Grammaticalization, polysemy and iterated modality: the case of should.

Viviane ARIGNE
I. Introduction

Shall and should are two word-forms of the same verbal lexeme shall with a wide range of uses and meanings in contemporary English. This polysemy has been analysed in previous research (Arigne, 1984, 1989) in terms of semantic derivation. The basic working assumption of the analysis is that distinct modal meanings generate one another. The hypothesis is given support by etymological, diachronic and psychogenetic considerations (Onions, 1966, Klein, 1966, Behre, 1950 Piérad-Le Bonniec, 1974) as well as the existence of very strong constraints in contemporary usage notably in interrogative contexts. It should be noted that views based on the same kind of hypothesis have been expressed by other authors, either on specific questions or from a general standpoint (Traugott, 1974, 1989, Sweetser, 1986, 1990 among many others). On the basis of the theoretical principle of semantic generation, the analysis proposes a unified approach of the verbal lexeme shall which is grounded on the isolation of small meaning units defined in relational terms. The various meanings of shall and should are accordingly related to a primary etymological pre-auxiliary meaning in which the verb sceal has the meaning of the contemporary verb owe and governs a nominal as direct object. A subject-subject relation defines the original meaning or valeur-origin from which all other meanings are derived (Arigne, 1984, 1989). This article re-examines the results of this research in the light of grammaticalization and, more specifically, the processes of grammaticalization identified and discussed in the literature. It emphasises the role played by various processes that are together at work in iterated modality, while underlining the fact that the same processes can be found in the synchronic study of contemporary uses of should, which retain traces of the way they were historically constructed.
II. Grammaticalization in independent clauses and subordinate clauses not governed by a verb (such as comparative clauses)

II. 1. From lexical meaning to deontic and epistemic modality

II. 1. 1. From lexical meaning to deontic and epistemic modality: from $S \rightarrow S$ to $S \rightarrow S$ and $S \rightarrow P$²

The study of deontic *shall* shows how a syntactic construction gave way to another through reanalysis and metaphorical transfer (Arigne, 1984, 1989). The contemporary construction *shall do something* originates in a sequence like *shall something* which used to mean *owe something*. The verb *owe* means “have from somebody” (cp. *debere* < *de habere* in Latin (Ernout et Meillet, 1932) and can accordingly be construed as the localisation of an object, that which is owed, in reference to two subjects, the S who owes and the S to whom the object is owed. Two semantic features can be analysed in this first meaning: two subjects are related and the subject who owes, for example at the present time, contemplates his own deprivation of the object at some time in the future. In other words, the meaning associated with the present form of *shall* (= *owe*) is that of an obligation to return an object at some time in the future, in which one can see an original subject-subject relation noted $S \rightarrow S$ as well as an embryo of temporal future meaning. Such a meaning gives semantic motivation to a first metaphorical shift in which the nominal (referring to the object that is to be returned) is replaced by a verb in the infinitive form. In present-day English, the SS relation found in these *owe*-meanings of *shall* is retained, but the presence of a verb instead of a nominal as the governed unit also entails a subject-proposition (SP) relation, clearly apparent in assertive contexts:

1. You shall go $S_1 \rightarrow S_2$ and $S_1 \rightarrow P$
2. It shall be done immediately $S_1 \rightarrow P$

Moreover, the presence of a verb apt to express temporal reference allows the formerly embryonic future reference to develop more fully. The two semantic units (SS relation, SP relation) mentioned for *shall* are retained in the uses of deontic *should*, and the modal use of the past tense adds an idea of possibility, as other subjects’ desires are being taken into account:

3. You / he should go $S_1 / S_x \rightarrow S_2$ and $S_1 / S_x \rightarrow P$

In other words, $S_1$ conceives that other subjects, including $S_2$, may have a desire concerning $S_2$ and $P$, and that this desire may be different from his own. You *should go* (as opposed to *you shall go*) is therefore interpreted as *I want you to go but I know that other people (Sx) may feel differently about it*: other desires are possible, hence other propositions and other courses of action. This meaning of possibility is what contributes to an interpretation of such sentences as presenting $P$ as the desirable thing to do or “*le bon choix*” (Arigne, 1984, 1989) as well as expressing “weak” obligation (Rivière, 1981, Arigne, 1984, 1989). With a meaning of possibility superimposed upon a deontic meaning, two modal meanings are found together in the same use of the same unit *should*, thus constituting an instance of iterated modality.

---

Corela, 5-1 | 2007
II. 1. 2. The epistemic meaning derives from the deontic meaning: from \( S \rightarrow S \) and \( S \rightarrow P \) to \( Q \rightarrow P \)

The epistemic meaning of *should* is semantically derived from the deontic one through reanalysis. The deontic SS relation disappears and is replaced by a PP inferential relation, through another metaphorical shift: S is replaced by P. The proposition P is inferred from a second term which can take the form of another proposition Q, Q being what is supposed to make P possible: \( Q \rightarrow P \). At the same time, the inference of P never goes without a shade of deontic or evaluative meaning, which can be written as above \( S \rightarrow P \). This semantic overlapping has been noted by a number of authors among whom Leech (1971 / 1987: 100) who mentions “a favourable attitude”, Quirk et al. (1985: 227) who write that “the proposition […] is desirable” or Arigne (1984 and 1989: 186) who comments upon the relation between epistemic inferential meanings and evaluative modality, and more specifically the desirable proposition, “la bonne relation prédicative”. This type of semantic derivation finds support in data from historical linguistics since, with the exception of *may*, “the deontic meanings of the modals are older than the epistemic ones” (Traugott, 1989: 36, quoting Shepherd 1982 and Bybee and Pagliuca, 1985).

II. 2. Grammaticalization

The first passage from lexical *shall* to deontic *shall* illustrates both processes of bleaching and enrichment, as loss on one side is accompanied by gain on the other side. In other words, desemanticization and resemanticization are two products of semantic derivation, which occur as new semantic specialisations are found. The fact that one syntactic construction gives way to another leads to a change in scope and categories as a main verb becomes an auxiliary verb. In the auxiliary, the past tense adds a meaning of possibility to the deontic one of necessity, and the two meanings are present together in deontic *should*. The next semantic change, which goes from deontic to epistemic meanings, is also accompanied by a measure of resemanticization, but never without a strong persistence of the older meanings through the persistence of the idea of the desirable proposition, i.e. *le bon choix*. Evaluative modality, shown to be intimately related to deontic modality in the case of deontic *should*, remains so with epistemic *should*. In both cases, the semantic derivation is achieved through displacement or, in other words, a metaphorical shift. As was noted with deontic *should*, the epistemic interpretations of *should* combine the two meanings of possibility and necessity.

III. Meditative-polemic *should^9*

III. 1. Negative contexts and reanalysis of a deontic grammaticalized meaning: from \( S \rightarrow S \) and \( S \rightarrow P \) to \( P \rightarrow S \)

The first kind of context which is going to be examined is the negative one of superordinate expressions (SupExps) such as *strange*, in well-known examples like:

(4) It is strange that he should have done that.
Throughout the following analysis I shall assume for the sake of simplicity that this example is a direct-speech sentence in which the speaker (S1) unambiguously expresses his own feelings. Such contemporary usage is seen as retaining part of the semantic features analysed in the first cases of meditative-polemic should which appeared in history (Behre, 1950). The following lines present an analysis of those original features, which must be seen as an underlying shade of meaning to be found in contemporary uses, a more complete description of which will be given in the subsequent paragraphs.

