

THE POLYSEMY OF *DEVOIR*: A CONTRASTIVE AND DIACHRONIC ANALYSIS*

Corinne Rossari, Corina Cojocariu, Claudia Ricci and Adriana Spiridon

1. INTRODUCTION

The French verb *devoir* has a lexical value (referring to the notion of debt) and several modal values. Among the latter, the epistemic value is looked at as being essentially pragmatic insofar as *devoir* is supposed to code a form of inference. The analysis proposed below will assign a pragmatic value to this verb for the whole series of its modal values. We shall posit that *devoir* indeed codes a form of evidentiality, but we shall not associate it with an inference. *Devoir*¹ indicates that the speaker has motivated his/her utterance by making it depend on a source that coincides with one of the three parameters involved in the classical logical reasoning: the major premise, the minor premise and the conclusion.

Our analysis will not join either of the two main explanations traditionally given to the meaning of *devoir*. First, we do not conceive of *devoir* as encoding an indication related to epistemic modality, implying a quantification of the worlds where the proposition is true (as *probablement* or *peut-être* would do). Second, we do not consider *devoir* as encoding a form of inference either. In other words, we do not assume that *devoir* indicates that the information conveyed by the

* The research proposed here is conducted in the framework of a project on Evidentiality funded by the Swiss National Science Foundation (reference number 101512-117645/1). The study is the development of an article published in French under the title: *Devoir et l'évidentialité en français et en roumain* (Cf. Rossari *et al.*, 2007) [Online], URL: <http://discours.revues.org/index116.html>. We are grateful to our anonymous reviewers for their very insightful comments.

¹ Our analysis deals mainly with the present indicative use of *devoir*.

speaker should be understood as the result of a calculation. We associate the notion of inference to a general interpreting principle not coded in French; this very principle allows the listener to understand the origins of any utterance.

Data provided by Romanian will particularly highlight the functioning of *devoir* as a modal. On the one hand, we shall see that the French modal *devoir* has no equivalent in Romanian. On the other hand, we shall notice that this language has a structure named “presumptive” (made up of *o fi* + gerund or past participle) which can be associated with a conventional indication of absence of source. The various Romanian counterparts of the modal *devoir* will provide us with precious information leading to a better understanding of the way in which the modal values of the French verb came into being.

We shall start by commenting upon the different nuances conveyed by *devoir*. Then we shall justify the difference that we posit between the type of evidentiality coded by *devoir* and the other pragmatic values generally associated with it, i.e., inference and epistemic modality. In Sections 4 and 5 we shall describe the particularities of the Romanian evidential system taking as a basis the structure encoding the presumptive and the counterparts of *devoir*. Finally, in order to establish a link between the different modal values of *devoir* and its original lexical meaning, we shall adopt a diachronic perspective, by looking at the values that its Latin counterpart seems able to convey.

2. THE DIFFERENT VALUES OF *DEVOIR*

We take as a starting point the fact that one and the same occurrence of *devoir* may easily assume one or another value among those traditionally associated with it if we change the contextual parameters:

- (1) Paul doit dormir.

If the speaker sees Paul awake, *devoir* has a deontic value (*Paul must sleep*). If the speaker does not see Paul and someone is looking for the latter, *devoir* has an epistemic value (*Paul must be sleeping*).

- (2) Le bébé doit consommer au minimum 500 ml de lait chaque jour. (sante-medecine.commentcamarche.net/contents/bebe/11_comment-effectuer-la-diversification-alimentaire.php3)

If the utterance is interpreted as being generic, *devoir* takes an anankastic² value (*A baby must eat at least 500 ml of milk a day* in a context where this is a condition for his/her health); if the speaker

²This value appears in Conte (1995) and Kronning (1996).

is talking about her/his own child, *devoir* is interpreted as being deontic (*The/my baby must eat at least 500 ml of milk a day*).

Moreover, a number of uses are difficult to assign to either of these categories.

(3) Il doit faire beau demain.

Does *devoir* indicate the speaker's degree of belief (*The weather must be nice tomorrow*) or a prediction (*The weather will be nice tomorrow*)?

There are also uses in which *devoir* expresses an estimation:

(4) Il doit y avoir 150 personnes dans l'auditoire.

There must be 150 persons in the auditorium.

Devoir seems to absorb the different nuances *related* to the various interpretations that an utterance can be given. If the referent of the utterance is generic, *devoir* has a certain interpretation; if the state of affairs consists of an event that the speaker does not witness, *devoir* will have another interpretation; and if it is about an event to come, a third interpretation of *devoir* will emerge. It seems then difficult to distinguish between what is linguistically coded and the various meaning effects conveyed by *devoir* in different contexts.

