1. Introduction
Recently, Langacker (2014) worked out an analysis of evidentiality in a Cognitive Grammar framework, with special attention to its relation to grounding. The purpose of the present paper is twofold. On the one hand, it aims to elaborate on the picture of clausal grounding, especially with regards to the place of evidentiality and reported speech. Specifically, the paper will argue for the adoption of ‘source of knowledge’ as a grounding domain in its own right, defining it in a somewhat different way from Langacker (2014). On the other hand, the paper will discuss the grounding function of two German constructions, thereby departing from previous analyses by e.g. Mortelmans (1999), Mortelmans (2001) and Smirnova (2011). The divergences in terms of grounding of these two constructions are taken to be indicative of a more fundamental conceptual opposition between them. Section 2 will introduce the notion of grounding and set up a model that can adequately capture the grounding function of evidentials. Section 3 will analyse the grounding function of the reportive use of the German modal verb sollen as support for the proposed model, while section 4 will analyse the quotative present subjunctive, which will unearth a need to refine the model.
2. Evidentiality in grounding

2.1. Grounding

In Cognitive Grammar, the term ‘ground’ refers to the discourse context in which language is used: it indicates “the speech event, its participants (speaker and hearer), their interaction, and the immediate circumstances (notably, the time and place of speaking)” (Langacker 2008: 259, see also Langacker 1991: 318, Langacker 2002: 7; Mortelmans 1999: 9ff.; Brisard 2002: xi). In actual practice, it is often the speaker who is the most relevant part of the ground. Expressions are made up of semantic and phonological structures, and the term ‘predication’ refers to the semantic pole, i.e. to the conceptual content that an expression evokes. By that token, a grounding predication links an expression to the ground, i.e. connects the content evoked by an expression to the interlocutors and their speech situation. Grounding predications are therefore inherently relational elements.

‘Deixis’ is the overarching term used for the characterisation of a referent in terms of its relation to the ground. This type of relation is a reference in relative terms, i.e. “in the context of a discourse” (Langacker 2008: 277). Deictic expressions are contrasted with descriptive expressions, which characterize a referent in terms of its conceptual content and constitute reference in absolute terms, i.e. “in the world” (Langacker 2008: 277). For instance, whereas Fuß ‘foot’ or Arbeit- ‘work’ refer to entities in the world, mein Fuß ‘my foot’ or du Arbeit-est ‘you work’ refer to specific instances of these entities as related to the speaker and the hearer.1 There are three elements to the relational nature of deixis (cf. Diewald 1991, Diewald 1999; Brisard 2002; Smirnova 2011): i. the reference point, i.e. that which is related to (what Bühler 1934 called the origo and Langacker calls the ground – in casu often the speaker), ii. the referent, i.e. that which is being related to the reference point (the entity “in the world”, e.g. the actual foot or actual process of working), and iii. the relation between them, i.e. the localisation of the referent w.r.t. some aspect of the reference point (local, temporal, modal, personal,…, cf. Diewald 1991: 143), e.g. the specification of the foot as my foot or of you as the one working. It is the elements that code this relationship (either lexically or grammatically) that are considered deictic signs. Whereas all grounding predications are necessarily deictic (as they characterize a referent in terms of its relation to the ground), the reverse is not true. Grounding predications are a specific subset of deictic expressions that fulfil a number of

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1 An ‘entity’ is understood in the Langackerian sense as “anything that might be conceived of or referred to in describing conceptual structure: things, relations, quantities, sensations, changes, locations, dimensions, and so on”. In other words, both a ‘thing’ like Fuß and a ‘relationship’ or ‘process’ like Arbeit- are entities.
prerequisites. They can be characterized in terms of i. their degree of grammaticalisation, ii. their referent (or “profile”), and iii. their semantic content (cf. Mortelmans 2001; Langacker 2002, Langacker 2014). Typically, grounding predications are grammatical, rather than lexical expressions (they have “secondary discourse status”, cf. Boye and Harder 2009, Boye & Harder 2012). This means that they may belong to a small, obligatory paradigm of opposing elements, and that grounding predications are semantically “schematic”, i.e. abstract or “underspecified”\(^2\). Their semantic function is to specify their referent’s “epistemic status” in such fundamental cognitive domains as reality, time, immediacy and mental contact, i.e. they say something about whether, as far as the speaker (ground) is concerned, their referent is real, where it is located in time,… A grounding predication’s referent is either a “thing” (in the case of nouns) or a “process/event/occurrence” (in the case of verbs). As such, they are critical for the creation of nominals (i.e. noun phrases) and finite clauses, which are by definition grounded instances of things or of processes; whereas Fuß ‘foot’ is a noun and arbeit- ‘work’ is a verb, mein Fuß ‘my foot’ is a nominal and du arbeit-est ‘you work’ a clause.

Consequently there is both nominal and clausal grounding. For instance, a tense marker is a clausal grounding predication that specifies a process’s temporal location w.r.t. the ground, e.g. arbeit-est implies that one of the discourse participants is working at the moment of speaking. A grounding predication’s referent is thus the same as the referent of the entity it is grounding: -st specifies when a process takes place (i.e. the moment of speaking) and who is involved in it (i.e. the interlocutor), and arbeit- specifies what this process actually is, it “elaborates” the schematic process inherent in the grounding predication -st. Grounding predications thus do not explicitly refer to the ground (i.e. they do not refer to an aspect of the ground or the grounding relationship), but use it as an implicit reference point. An adverb like jetzt ‘now’ is deictic, because it relates to the ground in terms of something being evident at the moment of speaking, but it is not a grounding predication, because what it refers to is the actual temporal relationship, the temporal coincide of whatever it modifies with the ground. For instance, in jetzt arbeiten ‘to work now’, jetzt refers explicitly to the fact that the working is happening at the moment of speaking. –st, on the other hand, also implies temporal coincidence with the ground, but it does not actually refer to this coincidence, rather, it refers to a process (which is specified by the verb it is