Such negative contexts can be analysed as illustrating a second metaphorical transfer, in which the original SS relation is replaced by a PS relation. In this configuration, the shift corresponds to the following semantic characteristics. First, S1 expresses annoyance at the state of affairs or the idea of the event expressed in the subordinate clause (Behre, 1950). Secondly, P is viewed as expressing a feeling of “fatal necessity” (i.e. the propositional content of P was to happen; cf. Behre, 1950) so that the thing or event referred to by the proposition was originally felt as being imposed or imposing itself upon the subject. One can then imagine a metaphorical mapping of an SS relation into \(< ? \rightarrow P >\), which would eventually lead to \(< ? \rightarrow P \rightarrow S >\) in which \(< ? \rightarrow P >\) can be read as “something causes P to happen / be and P is (felt as) imposed upon S and makes S unhappy”. This conflict \(S / P\) is expressed in the SupExp through the adjective strange, which can be interpreted as “different from P” or “not P”, thus construing it as a negative expression. To conclude, should is used in a subordinate clause which functions as subject in a complex sentence and the orientation of the relation is the opposite of what is found in independent clauses \(< S \rightarrow P >\neq < P \rightarrow S >\). This inverted relation enables one to better understand what are often called “non-harmonic” uses and at the same time to find some measure of harmony in them. At this stage, it is important to note that Behre (1950), analysing the origin of such uses of should, observes that shall was first used ca. 1300 with “expressions of sorrow and displeasure” to be replaced ca. 1400 by a generalised use of should and that “meditative-polemic should” expresses “mental resistance”. Such mental resistance in contemporary meditative-polemic should is to be attributed to shall, whereas the meditative element is most probably to be related to the idea of possibility inherent in the past form should (see II. 1. 1. above) “when it was used synchronously with shall” before shall became recessive.

An additional interpretation may also be found in the contemporary uses of meditative-polemic should. It corresponds to what is mentioned in Arigne as an existential predication (“prédication d’existence”), paraphrased as \(< \text{let P be} >\). The existential predication is reinforced and made more perceptible when the subordinate clause is thematised (Arigne, 1984: 234, 1989: 197). I will draw here on this intuition and try to expand it. This so-called “existential predication”, having to do with “let P be”, amounts in fact to expressing a degree of necessity of P. This element of necessity associated with P should not be understood as the necessity of the event itself but as that of the representation of the event. The representation of an event constitutes another type of entity, different from the event itself. This direction of research might account for the fact that a number of these subordinate clauses are compatible with the noun fact (the fact that they should have achieved...) as well as compatible, though not necessarily associated, with actual events, since actualisation is by no means necessary for the use of should (Arigne, 1989: 200-201). Indeed, should seems to place the event outside temporal contingencies as it manages to raise it to a higher level of representation. The proposition P is no longer seen as solely referring to a propositional content or an event. It also refers
to another kind of entity, a more abstract one, which is the proposition itself as a representation. With such a reflexive use, the proposition as such (i.e. understood as a representation) comes under the scope of should. The original idea of fatal necessity is here re-interpreted as a metalinguistic act, which posits the necessity of a proposition, putting that of the actual event in the background. This is to be seen as a second, more abstract, interpretation of the relation < ? → P >. This interpretation leaves aside the subjective emotional part of the previous metaphorical interpretation < P → S > and posits P as necessary, inasmuch as it is an abstract representation and therefore a support for evaluation or other kinds of modal judgments (see also infra in the following sections).

11 Such analysis sheds a new light on and gives stronger support to labels such as “putative should” (Quirk et al., 1985, among many others) or “theoretical meaning” (Leech, 1971 / 1987). The idea of “theoretical meaning” is taken up by many authors among whom Paillard (1984) and Bernard (1992), who address the issue of the English subjunctive. They mention the absence of a mark of endorsement of the predication (“relation prédicative sans trace de prise en charge de l’énonciateur”, Bernard, 1992: 20), or a minimal degree of determination concerning the predicative relation (“un degré minimal de la détermination de la relation prédicative”, Paillard, 1984: 77). Mélis (1998), studying the question of the should-subjunctive, follows the same line of argument with “l'idée du fait” (109), which he reformulates subsequently as a reference to the representation of the fact (“référence non au fait lui-même mais à sa représentation”, Mélis, 1998: 117). Chuquet also quotes Leech and establishes a parallel between for…to infinitive constructions and that…should constructions (1986: 45).

III. 2. Grammaticalization

12 This third occurrence of reanalysis through a metaphorical shift is accompanied by a measure of bleaching as the original deontic meaning is immersed in an evaluative domain. The evaluative character is in such cases attested by the semantic type of the SupExp exemplified in those sentences. What we have here is first a meaning of mental resistance (Behre, 1950) showing another change in scope and categories. The “deontic” meaning originates in the propositional content of the subordinate clause, which annoys a subject, just as another subject’s desire(s) went against his feelings with deontic should. The thing or event referred to in the subordinate clause can thereby be seen as exerting some kind of constraint on the subject, who expresses his feelings through a SupExp containing a negative adjective (strange, unbelievable…). Secondly, we find an existential metalinguistic meaning which posits the necessity of P as a proposition so that it can be used as a support for modal judgment, reaching another level of abstraction in grammaticalization and a further change in categories. Thirdly, the notion of possibility given by the past tense is one element among others which allows one to consider P and non-P (other elements being the SupExp itself and, in some cases, the suffix –able of the adjective as for example in unbelievable, inconceivable…), a feature which will be fully exploited in other contexts seen in III. 4., allowing a “meditative” interpretation.
III. 3. Generalisation to other contexts

13 This use of should is extended to other superordinate contexts through analogy (Meillet, 1912 / 1982). Such a process of analogy preserves the original process at work in the complex sentence (III. 1. and 2.), so that the two processes of layering and persistence (Hopper, 1991, Peyraube, 2002) combine to account for all the other uses of should in subject nominal that-clauses. The first negative context is retained in all other subsequent uses in comparable contexts, whether positive or negative. The other contexts are built on top of the first one, which remains present as a first ground layer: the negative meaning of the first layer is thus incorporated into the meanings of the other contexts. The two principles of layering and persistence considered to account for distinct meanings of a word or even distinct linguistic items “within a broad functional domain” (Hopper, 1991: 22) therefore co-exist when should occurs in one particular syntactic and semantic context, that is to say when should is associated with one and the same SupExp. As we shall see, this multiplicity of layers can be made explicit through a semantic analysis of evaluative contexts: adjectives and, more generally, SupExps pertaining to the superordinate clause proper, as well as discourse markers and sometimes the discursive context outside the sentence.

III. 4. Positive contexts

14 I shall here distinguish between three kinds of positive contexts. The first are, of course, positive contexts more or less based on the negation of the first negative SupExps examined in III. 1. like not strange, normal, understandable..., the latter two being directive contexts with SupExps containing adjectives like necessary, appropriate, desirable... and emotional contexts in which are listed adjectives such as fortunate or lucky.

15 A subsequent natural step after a negative reaction is the attempt to overcome the negative feeling experienced (dissatisfaction, reluctance, incomprehension) and to find reasons to accept the fact or idea with which one finds oneself in conflict. The speaker tries to relate the propositional content of P felt to be the source of discomfort or the cause of conflict, to another unmentioned fact or idea, which could constitute the content of another proposition Q. This step does not obliterate the first stage of the train of thought which was pure rejection of P, so that we find a tendency to indicate, or just hint at, in context or discourse, the relation to the original negative context: but..., (conceivable) after all, only (fair), quite (normal), perfectly (understandable)... as can be seen in the examples below:

(5) I recalled that one day long ago Jocas had asked me, as a personal favour, to allow his tailor to take my measurements: and though puzzled, I had complied. [...] 
... this small trifle had hardly seemed worth troubling about. Now I understood. [...] 
It was perfectly understandable, I told myself, that I should dress appropriately, to match my new, my enormous salary ... (L. Durrell, 1968, Tunc)
(6) But it’s good that someone should have illusions. (in Behre, 1955: 23)

