

with an object or being, giving the word off to another
belonging to me, and so on. In this way, I can make up my dialogue

2 Subjectivity and upwards projection in mental space structure

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2.1 A Mental Space approach to subjectivity

This chapter proposes an analysis of historical processes of meaning *subjectification*, in terms of viewpoint relations in a dynamic network of mental spaces. We argue that defining subjectification in terms of mental space structure allows added precision both in identifying subjective aspects of meaning and in assessing *degrees* of subjectivity – and hence in accurately describing directions of meaning change. We shall begin by giving our definition, in the context of the extensive scholarship on subjectification, and continue with examination of particular cases.

Linguists' understanding of viewpoint has been advanced by, among other things, almost thirty years of research on subjectivity and subjectification. Traugott (1982, 1989, 1995), Langacker (1987, 1990, 1991), Hopper and Traugott (1993), Traugott and Dasher (2002), and others have in different ways used these words to define the relationship between the referential meaning of a word and the understanding of the speech setting – the speaker's and hearer's physical setting, beliefs, and interaction. Research also points (Sweetser 1990; Dancygier and Sweetser 2005; Sanders *et al.* 2009) to a cline of subjectivity between these aspects of the speech setting: the physical setting is more “objective” than the speaker's and hearer's mental states and interaction. Traugott has proposed the generalization that meanings can move towards greater subjectivity, but not towards decreased subjectivity. Relatively high subjectivity is present in grammatical meaning domains such as tense (time relative to the Speaker and Addressee's Now), epistemic modality (reference to the Speaker's reasoning processes), and (in)definiteness marking (reference to informational accessibility by Addressee, as assessed by the Speaker in context).

Langacker has defined subjectivity as *implicit* (or relatively *unprofiled*) reference to the Speaker, Hearer, and generally to the Ground (S, H, and their physical and temporal discourse setting); Traugott's examples of subjectification also clearly involve added meaning of this implicit kind. A meaning such as tense would be subjective by Langacker's definition, since the primary

reference of the clause (perhaps some past situation) need not be about the Speaker's Here and Now, in order for past tense reference to be computed relative to the Here and Now. Similarly, establishment of a definite reference primarily profiles the entity so designated, not the Speaker and Addressee relative to whose mental access the definiteness is calculated: *the cat* "refers" to the relevant feline, not to S and H's assumption that they can both successfully identify it, though the assumption is necessary for the reference to work. Even pronouns such as *I*, *you*, *she* can be said ultimately to *refer* to the entities designated, and only secondarily to the implicit speech situation via which such referential interpretation occurs. Crucially, as Langacker says, in all such cases viewpoint is present: your *I* is my *you*, and vice versa, while tense reference is relative to some Ego's current Now. No utterance is referential without Grounding; without a Now, tense marking fails to locate a described event in time, and without a shared discourse record or physical context including a cat, *the cat* fails to locate a specific cat. Although at opposite ends of the cline, there is a contrast between very minimal profiling of Ground elements (every English sentence requires tense marking) and full overt profiling (mention of the Speaker or of *now*), there is also every possible degree of relative profiling of Ground and Content in between these extremes.

Mental Spaces Theory is particularly well adapted to formalize such concepts; the general notion of Viewpoint Space (Fauconnier 1985, 1997; Cutrer 1994; Sweetser and Fauconnier 1996) is already formalized as meaning the space via which information about the Focus (referentially profiled) Space is accessed. Past tense marking in *Chris drove to San Francisco* thus indicates that while the Focus Space is the Past Content Space where the profiled events and situations are being elaborated, the access to that Focus Space is via a separate Viewpoint Space, a Present Space wherein Chris's drive is no longer taking place. The temporal reference of both of these Content Spaces makes further implicit reference, however, to the Ground of the Speaker–Hearer interaction. Although S and H and their location and setting are not mentioned, the temporal reference of the Content Space network is most likely calculated based on S and H's Now (though of course it could also be an imagined Narrator's Now).

Sanders *et al.* (2009) have formalized the concept of a Basic Communicative Space Network (henceforth BCSN), which includes the construal of a Content Space network relative to a Ground network. Following past work by Sweetser (1990), Dancygier (1998), and Dancygier and Sweetser (2005), the Ground network necessarily involves:

- (1) a Ground Base Space, or Real Space (cf Liddell 1998, 2003): the real S and H in their spatiotemporal setting;
- (2) one or more Epistemic Spaces: understandings of S's and H's beliefs and reasoning processes, which are also background to the communication;

Basic Communicative Space Network

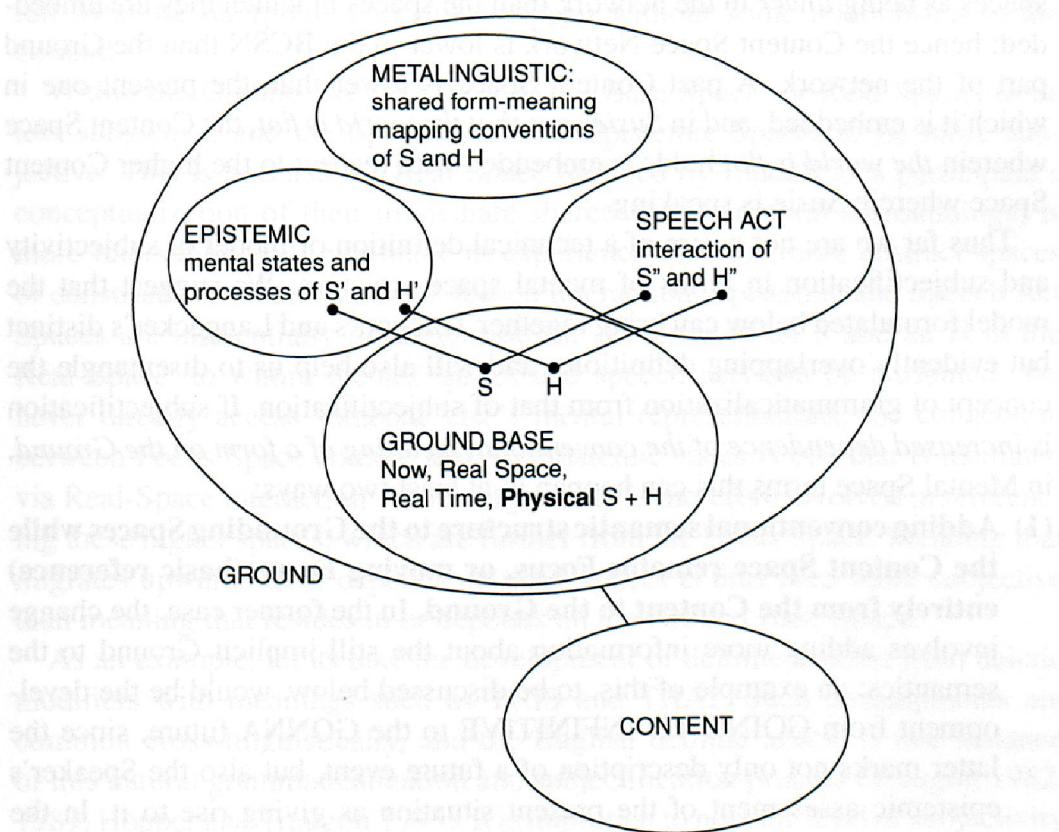


Figure 2.1

- (3) a Speech Act Space of performed speech interactions (e.g. this is a statement or a question);
- (4) a Metalinguistic Space of shared linguistic forms that can be referenced if chosen usages are brought into consciousness or disputed.

This extended BCSN complex is what allows the referential interpretation of the Content Spaces – that is, even though we may not be talking about the Ground, we inevitably need it (in Langacker's terms) to referentially “ground” our talk about other things. This space network, as argued in the work cited above, is therefore built up automatically and implicitly by any communicative use of language. One need not refer overtly to S, H, their mental processes, and so on, in order to make these entities available either for direct reference or as the Grounding for reference. No form can be used communicatively without some grounding of the Content with respect to a Ground; and as Langacker points out, there is a complex cline between primary profiling of Content (as in *Chris drove to San Francisco*), and primary profiling of Ground and interaction (as in *Hello*). Figure 2.1 shows a simplified version of Sanders *et al.*'s BCSN model.