3. *DEVOIR* AS AN INDICATOR OF THE EXISTENCE OF AN INFORMATION SOURCE

The linguistic literature mentions the following main values as being conventionally associated with *devoir*: epistemic, deontic, alethic and anankastic. They are illustrated in the following examples:

(5) Avec cette chaleur, tu dois être fatigué. (epistemic value)

You must be tired with this heat.

(6) Paul doit se laver les dents. (deontic value)

Paul must brush his teeth.

(7) Tout homme doit mourir un jour. (alethic value)

Every man must die one day.

(8) Pour être aux normes ISO, cette chaise doit supporter un poids de 120 kilos. (anankastic value)

In order to comply with ISO standards, this chair must be able to support a weight of 120 kilos.

Behind all these values we may find the property of indicating the existence of an information source that coincides with one of the foundations of logical reasoning, namely the major or the minor premise. The deontic, alethic and anankastic uses are all supported by a rule (corresponding to a major premise). The content of the utterance where they occur is nothing but a way of expressing the rule in question. As for the epistemic use, it is supported by a fact (corresponding to a minor premise); the utterance where it occurs expresses a conclusion derived through deduction or abduction from the latter.

The epistemic use in example (5) shown below as (9) may be analyzed as follows:

(9) Avec cette chaleur, tu dois être fatigué.

You must be tired with this heat.

Fact mentioned in discourse: the heat (minor premise: *it's hot*). Conclusion (derived through deduction or abduction): *the addressee is tired*.

The source of this utterance is an observation (whose object is the heat). *Devoir* signals that this observation is the source of the utterance where it occurs. Actually, the latter is nothing but a way of expressing a conclusion that may be derived from the former.

The second use of *devoir*, which could be assimilated to a deontic usage, has a rule as its origin. By rule we mean any causal correlation between actions, states of affairs, behaviors, attitudes, etc.

(10) Paul doit se laver les dents.

Paul must brush his teeth.

Rule: Taking care of one's teeth entails brushing them.

(11) Paul doit rentrer avant dix heures ce soir.

Paul must come back by ten tonight.

Rule: Parents' will entails children's coming back at a certain hour.

The two utterances express an obligation which derives from an entailment between a general attitude and a particular behavior, with one subject involved in the former, and two in the latter.

The third use, which in its turn could be assimilated to an alethic usage, has also a rule as its source.

(12) Tout homme doit mourir un jour.

Every man must die one day.

Rule: It is in the nature of every living being to die.

The utterance consists here in a manifestation of the underlying rule, as it is applied to a generic object, namely *every man*. This way of expressing the rule provides *devoir* with an alethic interpretation.

The fourth use, assimilated to an anankastic usage, is also supported by a rule.

- (13) Pour être aux normes ISO, cette chaise doit supporter un poids de 120 kilos.

In order to comply with ISO standards, this chair must be able to support a weight of 120 kilos.

Rule: Every chair complying with ISO standards supports a weight of 120 kilos.

The utterance is in this case a manifestation of the rule as it is applied to a specific object (namely *this chair*); it actually verbalizes the purpose of the rule (*in order to comply with ISO standards*). This feature differentiates anankastic *devoir* from deontic *devoir*. The mere fact of mentioning a certain purpose or aim in (10) would provide that specific occurrence of the verb with an anankastic reading.

- (14) Paul doit se laver les dents pour ne pas attraper de caries.

Paul must brush his teeth in order to prevent tooth decay.

The ambiguity between the epistemic and the deontic readings that characterizes *devoir* out of context depends on the information source of the utterance. If this source consists in an observation, the reading is epistemically oriented and the utterance in question stands for the expression of a conclusion. On the contrary, if the information source is represented by a rule, the reading of *devoir* is deontically oriented and the utterance where it occurs is nothing but a manner of expressing that rule. Out of context, (1) may be interpreted as expressing a conclusion derived from the observation that Paul is absent or as the incarnation of a rule of the type *Children need to sleep*. (2) takes on an anankastic interpretation if the manifestation of the rule signaled by *devoir* applies to a generic object and takes on a deontic interpretation if the rule in question applies to a specific object. The uses that are not very close to the traditional categories may also be described in a similar manner. For instance, the utterance in the following example:

- (15) Paul doit venir me voir demain.

Paul must come and see me tomorrow.

expresses a contingent rule of the type: *Si tout se passe comme prévu, alors tel événement adviendra/If everything goes as expected, then the event x will occur*. The use in (16) may be analyzed similarly.