\(^2\) Though Langacker (2014) also speaks of sentential adverbs (such as angeblich) as “higher-level grounding”.
attached to) and “secondarily” or “implicitly” relates it temporally to the ground.\(^3\)

According to Langacker (2014: 2), language has the dual function of achieving knowledge of the world (“epistemic control”) and of sharing that knowledge, or becoming aware of it, or, alternatively, drawing attention to it (“intersubjective alignment”). In order to achieve epistemic control a speaker builds a personal conception of reality (an “estimation” of the history of all occurrences in the mind of the speaker), which is only a partial representation of actual reality (the “objective” history of all occurrences). For clauses, the primary issue is the existence of a process, i.e. whether it actually occurs. Clausal grounding then concerns the existential status of the profiled process, i.e. whether or not it belongs to the speaker’s conception of reality. If an occurrence is real, the question then becomes when it is, and hence the basic domains that are tapped by grounding predications are time and reality.\(^4\) In both domains there is a contrast between immediate and non-immediate values, i.e. values that refer to coincidence and non-coincidence with the ground. The clausal grounding system of German as discussed by Smirnova (2011) may thus be represented as in Figure 1 (representation mine).

![Figure 1: Temporal and modal grounding distinctions, as discussed by Smirnova (2011)](image)

\(^3\) The ground may have different degrees of “salience” within an expression’s meaning: there may be no reference to it all (e.g. *laufen* ‘to run’, which for that reason is a non-deictic verb), it may be an implicit reference point (as with grounding predications and adverbs like *gestern* ‘yesterday’ that refer to the grounding relationship but not the actual ground itself), or it may be an explicit reference point, i.e. it may be part of the meaning itself, e.g. *ich* and *du* refer explicitly to participants in the ground, cf. Langacker (2002: 9).

\(^4\) Langacker seems to use the term reality in two related senses: on the one hand there is reality as the history of all occurrences, on the other the reality of a specific occurrence, which is what is at stake in modal grounding predications. The contrast can perhaps be paraphrased as ‘existence at large’ versus ‘the existence of a specific entity’.
2.2. Evidentiality

Evidentiality is understood as a domain of conceptual content that involves the notions of “source of information, evidence, justification” (Boye 2012: 2, see also Aikhenvald 2003a: 1, Aikhenvald 2004: 3ff.) and which is completely autonomous of any (syntactic, semantic or pragmatic) coding requirements (cf. Boye and Harder 2009). This means that it is not relevant how the evidential meaning is represented in the context, only the meaning itself matters. It can be subdivided along types of evidence (or modes of knowing), in direct vs. indirect and within indirect in inferential vs. reportive evidence (cf. Willett 1988). Direct evidence implies the speaker knows about the event because he heard it, saw it or otherwise directly experienced it. Example (1) from Tuyuca below (Barnes 1984) expresses that the speaker is justified in making the claim that ‘He played football’, because he actually saw this happening. In other words, he has visual evidence for the proposition. Indirect evidence, by contrast, implies a speaker has evidence that points to the event, but that he did not experience the event directly. He may have either inferred from some circumstance that the event took place, or may have heard about it from somewhere else. Example (2) below, also from Tuyuca, expresses that the speaker is justified in making the claim that ‘He played football’, because this was told to him. He thus has reportive evidence for the proposition.

(1) díiga apé-wi
   ‘He played football’ (I saw him play)
(2) díiga apé-yigi
   ‘He played football’ (I obtained the information from someone else)

In this capacity it is different from epistemic modality, which is likewise a domain of conceptual content, but which is involved with “the notion of degree of certainty, degree of commitment” (Boye 2012: 2). Both domains are considered related in that they both relate to the dimension of “epistemicity”, defined as “justificatory support for knowledge” (Boye 2012: 2). If knowledge is defined as “justified, true belief”, evidentiality may be said to supply “epistemic justification” for one’s stating a proposition, whereas epistemic modality supplies “epistemic support” for one’s belief in a proposition (Boye 2012: 2). In (3), a constructed example from German, the modal construction könnte gespielt haben ‘could have played’ expresses that the speaker believes it is possible that ‘He played football’, but there is no indication of the justification he has for making this claim:

(3) Könnte gespielt haben ‘could have played’
Whether evidentials qualify as clausal grounding predications depends on whether they are also concerned with the existential status of a profiled process, i.e. “how the occurrence relates to the speaker’s conception of reality” (Langacker 2014: 3). According to Langacker, evidentiality has a certain functional affinity to the other major groups of grounding predications, i.e. epistemic modals and tense markers. With tense, direct evidentials share a basis in “immediate personal experience”, i.e. a speaker’s direct experience of an event (hearing it, seeing it, etc.) will occur at his present time. With epistemic modals, indirect evidentials share the role of inference. It is one of the basic evidence types, but it is also an inferential path along which a modal projects the realisation of an occurrence with greater or lesser confidence (cf. also van der Auwera and Plungian 1998), i.e. judging that ‘He played football’ is possible in the future will depend on what you know now and what you can derive from that. Moreover, Langacker states that different evidence types have different degrees of reliability, with internal evidence (e.g. “because I know”) being most reliable, and reported evidence (“because I was told”) being least. He goes on to say that “reliability correlates with degree of epistemic certainty. In terms of how people actually think and reason, the difference between confidence in the source of information and certainty about the event described is subtle and non-essential” (cf. also Willett 1988: 86; Mortelmans 1999: 271).