It is general usage in the Mental Spaces framework to refer to embedded spaces as being *lower* in the network than the spaces in which they are embedded; hence the Content Space Network is lower in the BCSN than the Ground part of the network. A past Content Space is lower than the present one in which it is embedded; and in *Susie says that the world is flat*, the Content Space wherein *the world is flat* holds is embedded with respect to the higher Content Space wherein Susie is speaking.

Thus far we are not aware of a technical definition or model of subjectivity and subjectification in terms of mental space structure. We suggest that the model formulated below can bring together Traugott's and Langacker's distinct but evidently overlapping definitions, and will also help us to disentangle the concept of grammaticalization from that of subjectification. If subjectification is *increased dependence of the conventional meaning of a form on the Ground*, in Mental Space terms this can happen in at least two ways:

- (1) **Adding conventional semantic structure to the Grounding Spaces while the Content Space remains Focus, or moving Focus (basic reference) entirely from the Content to the Ground.** In the former case, the change involves adding more information about the still-implicit Ground to the semantics: an example of this, to be discussed below, would be the development from GOING TO INFINITIVE to the GONNA future, since the latter marks not only description of a future event, but also the Speaker's epistemic assessment of the present situation as giving rise to it. In the latter case, the shift makes the Ground the primary area of reference as opposed to some represented Content: an example of this would be the development of *God be with you* to *Good-bye*, where *Good-bye* no longer has any descriptive content meaning (hence no "truth conditions" in truth-conditional semantic models), but is meaningful only as a parting marker in the Speech Act Space. In both these cases, we might say that meaning migrates "upwards" in the space network.
- (2) **Increasing the distance between Grounding Spaces and Content Focus, while Focus remains lower in the network** – that is, increasing the calculation needed to locate the Focus Space with respect to the still-implicit Ground. We shall be examining cases of this as well – for instance, the development of the root or deontic meaning of the modal MUST to the epistemic meaning.

Our model of the Ground is situated within the BCSN model presented in Figure 2.1. Besides the Ground network (including the Base, the Speech Act Space, and the Epistemic Space(s)), and the Content Space network, a BCSN includes a metalinguistic space of putatively shared form-meaning mappings, and a metatextual space of shared discourse structure and history (cf Dancygier 1993, 1998; Dancygier and Sweetser 2005). These are parts of the Ground network, though not discussed in detail here. Placement within this extended BCSN

complex is necessary for the interpretation of any Content Space network – full meaning interpretation cannot happen without some relationship to the Ground.

Within the Ground, we take the Ground Base Space (or Real Space) to be less subjective, and the Speech Act and Epistemic Spaces to be more subjective. This is because the Real Space (defined by Liddell as a participant's conceptualization of their immediate shared spatiotemporal surroundings) is more intersubjectively verifiable in experience than the more abstract spaces of construals of mental states or speech interaction. Epistemic and Speech Act Spaces are inferentially dependent on the presence of an S and an H in the Real Space, to whom mental spaces and speech acts can be attributed. We never directly access someone else's mental representations; the connection between Focus Space content and S's epistemic states is one that is mediated via Real-Space interaction. More subjectivity is therefore involved in referencing these higher spaces, which are further from the Focus Space. Meaning that migrates upwards to or depends on these spaces is thus even more subjective than meaning that resides in or depends on the Ground Base Space.

As an example, let us take the development of definite articles from deictic modifiers with meanings such as THIS and THAT. Such developments are common cross-linguistically, and the English definite article is one instance of this natural grammaticalization and subjectification process (Traugott 1982, 1989; Hopper and Traugott 1993). It is important to note the level of subjectivity already present in deictic markers, although this is not focused on by Traugott. THIS and THAT clearly have reference to the Ground built into their meaning; in order to access the referent object (*this book* or *that tree*), they implicitly refer to the speaker's and/or the hearer's locations relative to the referent object, or to their manual or visual access to it. However, Traugott seems quite right to say that there is increasing subjectivity in the development of a deictic to a definite article, as the new meaning depends more on the mental processes of S and H, rather than on the physical Ground or Real Space of spatial relations.

In Figure 2.2, the mental space viewpoint structure of a THIS/THAT deictic is represented. The Content Space is understood to be primarily in Focus, including reference to certain objects. The upwards arrow indicates that access to those referents is achieved via reference to the unmentioned structure of the Real Space Ground of spatial relations – S's assessment of these relations as mutually accessible to S and H in their environment – even though the primary target of reference is not this presumed and unmentioned network of spatial relations, but the entity pointed out within it (a sentence such as *This book is red* does not profile the Ground).¹

In Figure 2.3, we diagram the relationships involved in interpretation of definiteness markers, which are frequently historically derived from deictic forms (as in the case of English *the*) and are one of Traugott's (1982, 1989) clear

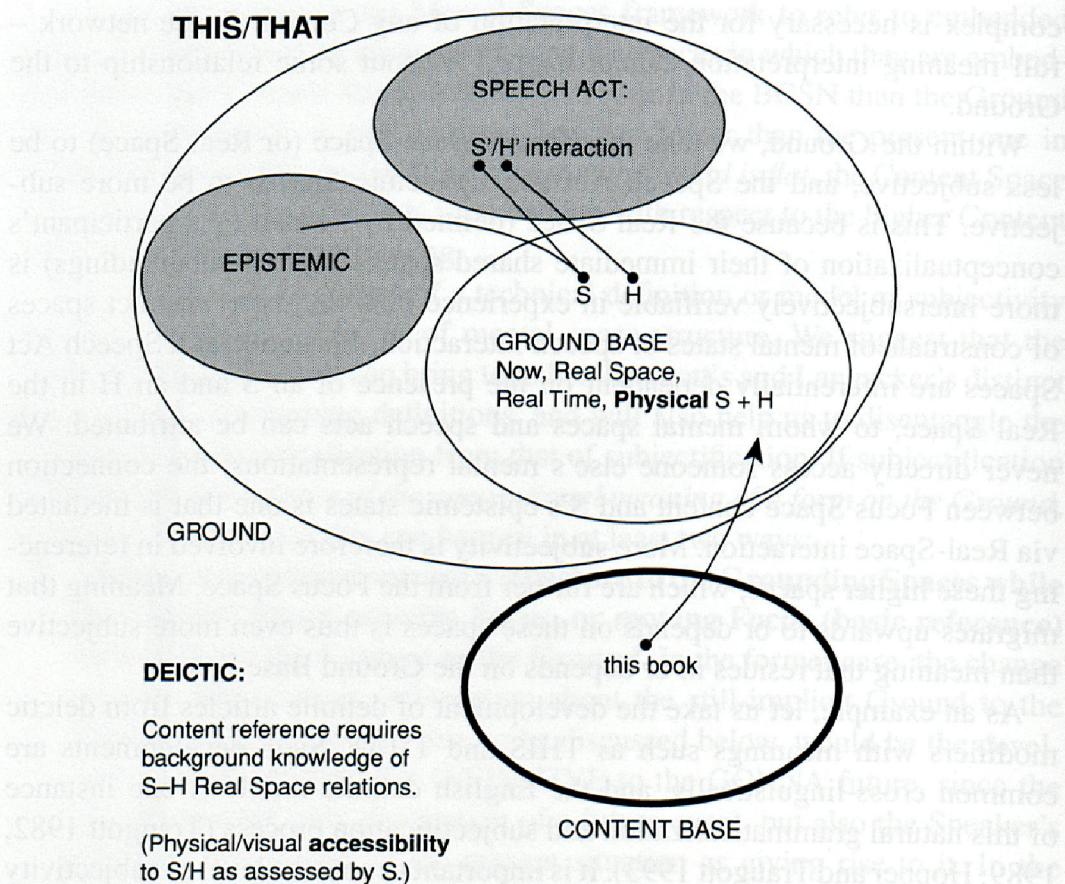


Figure 2.2

examples of subjectification of meaning. To frame or decode the reference of *the book*, unlike *that book*, it cannot be enough to know the Base Ground Space relationships involved in the Ground; the Speaker is communicating an assessment of the Hearer's cognitive access to relevant context, which may include speech act context (and discourse record) as well as Real Space context. As Figure 2.3 shows, we consider these spaces to be higher in the mental space network than the Base Ground Space, although necessarily linked to it (inasmuch as people in all Real Spaces have epistemic processes and interactional records). The Base Ground Space is more "objective" than these other spaces, because it is more intersubjectively verifiable and "shared." A definite article is thus more subjective than a deictic, because it involves implicit reference not just to the immediate presence of S and H in Real Space, but to the less accessible attendant spaces of their cognitive and discourse structures.

