



Direct evidentiality and discourse in Southern Aymara

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Abstract

This paper discusses the discourse contrasts that arise in connection to direct evidentiality in Southern Aymara (henceforth, Aymara), an understudied Andean language. Aymara has two direct evidentials, the enclitic =*wa* and the covert morpheme - \emptyset , which are used whenever the speaker has the best possible grounds for some proposition. I make the novel observation that a sentence with =*wa* can be felicitously uttered if the speaker attempts to update the common ground by addressing an issue on the table. In fact, the sentence with =*wa* that is uttered must be congruent with prior discourse; I tie this to the claim that =*wa* is a (presentational) focus marker (Proulx in *Language Sciences* 9(1):91–102, 1987). This paper thus claims that =*wa* is a marker that combines evidentiality and focus. In contrast, uttering a sentence with - \emptyset entails that the speaker's contribution is already in the common ground, which likens this evidential to common ground management operators—there is no congruence requirement in this case. I identify which construction can be used in different discourse settings (conversation openers and telling anecdotes). I implement a formal analysis based on Farkas and Bruce (*Journal of Semantics* 27:81–118, 2010) and Faller (*Semantics and Pragmatics* 12(8):1–53, 2019) that links evidentiality and discourse.

Keywords Direct evidentiality · Focus · Common ground management · At-issue · Not-at-issue · Aymara

1 Introduction

This paper discusses the discourse contrasts that arise regarding direct evidentiality in Southern Aymara (henceforth Aymara), an understudied Andean language.¹ Ev-

¹Typologically, Aymara is a suffixal and to some extent agglutinative language whose unmarked word order is SOV. I focus on the dialect of the town of Pomata (province of Chicuito, department of Puno) that is spoken by 13,637 people (Instituto Nacional de Estadística e Informática 2010).

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identicality is a grammatical category that encodes the source of information for a proposition (Willett 1988; Aikhenvald 2004; see also Aikhenvald 2018). Direct evidentiality is generally characterized in terms of having first-hand evidence, e.g., the evidence an individual has for a piece of information comes from direct perception. The focus in this paper is on matrix declarative clauses; the individual with the relevant evidence here is the speaker.

Descriptive work (Hardman 2001; Cerrón-Palomino 2008; Coler 2014) indicates that Aymara has a direct evidential, i.e., the enclitic *=wa*. *=wa* is used when the speaker has first-hand evidence for the proposition that is uttered, as in (1). (1) can be felicitously uttered when the speaker has direct evidence for the scope proposition (namely, that it rained in Puno), e.g., suppose that the speaker saw that it rained in Puno. The scope proposition is labeled *p* in the glosses; the evidence that the speaker has for some proposition is stated separately as the evidential proposition *ep*. The markers of interest are underlined in the examples.²

- (1) Puno-na jallu-i=wa.
 Puno-LOC rain-3S=wa
 p: 'It rained in Puno.'
 ep: 'The speaker has direct evidence for p.'

Interestingly, if the speaker has direct evidence for the scope proposition, she may also utter a sentence without *=wa*, as in (2) (the context here is the same for (1)). The evidential contribution that the speaker has direct evidence is present in both (1) and (2). This contribution is explicitly incorporated in (2) as well. In this paper, I provide evidence that, in cases such as (2), there is a silent evidential, which I label $-\emptyset$.

- (2) Puno-na jallu-i- \emptyset .
 Puno-LOC rain-3S- \emptyset
 p: 'It rained in Puno.'
 ep: 'The speaker has direct evidence for p.'

However, sentences with *=wa*, like (1), and sentences without *=wa* (i.e., with $-\emptyset$), like (2), are not simply interchangeable. This paper argues that they differ with regard to their properties in discourse. I show that a sentence with *=wa* can be felicitously uttered if the speaker attempts to update the common ground by addressing an issue on the table; specifically, uttering a sentence with *=wa* involves two aspects: (i) such a sentence constitutes a response that is congruent with prior discourse (e.g., a question) such that (ii) the proposition that it denotes is not in the common ground. I tie the congruence claim to the proposal that *=wa* is a focus marker (Proulx 1987; Martínez Vera 2018)—I concentrate on presentational focus. To the best of my knowledge, a similar claim has only been made for Cuzco Quechua, and no semantic analysis has been proposed: Faller (2002) notes that evidential markers in this language also play

²Abbreviations: 1 = first person, 2 = second person, 3 = third person, AG = agentive, ACC = accusative, CAUS = causative, DEP = dependent clause, DUR = durative, EMPH = emphasis, GEN = genitive, ID.REF = identity of reference, IMPR = impressive, IND = indirect evidential, INF = infinitive, INT = interrogative, LIM = limitative, LOC = locative, NEG = negation, NMZ = nominalizer, O = object, PST = past, PL = plural, POSS = possessive, PROG = progressive, REFL = reflexive, REP = reportative evidential, S = subject, SG = singular, SUB = subordinator, SUR = surprise, TOP = topic.

a role in focus, but only analyzes the evidential component; Sánchez (2010) proposes a syntactic analysis that attempts to integrate the two functions. As for sentences with $-\emptyset$, these entail that the speaker's contribution is in the common ground already (this property sets these sentences apart from bare assertions in English, as there is no proposal to update the common ground). In addition, there is no congruence requirement here, in contrast to sentences with $=wa$. I identify which construction can be used in different discourse settings (conversation openers and telling anecdotes). I further show that this split has an effect on the expression of disagreement. I capture these properties in a dynamic analysis based on Farkas and Bruce (2010) and Faller (2019) (see also Malamud and Stephenson 2012; Roelofsen and Farkas 2015; Murray 2017; Bhadra 2020; Rett 2021), which further integrates focus (Rooth 1985, 1992) and common ground management (Gutzmann and Castroviejo 2011; Repp 2013; Grzech 2020; Gutzmann et al. 2020). Overall, this paper contributes a novel distinction in the domain of (direct) evidentiality that makes explicit some links between evidentiality and discourse.

The data in this paper are based on two sources of information: previous literature, in particular, Hardman (2001), Cerrón-Palomino (2008) and Gonzalo Segura (2011) (see also Céspedes 2011; Coler 2014; Klose 2015), and original fieldwork with two consultants. The methodology used involved the presentation of contextual scenarios using Spanish as an auxiliary language, which was followed by a request for a felicity judgment on a particular grammatical sentence given that contextual scenario (see Matthewson 2004; Davis et al. 2014; Bochnak and Matthewson 2015 for discussion regarding the soundness and validity of the aforementioned methodological choices).

The paper is organized as follows. Section 2 discusses direct evidentiality in Aymara. Section 3 turns to $=wa$ and focus marking, as well as congruence in question-answer pairs and out-of-the-blue cases. Section 4 concentrates on discourse contrasts in sentences with $=wa$ and $-\emptyset$ with regard to whether the at-issue proposition is in the common ground or not. Section 5 discusses $-\emptyset$ in connection to common ground management. Section 6 discusses the issues of commitment and at-issueness in these constructions. Section 7 proposes a dynamic analysis that captures the properties under consideration. Section 8 extends the proposal to additional cases. Section 9 is the conclusion.

2 Direct evidentiality

This section introduces direct evidentiality in Aymara. According to Cerrón-Palomino (2008), direct evidentiality in this language is to be understood in terms of the speaker having first-hand evidence for some piece of information. Specifically, it is to be understood in terms of the notion of the best possible grounds, which was first used to characterize the Cuzco Quechua direct evidential *-mi* (Faller 2002; see also McCready 2015; Matthewson 2018). In a nutshell, direct evidentiality conveys the meaning that the speaker has “the best possible source of information” relative to the type of information brought in by the proposition under consideration (Faller 2002, p. 123).

The question is what counts as “the best possible source of information.” As is well-known, a major distinction in evidentiality is that of direct and indirect evidence

(see Willett 1988 for seminal work; see Faller 2002, 2012 for critical discussion of evidential hierarchies; see also Matthewson 2018). Direct evidence is usually tied to direct perception. Indirect evidence covers reportative and inferential evidence. Direct evidence is ranked higher than indirect evidence; there is an open debate with regard to whether inferential evidence is ranked higher than reportative evidence (see, e.g., McCreedy 2015; Bhadra 2020). As for an evidential conveying the best possible grounds, what is relevant is to determine what kind of evidence would be best for the proposition under consideration, where the most direct access to the information is best (Faller 2002, p. 18). This means that if the information under consideration is, in principle, observable, then direct (visual) perception would have to be the evidence that the speaker has to use such an evidential. Only in the absence of such a possibility, other sources (i.e., indirect evidence) may count as the best possible grounds. There does not seem to be an a priori reason to rank inferential evidence higher than reportative evidence or vice versa.

As shown in Sect. 1, there are two kinds of sentences that are compatible with the speaker having direct evidence in Aymara, i.e., sentences with the overt marker =*wa* and sentences without it. For the latter, I postulate a silent evidential, represented as - \emptyset —at the end of this section, I provide evidence for this. As for the evidence available to the speaker, consider (3) (which repeats (1)-(2)). (3) involves raining eventualities, which are, in general, observable. The sentences can be felicitously uttered when the speaker's evidence is the result of direct perception (if the speaker had, e.g., reportative evidence, she would use a reportative evidential instead; uttering them in such a case would be infelicitous).

- (3) *Context:* The speaker saw that it rained in Puno.
- a. Puno-na jallu-i=wa.
Puno-LOC rain-3S=wa
p: 'It rained in Puno.'
ep: 'The speaker has the best possible grounds for p.'
 - b. Puno-na jallu-i- \emptyset .
Puno-LOC rain-3S- \emptyset
p: 'It rained in Puno.'
ep: 'The speaker has the best possible grounds for p.'

There are cases, however, in which direct perception is unfeasible. Below I address examples where the best possible grounds are based on indirect evidence. Consider (4)-(6). Based on Mary's report, the speaker can utter the sentences in (4) felicitously (I assume that Mary knows best about her health). Here Mary's report counts as the best possible grounds (see Faller 2002). Note that, cross-linguistically, it is not uncommon to use an indirect evidential to talk about, e.g., internal states, as in Japanese (Kuroda 1965; Hashimoto 2015). Importantly, the notion of best possible grounds can incorporate this kind of evidence, since it is not limited to perception.³

- (4) *Context:* Mary is sick (and one cannot tell by looking at her that she is indeed sick); Mary herself tells the speaker that she is sick.