- (16) Il doit faire beau demain.

The weather will be nice tomorrow.

The estimation use illustrated in (4) resumed below:

- (17) Il doit y avoir 150 personnes dans l'auditoire.

There must be 150 persons in the auditorium.

is of the same type as the one illustrated in (5). The utterance is in this case the expression of a conclusion, but it differs from (5) in that it signals an information source consisting not in a fact (the heat) but in a range of signs unidentified by the speaker. This range of signs may be evoked

by resorting to locutions such as *à vue de nez*, *à vue d'œil*, *au pif* (roughly, at a quick glance, at a rough guess).

Our analysis also evacuates from the meaning of *devoir* the nuances of advice or moral obligation associated with utterances such as the following:

- (18) Tu dois aller voir un médecin. (advice)
You must see a doctor.
- (19) Tu dois lui être reconnaissant. (moral obligation)
You must be grateful to him.

Both (18) and (19) are manifestations of a rule – in the case of the former, that rule is *Everyone who cares about his/her health sees a doctor when he/she has a health concern* and, in the case of the latter, the rule is the following: *Anyone who is not base is grateful whenever someone does them a favor*. Both rules apply to the addressee and the contribution of *devoir* is confined to signaling their existence.

Thus, the polysemy traditionally attributed to this verb finds itself reduced to a simple indication of a source for the information conveyed by the utterance. The various interpretations to which this modal may give rise depend on the content of the major or minor premise functioning as information source.

Our analysis presents several advantages with respect to the analyses provided by Dendale and De Mulder (1996), Desclés and Guentchéva (2001) and Kronning (forthcoming).

Dendale and De Mulder (1996) and Desclés and Guentchéva (2001) advocate an approach that does not try to unify the various uses of *devoir*. These authors are mainly interested in its epistemic value, interpreted as resulting from a coded inferential trajectory; the modal value of probability or plausibility that verb may take on is, within this perspective, contingent on the type of reasoning underlying the utterance.

Dendale and De Mulder (1996) postulate that the nucleus of the reasoning process coded by *devoir* is deductive. They do not specify any constraints affecting the form of the major premise. The latter may reflect either a causal relationship (going from cause to consequence or from consequence to cause) or a non-causal link. When the major premise goes from consequence to cause, the modal value of *devoir* varies according to the conclusion calculated through abduction. Dendale and De Mulder (1996) posit a two-phase reasoning process: first we have a deductive reasoning phase based on an *ad hoc* rule and then an abductive reasoning phase that chooses the right conclusion on the basis of the *ad hoc* rule selected. Let us take a closer look at the way the two linguists analyze the following example:

- (20) (En voyant que Caroline a mauvaise mine) Elle doit être malade.
(On seeing that Caroline doesn't look well) She must be ill.

The first step consists in generating a series of premises going from consequence to cause, such as: *When one does not look well, one has worries/hasn't slept well/is ill*. The second step corresponds to

calculating conclusions through deduction from each of these premises. The third step consists in choosing a conclusion by assessing its probability in that specific context. The speaker selects the conclusion she or he deems most probable. The three steps of this process are seen to be a reflection of “human reasoning” in general, which is considered fundamentally abductive by Peirce (see in particular Peirce, 1974, vol. 5).

Dendale and De Mulder (1996) do not give any opinion on the necessity of taking into account an abductive inference for the selection of the premises and the conclusion when the major premise goes from cause to consequence. However, they point out that these uses must be differentiated from those where *devoir* alludes to a major premise having the consequence-cause configuration.

(21) Jean a beaucoup travaillé aujourd’hui. Il doit être fatigué.

Jean has worked a lot today. He must be tired.

Dendale and De Mulder’s analysis makes it difficult to delineate the specific contribution of *devoir*. We should first try to see what the role of this verb is in the cases where the major premise observes the cause-consequence order. In this case, there is no abductive process used for selecting one of the possible conclusions, as in example (20). We might hypothesize that *devoir* conveys an epistemic indication of the probability type; however, such a hypothesis seems to be contradicted by the fact that a conclusion derived through deduction may not be modalized by an adverb such as *probablement* (*probably*), but accepts *devoir* very well.

(22) Toute personne qui travaille beaucoup est fatiguée.

Everyone who works a lot is tired.

Paul a beaucoup travaillé.

Paul has worked a lot.

*Paul est *probablement* fatigué.

Paul is probably tired.

Paul *doit* être fatigué.

Paul must be tired.