This kind of meaning structure is not in fact unique to grammatical markers. An example of a lexical item that simultaneously has meaning at such multiple levels is the verb *know*. *Ann knows that the world is round* in principle refers to (focuses on) Ann's cognitive state; *know* is a mental space builder

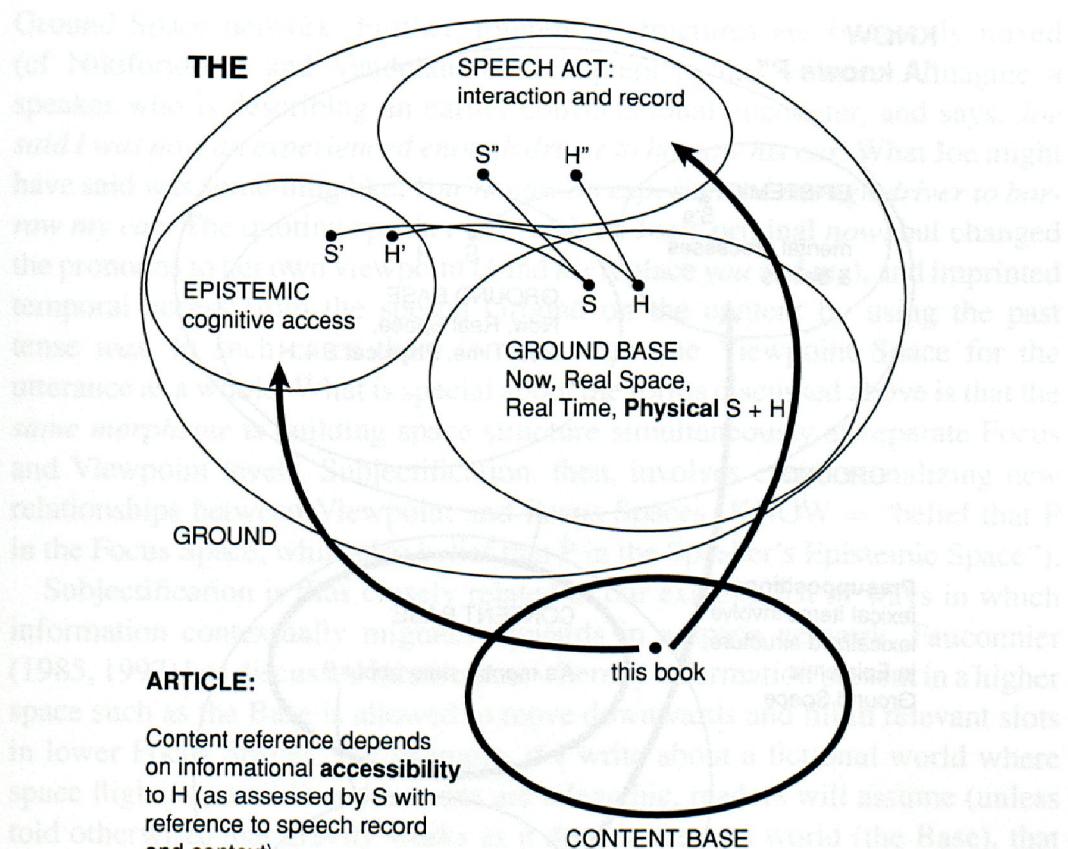


Figure 2.3

that opens up such a Focus Space of *stance* (see Dancygier, this volume). But it also necessarily makes reference to S's epistemic state, as shown in Figure 2.4. If S did not *also* believe that the world is round, then S would have to say something like *Ann thinks* or *Ann believes*, rather than *Ann knows*. *Know* and *the* both involve presuppositional structures; definite marking presupposes accessibility of the referent, which may in turn involve presupposing existence in some space. Conventional presuppositional items are ones that involve this kind of lexicalized structure in the non-focused Ground, as well as in the focused Content Space; reference to *stopping* in a Content Space (even as a query) marks S as believing in the presence of some ongoing situation that could stop, although it may not mark S as believing in the (explicitly referred to) stopping.

KNOW and STOP are good examples of structures involving subjective presuppositional meaning structure that we need not attribute to historical subjectification; many languages find these meaning packages useful, and express them, with no evidence that they derive historically from less subjective senses. Further, this presuppositional meaning is intersubjective in Verhagen's (2005)

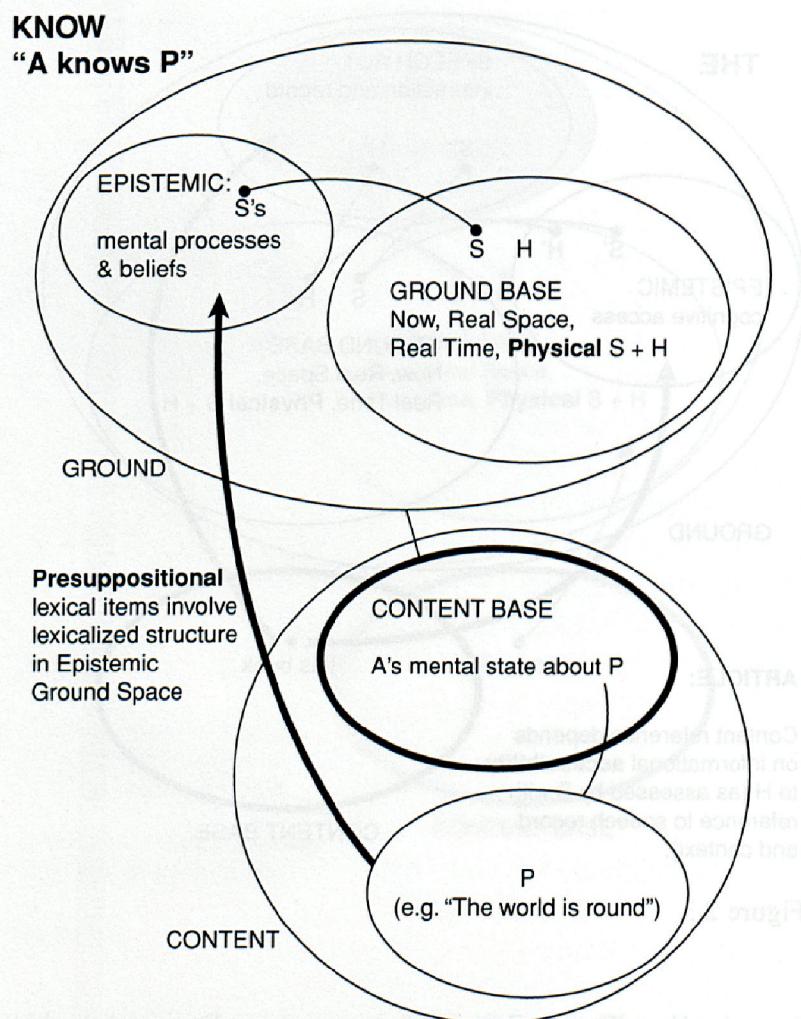


Figure 2.4

terms, rather than simply subjective. At least the Hearer's Epistemic Space is involved, not just the Speaker's: consider the difference between *I know P* and *I think P*; here the former pulls in an assumed shared “knowledge base” in a way that the latter does not. (These differences are further discussed by Dancygier (this volume).)