³According to the descriptive literature of Aymara (Cerrón-Palomino 2008; Gonzalo Segura 2011), there is a silent copula in the examples in (4), which can be interpreted as present or past.

- a. Mariya usuta- \emptyset =wa.
 Mary sick-3S=wa
 p: 'Mary is sick.'
 ep: 'The speaker has the best possible grounds for p.'
- b. Mariya usuta- \emptyset - \emptyset .
 Mary sick-3S- \emptyset
 p: 'Mary is sick.'
 ep: 'The speaker has the best possible grounds for p.'

The cases in (5) involve inferential evidence. As Faller (2002) indicates, the absence of the notebook in the backpack is (strictly speaking) non-observable, but the speaker can safely infer that this is the case. This is the most direct evidence (i.e., the best possible grounds) to support the proposition that the notebook was not in the backpack. A note is in order in (5a): in negative sentences, =wa must attach to negation.⁴ Note further that *jani* is reduced to *jan(i)* in (5b), with \emptyset (vowel elision is represented in parentheses). This will become relevant below.

- (5) *Context*: The speaker looked for a notebook in her backpack and did so thoroughly, but did not find it; there was a pocket with a lock that couldn't be opened, but the notebook didn't seem to be there either (this was checked by touching the pocket from the outside).
- a. Kurirnu-xa jani=wa muchila-na-ka-ka-i-ti.
 notebook-TOP not=wa backpack-LOC-be-NEG-3S-NEG
 p: 'The notebook wasn't in the backpack.'
 ep: 'The speaker has the best possible grounds for p.'
- b. Kurirnu-xa jan(i)- \emptyset muchila-na-ka-ka-i-ti.
 notebook-TOP not- \emptyset backpack-LOC-be-NEG-3S-NEG
 p: 'The notebook wasn't in the backpack.'
 ep: 'The speaker has the best possible grounds for p.'

The best possible grounds also covers encyclopedic information (Faller 2002). Sentences with direct evidentials may be uttered if the evidence for the relevant propositions comes from a source of authority. Consider (6); the source for the relevant proposition could be a teacher or a history book, i.e., an authority on the topic (thus, the source of a report). These sources constitute the best possible grounds here.

- (6) *Context*: The speaker read some information about colonizers from Spain reaching America in an encyclopaedia.
- a. 1492 mara-na Ispaña q'ara jaqi-naka-xa América-xa
 1492 year-LOC Spain foreigner person-PL-TOP America
 purini-pxa-tay-na=wa.
 arrive-PL-PST-3S=wa
 p: 'The Spanish arrived in America in 1492.'
 ep: 'The speaker has the best possible grounds for p.'

⁴See Sect. 3.1 for discussion of some cases where =wa is attached to different constituents in the sentence.

- b. 1492 mara-na Ispaña q'ara jaqi-naka-xa América-xa
 1492 year-LOC Spain foreigner person-PL-TOP America
 purini-pxa-tay-na-∅.
 arrive-PL-PST-3S-∅
 p: 'The Spanish arrived in America in 1492.'
 ep: 'The speaker has the best possible grounds for p.'

While =*wa* is an overt marker, a question arises with regard to postulating an additional covert evidential, -∅ here. Specifically, a question arises as to whether cases without =*wa* are instances of bare assertion. It could be assumed that the speaker must have adequate evidence (see Williamson 2000; Lackey 2007; Benton 2016), i.e., there would be no restriction imposed on the type of evidence available to the speaker. For instance, if the speaker utters *It rained in Puno*, the addressee may assume that the speaker saw the rain, but this is not required, i.e., if the speaker heard a report on the radio, she may well utter such a sentence (i.e., with this kind of evidence, she is in a position of making a bare assertion). Thus, it may well be that the speaker has the best possible grounds when uttering a bare assertion, but this is by no means required.

The Aymara cases without =*wa* do not fall under the characterization of adequate evidence. Thus, for (3), where the proposition points towards an observable eventuality, the speaker must have such kind of evidence. If the evidence she had were reportative, she would utter this sentence with the reportative evidential, i.e., in the absence of the best possible grounds, sentences with =*wa* would not be uttered. If the speaker has the best possible grounds for some proposition, she would utter a sentence with =*wa*. If the evidence she has is weaker, she would use a different evidential (e.g., a reportative), as indicated. This suggests that the counterpart of a sentence with =*wa* (i.e., a sentence without it) would not be a plain assertion. My proposal is that there is a silent evidential in the absence of =*wa* (-∅ here).

Independent evidence can be provided for the presence of a covert evidential (instead of assuming a contrast based on the presence vs. the absence of an element, =*wa* here). Specifically, Aymara is a language with an intricate morphophonology (Cerrón-Palomino 2008). Many suffixes in Aymara trigger the elision of the preceding vowel, such as the first person verbal conjugation suffix *-tha*, as in *mun(a)-tha* 'I want', and the aspect suffix *-su*, whose meaning is translated as 'completely,' as in *llusk'ach(a)-su* 'straighten completely,' among many others (Cerrón-Palomino 2008; Gonzalo Segura 2011; Martínez Vera 2021). The descriptive literature further points out that covert suffixes trigger the same elision process (Cerrón-Palomino 2008; Gonzalo Segura 2011). A prototypical example is the accusative marker, which is a covert morpheme. Its existence has been postulated, because the elision of the preceding vowel in the object is triggered (Gonzalo Segura 2011), as in (7). The elision of such an element does not follow from any other property or rule in the grammar of Aymara.

- (7) Mariya awt(u)-∅ ala-i=wa.
 Mary car-ACC buy-3S=wa
 p: 'Mary bought a car.'
 ep: 'The speaker has the best possible grounds for p.'

Key to discussing $-\emptyset$ is negation, *jani*. Aymara vowels may be elided for different reasons, e.g., the final vowel of a dislocated constituent is elided, elision takes place in argument position when there is a modifier, etc. This is relevant in connection to the verb in this language, since there are potentially many reasons as to why the final vowel of such an element may be elided (see Gonzalo Segura 2011 for discussion of vowel elision in verbs). Importantly, negation is not subject to these processes (i.e., there are no confounding factors). This means that it should surface in full, i.e., as *jani*, unless there is a marker that triggers vowel elision. That *jani* surfaces in full can be seen in the nominalization in (8).

- (8) Rosa-na jani awt(u)- \emptyset ala-ta-pa
 Rose-GEN not car-ACC buy-NMZ-3
 'that Rose didn't buy a car'

Crucially, *jani* is reduced to *jan(i)* in matrix clauses as the one in (5b). This contrasts with (5a); $=wa$ does not trigger elision and *jani* surfaces in full. (5b) suggests that there is a silent marker triggering elision in *jan(i)*. I propose that such an element is the silent evidential $-\emptyset$, i.e., there is a silent evidential in (5b).

In what follows, I use 'direct evidence' or 'the best possible grounds' interchangeably, since the ultimate goal is to account for the discourse-related properties of clauses involving direct evidentiality. What is relevant here is that two constructions in Aymara involve the same kind of direct evidentiality: those with $=wa$ and those with $-\emptyset$.

3 Focus marking, prior discourse and out-of-the-blue cases

This section discusses the cases under consideration in connection to prior discourse (here, a linguistic expression, e.g., a question, that directly precedes the target expression). Section 3.1 concentrates on the claim that $=wa$ is a (presentational) focus marker, which is addressed by discussing question-answer congruence. Section 3.2 turns to the issue of whether the cases under consideration must be congruent with prior discourse.

3.1 $=wa$ and presentational focus

Proulx (1987) suggests that $=wa$ is a focus marker; this claim has been further made in Martínez Vera (2020) and Assmann et al. (2023). This section concentrates on $=wa$ in connection to presentational focus (sometimes also called information focus). I discuss question-answer pairs and show that sentences with $=wa$ must be congruent with prior discourse. If the whole clause introduces the relevant information, $=wa$ appears in sentence-final position (Aymara is a head-final language); if a different constituent provides the relevant information, $=wa$ follows that constituent (see Sect. 3.2 for discussion of similar cases with $-\emptyset$).⁵

⁵See Martínez Vera (2018) for discussion of $=wa$ in cases with superlatives. In that work, the evidential contribution of this element is not discussed. See Martínez Vera (2020) for initial discussion of cases with $=wa$ involving contrast.

The first case I discuss involves a general *What happened?* question, as in (9). This exchange is congruent in that the answer provides a resolution for the issue raised by the question (Hamblin 1973; Karttunen 1977; Groenendijk and Stokhof 1984; Rooth 1985, 1992; Krifka 1992; Ginzburg 1996; Roberts 1996). My consultants indicate that this is a regular exchange where the question that is raised is answered (i.e., there is no controversy).⁶

- (9) a. Kuna-sa (masüru) kamacha-i?
 what-INT yesterday happen-3S
 ‘What happened (yesterday)?’
 b. Puno-na jallu-i=wa.
 Puno-LOC rain-3S=wa
 p: It rained in Puno.
 ep: ‘The speaker has the best possible grounds for p.’

The position of =*wa* plays a key role in question-answer congruence. In (9), there is a general question, and =*wa* surfaces in sentence-final position, following the verb. In what follows, I provide examples of subject (10) and object questions (11): =*wa* must follow the constituent that provides the relevant information. If =*wa* appears in a different position, the answer is infelicitous. (10) asks for the subject. The answer in (10b) indicates that Mary bought a car, and, crucially, the relevant information, i.e., Mary, is marked with =*wa*. If this is not the case, the answer is incongruent, as in (10c), where =*wa* follows the object. The same reasoning holds with the object question in (11), where =*wa* must follow the object in the answer in (11b); the answer in (11c), where =*wa* follows the subject, is infelicitous.

- (10) a. Khiti-sa awtu-∅ ala-i?
 who-INT car-ACC buy-3S
 ‘Who bought a car?’
 b. Mariya=wa awtu-∅ ala-i.
 Mary=wa car-ACC buy-3S
 p: ‘Mary bought a car.’
 ep: ‘The speaker has the best possible grounds for p.’
 c. #Mariya awtu-∅=wa ala-i.
 Mary car-ACC=wa buy-3S
 p: ‘Mary bought a car.’
 ep: ‘The speaker has the best possible grounds for p.’
- (11) a. Kuna-∅-sa ala-i Mariya?
 what-ACC-INT buy-3S Mary
 ‘What did Mary buy?’
 b. Mariya awtu-∅=wa ala-i.
 Mary car-ACC=wa buy-3S
 p: ‘Mary bought a car.’
 ep: ‘The speaker has the best possible grounds for p.’