16 A similarly multilayered analysis holds for the next two kinds of positive contexts, e.g. directive and emotional ones. The class of directive SupExps comprises expressions like necessary, indispensable, vital... or fair, fitting, appropriate... as well as advisable, desirable... These directive contexts, whose prototype I here take to be the adjective necessary, can be construed as double negatives, necessary being thereby analysed as equivalent to
“impossible that not”. Consequently, I regard the sentences containing these SupExps as an extension of the use of should in negative contexts like strange or inconceivable, still preserving the original negative meaning born from the relation \( \langle P \rightarrow S \rangle \) (cf. Arigne, 1984, 1989). Three types of argument can be put forward in favour of this analysis, which relate to etymology, semantics and ultimately the relation between syntax and semantics. If one takes a closer look at the etymology of necessary, one sees that the Latin word necesse can be interpreted as “impossible to go backwards / to back out” (Ernout and Meillet, 1932: 434). This definition is actually clearly built on two negatives, the first being the prefix im-, the second being marked by back and out, which from a localistic point of view indicates through a spatial metaphor that the outer part, as opposed to the inner part, of a thing is its negative counterpart (see for example Culioli, 1976 / 1990, 1981 / 1990, 1988 / 1990 and 1997). Likewise, indispensable is defined as that cannot be done without (Onions, 1966), a definition in which -out and not are the two negative markers. Secondly, some SupExps like good, fitting, appropriate, right, just, fair… and others exhibit a certain degree of semantic ambiguity insofar as they can be construed as directive as well as evaluative, the directive interpretation being entailed by, or inferred from, the evaluative expression of a norm. This is the case of example (6) supra, as it is here in:

(7) It would seem only fair that he should return the favour later. (BNC)

This example contrasts with the use of should in the following example in which fair, occurring with not and so, is clearly open to the sole evaluative interpretation:

(8) …she fiercely told herself that it wasn’t fair that her life now should be so miserable and exhausting. (BNC)

Lastly, the third type of argument is that the syntactic construction \(< P \text{ is Adj} >\) in which \(P\) functions as subject is different from that in which \(P\) functions as object. An adjective like necessary does not explicitly present the volition or desire of any particular subject, but is a means whereby the speaker posits \(P\) as being the thing to be desired by all subjects, which makes this kind of adjective both evaluative (just as evaluative as strange or good) and omni-personal. In other words, the will that…should… is semantically different from … imperative that… should… This can be illustrated by the following examples in which \(S\) urged that… should… in (9), or \(S\) be urgent that… should… in (10), totally differs from it be urgent that… should… in example (11):

(9) He urged that a review procedure should be devised. (BNC)
(10) Mrs Travers […] was most urgent that I should endeavour to persuade Mr Little’s cook to leave Mr Little’s service. And join her staff. (P. G. Wodehouse, 1925, Carry on, Jeeves)
(11) It is urgent that the patient should get to hospital. (Thomson & Martinet, 1960, A Practical English Grammar)

The same view is taken by Cotte (1988: 818) who remarks that the commonly called directive SupExps are in fact evaluative comments. So are adjectives like advisable, preferable, desirable… though it is more difficult to argue for a double negative analysis from a lexical semantics point of view. Still, one can observe two things. First, these adjectives share the possibility of temporal (future) and modal (intentional) meanings with double negative SuExps such as necessary, and secondly they are adjectives with an evaluative meaning, so that a derived adjective like desirable is different from the inflected verbal participle desired. I can only tentatively suggest that analogy with SupExps like necessary may have operated here, maybe reinforced by analogy with plain directive constructions (\(S\) demanded that… should…), this analogy being shared by adjectives such as necessary. Finally, the third and last kind of positive contexts, e.g.
positive emotional ones, is constituted by adjectives such as touching, lucky and the like, which always imply the idea that P is in some way unbelievable, or “too good to be true” (Behre, 1955: 144):

(12) It’s so touching and flattering that he should have come.

As was the case with SupExps like good or appropriate, some of these adjectives or SupExps like wonderful, remarkable, extraordinary, striking are ambiguous, since they also qualify as negative contexts (cf. III. 1. above), which makes them particularly compatible with this semantically stratified use of should.

III. 5. Grammaticalization

These new occurrences are clear examples of extension through analogy based on partial semantic structural identity. The meaning of should can be said to be even more bleached, in a possibly opaque but still elaborate way, as the bleaching is due to the layering which pushes the original semantic content \( P \rightarrow S \) further into the distance, but manages to keep it somehow in sight through persistence within the same use of should. The first layer provides the undertone of mental resistance in addition to the existential metalinguistic meaning, while the meaning of possibility, taking both P and non-P into consideration, may well be what allows the maintaining of this first layer together with the building of an evaluative opposite meaning on top of it. SupExps like not strange or normal are used in addition to those on the pattern of strange. Behre (1950: 284) mentions the “adaptability to both old and new purposes” of should, which may have been the reason why over time it was preferred to shall. Because of this superimposition of meanings in a multistratal construction, it also exemplifies a clear case of iterated modality.

III. 6. Emotional and intellectual uses of meditative-polemic should

III. 6. 1. Emotional uses and exclamative sentences: that it should come to that!

Exclamative sentences contain no SupExps and can be easily linked to the negative contexts seen in III. It should be remembered that the two cases were the first historical uses of shall in that-clauses, which later gave way to “meditative-polemic should” (Behre, 1950). In these instances of should, the emotion felt is too strong for the speaker to find words to express any judgment on P (for a more detailed description, see Arigne, 1984, 1989).

III. 6. 2. The “intellectual” uses: that... should... means that...

In this type of sentence, P is related to a second term, which typically takes the form of another clause so that the structure encountered here is, basically, an inter-propositional relation \( P \leftrightarrow Q \). The first reaction of rejection is overcome. The annoying content of the that-clause is related to another term which accounts for it, hence allowing the affected subject to better accept it. We have seen (III. 3. 1.) a first stage of this attempt at finding some reason or explanation for P, through which the subject’s annoyance could be somehow alleviated. A reason was found but was never made explicit within the sentence (Arigne, 1984, 1989). It must be underlined that, in all cases, those more intellectual uses take P as a starting point to reach a second term Q but never follow the
opposite direction. This means that the piece of reasoning goes “upwards”, from the consequence P to the cause or principle Q that accounts for P, in an inductive way. In fact, all contemporary occurrences are in some way an answer to the question contained in Chaucer’s following lines: “...by my hat! / That men shulde alwey loven, causeles, / Who can a reson finde or wit in that?” (Chaucer, quoted in Behre, 1950: 294; see also Arigne, 1989, note 5). This can be seen in the two examples below in which the terms proves and typical of connect P to a second term Q:

(14) … the fact that they should have rallied round him in this crisis proves that there must have been something likeable about the man. (in Behre, 1955: 68)

(15) It is typical of the cynicism of fate that he should imagine he loved me and still does. (L. Durrell, 1968, Tunc)

III. 6. 3. More sophisticated negative contexts: insignificant, irrelevant < P ← no Q >

The construction of an inductive piece of reasoning yields more sophisticated negative contexts than those described in III. 5. 2. as is shown by a sentence like:

(16) That he should have got up in the middle of the night is irrelevant.

In this example, another stratum is added, the speaker saying that there is no such thing as a second term Q which P could be referred to, and therefore accounted for and eventually accepted. Here we have a new, more sophisticated and elaborate way of expressing rejection, which is different from strange or revolting, thereby creating new negative contexts. From what is a simpler expression of a negative emotion (strange), one reaches something which might be felt as identical to this original stratum, but which in fact is different since it contains this first stratum upon which it is built, as well as additional strata corresponding to the attempt at finding an explanatory term Q and the failure in finding this term Q. This case illustrates a spiralling movement (cf. Culioli, 1968, Peyraube, 2002) such as that referred to by Culioli as a cam-structure, whereby one returns to a point which bears some resemblance to the starting-point but is in fact not identical with it, being of a different make-up.

