C-look.for-1>3(VTA CONJ) but NEG Jeff
'I saw the dog **I** was looking for, but Jeff didn't see the dog **he** was looking for' (Cook 2008:79, (41a))

5.2.5 Summary: Plains Cree has syntacticized presentative force

Plains Cree has two morphologically distinct clause-types, the independent mode and the conjunct mode, that differ in their context-of-use. The independent mode is an indexical clause and anchors to the utterance situation. Notably, this anchoring condition holds of Plains Cree indexical clauses (in the independent mode), but not of anaphoric clauses (in the conjunct mode). This accounts for the fact that indexical clauses anchor to the utterance time "now", the utterance location "here", and the utterance ORIGO, "me" *qua* speaker. In claiming that Plains Cree indexical clauses have presentative force, we predict that their ORIGO is necessarily the speaker. This immediately accounts for the distribution of root clauses. Indexical clauses are felicitous only in contexts where the ORIGO's perspective is presented: this holds when the speaker is a conscious participant, or is co-present in the situation. If these conditions are not met, then indexical clauses are not felicitous. Moreover, because they obligatorily anchor to the utterance situation, indexical clauses are root-bound. And because they index the utterance situation, they fail to support anaphoric dependencies such as A'-binding, and bound variable anaphora.

We have shown that indexical clauses, though they lack overt evidential morphology, nevertheless present propositions based on the direct experience of the ORIGO. In other words, they have presentative illocutionary force, and only ever update the ORIGO GROUND. To see how clause-types interact with updates to the ORIGO GROUND and COMMON GROUND in Plains Cree, consider (86). In the present analysis, Plains Cree indexical clauses — whether marked with an overt evidential or not — update the ORIGO GROUND only.

(86) PLAINS CREE CLAUSE TYPES RELATIVE TO COMMON GROUND AND ORIGO GROUND



Our claim that Plains Cree indexical clauses have presentative force has consequences for the analysis of the form-force pairing in that language. If one accepts the idea that evidentials update the ORIGO GROUND by presenting a proposition for consideration, then four clause-types perform this function in Plains Cree: zero-marked indexical clauses present the ORIGO's unmediated experience of the event (87)a; quotative-marked clauses

present indirect evidence that is mediated by another ORIGO (87)b; reportative-marked clauses present indirect evidence that is removed from the direct experience of the ORIGO (87)c; and dubitative-marked clauses present indirect evidence based on inferential reasoning by the ORIGO (87)d. Updates to the COMMON GROUND, are performed with anaphoric clauses that are otherwise unmarked for evidential force, (87)e. The QUESTION SET is updated with interrogative clauses (87)f. As for the TO-DO-LIST, it is updated with imperative clauses, (87)g.

(87) PLAINS CREE FORM-FORCE PAIRING

		OG ∪ (p^n)
a.	*ni-wâpamâw atim* 1-see(VTA INDEP 1>3) dog 'I see a dog' [ORIGO has direct unmediated experience of the event]	DIRECT EVIDENTIAL
b.	***"ê-wî-atoskâtam-ân,"*** ***itwêw*** C-fut-work.for-1SG(VTI CONJ) say.3(INDEP) ' "I'll do that', he said.' (cf. B&D2007:1a)	QUOTATIVE
c.	***ê-wâpamâ-t*** ***êsa*** *atim* C-see(VTA CONJ 3>3') REPORT dog 'Reportedly, s/he saw a dog'	REPORTATIVE
d.	***ê-wâpamâ-t*** ***êtokwê*** *atim* C-see(VTA CONJ 3>3') DUBIT dog 'S/he must have seen a dog'	DUBITATIVE
e.	*ê-wâpamât atim-wa* C-see(VTA CONJ 3>3') dog-OBV '… S/he saw a dog'	CG ∪ {p}
f.	*ki-wâpamâw cî atim* 1-see(VTA INDEP 1>3) Q dog 'Did you see a dog?'	QS ∪ {q}
g.	*pês-îhk-ok* bring-2PL>3-PL(IMP) 'Bring them!' (W1973:81b)	TDL(A) ∪ {P}

5.3 Consequences of the analysis for Plains Cree

The ORIGO GROUND is the primary locus of clause-typing in Plains Cree, and presentation, rather than assertion, is the default illocutionary force in this language. This accords with Plains Cree "rules of affirmation" (Wolfart 2000:148) which require that the speaker either endorse the reliability of the information source or indicate their relation to the information source (§5.3.1). The behaviour of Plains Cree indexical clauses in larger narrative contexts challenges Willett's widely accepted claim that there are evidentials that code the distinction between 1st-hand, 2nd-hand, and 3rd-hand reports (§5.3.2).