At this point it is important to mention the fact that it is oversimplifying to refer to “a” Viewpoint Space with respect to which a Focus Space is being accessed at any given time. As Fauconnier (1997) says, and Cutrer (1994) lays out in detail, any complex tense structure involves (analogously to the Reichenbach 1947 system) layers of such access: a pluperfect such as *had walked* demands placement of the Focus Space prior to some (reference or landmark) temporal space, which in turn is prior to the Real Time of the

Ground Space network. Further, referential structures are frequently mixed (cf Nikiforidou's and Vandelanotte's chapters in this volume). Imagine a speaker who is describing an earlier conversational encounter, and says, *Joe said I was now an experienced enough driver to borrow his car*. What Joe might have said was something like, *You're now an experienced enough driver to borrow my car*. The quoting speaker has retained Joe's original *now*, but changed the pronouns to her own viewpoint (*I* and *his* replace *you* and *my*), and imprinted temporal access from the speech Ground on the content by using the past tense *was*. In such cases there is more than one Viewpoint Space for the utterance as a whole. What is special about the forms discussed above is that the *same morpheme* is building space structure simultaneously at separate Focus and Viewpoint levels. Subjectification, then, involves conventionalizing new relationships between Viewpoint and Focus Spaces (KNOW = "belief that P in the Focus Space, while also belief that P in the Speaker's Epistemic Space").

Subjectification is thus closely related to our existing list of ways in which information contextually migrates upwards in a space network. Fauconnier (1985, 1997) has discussed Inheritance, whereby information present in a higher space such as the Base is allowed to move downwards and fill in relevant slots in lower Focus Spaces. For example, if I write about a fictional world where space flight is possible and humans are telepathic, readers will assume (unless told otherwise) that gravity works as it does in the real world (the Base), that human sensory perception works as it does in the real world, and so on. The inverse tendency is Presupposition Float, whereby information introduced into a lower space may be allowed to "float" upwards into the Base. Fauconnier gives the example of a speaker and addressee who pass one of the speaker's colleagues in a hallway. The colleague looks depressed, and the speaker says, *Maybe his children are worrying him*. Although the worrying is posited as taking place only in the *maybe* space, the existence of the children may well be assumed by the hearer to hold in the Base Space as well, given the speaker's likely knowledge about the immediate family structures of colleagues.

Subjectification is the historical result of such processes of information flow between spaces. When there is a frequently accessed pattern of inferential flow between spaces in a network, the "floated" inferences can eventually become a *conventional* part of a higher space. Further, as we shall see, the information transferred may be analogically or inferentially related to the Focus Space information, rather than being identical to it. The Ground, into which information moves upwards from the content, is not an unanalyzable whole; as we have said, it consists of a network of spaces, a sub-network of the BCSN diagrammed in Figure 2.1. The next section of the chapter lays out different ways in which historical meaning change involves shifting of meaning aspects between areas of the BCSN.

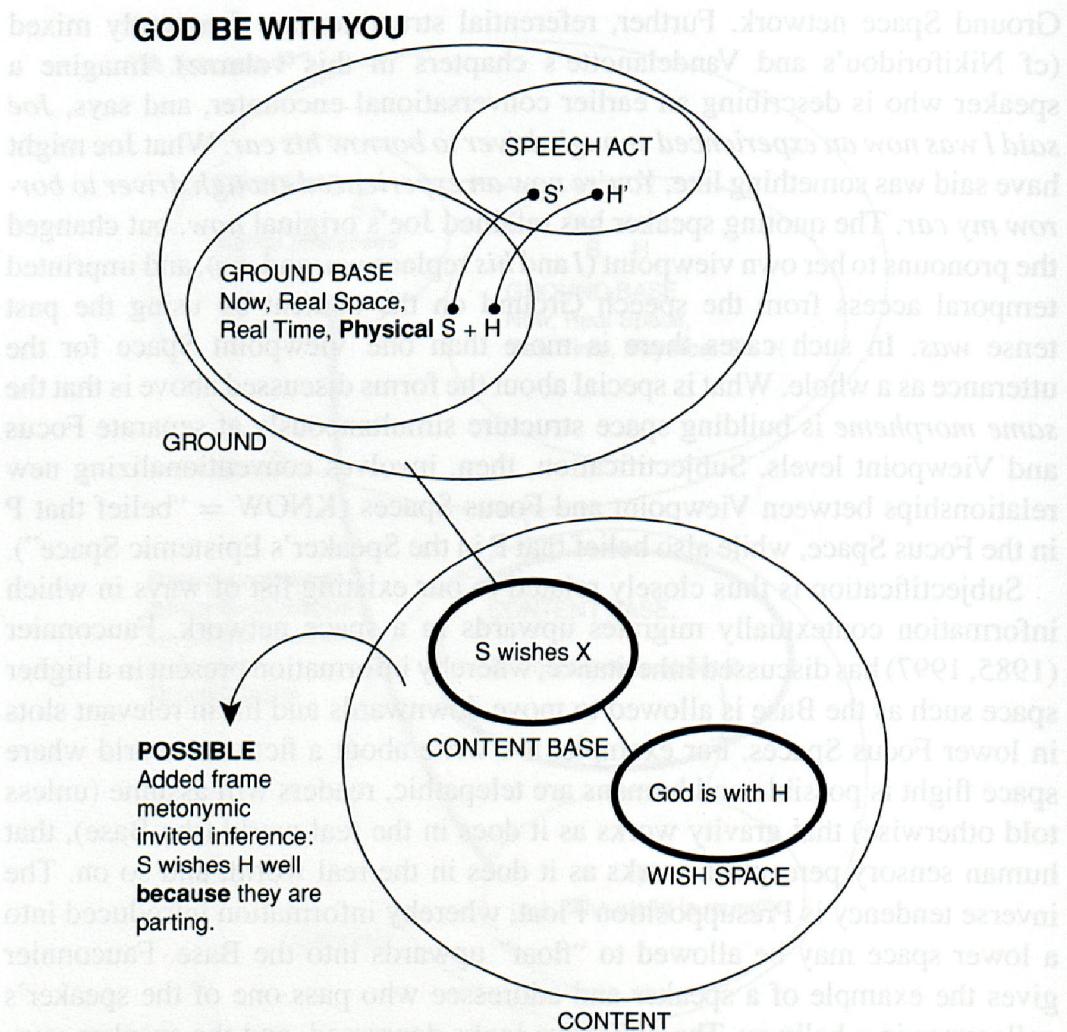


Figure 2.5

2.2 Subjectification and inferential transfer

In our typology of subjectification, one major sub-case is where the form completely loses Content Space referential meaning, and moves one-time inferences into the Ground sub-network to create a new conventional semantics. In Figures 2.5 and 2.6, we compare the semantics of *God be with you* and of its descendant *good-bye*, which are an example of this kind of subjectification.