Some points have to be raised about evidentiality’s relation to epistemic modality in this framework. First, though Langacker does not further specify what is meant by “an inferential path”, it seems to mean that based on the evidence that the speaker has for a certain occurrence he can be more or less certain of it actually occurring or having occurred. This type of insight used to be the rationale for accepting a category of ‘objective epistemic modality’ where an “evidential source influences the possibility or necessity of the truth of the proposition” (Diewald 1999: 210, translation JV, cf. also Lyons 1977: 797ff.), rather than simply a speaker’s ‘subjective’ judgement. It has since been suggested, though, that this is indeed an (evidential) dimension that is separate from the epistemic modal one (cf. Nuys 2001; Verstraete 2007; Cornillie 2009).5

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5 When discussing periphrastic means of marking evidentiality and modality, Langacker (2014: 13) likewise states that there is no clear dividing line, because “[e]ven when the judgment pertains to epistemic certainty, as in Jill is sure he stole it, C [Jill] is a source of information regarding P”. Though this is true on some level, the point of this construction is not to establish Jill as a source of information, but rather as a source of epistemic modal judgement. An evidential component can...
Second, the concept of ‘reliability’ is problematic. In the prototypical case Langacker’s (2014: 6) view of direct evidence as the most reliable and report or hearsay as the least reliable type might well hold, but there are two problems with this view. On the one hand, the degree of reliability of a piece of evidence may vary. Cornillie (2009: 58) points out that how reliable a source of information is “can be explained by looking at the shared or non-shared status of the evidence” (though some types of evidence inherently vary in reliability, e.g. a speaker’s conjecture may be more or less strong, regardless of whether it is shared or not). When access to the information source is shared by the speaker and others, it is considered most reliable. His own perception may well be reliable for the speaker, but whether it counts as reliable evidence depends on whether others have perceived the event as well. The same goes for reports, whose reliability additionally depends on their source. Not specifying a source (cf. hearsay) as in (4) may be considered less reliable than specifying one, as in (5). Even then, some sources are more reliable than others (a news report is generally more reliable than a random neighbour), and a rumour may still be considered more reliable the more people have access to it.

(4) Bis zum Abzug der Sowjet-Armee aus Afghanistan 1980 war bin Laden bei den USA gut gelitten. Die CIA soll sogar seine 
Sicherheitsausbildung übernommen haben. (L99/AUG,47820) 
‘Up until the retreat of the Soviet army from Afghanistan in 1980 bin Laden was well liked in the USA. The CIA is even said to have taken care of his security training’

(5) Medienberichten zufolge sollen es 50.000 Euro gewesen sein. 
(BMP/12-09/9) 
‘According to media reports it is said to have been €50,000’

On the other hand, the reliability of evidence is not a speaker stance. Langacker (2014: 6) describes reliability as “confidence in the source of information”. For a speaker to have confidence in something implies he has a certain commitment to its validity (and indeed Langacker’s definition of evidentiality includes the concept of ‘validity of information’). Epistemic modal assessments of this kind also have a degree of reliability, which depends on how strong the speaker’s commitment is: if a speaker says a proposition (henceforth P) is almost certainly the case, then his judgement is more reliable than if he

always be seen in an epistemic modal construction (but not vice versa, cf. Plungian 2001: 354), but this component is itself not epistemic modal.
were to deem P only possible. However, this is different from saying that a source of information or a piece of evidence is reliable.\(^6\) In the case of speaker commitments, the reliability depends on the speaker, whereas in the case of evidence, the reliability depends on the evidence type and people’s access to it.\(^7\) It can be said, though, that the question of degree of certainty usually arises when a speaker has no direct access to P (Sanders and Spooren 1996: 241; Plungian 2001; Cornillie 2009: 47-48), though Chafe (1986: 263) does state that belief should not inherently be considered more reliable, or deduction less reliable, than other evidence types. Langacker’s claim that the difference between “confidence in the source of information” and “certainty about the event described” is “subtle and non-essential” is only true in the sense that confidence is a degree of certainty of a speaker about P, but this is different from the reliability at stake in evidentiality. Moreover, as pointed out by Cornillie (2009) w.r.t. Dutch *moeten* ‘must’ and Spanish *parecer* ‘appear’, Mortelmans and Vanderbiesen (2011) and Vanderbiesen (2014) w.r.t. German *wollen* ‘will, want’ and Vanderbiesen (subm a) w.r.t. *sollen* ‘shall’, even the most indirect (i.e. inferential and reportive) evidentials do not necessarily correlate with a specific degree of speaker commitment. They show this by illustrating how the constructions in question can appear with markers of varying epistemic modal strength (e.g. ‘it is certain’ or ‘could be’), as well as with overt indications of epistemic modal neutrality (e.g. ‘it is unclear’).

Langacker’s (2014) argument for adopting evidentials as grounding predications seems to amount to the claim that they are not inherently different from the “established” grounding predications of tense and mood markers (and epistemic modals). It was pointed out above, though, that these perceived similarities may not be so straightforward. Nonetheless, evidentials and tense and mood markers certainly do have a functional affinity, which seems to be based on the same

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\(^6\) An anonymous reviewer remarked that regardless of how certain a speaker is about P, the reliability of his judgment (from the point of the hearer) depends first and foremost on how the speaker is evaluated as a source of information, i.e. a speaker may say P is almost certainly the case, but can still be considered an unreliable source. The reviewer is making the mistake described in this paragraph: The reliability of one’s judgement is one’s degree of certainty about P, it concerns the degree to which the speaker feels he can reliably say P is true, or the degree to which the statement that ‘P is true’ is reliable to his mind. If a person is a known liar, a statement he makes may be reliable from an epistemic modal standpoint (e.g. have a degree of certainty accorded to it about its truth approximating full certainty), though that person himself may be unreliable from an evidential standpoint (in his capacity as information source). Both types of reliability are quite independent of each other, but may and often do interact.