5.3.1 Plains Cree rules of affirmation: faultless disagreement is the norm

In the present analysis, Plains Cree indexical clauses, which lack overt evidential marking, have presentative force, but not assertive force. More generally, the significance of the Plains Cree data lies in the existence of a zero-marked evidential that updates the ORIGO GROUND without connecting it to the COMMON GROUND. This confirms Portner's (2006) conjecture that some languages will have a grammaticized clause-type that simply presents a proposition. Pushing this a step further, we suggest that not only does Plains Cree have a grammaticized clause-type with presentative force (in the form of the indexical clauses in the independent mode) but that presentation, rather than assertion, is the default in Plains Cree. On this view, Plains Cree discourse is structured around clauses with presentative force, where the speaker presents her or his experience of *p*. If presentation, rather than assertion, is the default in Plains Cree discourse, then interlocutors are expected to monitor the ORIGO GROUND very carefully. This captures a pervasive feature of Plains Cree discursive style, where interlocutors go to great lengths, not to establish the veracity of what is being said, but rather to establish the *author*-ity of what they are presenting. This accords with Plains Cree "rules of affirmation" (Wolfart 2000:148) which require that the speaker either endorse the reliability of the information source or indicate their relation to the information source. In our view, the systematicity and pervasiveness of these discourse-level strategies reflects the fact that Cree speakers closely monitor ORIGO GROUND updates, and are less concerned with COMMON GROUND updates. This close monitoring of the ORIGO GROUND is reflected, not only by evidential marking, but also by narrative protocols that require speaker to explicitly situate themselves relative to the propositions they present. There are two mains strategies for achieving this:

(i) endorsement of the reliability of the information source;

(ii) commentary on the speaker's relation to the information source.

We consider each of these strategies in turn.

A speaker's endorsement of the information source often takes the form of introductory comments that explicitly frame the reliability of what is about to be presented. For example, in (88)a, where *âtot-* 'give account' commits the speaker to presenting what they believe to be factual information. Likewise, in (88)b, the noun *âcimowin* 'factual account' commits the speaker to presenting factual information.

(88) a. …, *kotak êkwa nik-**âtot**ên*,…
other and FUT-give.account(IND VAI 1)
'…, now I will tell another [factual] story,…' (AA12-1, cited in Wolfart 2000: 147)

b. …, *êwako wiy ôma tâpwê-**âcimowin***,…
RESUMP 3SG this true-factual.account
'…., and this one is a true [factual] story,… (AA12-1, cited in Wolfart 2000: 147)

Another way for a speaker to affirm the reliability of the proposition they are presenting is to draw attention to their relation to the information source. They may invoke what Cook & Muehlbauer call co-presence (ref), either as an eyewitness (89)a or as a participant (89)b. Or they may invoke *realia* (Wolfart 2000) via a landmark (89)c. Or they may invoke their relation with someone who has a connection to the presented proposition

by addressing themselves directly to the interlocutor (89)d, or by establishing their relation with an event participant (89)e.