Originally, *God be with you* was a positive wish from S to H; it set up a Focus Wish Space in the Content sub-network, wherein God is with H (presumably watching over and protecting H). In the Ground network, there was some situation involving S and H, and a discourse frame. One conventional cultural reason for wishing God to take care of H was an imminent parting between S and H, so the Ground Base frequently (though not always) contained a parting

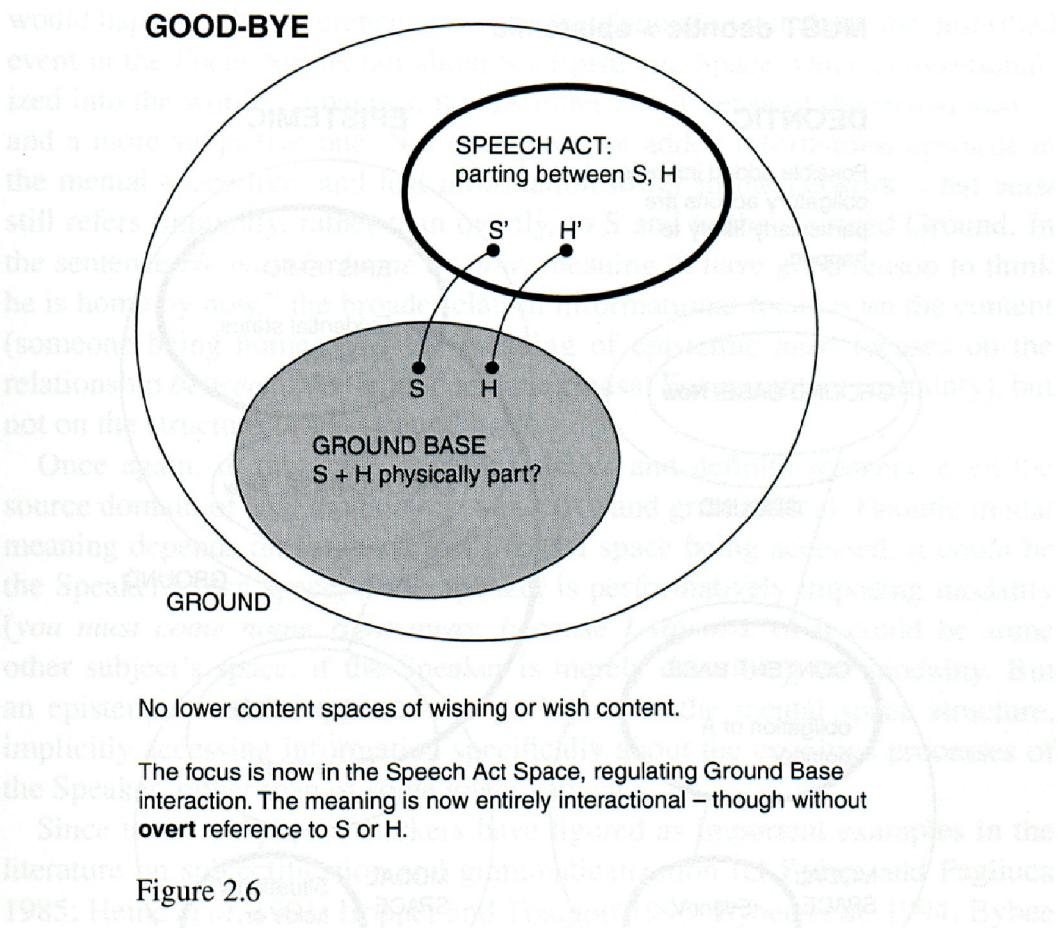


Figure 2.6

situation when this wish was uttered. Linguistic forms, we know, can either label extant situational frames or evoke the frames they normally label; therefore, if someone said *God be with you*, expressing a Wish Space with content of divine care for H, their hearers might well infer that in the Ground, parting was about to happen. (A similar story could be told for the more etymologically transparent *farewell*.) They might further infer that the speech act of uttering *God be with you* was a speech act intended to negotiate that parting. Once such inferences become conventionalized, *good-bye* or *farewell* is not only a good wish, but a speech act marking parting. And alongside the conventionalization of these Ground Space parting markers, their good-wish Content became backgrounded and gradually disappeared.

Good-bye does not today constitute a blessing or a good wish; it is just a social marker of parting. The meaning is now all interactional; yet the Ground is still not fully explicit, in that S and H are not overtly mentioned ("I the speaker hereby part from you the hearer"), but rather presupposed as present, the focus being on the negotiation of their speech act interaction. *Good-bye* and *Hello* are among words claimed by some semanticists to have "pragmatics but no semantics" – by which is apparently meant that they have no truth conditions,

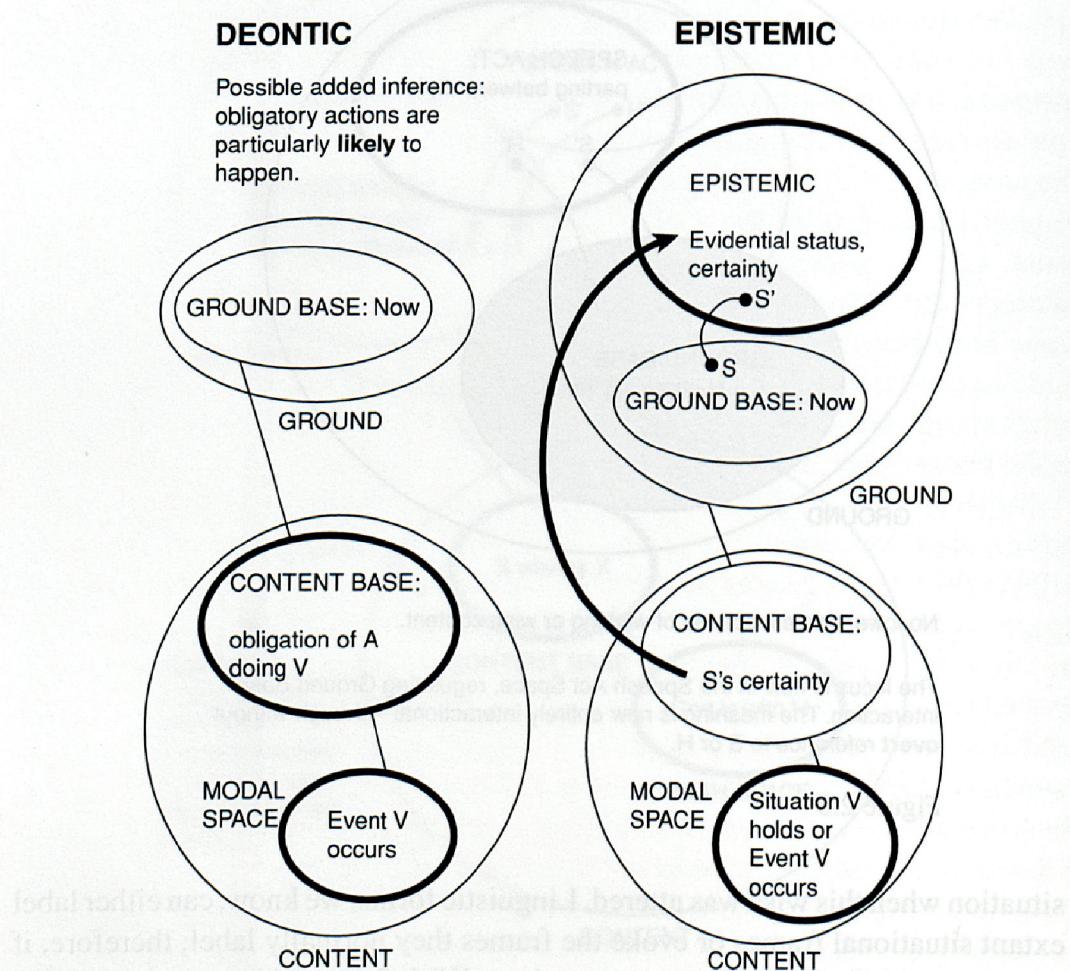
MUST deontic > epistemic

Figure 2.7

only pragmatic felicity conditions and pragmatic effects. We prefer to say that their conventional meaning resides in the Speech Act Space rather than in some lower content space – and yet, as just said, they assume the Ground and act on it, rather than overtly naming it.