\(^7\) Shared vs. non-shared access is what Nuyts (2001) calls “intersubjectivity vs. subjectivity”, and he describes them as domains at work in but independent of epistemic modality. Cornillie (2007) shows how the same concepts, that underlie the reliability of types of evidence, are likewise independent of evidentiality proper. Therefore, Nuyts later comes back on his analysis of “subjectivity as an evidential dimension”, and instead describes it as a domain in its own right (cf. e.g. Nuyts 2012).
divide in terms of immediacy: direct evidentials express an inclusive value, indirect evidentials express an exclusive value. Evidentials can be seen as contributing towards “epistemic control”, i.e. garnering knowledge of the world and allowing one to form an accurate conception of reality, but it seems they do so in a fundamentally different way from either mood or tense markers. Evidentials are not bound by temporal distinctions (though they can be, cf. e.g. Tariana, Aikhenvald 2003b), and they are insensitive to the reality – irreality distinction (Langacker 2014: 3: “a speaker can present a statement as being true irrespective of whether the assessment is based on direct observation, hearsay, or inference”). Their contrast lies on the level of source of knowledge: some sources are based on a speaker’s direct experience, others are indirect, relying on higher-order cognitive processes (such as inference), or other conceptualisers (as with reports). The grounding system presented in Figure 1 can thus be updated as in Figure 2. The values under the ‘source of knowledge’ branch all indicate kinds of evidentials, e.g. ‘visual’ or ‘reportive’ are all evidentials in the same way ‘present tense’ is a type of tense or ‘indicative’ is a type of mood. This representation goes beyond the distinctions made in German, which does not have dedicated markers of direct evidentiality.

Time and reality offer a basic and “irreducible” (Langacker 2008: 44) contribution to establishing a conception of reality. Paraphrasing, reality may be said to centre around “IF something exists”, whereas time involves “WHEN something exists”. Langacker (2014: 6) seems to say that source of knowledge might not be as central because of its “subsidiary status: determining the source of information is not an end in itself”, like establishing the (temporal) existence of an entity, but rather a means to achieve a more accurate conception of reality. It does seem, though, that most languages have grounding predications in these three domains, be it in the form of tense-modal, evidential or combined systems,
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though pure evidential systems (cf. Aikhenvald 2004 for examples) are relatively rare (cf. also Boye 2012). Regardless of the system they belong to, many languages have grounding predication that are exclusively concerned with source of knowledge, and not with time or reality (e.g. the Tuyuca evidentials in examples (1) and (2), or German SOLL below). As such the adoption of source of knowledge as a domain in its own right seems warranted.

To conclude, (clausal) grounding is an egocentric system that is organised around immediacy. It contributes to a language user’s epistemic control by allowing him to relate entities to himself and his situation in several domains, notably time, reality and source of knowledge. A speaker’s own direct perception of a real occurrence in the here-and-now serves as a prototype (or “baseline”) from which the non-immediate values are increasingly more distant. In a language like German, there are dedicated grounding predication for each domain and each value, i.e. tense (present vs. past), mood (indicative vs. past subjunctive) and modals (absence vs. presence of a modal). In what follows, an analysis will be given of two German markers which serve a grounding function in the domain of source of knowledge, i.e. sollen ‘shall/should’ and the present subjunctive.

3. The grounding function of reportive sollen

3.1. SOLL as a reportive evidential

Vanderbiesen (2014, subm a) discusses the various ways in which the terms ‘quotative’ and ‘reportive’ have been used in the literature, and suggests more coherent, functionally-inspired definitions for them, which will serve as working assumptions for present purposes. The definition of a reportive builds on the description of evidentiality in 2.2, and runs as follows: A reportive evidential is an element that i. justifies the use of a proposition P by a speaker S, by ii. evoking the notion of a source completely unrelated to S from which P originated, thus signalling that iii. S had only indirect access to P. Reportives use the reference to the existence of a source only as a means to an end, namely the justification of a proposition, therefore they will often omit overt reference to this source. They are deictic, meaning they encode a speaker’s view on the proposition, and therefore also have propositional scope. They are different from other (indirect) evidentials in being the only ones that evoke an entirely separate consciousness as source of information. Being evidentials, finally, they can also be considered ‘epistemic’, meaning they have a function related to the justificatory support of knowledge (Boye 2012).

In the uses below, sollen has a reportive evidential function (cf. Vanderbiesen subm a; Mortelmans and Vanderbiesen 2011: 73ff.), meaning it points to the
existence of a speaker-external source for the information in the proposition. The existence of this source serves as a justification for the current speaker for saying what is in the proposition. In examples (6) and (7) this source is left unspecified, i.e. it is unknown where the information stems from, except that it is a third person. These examples also show some of the syntactic contexts SOLL may appear in: a main clause with a bare infinitive in (6), and a sub-clause with a perfect infinitive in (7). In (8) the source is overtly indicated by means of a prepositional phrase with laut ‘according to’, which does not in essence alter the function of SOLL (see Carlsen 1994; Diewald and Smirnova 2013).

(6) Bergers Neue soll Helene heißen, aus Kufstein kommen und 18 Jahre jünger sein… (B/12-09/4)  
   ‘Berger’s new flame is apparently called Helene, comes from Kufstein and is 18 years younger’

(7) Patrick Dehm war gleich zweimal fristlos gekündigt worden. Zunächst am 29. Juni, weil er sich abfällig über den Bischof geäußert haben soll. (FNP/12-09/11)  
   ‘P.D. was fired twice without notice. First on 29 June, because he was said to have made derogatory comments about the bishop’

(8) Laut Polizeiangaben soll der 30-Jährige, der unter Alkoholeinfluss stand, auf einen 42-jährigen Südamerikaner mit einem Messer losgegangen sein. (NUZ12/APR.01848)  
   ‘According to police reports the 30-year-old, who was intoxicated, is said to have come at a 42-year-old South-American brandishing a knife’

This use will henceforth be referred to as SOLL, and its function as a grounding predication will be the topic of the next section.