(89) a. *…,êkota nîst ê-kî-**wîcihiwêyân** ôma kâ-âtotamân kotak.*
there 1.too PAST-be.along(VAI 1 CONJ) this give.account(CNJ VTI 1) other
'**I myself was present** at the time when this second story I am about to tell took place.' (AA12-1, cited in Wolfart 2000, 148)

b. *nikâh-**koskwâpisin**inân wiy âta wiya kîkway êkotê*
surprised.at.sight(IND VAI 1PL) 3SG although 3SG thing there
'we were amazed by what **we saw** there' (AA2000:58, line 5)

c. **little red schoolhouse** *mân êkota kî-cimatêw;*
little red schoolhouse usually there PAST-stand(VAI 3 INDEP)

*kayâs ôma **k-âtotamân**,*
long.ago this give.account(VAI 1 CONJ)
'a **little red school-house** stood there; what **I am telling** about happened long ago,' (AA2000:122, lines 23-24)

d. *êwakw âna, **ki**wâpamâw **êtikwê** mâna,* Lawrence James
RESUMP that.one see(INDE[VTA 2-3) DUBIT usually L.J.
'**You** have **probably** seen that one around, Lawrence James' (AA2000:126, lines 32-33)

e. *« wiya nanâtohk ê-itahkamikisit,*
3SG variously behave.thus(VAI 3 CONJ)

*ahpô êtikwê nik-ôh-**pakamahok** anima masinahikan, » ê-**itêyimak**.*
even DUBIT hit(VTA 3-1 INDEP) that book think.of(VTA 1-3 CONJ)
' "He behaves oddly, he might even **hit me** with the book," **I thought** of him.' (AA2000:124, lines 3-5)

These rules of affirmation dovetail and supplement presentative force. For example, (88)a and (89)b-c-d are in the independent mode, which we have argued is an indexical clause with presentative force. And (89)d and (89)e have overt evidential marking in the form of dubitative *êtikwê* and the quotative *itêyim-* (which presents internal thought). More generally, we take the convergence of discourse-level rules of affirmation with presentative force to reflect a more general constraint on Plains Cree discourse structure: what interlocutors monitor, and what the grammar regulates, is the ORIGO GROUND. The rules of affirmation and illocutionary presentative force are not redundant: the former are legislated by discourse-level grammar, the latter by sentence-level grammar. And this by no means implies that there are no common ground effects in Plains Cree, but simply that the ORIGO GROUND plays a much more prominent in this language.[27]

[27] A reviewer suggests that, if it is the case that Plains Cree speakers attend to evidential commitment rather than to truth commitment, this could perhaps be captured with Murray's (2010) proposal that the evidential commitment (speaker has x-type evidence for *p*) enters the COMMON GROUND directly, without first being proposed. In contrast, assertions of *p* propose *p* and are only entered into the COMMON GROUND once *p* has been

The effects of these "rules of affirmation" also show up in elicitation. In particular, the ways in which a presented proposition can be felicitously challenged reflect a careful — indeed, judicious — monitoring of the ORIGO GROUND. Consider the paradigm in (90), where A presents proposition p^n ('he is a good worker'), and B1-B3 illustrate various strategies for challenging p^n .

(90) A: Scenario: A presents p^n ('he is a good worker') based on hearsay
nipêhtên *ê-nihtâ-atoskwêt*
ni-pêhtê-n *ê-nihtâ–atoskê-t*
1-hear-SAP(VAI INDEP) C-able-work-3(VAI CONJ)
'I heard that he is a good worker'

B1 Scenario: strong challenge
B has knowledge that p^n is not true or has knowledge from a reliable source

a. *kiyâskowin* *êwkwan'ôma*
kiyâsk-iwin êwkwan'ôma
lie-NMLZ DEM
'That's a lie'

b. *môy* *n-tâpwêhtê-n* *êwkwan'ôma*
môy ni-tâpwê-êyihtê-n *êwkwan'ôma*
NEG 1-true.by.mind-LOC(VAI INDEP) DEM
'I don't believe that'

B2 Scenario: faultless disagreement based on 1st-hand knowledge
B presents alternative source of evidence from p^n

a. *mwê* *ntâpwêkiskêyihtên* *êwkwan'ôma*
mwê ni-tâpwê-kisk-êyihtê-n êwkwan'ôma
NEG 1-true-cognize-by.mind-LOC(VAI INDEP) DEM
'I don't' know that for sure,…

mâka *nkî**pêhtê**n* *mwê* *tonih* *ê-nihtâ-atoskêt*
mâka ni-kî-pêhtê-n mwê tonih ê-nihtâ-atoskêt
but 1-PAST-hear-LOC(VAI INDEP) NEG very C-able-work-3(VAI CONJ)
but I heard that he or she isn't a good worker'

accepted by the addressee (possibly implicitly). Such an approach would not require a separate ORIGO GROUND. While this is feasible, we nevertheless maintain that the ORIGO GROUND is distinct from the COMMON GROUND, and this for two reasons. One, something like the ORIGO GROUND is independently needed for evaluative predicates (Malamud & Stephenson, 2011). Two, the fact that Plains Cree has a dedicated clause type with presentative force that only ever updates the ORIGO GROUND would remain mysterious.