⁶Here I only focus on complete answers. While partial answers are possible as long as they are relevant for the question under discussion, I set them aside.

- c. #Mariya=wa awtu-∅ ala-i.
 Mary=wa car-ACC buy-3S
 p: ‘Mary bought a car.’
 ep: ‘The speaker has the best possible grounds for p.’

The discussion thus suggests that =*wa* plays a fundamental role in providing an appropriate answer in question-answer pairs, following the relevant constituent.⁷ Key here is to further address whether =*wa* appears in cases where only its role in presentational focus is relevant, i.e., the evidential contribution would be absent. I show that, in the absence of direct evidence, =*wa* may not surface (regardless of its role in connection to focus). Consider (12). Here the answer includes the reportative evidential *siwa* in addition to =*wa*. Suppose that somebody is asked to answer the relevant question; this individual lives in the area but has only heard that it rained in Puno. Uttering (12b) is infelicitous. The issue is that the evidence available to the relevant individual is incompatible with =*wa*, even though it would be marking the relevant information.

- (12) a. Kuna-sa (masüru) kamacha-i?
 what-INT yesterday happen-3S
 ‘What happened (yesterday)?’
 b. #Puno-na jallu-i=wa siwa.
 Puno-LOC rain-3S=wa REP
 p: It rained in Puno.
 ep: ‘The speaker has reportative evidence for p.’

Consider (13) for further illustration, where there is a subject question (see (10)). Suppose that somebody is asked to answer the relevant question; this individual heard that Mary bought a car, but has not actually witnessed such an event. Uttering (13b) is infelicitous. As in (12), the issue is that the evidence available to the speaker is incompatible with =*wa*, even though it would be marking the relevant information. Similar considerations apply to the exchange asking for the object in (11).

- (13) a. Khiti-sa awtu-∅ ala-i?
 who-INT car-ACC buy-3S
 ‘Who bought a car?’

⁷A related question is whether =*wa* conveys verum, which has been studied in connection to focus marking (see Grzech 2020; Gutzmann et al. 2020; Goodhue 2022). In general, verum induces a high(er) degree of certainty regarding the truth of the scope proposition; intuitively, verum emphasizes that the scope proposition is true (Höhle 1992). Here I do not settle this issue for =*wa*, setting it aside for future research. I just point out two issues. First, =*wa* appearing following negation in the expression of disagreement, as discussed in connection to example (20) further below, would be a classic verum context. Second, emphasizing that the scope proposition is true seems to be expressed in Aymara by an element that is different from =*wa*, as in (i), which is uttered in a context in which it is emphasized that the hair is truly from Eustaquio himself, contrary to what is perhaps expected. The element that emphasizes such a meaning is the suffix *-sti*.

- (i) ...ñikuta-sti Ustaku kikpa-na-ka-i.
 hairs-EMPH Eustaquio self-LOC-be-3S
 ‘...the hair is really from Eustaquio himself.’

(Gonzalo Segura 2011, p. 249)

- b. #Mariya=wa awtu-∅ ala-i siwa.
 Mary=wa car-ACC buy-3S REP
 p: ‘Mary bought a car.’
 ep: ‘The speaker has reportative evidence for p.’

3.2 Prior discourse and out-of-the blue cases

This section turns to whether the cases under discussion require that there be prior discourse. More generally, this is tied to the discussion as to how the expressions under consideration fit in the exchange in which they are uttered (Roberts 1996)—there are different ways of capturing the previous discourse in the literature, e.g., via a question under discussion (Roberts 1996, 2004, 2012), via an issue on the Table (Farkas and Bruce 2010), etc. It is also possible that there be no issue that has been raised.

Section 3.1 showed that =*wa* is a direct evidential that is also a focus marker. In fact, =*wa* requires the presence of prior discourse, i.e., sentences with =*wa* must follow up on something that was previously raised. Evidence in this regard is provided by the consideration of a case where there is no obvious prior discourse in (14)–(15). Opening a conversation with (15) is infelicitous.

- (14) *Context*: Two strangers share an elevator after entering a building in Puno; it has rained quite heavily in the area; the rain has just recently stopped. One of them likes to make small talk; the other one may not need to do so. In order to break the silence, the individual who likes to make small talk says something about the weather conditions by uttering (15).
- (15) #Puno-na jallu-i=wa.
 Puno-LOC rain-3S=wa
 p: It rained in Puno.
 ep: ‘The speaker has the best possible grounds for p.’

Prior discourse is not required to utter a sentence with -∅, i.e., these can be uttered out of the blue (as long as the information is shared, i.e., that both individuals know what the weather is like in this case; see Sect. 4). Thus, uttering (16) against the context in (14) is possible.

- (16) Puno-na jallu-i-∅.
 Puno-LOC rain-3S-∅
 p: It rained in Puno.
 ep: ‘The speaker has the best possible grounds for p.’

As expected, sentences with -∅ may be uttered in the presence of prior discourse (as long as the information is shared, as indicated above). Thus, the exchange in (17), where an answer includes -∅, is possible (here the inquirer would ask the question even though she knows the answer, e.g., she needs the answerer to state the information out loud; see Sect. 4).

- (17) a. Kuna-sa (masüru) kamacha-i?
 what-INT yesterday happen-3S
 ‘What happened (yesterday)?’

- b. Puno-na jallu-i-∅.
 Puno-LOC rain-3S-∅
 p: It rained in Puno.
 ep: ‘The speaker has the best possible grounds for p.’

To sum up, sentences with =*wa* require prior discourse (in particular, sentences with =*wa* must be congruent with prior discourse); this is not the case for sentences with -∅. In addition to question-answer exchanges, evidence from conversation openers was provided.

4 Status with regard to the common ground

This section turns to the role that sentences with =*wa* and -∅ play with regard to an extant issue and the common ground. In a nutshell, uttering a sentence with =*wa* is felicitous in a setting where the speaker makes a proposal to update the common ground by addressing an issue on the table (see Faller 2019). In contrast, uttering a sentence with -∅ conveys that what is communicated is already entailed by the common ground (see Grzech 2020).⁸ Below I discuss different scenarios that shed light on this; I also discuss the expression of disagreement towards sentences with =*wa* and -∅.

The general setup consists of two individuals: a father and his child.⁹ The first case to be considered appears in (18). Here only the father has the relevant evidence for stating the relevant proposition. Uttering (18a), with =*wa*, is felicitous, whereas uttering (18b), with -∅, is not. The key here is that the father is providing the information to the child for the first time—the relevant proposition is thus not in the common ground.¹⁰

- (18) *Context:* A father is telling his child about the time when he rescued a girl from Lake Titicaca; nobody else in addition to the father and the girl were in the area. The father is telling the child the story before the latter goes to bed (the child asked for a bedtime story). The father utters the options below.

- a. Quta-na mä imilla axskat-kai-ri uñja-sina uma-tha
 lake-LOC one girl drown-DUR-AG see-SUB water-ABL
 waysu-ri-:-tha=*wa*.
 take.out-AG-be-1S=*wa*
 p: ‘Seeing a girl drowning in the lake, I rescued her (lit. I took her out of the water).’
 ep: ‘The speaker has the best possible grounds for p.’

⁸In Sect. 7, I discuss what is precisely meant by the notion of common ground. Informally, the common ground is formed by the propositions that are taken by the participants in the relevant conversation to be true (see Stalnaker 1978).

⁹See Sect. 8 for discussion of multiparty scenarios.

¹⁰An anonymous reviewer suggests that the nominalization in (18)–(19) (i.e., the part translated as ‘seeing a girl drowning in the lake’) could constitute a kind of dynamic update that raises an implicit question such as *What happened to the drowning girl?*. I set this issue aside for simplicity. What suffices here is that the child asked their father for a bedtime story, as indicated in the contexts.

- b. #Quta-na mä imilla axskat-kai-ri uñja-sina uma-tha
 lake-LOC one girl drown-DUR-AG see-SUB water-ABL
 waysu-ri-:-tha-∅.
 take.out-AG-be-1S-∅
 p: ‘Seeing a girl drowning in the lake, I rescued her (lit. I took her out of the water).’
 ep: ‘The speaker has the best possible grounds for p.’

Below appears another context, where both the child and the father share the story, i.e., it is shared information. Here the sentence with $\text{-}\emptyset$ is felicitous (19b); the sentence with $=wa$ is no longer felicitous (19a). This suggests that sentences with $\text{-}\emptyset$ are uttered when the relevant proposition is entailed by the common ground.

- (19) *Context:* A father is telling his child about the time when he rescued a girl from Lake Titicaca; nobody else in addition to the father and the girl were in the area. The father is telling the child the story before the latter goes to bed (the child asked for a bedtime story). This is the first time the child asks their father to repeat the story (the night before, the father told them the story for the first time). The father utters the options below.
- a. #Quta-na mä imilla axskat-kai-ri uñja-sina uma-tha
 lake-LOC one girl drown-DUR-AG see-SUB water-ABL
 waysu-ri-:-tha= wa .
 take.out-AG-be-1S= wa
 p: ‘Seeing a girl drowning in the lake, I rescued her (lit. I took her out of the water).’
 ep: ‘The speaker has the best possible grounds for p.’
- b. Quta-na mä imilla axskat-kai-ri uñja-sina uma-tha
 lake-LOC one girl drown-DUR-AG see-SUB water-ABL
 waysu-ri-:-tha-∅.
 take.out-AG-be-1S-∅
 p: ‘Seeing a girl drowning in the lake, I rescued her (lit. I took her out of the water).’
 ep: ‘The speaker has the best possible grounds for p.’

It is worth pointing out that the felicitous (18a) and (19b) would be infelicitous in the absence of direct evidence, i.e., the evidential meaning of the markers under discussion must also be present. In the absence of direct evidence, the father would use a different evidential, e.g., if the evidence was reportative, the father would use the reportative *siwa*.

Before ending this section, let me provide further evidence regarding the statement that sentences with $\text{-}\emptyset$, but not with $=wa$, contribute information that is already in the common ground. Here I focus on the expression of disagreement towards sentences with $=wa$ and $\text{-}\emptyset$ (Faller 2002; Murray 2017). Consider the exchanges in (20)–(21). The expression of disagreement must be indicated with $=wa$. My consultants indicate that this is the case, since the individual who disagrees would be directly addressing the issue under discussion. This means that sentences with $=wa$ can follow up on an

issue raised by a previous statement (20b), i.e., that it rained in Puno (see Sect. 3 for discussion of question-answer congruence).