3.2. SOLL as a grounding predication
The idea of German modal verbs as grounding predications was explicitly argued against by Langacker (1991: 335), since the modals allow non-finite verb conjugations (e.g. gesollt) and can themselves be inflected for and thus grounded by tense, person and mood (e.g. soll-e, soll-t-est). Since then not much has been written on the subject – even Smirnova (2011), in her article on the German clausal grounding system, states merely that “[s]ollen and wollen […] express a
neutral non-real status of the profiled event in respect to the speaker’s (present) knowledge of reality”, adding in a footnote that “I am not further concerned with the values of wollen and sollen here, since their epistemic modal status is somewhat problematic”.

Mortelmans (1999, see also Mortelmans 2001, Mortelmans 2002, and Mortelmans 2004) finds that some German modals do function as grounding predications, but only in certain uses. The central questions then are i. whether SOLL is a grounding use, and ii. if so, where its function lies. With respect to the first question, it should be noted that the objections levied against German modals at large by Langacker (1991: 335) do not hold for SOLL. First, being a deictic use of the modal (cf. Diewald 1999), SOLL has a considerable degree of grammaticalisation, and as such has lost the ability to appear in non-finite forms (er hat das Buch lesen sollen ‘he has to read the book’ or er hat als Letzter auf die Matte gesollt ‘he had to go on the mat last’ never have reportive meaning). Second, SOLL does not show much inflectional potential. Not only is it a third person singular present indicative in 149/200 cases in the sample underlying this paper, as a modal verb it also does not have any overt inflection in this conjugation (compare er läuf-t ‘he runs’ and er soll- ‘he shall”), meaning the report function is expressed by the (ungrounded) “root” form, as with English modals.8 Third, the reportive function of SOLL follows neither from its tense (present) nor its mood (indicative) marking. Present tense relates to either present or future events, and the indicative expresses that the event is accepted as real by the speaker. However, SOLL relates exclusively to past events. This is evident in the prototypical use of SOLL with perfect infinitive complements, as in (7)-(8), but also in its rare uses with a bare infinitive, as in (6). Though the proposition may still hold true at the time of speaking, SOLL itself bears on an occurrence that is decidedly and necessarily past, namely the point at which the speaker received the information (e.g. by being told).9 The whole proposition is presented as being non-immediate to the speaker, rather than immediate to him in terms of temporal location (present tense) or reality (indicative). This non-immediacy cannot be explained by either mood or tense marking, and can thus only come from the reportive meaning itself.

8 There are also two past subjunctives, one present subjunctive and 48 plurals. Mortelmans (2001) points out that even the English modals, unequivocally considered grounding predications, may still be grounded by tense. She gives examples of could and would.

9 This is not meant to imply that SOLL explicitly refers to this point in time, i.e. that a point in time is its referent. Rather, it follows from the reportive function itself that it bears on past occurrences, as one can only be told of something that already happened. The “past orientation” of SOLL is comparable to the future orientation of imperatives, where it follows necessarily that an obligation can only be carried out in the future. The point is that SOLL does not have a temporal function, which is illustrated by its bearing on past occurrences (in the sense described) while being coded in the present tense.
As to what SOLL’s grounding function is, Mortelmans (1999: 281, translation JV) says that “the evidential marking performed by sollen can be interpreted as an – albeit indirect – epistemic factuality assessment by the speaker. From this point of view the quotative [in this paper’s terminology: reportive, JV] sollen can thus be regarded as a ‘grounding predication’“. Like Langacker (2014: 3), she states that while SOLL’s function is primarily the marking of secondhand information, there is nonetheless a correlation “in our world” between evidence types and degree of certainty. Based on empirical analysis, she concludes that in the large majority of cases, SOLL is combined with a positive factuality assessment: “What is experienced from oral or written sources is generally given credibility, such that the hearer may get the impression of a more positive factuality assessment by the speaker” (Mortelmans 1999: 278, translation JV). Mortelmans seems to work from the assumption that a factuality assessment should be derivable from the primary evidential function in order to qualify SOLL as a grounding predication. Because of the apparent correlations between evidentiality and epistemic modality this does not seem too farfetched. Nonetheless, the epistemic modal function is, as Mortelmans (1999: 279) herself acknowledges, derived, indirect and non-conventionalised. A positive factuality assessment is attributed to SOLL when the speaker does not signal any additional “distance” or scepticism. Coupled to the observation that SOLL also readily (though somewhat less often) combines with other (negative) values, (see also section 2.2. supra) this seems to suggest that the “positive” value is in fact an epistemic-modal neutrality on the part of SOLL (cf. also Vanderbiesen subm a). The direct or indirect experience of P by a speaker-external conceptualiser is reoriented to the ground in that the speaker employs it as a justification for his own relation to P. SOLL thus locates a profiled entity as being non-immediate to the ground in terms of source of knowledge. With other grammaticalised modal verbs SOLL shares a non-immediate value. Its difference with other evidentials lies in the type of evidence and the extent of the distance of the profiled entity to the ground (because of the mediation of another conceptualiser). As pointed out by Mortelmans (1999: 286), however, SOLL only has this grounding function as a present indicative in a declarative main clause. She discusses cases where SOLL cannot be considered the grounding element itself, namely when it appears as a past indicative, or in the sub-clause of a superordinate reported speech construction, or with contextually-marked overt scepticism. Evidentiality is obviously one way in which the domain of ‘source of knowledge’ becomes relevant for grounding predications. However, similar to how both mood and modals may relate to the domain of (ir-)reality in different ways, so too are there different (non-immediate) ways of relating to source of knowledge. In the following section, this will be illustrated with the case of reported speech.
4. The grounding function of the quotative present subjunctive