III. 7. Grammaticalization

Section III has given us the opportunity to see a multistratal construction, the several stages of which show a clear linguistic instance of layering and persistence at work together within the same use and meaning. Again, we see how a superimposition of modal meanings, or in other words, iterated modality, is conducive to richer, though sometimes rather elusive, meanings. From a stage where the thing or event referred to by P can be seen as exerting some kind of constraint on S (III. 2.), we reach a stage in which the existence of P is constrained by another term which is perceived as the cause of P. Adding up new layers may seem conducive to a bleaching effect. First of all, the meaning is not easily accessible on account of the first inverted relation (actual desemanticization) and also, the first two layers at work in the meditative process are contradictory: P is difficult to accept, but on second thoughts understandable and therefore acceptable. Resemanticization is in fact achieved through contradiction, thereby leading to a blurring of meanings and partial invisibility. In the last case (III. 5. 3.), a spiralling movement takes us back to what seems to be a former simpler case (such as can be seen with strange in III. 1.), but is in fact constructed differently, as it takes into account a possible second term Q which might have been a reason to accept P.
IV. Meditative-polemic *should*, iterated modality and discourse

IV. 1. Preliminaries

27 In the present section dedicated to the way iterated modality is exploited in the use of meditative-polemic *should* in discourse, I wish to make preliminary observations upon what is understood, in depth, by the term “iterated modality”, and also to present in more detail some finer descriptions given by Behre on meditative-polemic *should*.

28 Iterated modality is an issue that is much debated in modal logic and linguistics. In the latter case, the literature often concerns itself with the question of embedded modalities. The question of embedded modalities is exemplified either by cases of explicitly embedding syntax like *it is possible that you will have to...* or by cases of single verbal sequences such as *you may have to...* where modality is iterated in one and the same clause. In both cases, the term refers to distinct modal meanings instantiated in distinct corresponding word-forms: a meaning of possibility marked by *possible* or *may*, and a meaning of necessity expressed by *have to*. The usage I make of the term is slightly different. I use it to refer to cases in which at least two distinct modal meanings are found together, encapsulated as it were in the use of the same word-form. For example, *should* in *you should go* (II. 1. 1.) is interpreted as expressing two different modal meanings, one pertaining to the domain of necessity, and the other to the domain of possibility. Similarly, in *...natural that...should...*, one can find a positive evaluative modal meaning built on top of a negative one (III. 4.). More generally, it should be noted that modal meanings do not have to pertain to different modal domains or even, within the same domain, to be different, to make modal iteration possible, as, for example, in *it might be possible that...*

29 The adjective “meditative-polemic” was coined by Behre to describe the uses of *should* examined in section III. The term “meditative” is justified by the fact that the use of *should* is associated with a “contemplative attitude” towards P (1955: 147) and “creates the impression that the writer is dwelling on a proposition which is familiar to the reader” (1955: 158). On the other hand, the label “polemic” is linked to the fact that *should* is in this case used “to bring the hearer to the speaker’s way of thinking” (1955: 146), because the speaker “may be anticipating some sort of reluctance in the mind of the hearer to accept the proposition” (1955: 149). The meditative side of *should* is used to soften a potential conflict: it “contributes to [...] easing the tension in the mind of the hearer” (1955: 163). “When resistance of some kind is anticipated in the mind of the reader or some other person(s), the *should*-clause, on account of its meditative aspect, provides a psychological meeting-ground for the parties concerned in the matter” (1955: 178). This analysis may be easily related to what has been said above, and more particularly to the existence of a first negative ground layer on the one hand, and to the idea of possibility on the other hand which is compatible with the positing of contradictory meanings through iterated modality.
IV. 2. Iterated modality

IV. 2. 1. How iterated modality is expressed.

Iterated modality is expressed in *should* complement clauses associated with a certain kind of SupExp, an adjective like *understandable* being different from a plain evaluative adjective like *strange*, and also sometimes with discourse markers within the sentence such as *after all, of course, yet...*, or outside the sentence. The successive layers can be made explicit, showing the semantic relation and progression between different SupExps, as one type of evaluation leads to another in the course of meditation. This process is to be seen in a variety of cases, whether the example, like (17), does not associate *should* with the expression of one of the layers identified in the train of thought or whether it does, as in examples (18) and (19):

(17) ... though it was almost inconceivable that he should have anything very special to tell us about Iolanthe, it was only fair to let Julia satisfy his curiosity.
(L. Durrell, 1970, Nunquam)

(18) She received the stockings from Beulah with her usual cheerfulness, for she would have thought it quite shocking as Mrs Haddington that she would be idle. 'Well, it wouldn't be right, would it?' she said. 'For she pays me for my time, and it's only to be expected I should be working while I'm here'. (G. Heyer, 1951, Duplicate Death)

(19) It was odd but somewhat typical of Bernie that he should have retained a dogged and invincible optimism about the business... (P. D. James, 1972, An Unsuitable Job for a Woman)

Here, attention must be drawn to the great flexibility of the SupExp, which may exhibit a wide range of modulations testifying to the process of iterated modality. Modality must be here understood in its broadest sense (see for example Culioli, 1976: 69), so that any attitude of the speaker towards a propositional content is viewed as modalisation. We have seen a first instance of this kind of modulation in example (8) with the combined use of *would* and *only* (*it would seem only fair*), but one can also find other kinds expressed, for example, through the use of the interrogative form, verbs of propositional attitude such as *may, seem, think*, or simply the use of *not*. We therefore find SupExps which are syntactically and semantically more complex than *it is fair such as is it fair that...?, it was/ it may appear necessary, it may seem strange/ he might have thought it strange that...* etc., as is to be seen in the following examples:

(8) ...she fiercely told herself that it wasn't fair that her life now should be so miserable and exhausting. (BNC)

(20) What did it matter that she should have her secrets? (L. Durrell, 1968, Tunc)

(21) Is it imperative that the tragic sense should reside after all somewhere in laughter? (L. Durrell, 1970, Nunquam)

(22) But is it fair, when the integrity of the Prime Minister is at stake, that he should have been able to select his referee? (Newstatesman, 16 February 2004)"
(23) But to return to your question: why Jesus Christ? The answer lies in many places. It lies, before History brought about the Incarnation, in logic. We have talked of an omnipotent God. An omnipotent God who loves man. What more logical than that he should show himself among men? (A. Burgess, 1980, Earthly Powers)

Here we find a rhetorical question which leaves it to the addressee to reconstruct the inductive reasoning along the lines of < God should show himself among men (that is to say the existence of Jesus Christ) is to be related to Q >. But what is more, the reasoning does not just amount to < God shows himself among men is the result of God loves man >. The inference, i.e. the relation < Q → P >, is already taken for granted and the reasoning is, in fact, a comment on the degree of logic (more logical) the inferential relation may exhibit, should occurring here in a reflexive, or in more technical terms, metalinguistic use: < God shows himself among men is to be accounted for / is to be related to logic > or, in other words and as Burgess writes, the answer lies in logic. One notes the relationship between this particular use and examples including such SupExps as necessary.

IV. 2. 2. What iterated modality expresses

Iterated modality can express either various successive stages of the meditative train of thought in one speaker's mind or the possible stands taken by subjects in a potential conflict (cf. Behre’s “psychological meeting-ground”). Clearly, we then leave the ground of unambiguous direct speech (III. 1.) as P can be attributed, for example, to another subject. Moreover, the subject-subject relation (SS) may be much more complicated than a speaker-addressee relation (S1 / S2). This can be found for example in fiction narrative where the presence of multiple characters and a narrator yields a multiplicity of subjective origins, as is shown in examples such as:

(24) Listeners would be mystified, wondering suddenly if perhaps they weren’t getting old or were unaccountably in the way. Of course, it is understandable that after so many years there should be areas of collective information in which these two could perform their mental short-hand, but often they were startled by the speed with which an idea passed from mind to mind. (M. Ross, 1970, The Special Pair)

We see how the “polemic” element has to do with interpersonal “deontic” relations and is conveyed by the existence of the first negative layer. The piling-up of contradictory layers selecting first the negative then the positive value of P, sometimes relating it to a second explanatory term Q, creates the meditative quality. This meditative train of thought, which concerns itself with a causal relationship linking one term P to another term Q, and therefore with inter-propositional relations, can be analysed as the expression of a certain kind of epistemic modality, thus yielding a complex “interpersonal epistemic” meaning.