b. *mâka nîya, nkî**pêhtê**n*
mâka n-îya, ni-kî-pêhtê-n
but 1-PRO 1-PAST-hear-LOC(VAI INDEP)

*môy tonih ê-nihtâ-atoskêt, **êsa***
môy tonih ê-nihtâ-atoskêt, êsa
NEG very C-able-work-3(VAI CONJ) REPORT
'As for me, I hear that he or she is not a very good'

B3 Scenario: faultless disagreement based on 2nd-hand knowledge, e.g., acquired via hearsay or gossip; B presents alternative source of evidence from p^n

a. *môy nihtâ-atoskêw **êsa***
môy nihtâ-atoskê-w êsa
neg able-work-3(vai indep) REPORT
'Apparently, she/he is not a good worker'

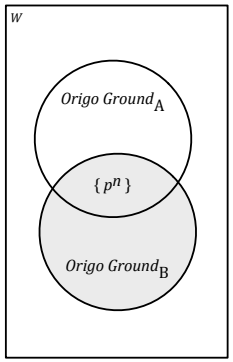
b. *mwê tonih **êsa***
mwê tonih **êsa**
NEG very REPORT
'Apparently not'

In B1, p^n is directly challenged; this is not only a refusal to update the COMMON GROUND with p, it is also a request to remove p^n from A's ORIGO GROUND. B2 and B3 are instances of faultless disagreement, where a source of evidence for not-p^n is presented; in B2 the evidence is 1st-hand; in B3, the evidence is 2nd hand. In both cases, B's ORIGO GROUND is contrasted with A's ORIGO GROUND. As predicted by the presentative hypothesis, these indirect challenges provide ORIGO GROUND updates by presenting not-p^n for consideration. Such faultless disagreement, which is the norm in Plains Cree, results in the ORIGO GROUND of A retaining p^n , and the ORIGO GROUND of B retaining not-p^n .

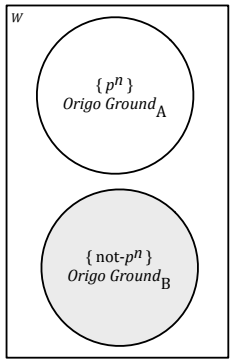
In the present analysis, the difference between disagreement (B1) and faultless disagreement (B2-B3) lies in whether the interlocutor allows their ORIGO GROUND to intersect with the ORIGO GROUND of the speaker. This is illustrated in y. If there is intersection, then disagreement ensues (91)a. If there is not intersection, then faultless disagreement persists y.

(91) PLAINS CREE ORIGO GROUND

a. "mutual mind"



b. "faultless disagreement"



If this is way of modeling (faultless) disagreement is correct, then, strictly speaking, Plains Cree speakers almost always refrain from positing a COMMON GROUND. Rather, whenever the ORIGO GROUNDS of interlocutors intersect, this gives the appearance of a COMMON GROUND. This accounts for the discursive style characteristic of Plains Cree counseling speeches which, as discussed at length by Lightning (1992), seeks to create what he calls *mutual thinking*:

> *It is assumed that there will be an effort to think mutually with the Elder. The assumption is that active attention, humility of the hearer, and respect for the Elder, will put one in the frame of mind where the minds can meet.*
> (Lightning 1992:62)

In terms of the analysis proposed here, mutual thinking corresponds to the intersection of two ORIGO GROUNDS. In such contexts, something approximating a truth-claim arises, but it is always crucially based on shared **experiential** knowledge.[28]