- (20) a. Puno-na jallu-i=wa.
 Puno-LOC rain-3S=wa
 p: 'It rained in Puno.'
 ep: 'The speaker has the best possible grounds for p.'
- b. Ukatha Puno-na jani=wa jallu-ka-i-ti.
 but Puno-LOC not=wa rain-NEG-3S-NEG
 p: 'But it didn't rain in Puno.'
 ep: 'The speaker has the best possible grounds for p.'

While disagreeing with a statement including =*wa* is possible, disagreeing with a statement with $-\emptyset$ is degraded (21) (degradation is represented as ??). This is a novel contrast in the cross-linguistic picture of direct evidentiality. My consultants mention that it may actually be possible to challenge the scope proposition in the case with $-\emptyset$, but it is not natural. It would have to be done in a more roundabout way (e.g., more indirectly). They further point out that the relevant individual (e.g., the utterer of (21b)) would have to be very skeptical of what was said. The oddity of disagreeing with a statement marked with $-\emptyset$, I suggest, is tied to the fact that these cases communicate something that is already entailed by the common ground, which makes it odd to question such a contribution in general.

- (21) a. Puno-na jallu-i- \emptyset .
 Puno-LOC rain-3S- \emptyset
 p: 'It rained in Puno.'
 ep: 'The speaker has the best possible grounds for p.'
- b. ??Ukatha Puno-na jani=wa jallu-ka-i-ti.
 but Puno-LOC not=wa rain-NEG-3S-NEG
 p: 'But it didn't rain in Puno.'
 ep: 'The speaker has the best possible grounds for p.'

The discussion in this and the previous section has thus shown that the speaker felicitously utters a sentence with =*wa* when she addresses a previously raised issue (uttering sentences with =*wa* out of the blue is infelicitous); this is tied to =*wa*'s status as an evidential with a presentational focus role—the relevant proposition is not in the common ground either in this case. In contrast, the speaker utters a sentence with $-\emptyset$ when she communicates something that is in the common ground already. Prior discourse is not required (as long as the information is in the common ground); in addition, disagreeing with the relevant proposition is degraded.^{11,12}

¹¹Note that this behavior separates expressions with $-\emptyset$ from bare assertions in that the latter do not imply that what is uttered is entailed by the common ground. I would like to thank an anonymous reviewer for pointing this out to me.

¹²An anonymous reviewer correctly points out that sentences with =*wa* and $-\emptyset$ do not exhaust the possible space of utterances involving direct evidence. They point to cases where something unexpected happens to an individual (the example they give is the following: "suppose I win an award at work. This is a total surprise. No one in my family was expecting me to win an award, no one even knew there was an award to win. But I won it, and I have direct evidence of this. I go home and tell my spouse: 'I won an award at

5 Common ground management

Sections 3-4 have identified some key differences in sentences with $=wa$ and $-\emptyset$: $=wa$ is an evidential with a presentational focus role such that the proposition in its scope is not in the common ground (a proposal to update the common ground is made), whereas $-\emptyset$ is an evidential that indicates that the scope proposition is already in the common ground (no prior discourse is required in this case). This section builds on this discussion and links it to common ground management (Gutzmann and Castro-viejo 2011; Zimmermann 2011; Repp 2013; Grosz 2020; Grzech 2020; Gutzmann et al. 2020), in particular, in connection to $-\emptyset$. Repp (2013, p. 231) characterizes common ground management markers as “operators, which indicate the status of a proposition relative to the common ground.” This section likens $-\emptyset$ to these operators.

An extensively studied element in this regard is the German particle *ja* (see Schneider 2018 for an overview; see Zimmermann 2011 for discussion that includes cross-linguistic issues). While a detailed comparison of $-\emptyset$ and *ja* lies beyond the scope of this paper, the discussion of the latter sheds light on the nature of the former. Consider the German example in (22), which is uttered in a context in which the speaker and the hearer know that Thatcher was not yet prime minister in 1978. In connection to these cases, Repp (2013) argues that *ja* conveys a retrieve function by which the speaker instructs the addressee to retrieve some proposition from the common ground (here, the proposition that Thatcher was prime minister in 1978). She captures this property by means of a discourse condition stating that the common ground entails that proposition (additional conditions may also be involved). This is what I adopt for $-\emptyset$.^{13,14}

work!’’). These cases certainly exist in Aymara, but they do not involve $=wa$ or $-\emptyset$. They include the suffix *-tay*, which is glossed as a remote past marker that conveys indirect evidentiality. This marker is compatible with direct evidence in cases involving unexpectedness. For example, in (i), the speaker expresses surprise towards Mary’s being present in a place where she did not expect her to be. (i) can be used very close to Mary’s arrival or can be used later to communicate what happened to somebody else. These examples are not investigated in this paper. See Klose (2014) and Martínez Vera (2020) for an analysis.

- (i) Aka-na-ka-ska-tay-na Mariya-xa-y!
 this-LOC-be-DUR-IND.PST-3S Mary-TOP-SURP
 ‘Mary is here!’.

¹³See Grosz (2020) for recent discussion regarding this property of *ja* (see also Kaufmann and Kaufmann 2012). Grosz captures the fact that the proposition is uncontroversial by stating that *ja* indicates that the negation of the proposition is not under consideration, i.e., the proposition that Thatcher was not prime minister in 1978 is not under consideration in (22).

¹⁴As Schneider (2018) indicates, the use in the main text is the classical one for *ja*, but it is by no means the only one. For illustration, I mention two uses where *ja*’s distribution differs from that of the markers discussed here (more research is needed in this regard). For instance, *ja* may be used in cases where the hearer has no prior knowledge about what the speaker states. (i) may be used in a context where the hearer has no idea whatsoever about the speaker’s private life.

- (i) Ich hab ja eine Katze und die war gestern krank, also musste ich mich um sie kümmern.
 I have ja a cat and she was yesterday sick so had.to I me about her take.care
 Darum konnte ich nicht kommen.
 thus could I not come
 ‘I have [JA] a cat and it was sick yesterday, so I had to take care of her. That’s why I couldn’t come.’
 (Schneider 2018, p. 5)

- (22) Im Juli 1978 war Thatcher ja noch nicht Premierministerin.
 in.the July 1978 was Thatcher ja still not prime.minister.
 ‘In July 1978, Thatcher [JA] wasn’t prime minister yet.’ (Grosz 2020, p. 2)

The common ground management literature further discusses how a familiar proposition eases its way into the common ground. For instance, Grzech (2020, p. 94) argues that the marker =*tá* in Upper Napo Kichwa is a common ground management operator that is used to communicate familiar or shared information, so that it is to be adopted without (further) questioning or challenging. Consider the question-answer exchange in (23). The answer provides information that should be conceived as shared; this is =*tá*’s contribution. Importantly, shared information should not be challenged or disagreed with. Here I adopt this view for $-\emptyset$ in Aymara. While $-\emptyset$ encodes something stronger (that the scope proposition is entailed by the common ground), there is a link in that shared information is not to be questioned or disagreed with. I tie this here to the fact that the scope proposition is entailed by the common ground in the presence of $-\emptyset$ (see Sect. 4).

- (23) a. Apa-chi-k=llara pamba-na?
 bring-CAUS-AG.NMZ=ID.REF bury-INF
 ‘[So] the midwife herself has to bury [the placenta]?’
 b. Apa-chi-k=llara pamba-na=tá
 bring-CAUS-AG.NMZ=ID.REF bury-INF=tá
 ‘Yes, the midwife DOES have to bury [it] herself.’ (Grzech 2020, p. 94)

This section has likened Aymara $-\emptyset$ to common ground management operators. I have indicated that $-\emptyset$ plays a role as to how the scope proposition is integrated into an exchange. I suggest that its presence indicates that the scope proposition is entailed by the common ground. In a similar vein, I have tied this property to the fact that expressing disagreement towards the scope proposition in cases with $-\emptyset$ is degraded.

In Aymara, these cases would be uttered with =*wa* (recall that cases with =*wa* need not be controversial; see Sect. 3.1). A sentence with $-\emptyset$ would not be used here, as discussed in Sect. 4.

The particle *ja* is further used to indicate surprise, regardless of whether the information communicated is new to the hearer. This is illustrated in (ii): the speaker expresses surprise with regard to something that is clearly known to the hearer.

- (ii) Oh, du hast ja ein neues Kleid!
 oh you have ja a new dress
 ‘Oh, you’ve got [JA] a new dress!’ (Schneider 2018, p. 5)

In Aymara, the expression of surprise is captured by the suffix -*y* (surprise is not conveyed by =*wa* or $-\emptyset$). (iii) repeats the example in footnote 12, where the speaker expresses surprise towards Mary’s being present in a place where she did not expect her to be.

- (iii) Aka-na-ka-ska-tay-na Mariya-xa-y!
 this-LOC-be-DUR-IND.PST-3S Mary-TOP-SURP
 ‘Mary is here!’

6 Discourse commitments and at-issueness

The literature about evidentials has discussed the properties that characterize evidentials as a linguistic category, and distinguish different kinds of evidentials cross-linguistically. For instance, the properties of commitment, assent and dissent, and embedding, as well as interaction with questions, have been addressed.¹⁵ This section discusses discourse commitments and at-issueness for Aymara direct evidentials, which play an important role in the analysis in the following section. For expressions with either Aymara evidential, the speaker is committed to the scope and evidential proposition. In addition, the scope proposition is at-issue, whereas the evidential proposition is not at-issue.

The discourse commitments of the participants in an exchange indicate what they regard as true in the exchange (see, e.g., Gunlogson 2001, 2008; Farkas and Bruce 2010). My focus is mainly on public commitments. As for the scope proposition, they are tested with a follow-up in which the participant questions the truth of the scope proposition; as for the evidential proposition, the follow-up indicates that the participant does not have the relevant evidence. Cross-linguistically, the literature shows that there is commitment to both the scope proposition and the evidential proposition with direct evidentials (see Murray 2017).¹⁶ This is also the case in Aymara: in clauses with direct evidentials, the speaker is committed to the scope and evidential propositions, as shown in (24)–(25). The follow-ups questioning the truth of the scope proposition and the evidence (direct visual perception) are infelicitous (the English translations are also infelicitous).¹⁷

- (24) a. Puno-na jallu-i=wa, #ukatha-xa jani-jama=wa uka-xa
 Puno-LOC rain-3S=wa but-TOP not-COMP=wa that-TOP
 chiqa-:-ka-i-ti.
 true-be-3S-NEG
 ‘It rained in Puno, but it doesn’t seem true.’
 ep: ‘The speaker has the best possible grounds for (stating that) it rained in Puno.’
- b. Puno-na jallu-i=wa, #ukatha jani=wa uka-∅ uñja-ka-tha-ti.
 Puno-LOC rain-3S=wa but not=wa that-ACC see-NEG-1S-NEG
 ‘It rained in Puno, but I didn’t see that.’
 ep: ‘The speaker has the best possible grounds for (stating that) it rained in Puno.’