4.1. The present subjunctive as a quotative

The definition of ‘quotative’ employed here is set up explicitly in contrast to that of reportives (cf. 3.1. and Vanderbiesen 2014, Vanderbiesen subm. a.). It says that a quotative is an element that

i. attributes some discourse expressed in its context, to some person or “personal entity” thus identified as the source of this discourse, thereby evoking the idea of a speech act relationship between the source and the discourse. The purpose of a quotative is the attribution of some information to and thus the identification of a source, meaning that, contrary to reportives, the reference to a source is the end in itself. For this reason, quotatives often (yet not always) overtly indicate their source, which is mostly a person or a “personal entity” such as a newspaper, university, capable of communication. Because the focus is drawn away from the speaker, quotatives are often non-deictic (making no reference to the ground), or “deictically displaced” (cf. Sennholz 1985: 224; Rauh 1978: 101; Diewald 1991: 113–117; and Bühler 1934 on “Deixis am Phantasma”), meaning they shift the vantage point from the referring speaker’s I-Here-Now to that of the referred (source) speaker (i.e. they refer to another ground). They tend to have speech act scope, rather than propositional scope, and they are not involved with the justification of (or degree of belief in) knowledge, hence they are neither evidential nor epistemic (Boye 2012: 32). In sum, reportives justify some information by signalling the existence of a source for it, whereas quotatives take the existence of a source and attribute some information to it. The “direction” of their semantic relation is diametrically opposed: reportives relate some information to a source, whereas quotatives relate a source to some information.

(9) Finanzminister Wolfgang Schäuble (CDU) jedenfalls meinte jüngst, er sei wegen der Wahl in den Niederlanden weit nervöser. (MM/12-09/2)

‘Finance minister W.S. at any rate stated recently he be-PRES.SUBJ. much more nervous on account of the elections in the Netherlands’

Example (9) is a typical quotative construction: the source is an overt, clearly identifiable person, and the quotation is clearly signalled by means of the present subjunctive as a marker of deictic displacement. It has scope over the whole speech act of Schäuble saying that he remains nervous. The current speaker is not making a ‘claim that P’ and thus not justifying anything, but rather signals that P is another person’s claim, and thus attributes it to that person. The actual quotative marker is the present subjunctive, but it can be said that reported speech as a whole, both direct and indirect speech, is a quotative phenomenon.
For that reason even constructions that lack a present subjunctive, like (10), can still be considered ‘quotative’, as they still function to attribute information to another source. In this case, the quotation is marked non-deictically by means of a speech verb (*melden* ‘to report’), as the indicative on *widmet* ‘devotes’ is not a marker of reported speech, or a quotative.

(10) Das Deutsche Literaturarchiv Marbach (DLA) meldet, dass sich eine neueingerichtete Koordinationsstelle seit Anfang September deutsch-jüdischen Nachlässen in Israel *widmet*. (FAZ/12-09/35)

‘The German Literature Archive Marbach (DLA) reports that since the start of September a newly founded coordination centre is devoting itself [lit. *devote-IND itself*] to German-Jewish manuscripts in Israel’

Nevertheless, in German, the present subjunctive is often considered the prototypical marker of reported speech. Being the only deictic (in the sense of deictically displaced) marker of its kind, its grounding function is the topic of the next section.

4.2. *The present subjunctive as a grounding predication*

Even in Langacker’s view, the present subjunctive would be considered a grounding predication, as it is a highly grammaticalised inflectional category that is not itself grounded (the distinction between present and past subjunctive is no longer a tense distinction – rather, both subjunctives express a quite distinct range of functions, cf. Fabricius-Hansen 1997; Helbig 2007).

When it comes to the actual grounding function of the present subjunctive, different opinions abound. Smirnova (2011) describes grounding predications in terms of the deictic triad mentioned in 2.1.: ground, grounded entity and grounding relationship. She argues that each member of the triad determines something about the grounding predication: the grounded entity determines the nominal vs. clausal contrast, while the grounding relationship determines the kind of grounding (in the clausal domain: temporal vs. modal (vs. evidential)). Smirnova points out, though, that the ground itself likewise has an impact, which leads her to the distinction between a *common deictic centre* and a *speaker-exclusive deictic centre*. The former is the ground construed as a point of reference common to speaker and hearer, while the latter is a construal where the hearer may fall outside the ground – it is a more egocentric type of grounding. The proposed distinction is important for the contrast between past and present subjunctive. As moods, both subjunctives are said to ground in “non-reality” (cf. e.g. Smirnova 2011: 103). A past subjunctive presupposes a *common* construal, because the counterfactual or hypothetical situations it refers to are actually non-
existent for both the speaker and the hearer. A present subjunctive, when used in reported speech, is supposedly tied to a *speaker-exclusive* construal. By attributing the information to someone else, the speaker also indicates that it did not originate with himself, that it is outside of his own reality. However, this does not automatically imply that it is outside of the hearer’s reality as well. In short, with a past subjunctive the contrast is reality vs. non-reality, with a present subjunctive it is reality vs. my own (speaker’s) reality.

There are two main problems with this analysis. First, as with Mortelmans’s (1999) analysis of SOLL, Smirnova (2011) seems to need to establish a reality-based function for the present subjunctive in order for it to be considered clausal grounding: “It is […] problematic to integrate Konjunktiv I (the present subjunctive) into the reality-based conception of modal grounding in German”. Again this may be attributed to the fact that the present subjunctive is part of a paradigm of forms that have reality-based functions. Nevertheless, the present subjunctive is epistemic-modally neutral, indicating a factual “neither-nor” rather than an “either-or” (cf. e.g. Mortelmans 1999: 27). Second, even if one assumes Smirnova’s (2011) analysis, then it is still only the present subjunctive that evokes another instance that is responsible for P (for whom P “is real”). This seems to be the core difference between both subjunctives, and indeed the description of the present subjunctive as an element with which the current speaker marks something relative to himself seems to obscure the fact that its actual (attributive) function lies in marking something about someone else.