IV. 3. Meditative-polemic should and why should

The search for a reason, found at work in the whole meditative process, relates those SupExps characteristic of meditative-polemic should in that-clauses to why, an adverb used to ask about a reason and with which should is often found. In fact, the last hybrid modal “interpersonal (deontic) epistemic” meaning we have just analysed is also found in some interrogative sentences in which should is associated with why in direct or reported speech:
(25) There was no conceivable reason why I should have murdered her. (G. Heyer, 1951, Duplicate Death)

(26) Strange that these two joined by mere marriage should see each other incestuously. Yet not so strange when one considers the passion of their involvement. If one thinks how numerous are the primitive tribes who link through mingling of the blood, then it is easier to see why these two should also wish for consanguinity. (M. Ross, 1970, The Special Pair)

(27) ‘I wanted to ask you to dinner/ Oh you did, did you?/ Why should that annoy you?’ She shrugged again. ‘Everyone asks me out to dinner’. (A. Brookner, 1996, Altered States)

One notes in (26) the similarity between easy to see why and the adjective understandable seen in III. 4. The whole meditative process unfolds through a discursive progression, which takes us from the negative marker strange onto not so strange and eventually to easier to understand.

IV. 4. Grammaticalization and evaluative modality

The analysis I have conducted so far shows that grammaticalization in the case of should follows a path from interpersonal relations to inter-propositional relations, which is a clear case of what a number of authors (after Traugott, 1989) call “subjectification”29. It also contributes to a reassessment of evaluative modality as expressed in sentences containing should in that-clauses. The process of semantic change analysed in the previous sections show that evaluative modality is grounded in interpersonal modality (which some might call deontic modality), that is to say subject-subject (SS) relations and affective relations linked to a subject’s will or desire. But evaluative modality also bears a relation to epistemicity. In fact, as has already been noted, seeing P as contrary to desire or expectation in evaluative judgments (strange, unbelievable) has clearly to do with inferential epistemic meanings (i.e. this should be so), which are, precisely, concerned with what is expected. It therefore provides proper foundations for meanings that may be interpreted as being on the epistemic side (not strange, normal, inevitable). Moreover, these meanings lead to other cases in which one goes from P to Q in an inductive piece of reasoning, which points to a more fully “epistemic” interpretation (III. 6. 2.). Lastly, because of its multistratal, potentially multi-subjective, semantic architecture, the expression of evaluative modality with should, has to be analysed in its discursive dimension.

V. Particular uses of why...should (?) in interaction

V. 1. Deontic metalinguistic meanings: a particular kind of speech act

Being interrogative, why should sentences may in some cases, and will always in direct speech, be analysed as containing a relation < S2 → S1 > which does not belong in the interpersonal (SS) modal domain (cf. II. and note 2 above) and can therefore be said to be modally neutral. This neutral relation provides a ground for the reactivation of modal interpersonal relations so that a pragmatic “intention to say” or “meaning to say” can be attributed to S2 in a relation which I note < PragS2 → S1 > (cp. a subcategory of French
questions beginning with “pourquoi veux-tu...?”, Milner et Milner, 1975, Arigne 1984, 1989, Chuquet, 1986\(^3\)). A portion of what has been said by S2 is taken up:

(28) 'You, er – you been there, Geoffrey? / ‘Me? But...why should I have been there?'
(K. Amis, 1978, Jake’s Thing)

(29) 'Did he ask you to do the washing-up? / Why should he have asked me? He told me to do it' (Arigne, 1984)

The equivalence between why + you (mean to) say / think and why should can be made explicit, as in the following example:

(30) ‘... Is she joining us?’ / Geoffrey frowned and shook his head. ‘No,’ he said with an upward inflection. ‘Where did you get that idea from?’ / ‘I didn’t get / ‘I mean why should she be joining us?’ (K. Amis, 1978, Jake’s Thing)

Here, the intention attributed to S2 by S1 in dialogue does not apply to the act of joining performed by the referent of she (should she join us?), but to the very act, performed by S2, of conceiving an idea or a propositional content (her joining us). Hence the comment Where did you get that idea from?, which could also have been worded as what makes you think / say that? What is questioned here is the addressee's will regarding what he says or has just said or, in other words, thinks. We find an interpersonal (deontic) meaning working upon a metalinguistic meaning, which, again, has to do with the representation of an event. What was in III. and IV. an existential meaning positing the necessity of P (seen as the representation of an event) shared by all is here a subjective necessity originating in a subject's will or desire. A speech act of the say-type is presented as the result of will or desire. The question is not what X means when he says that (for instance you should... as an equivalent of I advise you to...), but why S wishes / wants / means to say that, S being the addressee S2.

One should note at this stage that, as is often the case, the speech act does not need to be explicitly quoted and the fact that one is performing the speech act is enough for it to be referred to in the following line of dialogue. In fact, “it seems that the idea of asserting as a speech act is so basic to our cognitive systems that we don't even need to overtly talk about asserting in order to negate it” (Sweetser, 1990: 11). Conversely, if the speech act is overtly marked by a verb and therefore comes itself within the scope of should instead of being covertly marked by it, the should-clause can no longer be a direct-speech question, and one is brought back to ordinary meditative-polemic should (cf. Arigne, 1984: 270-272)

(31) Even at he LCE, once famous for sit-ins and street demos, the barricades are looking musty. I was discussing this with Professor Hugh Stephenson at the CEP. ‘Funny you should mention that,’ he said. (Newstatesman, 7 June 2004)

(32) ‘[...] Content you, he sent the news before ever we arrived at that house.’ ‘Why you should suppose that should content me I do not know, but never mind!’ said Hemingway. (G. Heyer, 1951, Duplicate Death)

In the case of these interpersonal-metalinguistic interpretations, it must be added that plain subject-subject relations (SS) as well as subject-proposition (SP) relations defining ordinary deontic meanings (II. 1.) reappear in favourable contexts (e.g. agentive verb allowing the expression of a subject’s will) together with the pragmatic meaning defined by the relation < PragS2 \to S1 >.

(33) She [...] swears she will report me to you and Dr. Marchant. [...] And all just because I spent half the day in London without telling her. I knew she wouldn’t let me go — why should I tell her? And whose permission should I have sought? Yours? (L. Durrell, 1970, Nunquam)
V. 2. Grammaticalization

I have no knowledge as to the period of emergence of such uses and interpretations. I can only tentatively suggest that the phenomenon could be analysed as a case of pragmatic enrichment. This step in grammaticalization is thought by a number of authors to be typically the ultimate stage of “subjectification” which emerges later than epistemic inferential meanings (see for example Traugott, 2004 among others). As a whole, grammaticalization would here amount to a reanalysis of the original subject-subject relation seen in II. Again, in this case, we might find a measure of bleaching due to the fact that a metalinguistic interpretation is usually seen as a sign of an increase in abstractness. Yet along with this bleaching process, one must acknowledge one of resemanticization through pragmatic enrichment. Enrichment here is achieved through persistence, which leads to a new “spiralling” way (cf. the cam-structure in III. 6. 3. above) of retrieving interpersonal relations as the subjects can confront each other in this will or intention to think or say, or “meaning to say”. These particular pragmatic uses of should constitute a new illustration of a polemic element.