¹⁵I do not discuss embedding, because Aymara evidentials cannot appear in it (Coler 2014). Aymara makes extensive use of nominalizations in this regard, as in example (8).

¹⁶With other evidentials, there is variation with regard to the commitment to the scope proposition—in all cases, there is commitment to the evidential proposition. Thus, in the presence of inferential evidentials, there is commitment to at least the possibility of the scope proposition. In the presence of reportative evidentials, there may or may not be commitment to the (possibility of the) scope proposition. Different ways of testing discourse commitments have been developed to target the different issues that may arise; see Faller (2002, 2007), Matthewson et al. (2007), Murray (2017).

¹⁷Similar considerations apply in scenarios where the best possible grounds involve other kinds of evidence.

- (25) a. Puno-na jallu-i-∅, #ukatha-xa jani-jama=wa uka-xa
 Puno-LOC rain-3S-∅ but-TOP not-COMP=wa that-TOP
 chiqa-:-ka-i-ti.
 true-be-3S-NEG
 ‘It rained in Puno, but it doesn’t seem true.’
- b. Puno-na jallu-i-∅, #ukatha jani=wa uka-∅ uñja-ka-tha-ti.
 Puno-LOC rain-3S-∅ but not=wa that-ACC see-NEG-1S-NEG
 ‘It rained in Puno, but I didn’t see that.’
 ep: ‘The speaker has the best possible grounds for (stating that) it rained in Puno.’

Turning to at-issueness, the key question here is whether the scope and evidential proposition are at-issue. While the former is at-issue, the latter may not be (see Murray 2017). This is tested in connection to the question under discussion (Roberts 1996; Tonhauser 2012), i.e., the notion of at-issueness adopted is tied to what content can contribute to answering the question under discussion. If a proposition can address it, then it is at-issue (see Koev 2018; Korotkova 2020 for discussion of different notions of at-issueness).¹⁸ For the scope proposition, a *What happened?* question is used to test this property; for the evidential proposition, a question about having the relevant evidence is asked (Korotkova 2020). These tests suggest that, in the Aymara cases, the scope proposition, but not the evidential proposition, is at-issue (see Sect. 3). The relevant contrasts are shown in (26)-(27). By (not) addressing the question under discussion, (26) shows that the scope proposition is at-issue, whereas (27) shows that the evidential proposition is not at-issue.

- (26) a. Kuna-sa (masüru) kamacha-i?
 what-INT yesterday happen-3S
 ‘What happened (yesterday)?’
- b. Puno-na jallu-i=wa.
 Puno-LOC rain-3S=wa
 p: ‘It rained in Puno.’
 ep: ‘The speaker has the best possible grounds for p.’
- c. Puno-na jallu-i-∅.
 Puno-LOC rain-3S-∅
 p: ‘It rained in Puno.’
 ep: ‘The speaker has the best possible grounds for p.’
- (27) a. Kunja-tha-sa (uka-∅) yati-ta?
 how-ABL-INT that-ACC have.evidence-2S
 ‘What is your evidence (for that)?’
- b. #Puno-na jallu-i=wa.
 Puno-LOC rain-3S=wa
 p: ‘It rained in Puno.’
 ep: ‘The speaker has the best possible grounds for p.’

¹⁸I would like to thank an anonymous reviewer for suggesting that I incorporate the discussion below.

Table 1 Sentences with direct evidentials (the best possible grounds) in Aymara

	With =wa (evidential + focus marker)	With -Ø (evidential + CG operator)
<i>Must there be congruence with prior discourse?</i>	Yes	No
<i>Is the scope proposition entailed by the common ground?</i>	No	Yes
<i>Is the speaker committed to the scope proposition?</i>	Yes	Yes
<i>Is the speaker committed to the evidential proposition?</i>	Yes	Yes
<i>Is the scope proposition at-issue?</i>	Yes	Yes
<i>Is the evidential proposition at-issue?</i>	No	No

- c. #Puno-na jallu-i-Ø.
 Puno-LOC rain-3S-Ø
 p: 'It rained in Puno.'
 ep: 'The speaker has the best possible grounds for p.'

This section has thus shown that, in the cases under discussion, the speaker is committed to the scope and the evidential propositions, and that the scope proposition is at-issue, while the evidential proposition is not.

7 Proposal

This section is organized as follows. Section 7.1 introduces the general setup for the analysis. Section 7.2 discusses the evidential commitments in connection to the best possible grounds. Section 7.3 provides an analysis for sentences with =wa, which makes explicit the role of focus to account for these cases. Section 7.4 analyzes sentences with -Ø, likening this evidential to common ground management operators. For ease of reference, Table 1 summarizes the properties that were identified in the previous sections (CG stands for common ground).

7.1 General setup

My analysis is mainly based on the model of discourse structure proposed by Farkas and Bruce (2010), as implemented in Faller (2019) (see Roelofsen and Farkas 2015; Murray 2017; see also Stalnaker 1978; Roberts 1996, 2004, 2012; Gunlogson 2001, 2008; Malamud and Stephenson 2012; Bhadra 2020; Rett 2021). I adopt Faller's (2019) approach as a starting point, since she proposes an analysis of evidentiality that includes the notion of the best possible grounds and explicitly indicates how to capture evidential commitments in the table model from Farkas and Bruce (2010). Discourse context is represented by means of discourse structures (DSs). A DS consists of separate sets of discourse public commitments for the participants, as well as a Table and a representation of the Common Ground (CG).

As is standard in the work on discourse structure that builds on Stalnaker (1978), I assume that discourse unfolds against a (changing) background of a context set, which is obtained by intersecting the propositions in the CG. The CG "contains the

propositions in the intersection of the participants' sets of [public] truth commitments" (Faller 2019, p. 23).¹⁹ These are propositions that are taken by the participants in the conversation to be true of the world of (and from the perspective of) the conversation (see Sacks 1992). The CG and each discourse participant's commitments are represented separately. I assume that DSs include the truth commitments TC_a (which may be empty) for each participant a . TC_a is a set with those propositions to which a is committed in the conversation up to a relevant time. Assertion, as well as other discourse moves, have an effect on the discourse context, i.e., an assertion is viewed as a proposal to change the context set by adding the proposition that the asserted sentence denotes to the CG or, differently put, the assertion of a proposition puts such a proposition on the Table with the intention of adding it to the CG (see Clark and Schaefer 1989; Clark 1992; Ginzburg 1996, 2015; Krifka 2008).

The Table is the component in discourse that records the questions under discussion (Ginzburg 1996; Roberts 1996, 2004, 2012; Buring 2003; Beaver and Clark 2008; Faller 2019). Following Farkas and Bruce (2010), I assume that items on the Table are sentences that denote (sets of) propositions. The Table keeps track of what is at-issue in the conversation, i.e., what carries the main themes in discourse, which are put out there (i.e., on the Table). The interlocutors can, in general, negotiate what is at-issue before accepting it in the CG (Potts 2005). Importantly, the question under discussion can (only) be addressed by items that are on the Table. The items on the Table form a stack. When the Table is not empty, the goal of the conversation is to settle the relevant issue, thus moving towards making the Table empty. When the Table is empty, the conversation is in a stable state, which corresponds to the conversation's natural end. In this regard, assertions make a proposal to address the question under discussion, which then normally requires confirmation (i.e., that the proposal made by the assertion be accepted) and questions require resolution (i.e., that the question be answered).²⁰ If the issue or its negated counterpart follows relative to the CG, then such an issue is decided.

Diagrams as in (28) are used to represent a conversation between discourse participants A and B . TC_A and TC_B are the sets of propositions individuals A and B are committed to—evidential commitments are incorporated in the next section. The CG contains the propositions in the intersection of the participants' sets of truth commitments. The items on the Table are represented as pairs, where, e.g., declarative sentence S is one member of the pair, and the other member is its denotation, the singleton set containing the proposition that S denotes.

¹⁹For Faller, such a view of the CG includes the commitments to the truth of some proposition, as well as the commitment to the evidence for some proposition, which arise as a result of a speech act. She indicates that such an approach captures explicitly why it is infelicitous to question the commitments of a discourse participant to the scope and evidential propositions. Following her conventions, I do not represent these elements as added directly to the CG. What suffices for current purposes is that what is subject to manipulation by the interlocutors is what is on the Table (what is at-issue), which yields a similar effect in terms of making it infelicitous to question the pieces of information that are not on the Table (see below)..

²⁰See, e.g., Farkas and Bruce (2010) and Roelofsen and Farkas (2015) for formalizations of confirmation, denial, etc.

(28) Sample DS

A	Table	B
$T\bar{C}_A$	$\langle S; \{p\} \rangle$	$T\bar{C}_B$
CG		
$\bar{C}\bar{G}$		

In addition, (29) introduces the notation used to characterize relevant notions (e.g., operations) in connection to stack T , i.e., the Table in a given context structure.

- (29) a. $push(e, T)$ represents the new stack obtained by adding item e to the top of T .
 b. $pop(T)$ represents the stack obtained by popping off the top item of T .
 c. $top(T)$ represents the top item of T . (Farkas and Bruce 2010, p. 90)

7.2 Direct evidentiality

This section discusses evidential commitments. Following Faller (2019), the evidential contribution of evidential markers is captured as evidential commitments of discourse participants (see also Anderbois et al. 2015; Faller 2002, 2007, 2012; Simons et al. 2010; Tonhauser et al. 2013; Rett 2014; Murray 2017; Bhadra 2020 for relevant discussion). That the evidential meaning is represented under the commitments of some discourse participant captures the properties discussed in Sect. 6: it is infelicitous to question the commitment to the evidence of such a participant and the evidential meaning cannot address the question under discussion, since it is not on the Table, so it is not at-issue (see Table 1).