Mortelmans (2001: 7) preempts both problems when she describes the contrast between indicative and past subjunctive as one between reality and irreality, but of the present subjunctive observes that it is “less concerned with epistemic than with personal matters: it does not indicate a shift as far as the epistemic region (reality → irreality) is concerned, but signals a change with respect to the personal perspective (speaker → third person) on the SoA [state of affairs, JV]”.10 In fact, Mortelmans shows that even the indicative and the past subjunctive in certain uses may not locate a process in reality or irreality respectively (e.g. indicatives also appear in conditionals). Thus, she proposes that mood as a whole should be viewed not in terms of reality, but in terms of speaker stance. The past subjunctive would indicate a generally negative attitude, the indicative a positive one, and the present subjunctive a neutral one.

The neutrality of the present subjunctive derives from its use as a marker of reported speech. This is both the strength and the weakness of the analysis. On the one hand, the grounding function of the subjunctive should indeed relate to

10 In a sense, Mortelmans is here making Smirnova’s (2011) point about the relevance of the ground as an element of the deictic triad: the reality vs. irreality distinction is a characteristic of the grounding relationship, but a speaker’s stance is an element of the ground itself.
what is obviously its primary, quotative meaning. On the other hand, the proposed grounding function is a derived one, in both analyses: for Mortelmans it is speaker stance, for Smirnova (2011: 101-102) the location of an event outside of one’s own (speaker) reality (from which in turn speaker stance can be derived). In both cases the subjunctive’s reported speech function is the basis for the derivation.

Not only does it seem unlikely that the import of an expression lies in a derivation from another function, it is also quite clear that as in the domain of reality, the moods may combine readily with different speaker stances. In (11), where the italics are added alternatives, all three moods may be said to express neutrality, whereas in (12) the present subjunctive is clearly negative.\(^{11}\)

\[(11)\] Die Ausschussmitglieder reagierten empört darauf, dass der MAD die Unterlagen nicht von sich aus offengelegt hat/habe/hätte. (FNP/12-09/2)

‘The committee members angrily reacted upon hearing that the MAD have-PRES.IND./PRES.SUBJ./PST.SUBJ. not made the documents public of their own accord’

\[(12)\] Denn im Mixed-Finale hatte sie gespielt, als sei es ihre Bestimmung, zu verlieren (Jäger 1971: 411)

‘As in the mixed finals she had played as if be-PRES.SUBJ. her destiny to lose’

Though in “minimal pairs“ the three moods do seem to correlate with certain speaker attitudes (compare e.g. Johann ist/sei/wäre zu Hause ‘John is/would be at home’), the stance in (11) and (12) seems to come from the constructions themselves, rather than from the moods, i.e. the reading is perhaps “coerced” onto the moods. In (11), the reported speech construction is signalled by reagieren auf ‘to react to’, and what follows is a ‘neutral’ attribution of the information to the source Ausschussmitglieder ‘committee members’, regardless of which mood is used. In (12), the ‘negativity’ derives from the unreal comparison signalled by als ‘as if’, which exists autonomously of the mood that follows. By contrast, the reported speech function of the present subjunctive need not be contextually supported. Example (13) is recognizable only as reported speech when the verb is conjugated in the present subjunctive.

\(^{11}\) It should also be clear, then, that Smirnova (2011: 103) is mistaken when she contends that while the past subjunctive can “stand in” for the present subjunctive (in reported speech), “the reverse situation does not hold in German”.

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(underlined) – the indicative and past subjunctive alternatives (in italics) do indicate reported speech in and of themselves.

(13) Ihr Mann habe/hatt/hätte es nicht geschafft, sich auch noch um ihre Gefühle zu kümmern, was er heute bereue/bereut/bereute/bereute (B/12-09/5)

‘He husband did not manage [lit. manage-PRES.SUBJ./PRES.IND./PST.IND./PST.SUBJ. not] to also care about her feelings, which he regret-PRES.SUBJ./PRES.IND./PST.SUBJ./PST.IND. today’

Therefore, the present subjunctive’s quotative meaning is a better candidate for grounding function.

Diewald (1999: 182) comes close to an accurate analysis. She describes the function of the present subjunctive as being that of shifting the reference point from the referring speaker to the referred speaker. In grounding terms, then, the subjunctive would not locate the profiled entity relative to a reference point, but would rather locate the reference point itself. There are two ways in which this statement is not entirely accurate, though. First, it is clear from example (14) that the actual ground containing the current speaker also still functions as a reference point: though the subjunctive attributes the information to Samsom and identifies him as source, the underlined pronouns remain anchored in the current speaker (er ‘he’ refers to Samsom, who would have used ich ‘I’ when talking about himself).

(14) Samsom sagte, er stehe dem französischen Staatspräsidenten Hollande ideologisch näher als Bundeskanzlerin Angela Merkel, er wolle aber nicht wie der Franzose möglichst bald Eurobonds einführen. (FAZ/12-09/2)

‘Samsom said he was [lit. stand-PRES.SUBJ.] ideologically closer to French president Hollande than to chancellor Angela Merkel, but he does not want-PRES.SUBJ. like the Frenchman to introduce Eurobonds as soon as possible’

One minor point of criticism is that if something is located, it is located relative to something else. If, then, the reference point is “located”, it should be located with respect to something else, which would then be the actual reference point. As it turns out, in this conception the reference point could only be the actual ground. The statement would thus more or less negate itself.