V. 3. Pragmatic counterparts: may / might

These pragmatic uses of should have their counterparts in two different uses of may, concessive may and “likely counterfactual” might. The concessive uses of may are those found in sentences like:

(34) He may be intelligent, but I don’t like him.

in which may can be analysed as “I allow you to think / say”, hence < PragS1 → S2 >. I refer the reader to Sweetser (1990: 71) for a similar analysis in which the speaker’s “grudging spirit” might mirror Behre’s “polemic element”32. The second pragmatic counterpart is might in its “likely counterfactual” use (see Charreyre, 1984, for a description of “l'hypothèse-mirage”), as in:

(35) At first, catching sight of him as she passed the glass wall of the dining room, the slight figure with its foreshortened shadow, she had given a sharp little cry. Greg! And it might have been Greg standing there with only the street behind him. He would have been just that age. Doubting her own perceptions, she had gone right up to the glass and stared. But Greg had been dead for seven years;…
(D. Malouf, 1985, The Empty Lunch-Tin)

The sequence it might have been Greg can be paraphrased as follows: if one had not known it wasn’t true (hypothesis + counterfactual) there was such a high degree of likelihood that one would have been allowed to think, or it might have been legitimate to conclude… (permission to think or say). Contrary to what happens in (34), this use of might shows no pragmatic interaction between S2 and S1. The pragmatic permission does not originate in a particular subject, but is metaphorically attributed to the situation or the circumstances, which could be noted : < Prag Sit → S / Sx >. The fact that no particular or no singular subject is involved on either side of the pragmatic relation makes this use of might omni-personal and thus reminiscent of the SupExps found in that-clauses (cf. III.), while the idea of possibility inherent in the use of the verb may gives it a meditative quality.
V. 4. Pragmatic use of should in narrative interaction: Wh-...should... but...!

The same kind of pragmatic meaning is found in narratives with the meaning of “narrative necessity” (for details see Arigne, 1984, 1989: 223-226) in examples like:

(36) But round the end of a cucumber frame, whom should he meet but Mr. Mc Gregor! (B. Potter, 1902, The Tale of Peter Rabbit)

In such cases, the interrogative structure is used to simulate a question addressed to S2 thereby temporarily making him the origin of the necessity. Necessity here bears upon what happens next in the story and which, at least in one case of the narrative situation which might be considered prototypical, is only known to S1. We have a narrative SS relation < Prag S2 → S1 >, which can be paraphrased as I ask you: who do you think / would you say he met?

VII. A short summary

The preceding sections have presented an analysis of some uses of should, emphasising the semantic construction of evaluative modality in the double perspective of grammaticalization and synchronic polysemy. The meanings and processes described are many and often closely intertwined, making the meaning of should, in most cases, extremely elusive. This is why I shall here give a short summary of the main results and conclusions of the study I have conducted.

VII. 1. Semantic change: the generation of meanings

The isolation of small meaning units makes it possible to describe the transition from one meaning to another. In the case of should, and due to the persistence of its etymological meaning, some of these semantic units can be described in relational terms. The description of semantic change has shown that interpersonal relations lead to the construction of evaluative modality, built upon an original < S → S > construction construed in the owe-meaning of shall. The first historical instances of meditative-polemic should are found in the uses of shall with “expressions of sorrow and displeasure” (Behre, 1950). In this case, the analysis of change has to take into account an inverted relation, as the relation < S → P > found in he should go gives way to < P → S > or < S ← P > in ...strange that he should go. This view departs from other theses put forward on the subject (Bouscaren, Chuquet & Danon-Boileau, 1987, Bybee, Perkins & Pagliuca, 1994). What are clearly in those cases evaluative meanings lead in turn to the expression of inferential meanings which can be said to be “on the epistemic side” (from ...strange that ...should... via ...understandable that...should..., to inductive pieces of reasoning such as ...that...should... shows / is due that...). Furthermore, I have suggested that, in all contemporary uses, should bears upon the proposition as a representation of an event, as a metalinguistic use expresses the necessity of an abstract entity P (cf. “semantically empty” should (Coates, 1983); a “more generalized meaning” (Bybee, Perkins & Pagliuca, 1994), “theoretical should” (Leech, 1971 / 1987), “putative should” (Quirk et al.).
VII. 2. Evaluative modality as multistratal

Evaluative modality as expressed in should that-clauses is multistratal, combining distinct modal meanings. The existence of a multiplicity of layers makes it possible to encompass contradictory meanings. For example, in understandable that...should..., a positive evaluation is built up on the original negative one, and the semantic contradictions are sometimes made explicit in the discursive context. The combination and, inevitably, the fusion of the meanings combined account for the elusive character of meditative-polemic should. The first layer remains underneath and its meaning is obscured as a result. Its persistence can be felt as the polemic element (Behre), reminiscent of the original subject-subject relation $<$S $\rightarrow$ S $>$ . Not only do the use and meaning seen in that... should... means that... co-exist with those of strange that...should..., but the latter are, somehow, contained in the former as a ground layer. In such a perspective, “directive” contexts (necessary, indispensable...) can be analysed as evaluative, and as instances of meditative-polemic should. This view differs from the analysis of should as simply “harmonic” (Bybee, Perkins & Pagliuca, 1994): S was urgent / demanded that...should... is constructed differently from it is / was urgent that...should...

VII. 3. Iterated modality and modal categories

Iterated modality is what permits the multistratal construction. It combines modal meanings and can be seen at work in one and the same use of the same word-form. For example, should in you should go combines the two meanings of necessity and possibility, just as should in understandable that...should... combines two evaluative modal meanings, a negative and a positive one. As a result, modal categories whether they are called deontic or interpersonal, epistemic, evaluative..., are not that clear-cut in linguistic “real life”. The combination of modal meanings in iterated modality produces hybrid modal meanings, for example an “interpersonal epistemic” meaning or a “deontic metalinguistic meaning”. The meaning(s) of should remain(s) a puzzle unless one takes into account the existence of iterated modal meanings, superimposed upon one another. The meaning and function of should in its meditative-polemic uses cannot be assessed without analysing the syntactic and semantic context, and the analysis of SupExps in the only means of unravelling the semantic intricacy of meditative-polemic should. The particular semantic link between should and the SupExps accounts for the apparent paradox of the interpretation of meditative-polemic should as both “désémantisé” and “redondant” (Féraud et al., 1972: 74).

VII. 4. Semantic change in grammaticalization and polysemy

The two principles of layering and persistence are seen as working together in the making up of one and the same meaning. They are principles of grammaticalization (Hopper, 1991, Peyraube, 2002), but can also be profitably used in synchronic analysis. The directions of change cannot be described as univocally oriented. The modal meanings pile up in a spiralling movement (Culioli’s cam-model). Following this motion, one reaches a point referring to a state of affairs both similar to and different from the state of affairs one was facing at the starting point (Culioli, 1968 and note 22): possible is different from not impossible (note 27) just as irrelevant is different from strange or revolting
The linguistic description of both grammaticalization and synchronic polysemy has also to take into account the dimension of transcategoriality. Once a main verb, the verbal lexeme shall has become an auxiliary of deontic or epistemic modality. In its auxiliary function, should can also be taken as a support for subordination and evaluation within a complex sentence in a subject clause. It can also be the marker of what has been labelled a deontic metalinguistic speech-act in direct-speech why-questions and narrative necessity. In the latter two cases, it acquires a metalinguistic function. As a deontic or epistemic modal auxiliary, should deals with what happens in the world, whereas in its metalinguistic function, it bears upon representational entities of a more abstract level. The shift from one category to another is achieved through processes of metaphorization, with a shift in the terms related and / or changes in the orientation of the relation.

VIII. Conclusion

The analysis above offers an approach of the verbal form should within a unified treatment of the verbal lexeme shall. Evaluative modality is deeply rooted in subjective interpersonal relations and has to be studied in its discursive dimension. The original subject-subject meaning is seen as extremely pervasive in the case of shall / should, as it is to be found in all the contemporary uses whether their prevailing interpretation is deontic, epistemic, meditative-polemic or metalinguistic. Also, one sees how lexical semantics, and more particularly here, the semantics of adjectives, and discourse are in some cases closely interlinked.

The semantics of should sheds light on the interfaces between different modal fields or categories, and the possible ambiguities arising between them. The transitions from one field to another and the possible merging or overlapping of these semantic fields should be studied in their cognitive dimension. The analysis of the ontology of the entities coming under the scope of should (cf. Vendler, 1967, 1972; Godard & Jayez, 1999) constitute another field equally open to cognitive studies. Ultimately, one sees how some theoretical concepts and research directions used in the two fields of grammaticalization and synchronic polysemy can sometimes converge and be mutually enlightening (cf. Robert, 2003).