Particularly relevant here is the representation of the best possible grounds within DSs.²¹ The best possible grounds are represented as a set of propositions for which discourse participant a is committed to having best possible grounds, i.e., $BpgC_a$.²² Thus, by uttering sentence S with $=wa$ and $-\emptyset$ that denotes proposition p , $\{p\}$ is added to $BpgC_a$ (for discourse participant a , the author of the relevant expression), i.e., $BpgC_a \cup \{p\}$, under a 's discourse commitments in the relevant DS (K_i is the input DS; K_o is the output DS; the unaffected elements are not listed):

$$(30) \quad =wa \quad (non-final) \\ =wa(S, a, K_i) = (S, a, K_o) \text{ such that } BpgC_{a,o} = BpgC_{a,i} \cup \{p\}.$$

$$(31) \quad -\emptyset \quad (non-final) \\ -\emptyset(S, a, K_i) = (S, a, K_o) \text{ such that } BpgC_{a,o} = BpgC_{a,i} \cup \{p\}.$$

While the implementation in the model is straightforward, what needs further discussion is how the best possible grounds are to be understood. Key for current purposes is the characterization of the best possible grounds as “the best possible source of information” relative to the type of information brought in by the proposition under consideration (Faller 2002, p. 123), as discussed in Sect. 2. While I ultimately adopt a working definition for this notion, I make some comments building

²¹Faller (2019) also mentions commitments to propositions for which an individual has adequate evidence, building on Grice's Maxim of Quality. These are set aside here for simplicity.

²²See Faller (2019) for discussion of the distinctions between different types of commitments and why they are represented separately.

on McCready (2015). McCready adopts an approach that makes explicit what the best possible grounds mean in a setup that builds on a general characterization of reliability (see this work for formal details). An initial approach to the best possible grounds would require that some individual has the maximally ranked evidence for some claim, where perception is ranked above indirect evidence (see this work for discussion as to how to rank indirect evidence). The best possible grounds vary depending on the statement under consideration, including the elements of the relevant sentence (McCready 2015, p. 237). Consider an example. Suppose that a speaker who lives in Puno utters the sentence *It rained in Puno*. The evidence comes from direct perception as suggested by, e.g., the fact that the verb describes an observable eventuality and the tense marker indicates past. Since this kind of evidence would be best, this is the kind of evidence that counts as the best possible grounds. If the case considered excludes direct evidence (e.g., a non-observable eventuality), then some other kind of evidence may count as the best possible grounds.

My working definition for the best possible grounds appears in (32). I adopt a view where $BpgC_a$ is a set containing the (sets of) propositions to which discourse participant a is committed. a 's commitments are to be understood in terms of the evidence that she has for the propositions under consideration. The propositions in $BpgC_a$ are of two kinds: there may be propositions for which a has direct evidence and there may be propositions for which a has indirect evidence, but only if direct evidence is unfeasible.

(32) *Best possible grounds*

$BpgC_a$ is the set that contains the (sets of) propositions to which discourse participant a is committed in terms of evidence such that a either (i) has direct evidence (e.g., by observation) for those (sets of) propositions or (ii) has indirect evidence (e.g., reportative, inferential) for those (sets of) propositions if it is unfeasible to have direct evidence for those (sets of) propositions.

7.3 Sentences with =wa

This section analyzes declarative sentences with =wa. As discussed in Sects. 3-4, this evidential is a focus marker that appears next to the constituent that provides the relevant information to address the corresponding previously raised issue. Since sentences with =wa attempt to solve the current issue on the Table, I adopt the view that they are assertions—I further tie this to the fact that the scope proposition is not in the CG in this case.

=wa marks the focalized constituent, namely, the relevant sentence or the relevant non-clausal constituent. Assuming that =wa combines with a proposition denoting element, it stays in situ when its sister is the relevant sentence (the actual label of =wa's projection is not relevant; it may be assumed that it is located in the left periphery, as standardly assumed for evidentials or focus markers). Otherwise, it moves covertly to a higher position in the structure (due to a type mismatch), so that its sister is a proposition denoting element, leaving a vacuous trace in its base-generated position (see Wilkinson 1996; Nakanishi 2012). The LFs for declarative sentences with =wa appear in (33), where S is a proposition denoting element, α is the assertion

operator, β is a non-clausal constituent (e.g., an individual denoting expression), and F indicates that the constituent is marked for focus—for concreteness, I assume that illocutionary operators, such as assertion, are represented syntactically (Krifka 2014, 2015).

- (33) a. $[[[s \dots]_F =wa] \alpha]$
 b. $[[[s \dots [[\beta]_F t] \dots] =wa] \alpha]$

What is offered here is an analysis of question-answer congruence, where an assertion of a sentence with $=wa$, a focus marker, is congruent with the item on top of the stack. First, I discuss the question under discussion (Ginzburg 1996; Roberts 1996, 2004, 2012; Beaver and Clark 2008), which would be recorded on top of the stack (see Sect. 7.1). Roberts (1996, 2004, 2012) proposes that the narrowing down of the context set is driven by questions (this suffices for current purposes). Questions are sets of possible answers (Hamblin 1973). Discourse participants attempt to provide (complete) answers (by uttering one of those possible answers). In doing so, an attempt is made to empty the Table (see Sect. 7.1). Following Farkas and Bruce (2010), I adopt question operator γ in (34) (as in the previous denotations, a stands for the discourse participant who utters the relevant expression, question Q here, which is put on top of the stack).

- (34) *Question operator γ*
 $\gamma(Q, a, K_i) = K_o$ such that $T_o = push(\langle Q; \{p_1, \dots, p_n\}, T_i)$

The question now is how sentences with $=wa$ answer the question under discussion. I analyze $=wa$ as a focus marker (Rooth 1985, 1992; see also Beaver and Clark 2008; Büring 2016; Wagner 2020). Following the extensive tradition in the analysis of focus, I assume that sentences have an ordinary value and a focus value. The former is the denotation of the relevant sentence. The latter is understood in terms of alternatives to the relevant linguistic expression. Specifically, if $=wa$ marks a linguistic expression S that denotes $\{p\}$ (i.e., the ordinary value), the set of alternatives (i.e., the focus value) is formed by propositions, i.e., $Alt(\langle S; \{p\} \rangle) = \{q \mid q \in D_{st}\}$, where $\{p\}$ is in that set (alternatives are constrained contextually; this is not explicitly represented here for simplicity). If $=wa$ marks a subclausal constituent, e.g., the subject, then the set of alternatives will be formed by propositions which vary with regard to this individual. Thus, if S is of the form *Mary_F bought a car*, then $Alt(\langle S; \{p\} \rangle) = \{\lambda w[x \text{ bought a car in } w] \mid x \in D_e\}$.

Congruence is captured in terms of the relationship between the top of the stack (the question under discussion) and the alternatives to the sentence with $=wa$ that is uttered to answer the relevant question. I adopt Roberts's (1996, 2004, 2012) notion of congruence, which states that the question under discussion is equal to the alternatives of the linguistic expression under consideration, i.e., the set of propositions that constitutes the top of the stack and the set of propositions which are the alternatives for a given linguistic expression are equal (see Rooth 1992 for a broader approach where the denotation of the question is a subset of the alternatives of the answer).

Based on this discussion, the final denotation of $=wa$ appears in (35). $=wa$ presupposes the need for congruence, which captures the fact that sentences with this

evidential must contribute to a previously raised issue. In addition, $=wa$ updates the evidential commitments of discourse participant a (see Sect. 7.2).

- (35) $=wa$ (final)
 $=wa(S, a, K_i) = (S, a, K_o)$ such that $BpgC_{a,o} = BpgC_{a,i} \cup \{p\}$.
Presupposition: $Alt(\langle S; \{p\} \rangle) = top(T_i)$

What remains to be addressed is how sentences with $=wa$ make a proposal to update the CG, which is tied to the fact that the relevant scope proposition is not in the CG in this case. This is captured by means of the assertion operator. As anticipated in Sect. 7.1, assertions make a proposal to update the CG. Note that there is no need to explicitly add some condition indicating that the scope proposition is not in the CG in the denotation of $=wa$, since assertion already indicates that a proposal to update the CG (i.e., information that is not in the CG), is made (see Stalnaker 1978). Following Farkas and Bruce (2010) (see also Krifka 2001, 2014, 2015; Ginzburg 2015; Roelofsen and Farkas 2015), I assume an assertion operator, α , which yields a DS in which the asserted proposition is put on top of the stack and is added to the relevant discourse participant's truth commitments (a here).

- (36) *Assertion operator* α
 $\alpha(S, a, K_i) = K_o$ such that
 (i) $TC_{a,o} = TC_{a,i} \cup \{p\}$
 (ii) $T_o = push(\langle S; \{p\} \rangle, T_i)$

In terms of compositionality, $=wa$ applies to the relevant arguments (a discourse participant, a proposition denoting expression, and an input DS) first; assertion operator α applies to this output. The relevant discourse participant's move ends upon the utterance of the relevant speech act (assertion here), which puts something on the Table.

For illustration, recall the exchange in (9). The whole proposition signals the information that answers the question (see (10)-(11) for subject and object questions, which are analyzed along similar terms).

- (37) a. Kuna-sa (masiuru) kamacha-i?
 what-INT yesterday happen-3S
 'What happened (yesterday)?'
 b. Puno-na jallu-i=wa.
 Puno-LOC rain-3S=wa
 p: It rained in Puno.
 ep: 'The speaker has the best possible grounds for p.'

The DS representing the move in (37a), made by discourse participant B, is represented below. Question operator γ applies here (recall that TC_a represents the truth commitments of discourse participant a).

(38) K_1 : B asked (37a)

A \overline{TC}_A $BpgC_A$	Table {‘What happened (yesterday)?’: $\{p_1, \dots, p_n\}$ }	B \overline{TC}_B $BpgC_B$
CG \overline{CG}		

The answer to (38) is represented below. Such an expression includes =*wa*. Here a proposal to update the CG by indicating which proposition is the (complete) answer to the issue on top of the stack is made—this is what assertion operator α contributes. For ease of reference, I include =*wa*’s presupposition in the DS.