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Second, as pointed out by Diewald (1999: 229-230) herself, the (shifted) reference point of a present subjunctive is fully unspecific. In a contextless main clause use of the present subjunctive as in (15) there is no source that the subjunctive can refer to, and it would be impossible to determine what the source would be – it could be the speaker himself, his interlocutor, or a third person. For this reason, this type of unspecified main clause use is rare (5/123 in the sample):

(15) Deutschland habe gezeigt, dass sich Wachstum und Konsolidierung nicht ausschließen. (FAZ/12-09/1)

‘Germany have-PRES.SUBJ. shown that growth and consolidation are not mutually exclusive [lit. not exclude-PST.SUBJ. each other]’

If the function of the present subjunctive rested in the localisation of a reference point, one would expect it to be able to do this without contextual support. Grounding is defined as the localisation of a profiled entity (a referent) w.r.t. the ground. As a grounding predication, this is what the present subjunctive does. Its peculiarity, however, rests in the observation that it locates the entity relative to another ground than the actual one, i.e. to a “surrogate ground”. The actual ground remains a reference point: within a reported speech construction such as (14) it still grounds pronominal reference, for instance, but it also remains the point from which the link between the surrogate ground and the proposition is asserted. The surrogate ground may even have the function of an “imagined ground” (cf. Langacker 2014), i.e. of a conjured-up reference point, in cases where the reported speech construction does not go back to an actual original utterance. It would then purely exist by virtue of being imagined from the actual ground. A natural consequence of this function of the present subjunctive is neutral speaker stance: because the information in the proposition is attributed to another ground it follows that the referring speaker does not and/or cannot pronounce on its validity from the actual ground. Likewise, if a proposition is outside of the actual ground, it is also outside of that ground’s epistemic space and can thus be analysed as marking irreality. In short, as a grounding predication the present subjunctive locates a profiled entity as immediate to a surrogate ground in terms of source of knowledge.

5. Conclusion
This paper has discussed the relation of evidentiality and grounding. It was argued that evidentiality relates to the ground in terms of ‘source of knowledge’, where it applies to an immediate vs. non-immediate contrast, parallel to the other
fundamental grounding categories of reality and time. On this basis the grounding function of reportive *sollen* (SOLL) was analysed. As a grounding predication, SOLL marks a profiled event (i.e. the event referred to) as non-immediate to the actual ground in terms of source of knowledge. Further, the paper also discussed the relation of reported speech and grounding. The quotative present subjunctive, though not an evidential, also relates to source of knowledge: it marks a profiled event as being immediate to a surrogate ground in terms of source knowledge. These descriptions coincide with the definitions of reportives and quotatives offered here. In the former case, an expression invokes a source to serve as a justification in the actual ground, while in the latter case information is explicitly attributed to a surrogate ground.

There is thus a fundamental difference in the “salience” of the source in the grounding function of reportives and quotatives. With a present subjunctive, the source conceptualiser is the centre of his own (surrogate) ground, which is distinct from the actual ground and from which the current speaker is (portrayed as being) excluded. The role of the current speaker in a present subjunctive is limited: though he still serves as a reference point (as part of the ground from which the connection between surrogate ground and proposition is signalled), he is not the ultimate “centre of responsibility” for the proposition. With SOLL, however, he is. The speaker-external conceptualiser is only invoked as a justification for the proposition, not as a reference point with respect to which the proposition is located (in the same way as an inference or some direct evidence are not reference points). I thus disagree with e.g. Diewald’s (1999) or Mortelmans’s (2001) analysis of *sollen* as an element that shifts the “origo”, i.e. the reference point. The current speaker remains the only reference point in the grounding relation. What is at stake is how the proposition relates to the speaker’s own “epistemic space”, and as such reportives are more subjective grounding predications than quotatives.

In the schema of clausal grounding distinctions offered in Figure 2, a further differentiation can thus be made. Figure 3. only represents the source of knowledge branch.
The concepts in italics all refer to linguistic elements, as they did in Figure 1 and Figure 2. For reasons of completeness, some more elements have been added: ‘internal’ is a type of evidential that justifies a proposition based on the fact the speaker simply knows about it, while ‘assumptive’ and ‘conjecture’ indicate a speaker ‘assumes’ P or ‘guesses’ P (cf. Aikhenvald 2004). ‘Direct’ and ‘indirect’ are labels for the type of “access” the current speaker has to the referent of the grounding predication, i.e. to the event described: with the direct values he is the source himself and directly experienced the event, whereas with the indirect values there is some kind of “obstacle” between him and the event described. Notice that in this case, ‘indirect’ covers more than just evidentials, as the quotative was defined as a non-evidential element. Its inclusion under the non-immediate branch is motivated by the fact that from the current speaker’s point of view immediacy to a surrogate ground automatically entails non-immediacy to his actual ground. As stated in 4.2., the actual ground also still serves as some kind of reference point, and, at any rate, the (surrogate ground) immediacy of a quotative is of a different order than the (actual ground) immediacy of direct evidentials, and is in fact more closely related to the (actual ground) non-immediacy of reportives.

The split between ‘inferring’ and ‘referring’ bases on the type of “obstacle” there is between the speaker and the event, or the “increments of distance from the baseline” as Langacker (2014: 4) puts it. Referring grounding predications (reportives and quotatives) evoke a separate, speaker-external conceptualiser as the source, whereas inferring grounding predications relate to higher-order mental processes of the current speaker himself (inferring, assuming, guessing,…). Reportives and quotatives are different from each other in the
salience of that conceptualiser in the grounding function, which is a reflection of
a functional distinction between them, outlined in 3.1. and 4.1. 13

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13 Vanderbiesen (2014), Vanderbiesen (subm a), and Vanderbiesen (subm b) go deeper into the
functional differences of reportives and quotatives as markers of ‘referral’.
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