BIBLIOGRAPHY


ARIGNE, V., 1989, “Shall et should, étude de modalités”, in A. Gauthier (dir.), Explorations en linguistique anglaise, Bern: Peter Lang, 155-227

ARIGNE, V., 1994, “Quelques remarques sur les énoncés de type I should think...” in SIGMA 16, Aix-en-Provence: Publications de l’Université de Provence

BEHRE, F., 1950, "The Origin and Early History of Meditative-Polemic should in that-clauses" in Symbolae Philologicae Gotoburgenses, Göteborg: Göteborg Högssolas Arsskrift 56, 275-309

BEHRE, F., 1955, Meditative-Polemic should in Modern English that-clauses, Stockholm: Gothenburg Studies in English, 4


CHARREYRE, Cl., 1984, “Quand MIGHT (HAVE-EN) peut se traduire par « c’était comme si »”, Cahiers Charles V, n°6, 27-58

CHUQUET, J., 1986, “To et l’infinitif anglais”, in Cahiers de recherche en linguistique anglaise, numéro spécial, Gap, Ophrys


COTTE, P., 1988, Le système des auxiliaires modaux dans le système verbal de l’anglais contemporain, Thèse de Doctorat d’Etat, Université de Grenoble 3


CULIOLI, A., 1990, Pour une linguistique de l’énonciation, Opérations et représentations, Tome 1, Gap: Ophrys


ERNOUT, A. and MEILLET, A., 1932, Dictionnaire étymologique de la langue latine, Paris: Klincksieck (1979, 4e édition)


RIVIERE, Cl. 1981, “Is should a weaker must?”, in *Journal of Linguistics* 17, 179-195


APPENDIXES

Symbols and abbreviations

S: subject, P: proposition

SS (relation: subject-subject relation, PS (relation): proposition-subject relation)

S1: speaker, S2: addressee, Sx: any other subject

< Sa → Sb > or < Sb ← Sa >: oriented relation in which Sa is a reference point for Sb. The arrow is a simplified notation for Culioli’s locating operator epsilon (see for example Culioli, 1968, 1976, Arigne, 1984, 1990, Bouscaren, Chuquet & Danon-Boileau, 1987...)

The interpersonal or relations can be linked to the two roles of speaker and addressee in questions (are they here?: < S2 → S1 >). They can also be linked to deontic meanings (you shall learn shorthand?: < S1 → S2 >, shall I open the door?: < S2 → S1 >) in which Sa is seen as exerting a constraint on Sb. In the first case, the relation is interpreted as modally neutral. In the second case, Sa exerts a constraint on Sb, which is interpreted as “intersubjective modality” (Culioli, 1976)

SupExp: expression belonging exclusively to the superordinate clause. I have found Behre’s term “expression” particularly satisfactory, as it is vague enough to refer to all kinds of syntactic sequences such as is quite natural, shows (that P), is irrelevant... However, when the SupExp is presented in its simplest form, for example in it is strange (that) (present tense, no modulations...), the semantic study of the SupExp amounts to that of the sole adjective strange.

NOTES

1. The psychogenetic considerations are to be found in an ontogenetic study of modal reasoning (Piéraut-Le Bonniec). It should be added that data from psycholinguistics studies in language acquisition show that epistemic modality follows dynamic and deontic modality in spontaneous speech (Bassano, 1996 for French and Stephany, 1986 and 1993 for English and a cross-linguistic study) though a degree of variation is exhibited according to the type of modality marker involved, main verbs or adverbs apparently preceding auxiliaries (Stephany, 1986) and inflections (e.g. obligatory bound-forms) appearing earlier than in non-bound forms as in Korean (Choi, 1991, quoted in Stephany, 1993). The fact that deontic utterances precede epistemic ones in early language is not enough to conclude that epistemic modality originates in deontic modality (Bassano, 1996: 108). The publications quoted above are: D. Bassano, “Functional and formal constraints on the emergence of epistemic modality: a longitudinal study on French”, First

2. See symbols and abbreviations at the end of the article.


4. The term “subject” is here to be understood as referring to persons, e.g. potential speakers, bearing in mind that these speakers may be referred to by a grammatical subject. This is the case in the type of example X owes Y to Z currently examined, where the subject or the person who owes is the referent of the grammatical subject who owes.


7. A slightly different type of analysis is proposed by Sweetser (1990: 64) for the epistemic meaning of must (“a body of premises […] compels the speaker to reach the conclusion…” hence \( \langle p, q, r, \ldots \rangle \rightarrow S \) ) in which she sees “the conventionalization […] of a metaphorical mapping between domains”.

8. Arigne (1984, 1989) is not documented on this point. For more detail about these particular modal meanings, see Arigne 1984, 1989 and 1990.


10. See IV. 2. 2. for other interpretations.

11. Contra Bouscaren, Chuquet and Danon-Boileau (1987: 57) whose interpretation of should in this type of sentence (e.g. it is surprising that he should play this concerto) is that of a constraint exerted on the grammatical subject of the subordinate clause (“on peut gloser ainsi: il est surprenant qu’il ait été amené à jouer ce concerto”). The meaning of should is therefore the meaning found in independent clauses, restricted to SS relations (Culioli’s “intersubjective relations”), no subject-proposition (SP) relation being taken into account.

12. Cf. the description of should as “semantically empty” (Coates, 1983: 69) and the analysis of the SupExps as “non-harmonic” contexts (Bybee, Perkins and Pagliuca, 1994: 217-218) which, like that of Bouscaren, Chuquet and Danon-Boileau (see note 11 above), only take into account one orientation of the relation, that which is found in independent clauses (see also note 20).

13. Behre (1950: 281-2) also mentions one example of the use of shall “after an expression of joy, contrasting with the use of the same auxiliary after an expression of sorrow”, as well as one example of should (1950: 301) used “to emphasize the same kind of contrast of joy and sorrow”.

14. This phenomenon may be akin to what is described by Godard and Jayez (1999) in their analysis of the singular uses of the French noun fait (= fact). Drawing on Vendler's previous analysis (1967, 1972) they observe that “les faits” (i.e. facts) are “des garants de propositions” (propositional guarantees) and should not be confused with events, since a fact, far from being the result of an event, is a representation of it (“Il est facile de confondre l’événement et le fait, parce que le fait, loin d’être le résultat de l’événement, en est la représentation” (Godard and Jayez, 1999: 129). This analysis is grounded on a three-level distinction between i) parts of the world, ii) propositions and iii) propositional guarantees. If the proposition is true, the relation to what makes it true is constant. This relation is precisely a fact (“... si la proposition est vraie, son rapport à ce qui la rend vraie est constant. C’est ce rapport qui constitue un fait” (Godard and Jayez, 1999: 126).

15. It seems that reference to abstract entities such as have been described above can be made through a variety of devices, among which can be mentioned: the use of the verbal form should,
the use of a noun like *fait* (= *fact*), or again that of a verbal form in infinitive constructions, “subjunctive”...

16. For example, in meditative processes following various stages: let P be (P is taken into consideration), I don’t like P (S expresses a preference for non-P, the negative value), why not P after all (back to P again, the positive value).

17. Among the examples given by Hopper to illustrate the Principle of Layering, are the various linguistic devices used in English to refer to a future or past period of time (Hopper, 1991: 23-24). The analysis of the Principle of Persistence may well presuppose the existence of layers, but these layers are not described as possibly functioning simultaneously within the same use of the same linguistic item. They are only successive stages of the use of one item, each stage corresponding to one particular distinct meaning. Any subsequent stage is thereby analysed as a natural development of the meaning found in the preceding stage that is to say as “a semantic continuation [...] of [...] [its] original lexical meaning”. For example, “the ‘predictive’ future develops out of intention / promise use of will” and “[...] the predictive future remains only one of the several distinct meanings in Present-Day English” (Hopper, 1991: 28-30). Similarly, Heine, Claudi & Hünnemeyer (1991: 178) mention cases where “semantically the first stage [...] co-exists side by side with the second stage [...]”, so that the grammaticalization process involves “overlapping, i.e. a stage where the former meaning still exists while a new meaning is introduced” (B. Heine, U. Claudi & F. Hünnemeyer, “From cognition to grammar: Evidence from African languages” in E. C. Traugott et B. Heine, 1991).