(39) K_2 : A asserted (37b) against (37a)

A $\overline{TC}_A \cup \{p_1\}$ $BpgC_A \cup \{p_1\}$	Table {‘It rained in Puno’: $\{p_1\}$ } {‘What happened (yesterday)?’: $\{p_1, \dots, p_n\}$ }	B \overline{TC}_B $BpgC_B$
CG \overline{CG}		Presupposition $Alt(\{S: \{p_1\}\}) = \overline{top}(T_1)$

This analysis of =*wa* captures the fact that, in the absence of prior discourse, sentences with this marker cannot be uttered. This accounts for why these sentences cannot be used as conversation openers (see Sect. 3.2). In addition, the analysis captures why =*wa* cannot be used with a sentence whose denotation is already in the CG, as discussed in Sect. 4. This is at odds with the proposal that sentences with =*wa* are assertions, which, by definition, make a proposal to update the CG (see Sect. 7.4 for discussion of disagreement).²³

7.4 Sentences with - \emptyset

This section analyzes declarative sentences with - \emptyset . As discussed in Sects. 4–5, the key property here is that the scope proposition is entailed by the CG, which likens - \emptyset to common ground management operators, such as German *ja* (Repp 2013)—there is no congruence requirement in this case. Furthermore, it is degraded to disagree with sentences with - \emptyset . Note that sentences with - \emptyset cannot be assertions, since what is uttered is already in the CG.²⁴ I propose that the illocutionary force in these cases is that of presentation (Faller 2019).

I assume the LF in (40), with - \emptyset located in the left periphery, which is consistent with it being an evidential and a common ground management operator. - \emptyset combines with proposition denoting S; ρ stands for the illocutionary force of presenta-

²³Note that my proposal for sentences with =*wa* accurately explains why the relevant proposition denoting expression marked by this evidential cannot be in the CG, since these are assertions. As pointed out to me by an anonymous reviewer, this approach raises the question as to whether =*wa* is restricted so that it can only appear in assertions. This actually appears to be the case. For instance, =*wa* does not appear in questions. An additional question is why =*wa* is restricted to assertions (this question was also raised by this reviewer). I provide an initial answer to it in Sect. 7.4.

²⁴I would like to thank two anonymous reviewers for fruitful discussion of this.

tion (which I represent syntactically for concreteness, as in Sect. 7.3, where assertion operator α was discussed).²⁵

(40) $[[[s \dots] -\emptyset] \rho]$

Following Repp's (2013) analysis of *ja*, I formalize the property that the CG entails the scope proposition as a discourse condition. This captures the intuition that sentences with $-\emptyset$ convey the meaning that the scope proposition is shared knowledge.

(41) $-\emptyset$ (non-final)²⁶
 $-\emptyset(S, a, K_i) = (S, a, K_o)$ such that $BpgC_{a,o} = BpgC_{a,i} \cup \{p\}$.
 Discourse condition: $\{p\} \subseteq CG_i$

As indicated, sentences with $-\emptyset$ cannot be assertions. In her discussion of the Cuzco Quechua reportative, Faller (2019) argues that truth commitments and at-issueness can be split. She shows that sentences with reportatives share several properties with sentences without them in that they can, e.g., address the question under discussion. In this sense, they are similar to assertions. However, they differ from assertions in that the scope proposition is not added to the speaker's truth commitments. This is exemplified in (42), which shows that the speaker need not be committed to the scope proposition when uttering a sentence with the Cuzco Quechua reportative (see Anderbois 2014 for similar examples with reportatives cross-linguistically).

(42) Pay-kuna=s qulqi-ta saqiy-wa-n. Mana=má, ni un sol-ta
 (s)he-PL=REP money-ACC leave-1O-3 no=IMPR not one Sol-ACC
 saqi-sha-wa-n=chu.
 leave-PROG-1O-3=NEG
 'They left me money (I was told)'. (But) no, they didn't leave me one
 sol.' (Faller 2002, p. 191)

Cases with $-\emptyset$ are similar to those with the Cuzco Quechua reportative in that truth commitments and at-issueness can be split. Specifically, the scope proposition is at-issue, but the speaker's commitment has already been settled, since the scope proposition is already in the CG. Thus, the scope proposition should not be added to the speaker's truth commitments by uttering a sentence with $-\emptyset$. The illocutionary force of presentation captures precisely this: the scope proposition is put on the Table, but the truth commitments of the relevant discourse participant are not updated by incorporating the proposition into them. Building on Faller's (2019, p. 35) denotation of the Cuzco Quechua reportative, I define presentation below.²⁷

²⁵Further research is needed with regard to $-\emptyset$'s morphosyntactic nature. As discussed in Sect. 2, it may have a flexible position in that it follows negation. A suggestion is that, just like $=wa$, $-\emptyset$'s flexibility is tied to it being an enclitic. I would like to thank an anonymous reviewer for raising this issue.

²⁶This denotation is revised in Sect. 8, in which the analysis is extended to multiparty interactions.

²⁷Faller (2019) provides a way of linking assertion and presentation. This is not adopted here. I treat these two illocutionary forces separately for simplicity.

- (43) *Presentation operator* ρ
 $\rho(S, a, K_i) = K_o$ such that $T_o = \text{push}(\langle S; \{p\} \rangle, T_i)$

While presentation in Faller's discussion and here is rather similar, there is a key difference, which lies in the nature of the linguistic expression that is presented. Sentences with reportatives behave like assertions, i.e., a proposal to update the CG is made, unless the truth commitment of the speaker is questioned (Faller 2019 adopts a pragmatic principle, the Collaborative Principle, to capture this). In contrast, in sentences with $-\emptyset$, the scope proposition is already in the CG, which entails the truth commitment of the speaker towards that proposition. Thus, a proposition is presented, but questioning the relevant truth commitment is degraded. The discussion in this paper suggests that the illocutionary force of presentation is needed beyond reportatives. This is, I believe, a welcome result, since the functional domain of a linguistic item is expanded. A related question, however, arises: why is presentation not available for sentences with $=wa$ (or even more generally)? I suggest that assertion applies by default in the case of declarative sentences, unless there is a reason as to why this should not be the case. Sentences with $-\emptyset$ illustrate precisely this. Since the scope proposition is already in the CG, no proposal to add it to the CG is needed (this does not arise in the case of sentences with $=wa$, since the scope proposition is not in the CG). As a result, asserting sentences with $-\emptyset$ is not possible, but presenting them is. In terms of compositionality, as in the case of $=wa$ (see Sect. 7.3), $-\emptyset$ applies to the its arguments (a discourse participant, a proposition denoting expression, and an input DS); presentation operator ρ applies to this output. The relevant discourse participant's move ends upon the utterance of the relevant speech act (presentation here), which puts something on the Table.

For illustration, recall example (19), where the father tells his child a bedtime story that both know. (45) is felicitously uttered again the context in (44), since the story is shared information.

- (44) *Context:* A father is telling his child about the time when he rescued a girl from Lake Titicaca; nobody else in addition to the father and the girl were in the area. The father is telling the child the story before the latter goes to bed (the child asked for a bedtime story). This is the first time the child asks their father to repeat the story (the night before, the father told them the story for the first time). The father utters the options below.
- (45) Quta-na mä imilla axskat-kai-ri uñja-sina uma-tha
 lake-LOC one girl drown-DUR-AG see-SUB water-ABL
 waysu-ri-:-tha- \emptyset .
 take.out-AG-be-1S- \emptyset
 p: 'Seeing a girl drowning in the lake, I rescued her (lit. I took her out of the water).'
 ep: 'The speaker has the best possible grounds for p.'

The DS representing (45) appears below. The relevant discourse condition is incorporated in the representation for ease of reference (I assume that some previous discourse state exists, which is represented below as K_0 ; $\{p\}$ was already entailed

in the relevant CG; recall that TC_a represents the truth commitments of discourse participant a).

(46) K : A presented (45)

\overline{A} $\overline{TC_A}$ $BpgC_A \cup \{p\}$	Table {‘Seeing a girl drowning in the lake, I rescued her’; $\{p\}$ }	\overline{B} $\overline{TC_B}$ $BpgC_B$
CG \overline{CG}	Discourse condition $\{p\} \subseteq \overline{CG_0}$	

My analysis thus captures the fact that sentences with $-\emptyset$ are uttered when the relevant proposition is shared information (i.e., it is in the CG). Note that my analysis can further capture why these sentences can be uttered as conversation openers as long as the presented proposition is shared information (see Sect. 3.2). Turning to the discussion of sentences with $-\emptyset$ with regard to disagreement, recall the exchange in (21), repeated below. The judgement is that it is odd to challenge the scope proposition of (47a), but not impossible—this does not arise in cases with $=wa$, which can be disagreed with, as they involve a proposal to update the CG, which requires, e.g., confirmation or denial (see (20)). Challenging the scope proposition in cases with $-\emptyset$ contrasts with, e.g., challenging the evidential contribution, which is simply not possible. In this sense, the challenge in (47b) constitutes an intermediate case in that it is odd, but not completely out. My account captures this property as follows: as can be seen in (46), presenting a sentence with $-\emptyset$ puts an item on the Table, while it simultaneously entails that the relevant proposition is in the CG. This creates a duality: there is an at-issue component, as well as a not at-issue component. I take this to mean that exchanges as in (47) are not completely out, because the relevant scope proposition is at-issue, which means that, in principle, it can be questioned; however, it is odd to do so, because such a proposition is in the CG.

- (47) a. Puno-na jallu-i- \emptyset .
 Puno-LOC rain-3S- \emptyset
 p: ‘It rained in Puno.’
 ep: ‘The speaker has the best possible grounds for p.’
- b. ??Ukatha Puno-na jani= \underline{wa} jallu-ka-i-ti.
 but Puno-LOC not= \underline{wa} rain-NEG-3S-NEG
 p: ‘But it didn’t rain in Puno.’
 ep: ‘The speaker has the best possible grounds for p.’

To end this section, I would like to mention two issues. The first one is to briefly indicate how a discourse participant may react to a sentence with $-\emptyset$. My consultants indicate that, normally, these sentences are simply followed up by some form of acknowledgment that links what was communicated to what must be discussed (e.g., it is a way of bringing to the foreground something that will be used to build on in what follows). This is more restricted when compared to sentences with $=wa$, which can be questioned (e.g., the addressee may express disagreement, as in (20), i.e., the counterpart of (47) with $=wa$), as well as confirmed or simply accepted, as mentioned above (see Farkas and Bruce 2010 or Roelofsen and Farkas 2015 for formalizations in this regard). These differences are consistent with the discussion in this paper.