5.3.2 Why Willett is wrong: there are no 3rd-hand reports

One of the most often-cited typologies of evidentials is that of Willett (1988), who claims that reportatives, as indirect evidentials, can distinguish between 1st-hand, 2nd-hand and 3rd-hand reports. While a 1st hand report is transmitted directly to the ORIGO/speaker; a 2nd-hand report is transmitted to the ORIGO/speaker via one intermediary; and a 3rd-hand report is transmitted to the ORIGO/speaker via two intermediaries. However, to our knowledge, and *contra* Willett, no language with a reportative evidential codes this three-

[28] This has implications for rhetorical analysis. While Aristotelian rhetoric is oriented towards ***persuasion***, Plains Cree rhetoric is oriented towards ***mediation***. A Plains Cree speaker does not seek to persuade the audience by inculcating a belief; rather, the goal is to facilitate transmission of knowledge. For an example of how this applies to a Cree counseling speech (*kakêskihkêmowin*) see Cook, Déchaine & Muehlbauer (2006).

way contrast with distinct evidential morphemes. Plains Cree is instructive in this regard, as it does in fact contrast 1st-hand, 2nd-hand, and 3rd-hand reports, but crucially not via distinct evidential morphemes. Rather, as shown by Muehlbauer (2008, 2009, 2012), these contrasts arise from the convergence of three independent mechanisms:

(i) overt evidential marking in the form of quotative *itwê*

(ii) clause-typing in the form in the form of indexical (independent mode) versus anaphoric (conjunct mode) clauses

(iii) referent-typing in the form of PROXIMATE versus OBVIATIVE DPs

The interaction of these three mechanisms creates a "chain-of-transmission". One of the predictable side-effects of these chains-of-transmission is the emergence of 3rd- hand, and even 4th-hand, reports.

To see how the chain-of-transmission is morphologized in Plains Cree, consider the examples in (92), which all involve an utterance situation where the ORIGO/speaker is presenting what a *pawâkan* 'dream spirit ' has said. In (92)a, which presents the speaker's eyewitness (1st-hand) account, the proposition is in the independent mode, and the noun is proximate. If the speaker heard about the proposition from someone who witnessed it, then this 2nd-hand report is presented in the conjunct mode, and the noun is proximate (92)b. If the speaker comes by this knowledge from someone who did not directly witness the event, then this 3rd-hand report is presented in the conjunct mode, and the noun is obviative (92)c. And if the speaker does not recollect who they acquired the information from, then reportative *êsa* is used to establish even further distance from the original source of information, (92)d.

(92) a. Scenario: Speaker presents *p* ('the dream spirit said something')

a. 1ST-HAND: Speaker heard the dream spirit say it
*êkosi itwê-**w*** *ana* *pawâkan*
thus say -3(VAI INDEP) DEM.PROX dream.spirit.PROX
'That's what the dream spirit$_{PROX}$ said' (M2008:340 (58a); volunteered S4)

b. 2ND-HAND: Speaker heard about this from someone who witnessed it
*êkosi **ê**-itwê **-t*** *ana* *pawâkan*
thus C-say-3(VAI CONJ) DEM.PROX dream.spirit.PROX
'That's what the dream spirit$_{PROX}$ said' (M2008: 340 (58b); volunteered S4)

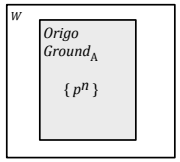
c. 3RD-HAND: Speaker heard about this from someone who did not witness it
*êkosi **ê**-itwê-**yi**-**t*** *anihi* *pawâkan-**a***
thus C-say-OBV-3(VAI CONJ) DEM.OBV dream.spirit-OBV
'That's what the dream spiri$_{OBV}$t said' (M2008:340 (58c); volunteered S4)

d. [Speaker heard about this from someone who did not witness it and speaker does not remember the reporting event]
…iskwêw-a ***ê**-wîhtamaw-**iyi**-t* ***êsa**,* *ê-ahkosi-**yi**-t*
woman-OBV C-tell.VTA-OBV-3>1(CONJ) REPORT C-sick-OBV-3
…apparently, the woman$_{OBV}$ told me that she$_{OBV}$ was sick' (M2009:235 (101); volS2)

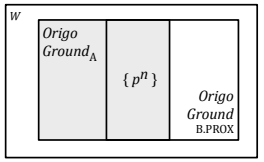
It is instructive to consider how this chain-of-transmission is constructed. Consider the illustrations in (93).