18. Note however that, insofar as it is morphology-based (*ne + *cessis from cedo*), this etymology “il n’y a pas moyen de reculer” cannot be established with certainty. Even if the morphological analysis remains fragile, the meaning of *necesse* was that of “une nécessité à laquelle il est difficile de se soustraire”, which allows for a similar semantic interpretation. The analysis of necessity as doubly negative is also encountered in the analyses of necessity as “impossible that not” found in Aristotelian logic.

19. These cases are not usually treated as occurrences of “meditative-polemic” or “putative” *should*. Behre himself excludes examples containing SupExps like necessary on the grounds that the “sense and function” of *should* is identical to “the sense and function of *should* in independent clauses”, i.e. “logical inference” or “should of obligation, duty and propriety” (Behre, 1955: 16-18).

20. Bybee, Perkins and Pagliuca (1994: 214-218) make no such distinction. In their analysis, meditative-polemic *should* derives from directive uses after harmonic predicates such as necessary, essential or suggest, no distinction being made between personal or non-personal predicates (the table of predicates on page 216 is taken from Coates (1983: 69) and contains adjectives, verbs and nouns, e.g. suggestion). This view is contradicted by Behre’s studies (1950, 1955), which show that meditative-polemic *should* developed from a first use of *shall* in “non-harmonic” contexts. This “non-harmonic” use of *shall* emerged ca. 1300, as the use of “harmonic” *should* seems to have been already well-established: OED (quoted by Bybee, Perkins and Pagliuca) dates its emergence ca. 1000 A.D. for its uses with past reference, and ca. 1200 A.D. for non-past references. They write: “Thus, around 1350 there seems to have been a rapid expansion of *should* into non-harmonic contexts, which affected complements of predicates of two major types: those expressing evaluation, and those expressing belief or opinion. While all these uses continue into current British English, their first appearance in the language represents a diachronic progression of precisely the type we predicted — from harmonic to non-harmonic contexts.” Note that Mélis (1998) recognizes the role of subordination as essential for the comprehension of the *should*-subjunctive phenomenon, but does not take into account the syntactic difference between subject or object complement clauses.

21. About tendencies presiding over the selection of more emotional or more intellectual meanings, see Arigne (1984, 1989: 208-210) who examines the role played by the position (front-
position or postposition) of the subordinate clause and the form of the SupExp (morphology, expansion and modulations).

22. Culioli’s comments have to do with the way natural languages work in general, while Peyraube is concerned with the process of reanalysis. Culioli observes that “De très nombreux systèmes sont munis d’une structure en “came” [...] Ce modèle, d’une grande importance dans les langues naturelles, permet de mieux concevoir certains problèmes touchant à l’ambiguïté, l’ambivalence (au sens psychanalytique du terme), et d’une façon générale fait sans doute apparaître une propriété fondamentale du langage”. As for Peyraube (2002: 52-53), he writes: La réanalyse procède par cycles. Gabelenz (1891, p.251) avait déjà en son temps développé cette idée, reprise plus récemment par Hagège (1978), selon laquelle le changement syntaxique n’est pas un processus linéaire, mais plutôt cyclique, ou plus exactement qui implique un mouvement en spirale. La raison de cette nature cyclique du changement peut être sans doute trouvée dans la relation dialectique qui existe entre les besoins de simplicité de la communication, d’un côté […] et de l’autre côté, à l’opposé, les besoins d’expressivité maximum” (the references in Peyraube are Die Sprachwissenschaft; Ihre Aufgaben, Methoden und bisherigen Ergebnisse for Gabelenz et “Du thème au rhème, en passant par le sujet; vers une théorie cyclique” for Hagège).

23. Note that other adjectives would take us further along the “spiral” of meanings. Just as irrelevant and insignificant are both similar to and different from strange or revolting, adjectives built on the semantic pattern of relevant or significant belong in some way with SupExps like not strange, (quite) natural and understandable: P signifies something / points to Q, but Q is not mentioned.

24. Most probably accounting for the label of “a more generalized meaning” given by Bybee, Perkins and Pagliuca (1994: 218) who write that “should retains its older meaning in certain contexts while it expresses a more generalized meaning in other contexts”.

25. See for example “Backtracking Counterfactuals and Iterated Modalities”, a recent paper given by A. Arregui at the Congress of Syntax and Semantics in Paris (CSSP) in 2005.

26. See also (5) in III. 4. (...though puzzled, I had complied. [...] Now, I understood. [...] It was perfectly understandable, I told myself, that I should dress appropriately...).

27. About the role played by interrogative constructions for better acceptability, see for example Kruisinga & Erades, 1950, on the difference between *it is possible (that... should) and is it possible? (E. Kruisinga and P. Erades, An English Grammar, 1950, quoted in Behre, 1955: 30). See also Arigne (1984, 1989) about differences in pairs such as it is possible / it is possible after all, possible / not impossible, and also about the way *it is conceivable (that...should) differs from it is conceivable after all (that... should).

28. For the difficulty inherent in pinpointing this specific modal meaning, see section III. above, and more particularly note 24.

29. Duchet, studying the path from radical to epistemic meanings of the present form shall, writes that shall has not completed the grammaticalization process. Note however that he mentions other epistemic uses of shall (“d’autres emplois épistémiques de shall”), among which the use of should found in why should he think that?, seen close to the use of should in It is strange that you should say that (J. L. Duchet, “Shall, ou l’histoire d’une grammaticalisation manquée”, in J. L. Duchet & L. Danon-Boileau (éd.), Opérations énonciatives et interprétation de l’énoncé, 1993, p. 108).

30. Chuquet (1986: 81-82) draws a parallel between why should-questions (why should we leave?) and infinitive why-questions (why leave?).

31. Similarly, this kind of pragmatic interpretation seems generally precluded in interaction if any evaluation attributed to S2’s previous words comes within the scope of should: cp. Of course she would / *why should you say that/ *why should you be so sarcastic about it? vs. I don’t see why you should be so sarcastic about it (Arigne, 1984: 270-272).
32. Sweetser (1990: 70) proposes paraphrases on the model of: “I do not bar from our (joint) conversational world the statement that he is […], but…”

33. I wish to thank Eithne O’Neill for her comments upon one of the very last versions of this paper. Errors are of course my own.

34. Jean Stubbs, 1972, Call me again the Day that is Past.

ABSTRACTS

This article addresses the question of iterated modality from the twofold perspective of grammaticalization and polysemy through the semantic description of various uses of should in contemporary English, and more particularly that of “meditative-polemic should”. Distinct modal meanings can be found together within the same use and meaning. Possibility accompanies necessity, and evaluative modality is shown to be multistratal owing to the two principles of layering and persistence at work within the same use and meaning. The combination of distinct modal meanings yields hybrid modal meanings pertaining to different modal categories. The dimension of transcategoriality is also taken into account: should is either an auxiliary of deontic or epistemic modality, or used metalinguistically as a support for subordination and evaluation, or as the marker of a “deontic speech-act”.

INDEX

Mots-clés: modalité radicale, modalité épistémique, modalité appréciative, grammaticalisation, valeurs modales hybrides, relation interpersonnelle, modalité itérée, stratification, persistance, polysémie, harmonie sémantique

Keywords: deontic modality, epistemic modality, evaluative modality, grammaticalization, hybrid modal meanings, interpersonal relation, iterated modality, layering, persistence, polysemy, semantic harmony
AUTHOR

VIVIANE ARIGNE

LDI, UMR 7187, CNRS et Université Paris 13