The second issue regards how questioning takes place. As seen in (47b), questioning a previous utterance is done with an expression with =*wa*; questioning an utterance with an expression with \emptyset is not possible, as my consultants indicate. I suggest that this gap follows from the different kinds of contributions that the utterances with these evidentials make in combination with what disagreeing normally implies. Expressing disagreement prevents incorporating a previous contribution into the CG (see, e.g., the discussion of agree to disagree in Farkas and Bruce 2010). This is naturally possible in the presence of =*wa*, where a proposal to update the CG is made; such a proposal can be questioned. In the presence of \emptyset , however, the relevant proposition is in the CG. By questioning it, then, something that is both on the Table and in the CG would be questioned. Since the CG is not at-issue, directly questioning something in it is degraded.

8 Extensions

I have discussed exchanges with two discourse participants up to this point. This section extends the discussion to multiparty interactions. The examples to follow show that a sentence with =*wa* will be uttered if the relevant proposition (addressing the question under discussion) is not in the CG. In contrast, a sentence with \emptyset will be uttered if at least two discourse participants share the relevant information.

The general setup involves a group of five people. Consider (48). Uttering (48a), with =*wa*, is felicitous; in contrast, uttering (48b), with \emptyset , is infelicitous. In this case, the scope proposition is not in the CG, so only the utterer can address the question under discussion.

- (48) *Context*: There is a group of five people having a conversation, Mary is not present and the members of the group (with the exception of the speaker) are wondering about her recent whereabouts. The speaker can say something about Mary, because the other four people have not been in touch with her, whereas the speaker is her best friend and is in touch with her frequently. The speaker was with Mary when she visited her sister, so that she has direct evidence for the scope proposition. The speaker utters the options below to address the group's inquiry about her whereabouts.
- a. Mariya masüru kullaka-pa- \emptyset tumpa-i=wa.
 Mary yesterday sister-3POSS-ACC visit-3S=wa
 p: 'Mary visited her sister yesterday.'
 ep: 'The speaker has the best possible grounds for p.'
 - b. #Mariya masüru kullaka-pa- \emptyset tumpa-i- \emptyset .
 Mary yesterday sister-3POSS-ACC visit-3S- \emptyset
 p: 'Mary visited her sister yesterday.'
 ep: 'The speaker has the best possible grounds for p.'

This case can be readily accounted for under the analysis of =*wa* in Sect. 7.3 (the only difference is that more discourse participants would be present). There is an issue on the table that the relevant proposition addresses. The option with \emptyset is ruled out, because the relevant proposition is not in the CG.

Consider a variation of the context in (48), where two people know about Mary's whereabouts. The speaker can felicitously utter (49b), with $-\emptyset$;²⁸ uttering (49a), with $=wa$, is infelicitous. My consultants indicate that the speaker would not utter the option with $=wa$, as other people already know about it. In this sense, they further indicate that (49b) will be assumed as accurate information by the people in the group that did not know about Mary's whereabouts, i.e., it is adopted as shared information.²⁹ Note that (49b), with $-\emptyset$, is truly informative for those who did not know about Mary's whereabouts: they learn about Mary's whereabouts, and they also learn that there are other people who have direct evidence for the information.³⁰

(49) *Context:* There is a group of five people having a conversation, Mary is not present and Person 3, 4 and 5 in the group are wondering about her recent whereabouts. In addition to the speaker, Person 2 in this group knows about Mary's whereabouts, because, e.g., Person 2 is also a very close friend of Mary (thus, the speaker and Person 2 already know about Mary's whereabouts). Both the speaker and Person 2 were with Mary the day before and they both were with Mary when she visited her sister. In addition, the speaker knows that Person 2 was with Mary the day before and vice versa, because they talked to each other later that day. The speaker utters the options below to address the group's inquiry about her whereabouts.

- a. #Mariya masüru kullaka-pa- \emptyset tumpa-i=wa
 Mary yesterday sister-3POSS-ACC visit-3S=wa
 p: 'Mary visited her sister yesterday.'
 ep: 'The speaker has the best possible grounds for p.'
- b. Mariya masüru kullaka-pa- \emptyset tumpa-i- \emptyset .
 Mary yesterday sister-3POSS-ACC visit-3S- \emptyset
 p: 'Mary visited her sister yesterday.'
 ep: 'The speaker has the best possible grounds for p.'

To account for this case, I revise the analysis of cases with $-\emptyset$ in Sect. 7.4. Specifically, I suggest that the CG entails the relevant information, which takes place via an accommodation process (Stalnaker 1978, 2002, 2008; Lewis 1979; von Stechow 2008). Upon hearing a sentence with $-\emptyset$ such that its denotation is not in the CG (e.g., only some discourse participants have shared commitments towards the relevant proposition), the participants without the relevant information will infer that the information is to be treated as part of the CG.

To make this more explicit, I suggest the following. The CG could be understood as a layered construct such that for any (two) discourse participants a CG for these participants can be determined (i.e., for any two participants a , b in context K_i , $CG_{\{a,b\},i}$ represents the shared commitments of a , b in K_i). The CG among all partic-

²⁸The speaker would also utter (49b) if more than two people know about Mary's whereabouts, as expected.

²⁹My consultants also indicate that if the speaker considers that the information should not be simply assumed, she would utter a sentence with $=wa$ instead (e.g., if it is unclear whether the other people have accurate information), so a proposal to update the CG is made.

³⁰I would like to thank Jon Gajewski for pointing this out to me.

ipants includes the shared commitments for all participants, which consists of the intersection of the different CGs including the shared commitments of two participants (i.e., for every pair of participants $\{a, b\}$ in context K_i , $CG_i = \bigcap CG_{\{a,b\},i}$). Accommodation thus takes place when, in an exchange, the CG that results from considering the shared commitments of two participants includes the relevant information—there can be additional participants, but it suffices that two of them share the relevant commitment.

I capture such an accommodation process in connection to the CG as tied to the presence of particular means in a language, e.g., $-\emptyset$ in Aymara. If a sentence with $-\emptyset$ is uttered (which requires that some discourse participants share the commitment towards the relevant information), the participants that did not know about the relevant information will assume the information as part of the shared commitments of all discourse participants (i.e., as part of the CG). This requires a slight revision of $-\emptyset$'s discourse condition, which is shown in (50). Crucially, it is required that the relevant proposition be shared by two discourse participants (not by all discourse participants in the group).

$$(50) \quad -\emptyset \quad \text{(final)}$$

$$-\emptyset(S, a, K_i) = (S, a, K_o) \text{ such that } BpgC_{a,o} = BpgC_{a,i} \cup \{p\}.$$

$$\text{Discourse condition: } \{p\} \subseteq CG_{\{a,b\},i}, \text{ where discourse participant } b \neq a.$$

The accommodation mechanism is stated in (51) (see, e.g., Lewis 1979). Accommodation requires at least two different individuals. In the presence of two participants, it follows trivially. If there are more discourse participants, then the relevant information will be accommodated, i.e., it will be treated as included in the CG (here this is tied to expressions including lexical means like $-\emptyset$), where the relevant information was shared beforehand by at least two participants. Under this approach, then, the multiparty cases are accounted for.³¹

$$(51) \quad \text{CG accommodation}$$

$$\text{For contexts } K_i \neq K_i' \text{ with discourse participants } a_1 \neq a_2, \dots, a_n, \text{ if } \{p\}$$

³¹As indicated, when the speaker communicates something that a (relevant) larger group of people knows about (but not the hearer), she would use $-\emptyset$. Interestingly, it does not matter whether these other people are present or not; what is communicated is treated as in the CG. Consider (i), which builds on the scenario with the father and child in Sect. 4. The sentence in (ib), with $-\emptyset$, is felicitous; the sentence in (ia), with $=wa$, is not. Here the child has not heard the story just yet; nonetheless, the father would use $-\emptyset$, as the story is shared by most members of the community.

- (i) *Context:* A man rescued a girl from Lake Titicaca. They got married and had a child. This anecdote (the rescue) became an important part of the community's tradition based on the couple's testimony. As a result, many (if not all the) people in the community know about it. The father is going to tell his child the story for the first time, before the child goes to bed, because they asked for a bedtime story; the mom is not present.

- a. #Quta-na mä imilla axskat-kai-ri uñja-sina uma-tha waysu-ri-:-tha=wa.
lake-LOC one girl drown-DUR-AG see-SUB water-ABL take.out-AG-be-1S=wa
p: 'Seeing a girl drowning in the lake, I rescued her (lit. I took her out of the water).'
ep: 'The speaker has the best possible grounds for p.'
- b. Quta-na mä imilla axskat-kai-ri uñja-sina uma-tha waysu-ri-:-tha=∅.
lake-LOC one girl drown-DUR-AG see-SUB water-ABL take.out-AG-be-1S=∅
p: 'Seeing a girl drowning in the lake, I rescued her (lit. I took her out of the water).'
ep: 'The speaker has the best possible grounds for p.'

(where p is a proposition) is a shared commitment by (at least) discourse participants a_1, a_2 in K_i such that a_1 or a_2 's utterance involves sentence S that denotes $\{p\}$ (where lexical means $\delta, -\emptyset$ here, are present), then K_i is updated into $K_{i'}$, where $\{p\} \subseteq CG_{i'}$.

9 Conclusion

This paper discussed the discourse contrasts that arise in connection to direct evidentiality in Southern Aymara, an understudied Andean language. This language has two direct evidentials, the enclitic $=wa$ and the covert morpheme $-\emptyset$, which are used whenever the speaker has the best possible grounds for some proposition. On the one hand, I made the novel observation that a sentence with $=wa$ can be felicitously uttered if the speaker attempts to update the common ground by addressing an issue on the table (the relevant proposition is not in the common ground in this case); in addition, these sentences must be congruent with prior discourse (I tied this to $=wa$'s status as a presentational focus marker). On the other hand, I showed that uttering a sentence with $-\emptyset$ entails that the speaker's contribution is in the common ground, which likens this evidential to common ground management operators (there is no congruence requirement in this case). I further discussed which construction can be used in conversation openers and telling anecdotes. I implemented an account that builds on Farkas and Bruce (2010) as discussed by Faller (2019). By examining a phenomenon in Aymara, my account made explicit what the links between evidentiality and discourse are.

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Declarations

Competing Interests I have no conflicts of interest to declare.

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I suggest that the CG does entail the relevant information here, since the shared commitments that are considered are those of the larger community. The relevant CG is a broader one, which involves the shared commitments of additional potential participants, since the father is actually invoking additional individuals, namely, the members of the larger community (the accommodation process would take place as indicated). A detailed characterization of the larger community, where potential discourse participants that are relevant in context but are not physically present may be invoked, is left for future research.

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