Perhaps one of the most discussed examples of subjectification is the development of epistemic modal meanings from deontic or root modal meanings (Traugott 1982, 1989; Bybee and Pagliuca 1985; Sweetser 1990; Bybee *et al.* 1991, 1994; Hopper and Traugott 1993; Bybee and Fleischman 1995). In Figure 2.7, this shift is depicted for English *must*. Following Traugott's inferential transfer analysis, a statement of strong obligation on the part of an agent (in the Content or Focus Space) might naturally give rise to contextual inferences about the speaker's level of certainty that the strongly obliged action or event

would happen. That inference, however, is information not about the described event in the Focus Space, but about S's Epistemic Space. Once conventionalized into the word's semantics, it constitutes a new sense of the modal *must* – and a more subjective one. Not only have we added information upwards in the mental space tree, and lost information lower in the network – but *must* still refers implicitly, rather than overtly, to S and to the assumed Ground. In the sentence *He must be home by now*, meaning "I have good reason to think he is home by now," the broader clausal informational focus is on the content (someone being home), and the meaning of epistemic *must* focuses on the relationship *between* that Ground and the clausal Focus content (certainty), but not on the structure of the Ground itself.

Once again, in this case, as with deictics and definite markers, even the source domain of root modality is subjective and grammatical. Deontic modal meaning depends on some subject's modal space being accessed; it could be the Speaker's own space, if the Speaker is performatively imposing modality (*you must come home right away, because I say so*), or it could be some other subject's space, if the Speaker is merely describing the modality. But an epistemic modal requires us to go higher in the mental space structure, implicitly accessing information specifically about the cognitive processes of the Speaker, rather than of some lower subject.

Since tense and aspect markers have figured as important examples in the literature on subjectification and grammaticalization (cf Bybee and Pagliuca 1985; Heine *et al.* 1991; Hopper and Traugott 1993; Bybee *et al.* 1994; Bybee 1995), let us examine the grammaticalization of English *going to gonna*, diagrammed in Figure 2.8. *She is going to Paris* presumably describes a content situation. There is no added information about any mental space other than the focal one where the described travel happens. From information about deictic motion, however, further inferences may be drawn about later locations of the moving entity: if someone is going to Paris at Time 1, then at some later Time N she may reach it. But, as Fleischman (1982) has pointed out, *She is gonna write that paper* conveys not only a description of a Future Mental Space, with content clearly distinct from the Base (present) Content Space, but also some information about the speaker's mental space, namely that the prediction about the future is based on some *assessment* (by default, the speaker's assessment) of the *current situation*. (This is distinct from the *will* future, where a prediction is made in the sense of speaker commitment to a statement about the future, but there is no such semantics of *present assessment*; cf Fleischman 1982; Dancygier 1998; Dancygier and Sweetser 2005.) The English *gonna* future thus involves two added spaces not required to represent the GO + INFINITIVE construction: a Future Focus Space embedded under the Present Content Space, and a speaker's Epistemic Assessment Space, present above the Real Space Ground. Again, the Focus is below, while the reference to

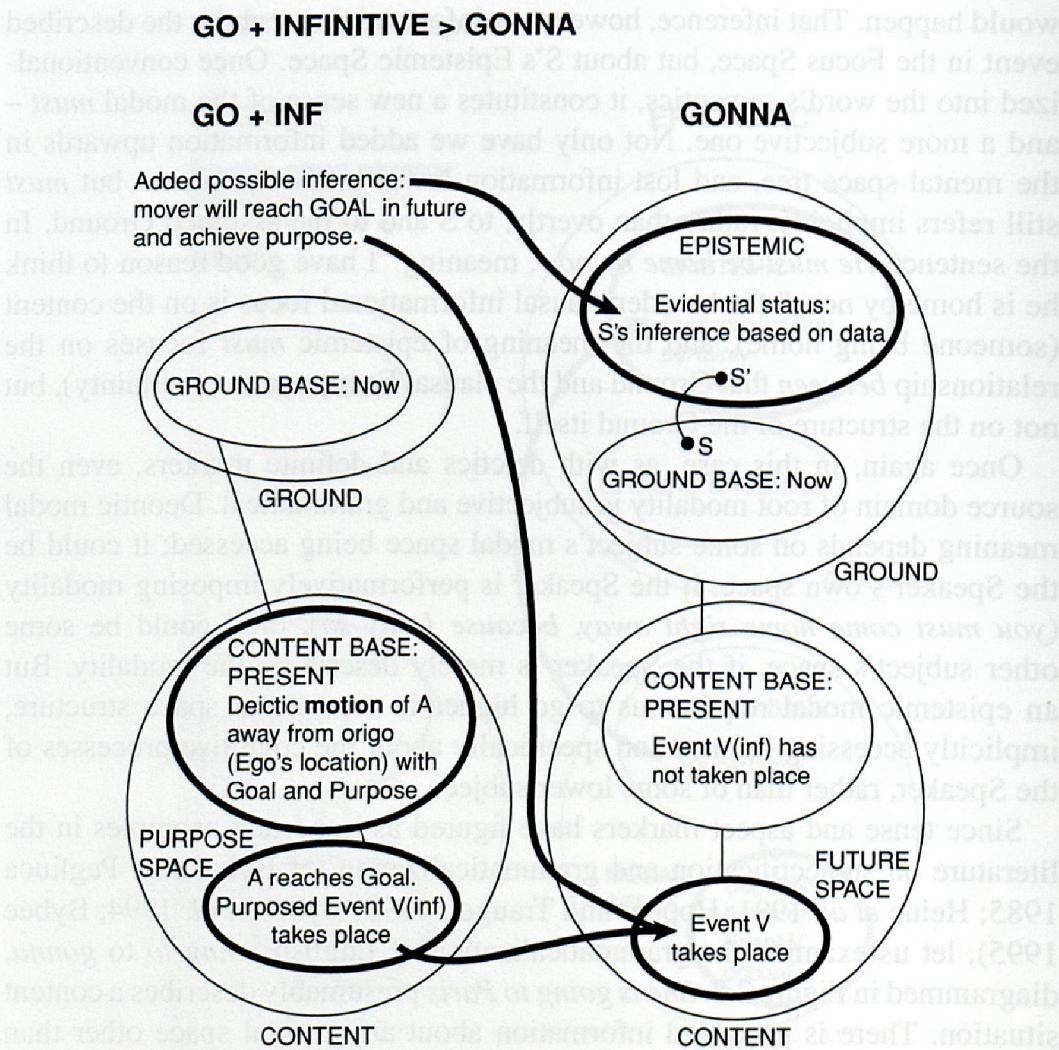


Figure 2.8

the higher Epistemic Space is implicit. Here, note specifically that the distance covered by the connections within the space network has increased as well. Where GOING + INF originally only involved one Content Base Present Space, with only the usual temporal grounding to the Ground Base, GONNA involves connections between an embedded Content Future Space and a higher Ground Space, the Epistemic Space of assessment.

In Figure 2.8, the left-to-right arrows mark correspondences between information in the GOING TO space network and information in the GONNA network.

The WILL future (Figure 2.9) has a similar story. The verb *will* once meant "want," or "desire." It thus set up a Desire Space wherein the situation described in the complement took place. In the highest-level Content Space, a Wanter wants P to happen; within the Want Space, Event Phappens. By inference, Event