(93) PLAINS CREE CHAIN-OF-TRANSMISSTION VIA ORIGO GROUND

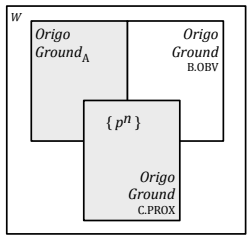
a. 1st-hand: A
A presents p^n (CP: indexical)



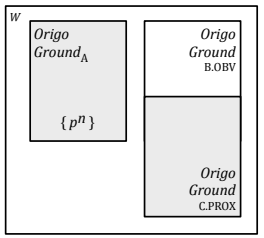
b. 2nd-hand: B.prox → A
A transmits p^n (CP: anaphoric)



c. 3rd-hand: C.obv → B.prox → A
A transmits p^n (CP: anaphoric)



d. anonymous: [C.obv → B.prox] ?→ A
A recalls p^n (CP: anaphoric + report)



As predicted by the presentative hypothesis, 1st-hand reports are indexical clauses (in the independent mode) with presentative force. As such, the presented proposition (p^n) updates the ORIGO GROUND, (93)a. In contrast, 2nd-hand and 3rd-hand reports are mediated transmissions of p^n. Plains Cree strictly monitors the difference between presenting versus transmitting p^n. It does so by manipulating three mechanisms. First, as already discussed, if p^n is directly presented the clause-type is **indexical** (independent mode); this is (93)a. Second, if p^n is transmitted the clause-type is **anaphoric** (conjunct mode), (93)b. Third, Plains Cree further sub-divides a transmitted p^n according to the "degrees of separation" that lie between the original presenter and the ORIGO/speaker. If the mediating presenter (B) directly experienced p^n, then that presenter is coded as **proximate**, (93)b. If the mediating presenter (B) did not directly experience p^n, then that presenter is coded **obviative**, (93)c. Finally, if the ORIGO/speaker does not recall who the mediating presenter was, then reportative *êsa* is added, (93)d.

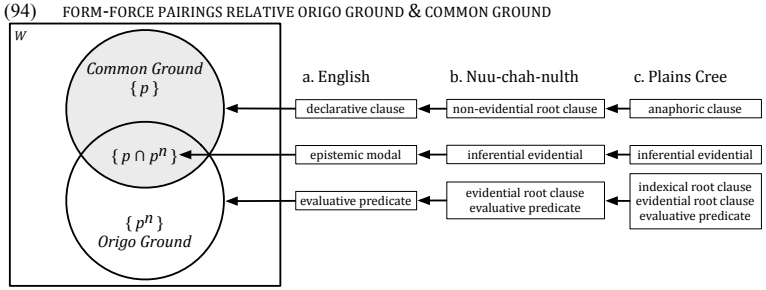
These chain-of-transmission effects confirm two things. First, contra Willett (1988), the distinction between 1st-hand, 2nd-hand, and 3rd-hand reports is not coded by a distinction between evidential morphemes. Rather, at least in Plains Cree, such contrasts are coded by a combination of devices that manipulate perspectival information, including clause-typing, argument-typing, and evidential marking. Second, our claim that Plains Cree

independent mode clauses are indexical root clauses with presentative force, whose ORIGO is the speaker of the utterance situation, is confirmed by the fact that the independent mode is used to present the direct experience of the ORIGO; this is what Willett (1988) calls a 1st-hand report.