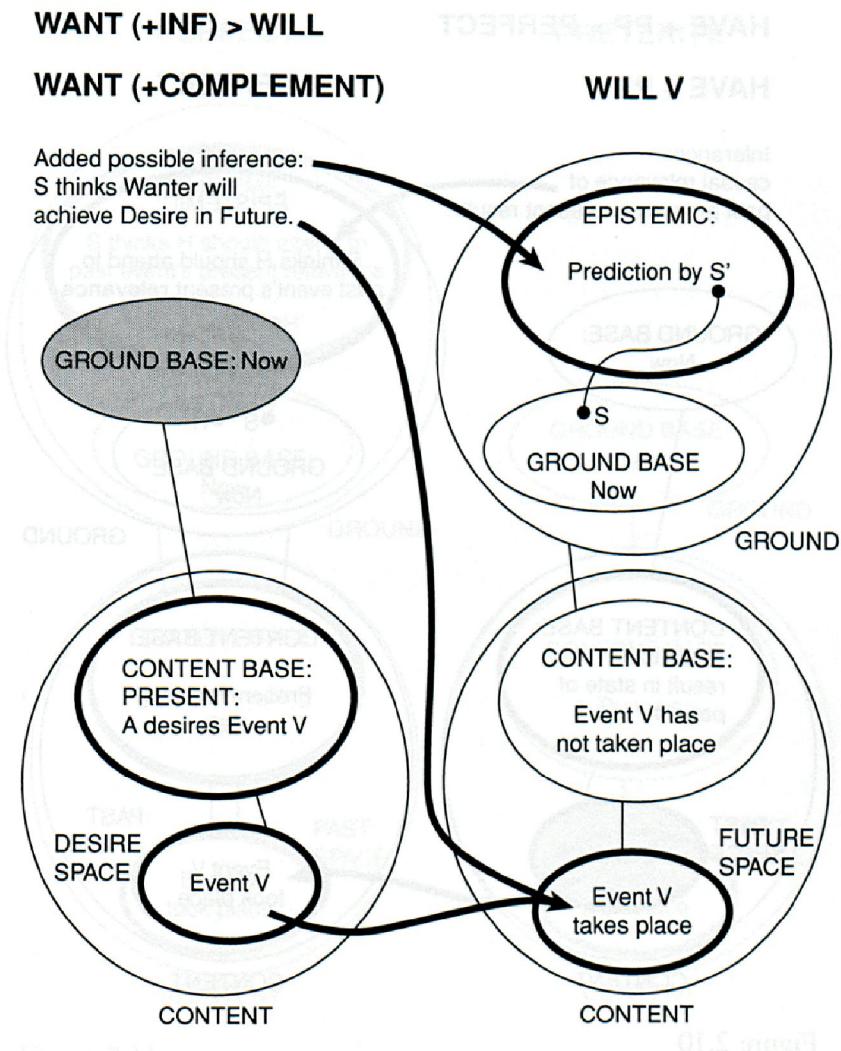


Figure 2.9

P does not hold in the Wanter's Base Space. However, Desire being a future-oriented intentional state, it is possible that S thinks that the Wanter will actually achieve his or her desired situation in the Future. By conventionalization of this inference, we get the switch from a Want Space to a Future Space in the meaning of WILL V constructions. Also, the Epistemic Space now contains semantics of *prediction* (commitment to a statement about a future situation), which is a conventionalization of the possibility that when S said *NP WILL INFINITIVE*, S was involved in prompting or sharing inferences about the future attained goal, not just the present desire state.

Note that in the GONNA and WILL futures, the literal meanings of WANT and GO are replaced by deictic tense meanings (building Future Spaces), which require negotiation of a larger temporal space network to relate the Focus Space

HAVE + PP > PERFECT

HAVE + PP

PERFECT

Inference:

causal relevance of past process to present result.

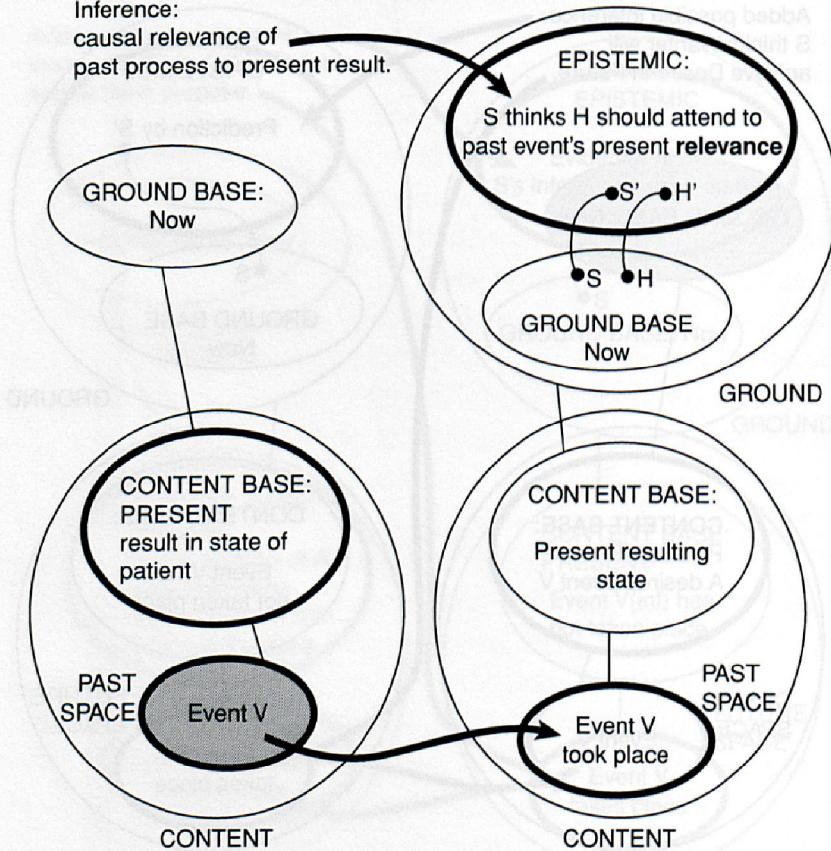


Figure 2.10

to the Ground's Here and Now than a present statement about deictic motion or wanting. Speaker activities of assessment and prediction are conventionally referred to by these grammatical forms as well, and this information is located higher in the space network than any of the content-level conventional meaning structures of lexical *go* or *want*.

Finally, let us consider two other semantic shifts, the HAVE + PP > Perfect shift (Figure 2.10), which happened in English and various other Indo-European languages, and the cross-linguistically common Perfect > Preterite shift (Figure 2.11). In the HAVE + PP > Perfect shift, we see something like the story we told for the English future morphemes (on perfects, see Fleischman 1983; Carey 1995).

We start out with HAVE + PP, involving a focal Content Space wherein the result of some process is tangibly present in the PRESENT state of affairs. This

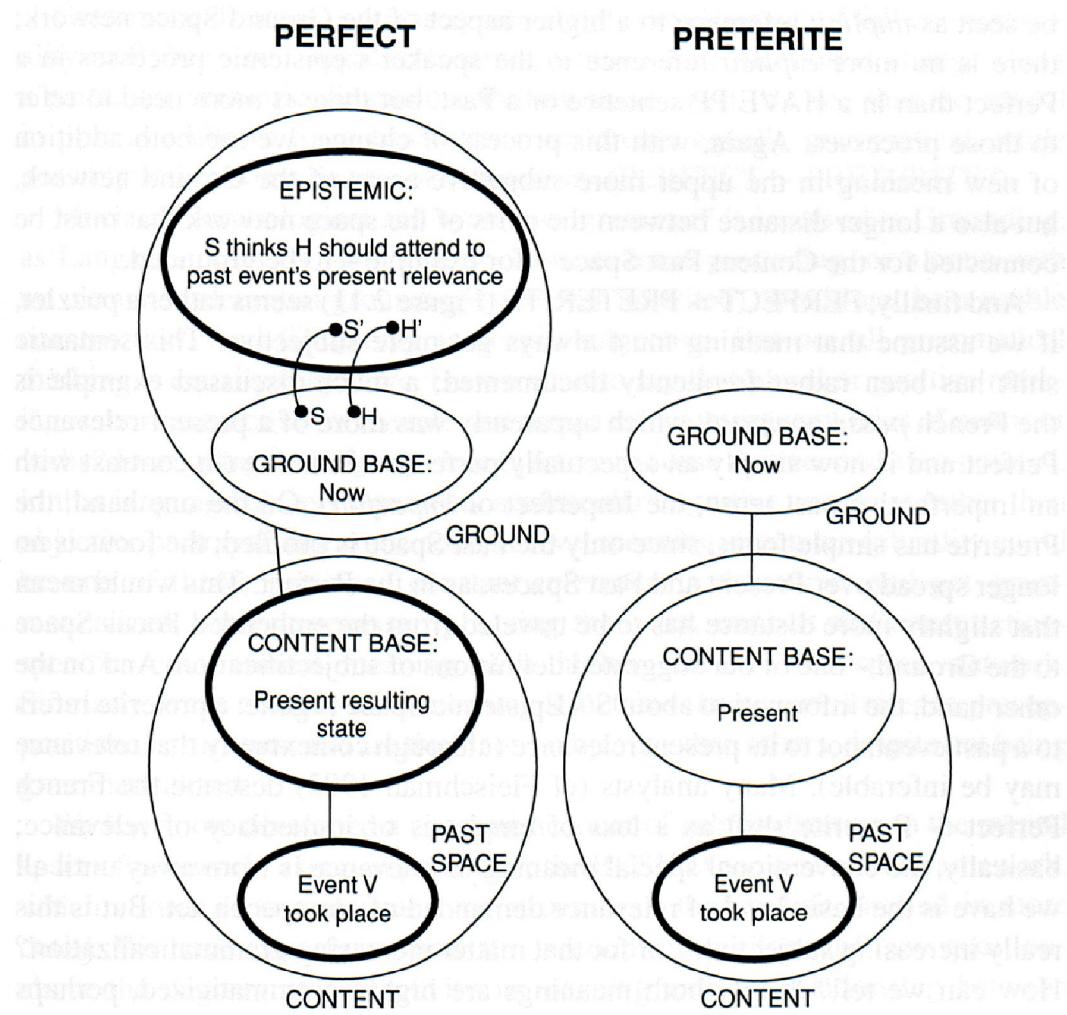


Figure 2.11

information allows inferences, in particular that the process in question really took place in the Past – but the past event itself is not profiled or in focus. And the Perfect indeed has a complex viewpoint structure, referring to two levels of Focal Spaces: *I have read the book* refers primarily to the present situation, where the results of reading are present and relevant, and secondarily to the past reading event, which gave rise to those results. Further, the use of the English Perfect conventionally presents the speaker as noting the relevance of the past event to the present situation. The simple past, *I read the book*, which refers only to the past, does not profile in the same way the relevance of past reading to my present state. This special PERFECT past–present relationship is a conventionalization of the earlier contextually accessible inference that the present state of things is related to past processes in which they were involved; as such, it requires conventional representation of aspects of the speaker's Epistemic Space, as well as of Present and Past Content Spaces. This can again

be seen as *implicit* reference to a higher aspect of the Ground Space network; there is no more *explicit* reference to the speaker's epistemic processes in a Perfect than in a HAVE PP sentence or a Past, but there is more need to refer to those processes. Again, with this process of change, we see both addition of new meaning in the upper more subjective areas of the Ground network, but also a longer distance between the parts of the space network that must be connected for the Content Past Space – for example – to be grounded.

And finally, PERFECT > PRETERITE (Figure 2.11) seems rather a puzzler, if we assume that meaning must always get more subjective. This semantic shift has been rather frequently documented; a much-discussed example is the French *passé composé*, which apparently was more of a present-relevance Perfect and is now simply an aspectually perfective Preterite (in contrast with an imperfective past tense, the Imperfect or *imparfait*). On the one hand, the Preterite has simple focus, since only the Past Space is profiled; the focus is no longer spread over Present and Past Spaces, as in the Perfect. This would mean that slightly more distance has to be traveled from the embedded Focus Space to the Ground – one of our suggested definitions of subjectification. And on the other hand, the information about S's Epistemic Space is gone: a preterite refers to a past event, not to its present relevance (although contextually that relevance may be inferable). Many analysts (cf Fleischman 1983) describe the French Perfect > Preterite shift as a loss of emphasis or immediacy of relevance; basically, the conventional special meaning of relevance is worn away until all we have is the basic level of relevance demanded of any speech act. But is this really increasing subjectivity, or for that matter increasing grammaticalization? How can we tell? Surely both meanings are highly grammaticized, perhaps equally so. And both involve the basic subjectivity of deictic tense reference, which relates the content to the Ground Here and Now. But it does seem that the reference to Ground meaning has diminished rather than increased, no matter how we compute it.

2.3 Conclusions

A mental space model involving a BCSN is, we find, helpful in modeling viewpoint, subjectivity, and subjectification. Added internal elaboration of the Ground into a space network is also helpful, since it allows us to notice movement of information to higher or lower locations within the Ground network. Traugott's and Langacker's models are readily brought together in this framework. Traugott's inferential transfers are now specifically transfers of information between spaces. Langacker's Ground is given a more elaborate mental space instantiation as a BCSN. And the crucial role of implicitness in subjectivity is recognized by stipulating that when meaning is subjective, the Focus is not in the Ground, although Viewpoint is at least partly there.

Grammaticalization is precisely and simply development of full conventionality in Bybee's or Langacker's terms, while subjectification is change along a particular semantic dimension. Pulling these apart, we see that the model in principle allows for a construction to remain equally grammatical, while possibly losing some degree of subjectivity (PERFECT > PRETERITE?).

Much of morphological and syntactic "grammar" is involved in Grounding, as Langacker says. A verb with no ultimate tense grounding, or a noun with no ultimate referential grounding (however inherited), would not be a usable construction. And Grounding is deeply subjective. But not all grammatical marking is equally subjective. Do we want to say that plural or genitive marking is more subjective (in the relevant sense) than content semantics of nouns or verbs? Everything in language is subjective to some degree, and viewpointed, in that language always represents a particular cognitive construal rather than objective portrayal. But some content-level meaning structures (plurality could be one of these) just need constant reference in discourse, and get grammaticalized, without necessarily having the extra, implicit and construction-specific, conventional meaning at a higher level of the space network. Similarly, some content-level meaning structures (*know, stop*) refer to presuppositional structures, and are thus more subjective than others, despite not being grammaticalized.

We have now developed a concrete account of subjectification in the mental spaces framework, using, in particular, the BCSN expansion of the framework, which allows us to understand the structure of the implicit Ground in more detail. We have also shown how this account brings forward new questions about the degrees of subjectivity in meaning and the relationship between subjective meaning and grammar.

What are the broader lessons for our developing understanding of viewpoint? One is that implicit and explicit viewpoints are not just separate kinds of things; this is why implicit viewpoint structure can develop into explicit viewpoint structure historically over time, in subjectification processes. The distinction between profiling the Ground and profiling the expressed content is fluid, or a matter of degree – as we would predict from Langacker's (1987, 1990, 1991) framing of the issues. Another is that we need to attend to the internal structure of the complex Ground spatial network, since newly explicit structure may end up being represented specifically in one place: *know* and other presuppositional forms elaborate the representation specifically of the Epistemic Space of the Speaker, for example, while *good-bye* adjusts the Speaker–Addressee social relationship.

A question that we have not addressed here, though it is addressed by Sanders *et al.* (2009) and by a number of other chapters in this volume, is the relationship of Ground participants' viewpoint to character viewpoint; free indirect style, for example, as a construction, expresses a particular blend of narrator and

character viewpoints. Historical work could be done on the development of these larger discourse-level constructions as well, and Construction Grammar and Mental Spaces Theory provide potentially useful tools for such work.

And last but not least, this work reinforces a point that Fauconnier and Turner (2002) make very clearly, but which seems insufficiently profiled in some work on mental spaces; “meaning” does not reside in one space, but in a spatial network. Tobin and Israel (this volume) make this clear with respect to irony – particular content may be in one space, but ironic interpretation of that content resides in the network to which it is linked. Similarly, with respect to the interpretation of tense and viewpoint in narrative (for example, chapters in this volume by Nikiforidou, Vandelanotte, and Janzen), how to interpret a past tense form, or a signer’s bodily position, depends on what spatial network is available, not just on the form itself. In our examples, we have seen that subjectification generally involves added complexity in the distribution of information across the BCSN. The Mental Spaces model allows us to talk about this explicitly, and to describe the network as a whole rather than just the Content Space. We end, therefore, with the hope that cognitive linguistic models will go on to facilitate understanding of subjectification and subjectivity in new domains of language.

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