6. Conclusion: form, function, and context

We have argued that languages don't really differ in whether they have grammaticized evidential morphemes. Rather, they differ in default illocutionary force and perhaps in whether they have morphemes that specifically mark presentational force. If the arguments put forward here in favor of "presenting" as a distinct illocutionary force are tenable, this has consequences for how we model assertion, belief-states, common ground, and clause-typing. With this in mind, consider (94). We have proposed that all languages have evidentials in the form of evaluative predicates which update the ORIGO GROUND. We illustrated this on the basis of English data. We conjecture that that lexicalized preseentatives are UG property, and that they are likely the basis for other types of presentatives. For Nuu-chah-nulth, which exemplifies morphologized presentatives, we argued that clause-typing evidentials are root-bound and update the ORIGO GROUND. And for Plains Cree, which exemplifies syntacticized presentatives, we argue that clauses in the independent mode, despite having no overt marking for evidentiality, nevertheless behave as if they have presentative force. Although not treated at length, one of the side-effects of this approach is that a double update of the ORIGO and COMMON GROUND accounts for the emergence of epistemic modals and their inferential counterparts in the evidential domain.

(94) FORM-FORCE PAIRINGS RELATIVE ORIGO GROUND & COMMON GROUND



The major claim that we have advanced is that evidentials have presentative force, and, as such, they update the ORIGO GROUND. One consequence of this proposal is that the set of form-force pairings is enlarged, as in (95), such that some clause-types have presentative illocutionary force. In addition to requiring, asking, and asserting, speakers also present.

(95) ASSOCIATION OF CLAUSE-TYPE, DENOTATION, DISCOURSE COMPONENT AND SENTENTIAL FORCE (adapted from Portner 2004:238)

TYPE	DENOTATION	DISCOURSE COMPONENT	FORCE
Presentative	not-at-issue propositions (p^n)	ORIGO GROUND: set of not-at-issue propositions	Presenting$_O$ OG ∪ (p^n)
Declaratives	at-issue propositions (p)	Common Ground: set of at-issue propositions	Asserting CG ∪ {p}
Interrogatives	set of propositions (q)	Question Set: set of sets of propositions	Asking QS ∪ {q}
Imperatives	property P	To-Do List Function: function from individuals to sets of properties	Requiring TDL(A) ∪ {P}

The addition of presentative illocutionary force, together with a special clause-type whose function is to update the ORIGO GROUND enriches the inventory of form-force pairings. Two questions immediately arise in this regard. First, is such enrichment empirically motivated? Second, is such enrichment conceptually necessary?

Regarding the empirical motivation for an ORIGO GROUND, the most compelling evidence comes from Plains Cree, which we have argued has a special clause-type — the independent mode — whose default illocutionary force is presentative. More broadly, we have argued that otherwise puzzling properties relating to Plains Cree discursive practice, "rule of affirmation", fall into place once we recognize that Plains Cree interlocutors closely monitor the ORIGO GROUND, rather than the COMMON GROUND.

Regarding the conceptual motivation for an ORIGO GROUND, we call attention to recent analyses in formal pragmatics which use constructs that walk and talk like the ORIGO GROUND. In particular, Farkas & Bruce (2010) invoke, for each discourse participant, a **DC$_X$** which constitutes X's public discourse commitments. DC$_X$ seems to do the same work as the ORIGO GROUND. However, the two proposals diverge in how they integrate ORIGO GROUND updates. For Farkas & Bruce , propositions are transferred from DCx to the COMMON GROUND. In our analysis, interlocutors maintain their ORIGO GROUND, and make forays into the COMMON GROUND. If we are correct, then in a language such as English, forays into the COMMON GROUND are frequent, but in a language like Plains Cree, they are relatively infrequent. This accounts for the difficulty in making the logic of one system apparent to speakers of another system. Anecdotally, it has been our experience that audiences familiar with Plains Cree oratory and rhetoric take it to be self-evident that presentative illocutionary force is the default in that language, and that faultless disagreement is the norm. But when the same material is presented to audiences more familiar with English-style discursive practice — where assertive illocutionary force is the default, and (dis)agreement is the norm — our claims appear exotic and far-fetched. The rudimentary formal tools that we have deployed — namely **ORIGO GROUND** (as distinct from the COMMON GROUND) and ***presentative illocutionary force*** (as distinct from assertive illocutionary force) — provide a way of investigating discursive styles in a more detailed and explicit fashion. More broadly, this is no different than cross-linguistic analysis of phonological, syntactic, or semantic patterning. In this sense then, this paper can be seen as a contribution to ***cross-linguistic pragmatics***.

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