The hypothesis put forward by Desclés and Guentchéva (2001) overcomes this difficulty. It is built around two types of reasoning (abductive/deductive) that directly connect the premises and the conclusion modalized by *devoir*, without resorting to an abduction-based assessment procedure meant to select the right conclusion. The rule is selected on the basis of common sense and always has a cause-consequence configuration. When it triggers off a deductive inference, the contribution of *devoir* is to signal that the rule itself has a probable consequent. In such cases, the latter contains the adverb *probablement*.

In a sequence such as “Caroline a mauvaise mine. Elle *doit* être malade ” (*Caroline doesn’t look well. She must be ill*), the utterance “Elle *doit* être malade” (*She must be ill*) is presented as

a plausible hypothesis resulting from abductive reasoning. For Desclés and Guentchéva (2001), the most likely rule is *Si on est malade, alors on a mauvaise mine* (*If one is ill, then one doesn't look well*) and the observation on which the speaker constructs his/her reasoning is “Caroline a mauvaise mine” (*Caroline doesn't look well*).

As for the example:

- (23) Jean a beaucoup travaillé aujourd'hui. Il doit être fatigué.

Jean has worked a lot today. He must be tired

the utterance “Il doit être fatigué” (*He must be tired*) “derives from a deductive reasoning associated with the general rule *Si quelqu'un travaille beaucoup, alors il est probablement fatigué* (*If one works a lot, then one is probably tired*)” (Desclés and Guentchéva, 2001: 116). The presence of *devoir* in the conclusion marks the probability of the consequent of the rule.

However, Desclés and Guentchéva's approach is problematic in that it raises the question of the legitimacy of a law having a probable consequent. Moreover, by associating two distinct types of reasoning with the epistemic use of *devoir*, the two linguists actually posit two different semantic values for one and the same verb. This becomes obvious when they explicitly mention that *devoir* may signal either a probable or a plausible conclusion. However, such a difference, if we may speak of one, is not something specific to *devoir*, but something intrinsically linked to the interpretative principles contextually activated when the addressee is trying to interpret an utterance as a hypothesis about a fact having already taken place or a speculation about the consequence of a fact. For instance, an utterance such as the following:

- (24) Paul est fatigué.

Paul is tired

may very well be interpreted as a hypothesis (associated with a plausibility value for Desclés and Guentchéva – *He's made mistakes in his dictation. He is tired*) or as a speculation (associated with a probability value – *He has worked a lot. He is tired*).

Our analysis does not have to resort to the difference between deductive and abductive reasoning and can very well do without a notion of probability/plausibility potentially attached to it. In an utterance such as the following:

- (25) Ce garçon doit être un fan de l'équipe du Brésil.

This boy must be a fan of the Brazilian team

devoir codes the fact that the piece of information according to which a certain boy is a Brazil fan originates in an observation. However, the content of that observation and the type of reasoning having led to the utterance as such have nothing to do with the intrinsic semantics of *devoir*. The utterance in question may be the expression of a conclusion derived from the observation that “that boy is wearing a yellow-green shirt”. The semantic value of *devoir* is not affected by the fact

that the reasoning process having led to this conclusion is deductive and relies on the rule *Every person wearing a yellow-green shirt is a Brazil fan* or has an abductive nature and is constructed on the rule *Every Brazil fan wears a yellow-green shirt*. No distinction should therefore be made between two semantic values attached to *devoir*, one expressing probability and the other plausibility.

Kronning (forthcoming) dissociates the epistemic value of this verb, as illustrated in example (5), from its “mediative alethic future” value, illustrated in (3). Through these two values, the verb jointly performs a complex modalization (indicating that the state of affairs in question is possibly or probably true) and an inference-based epistemic mediation. The difference between the epistemic and the “mediative alethic future” values resides in the nature of the premises. In the former, the inference is constructed on *in praesentia* premises, whereas the latter requires *in absentia* premises. This analysis raises two difficulties. The first one is that it cannot account for the possible co-occurrence of *devoir* and a modal adverb such as *probablement*.

- (26) Elle doit probablement être en train de danser quelque part en ce moment même.
(www.gamekult.com/blog/sauron1968/108754/CYD+CHARISSE+1921+2008+RIP.html) *She must probably be dancing somewhere right now.*

If *devoir* signals, in addition to inference as such, a complex modalization, then what is its specific contribution when it co-occurs with an epistemic marker such as *probablement*? The analysis we propose dissociates the two domains involved. We assign *devoir* the role of an evidential marker which signals the existence of an information source. As such, the indication it conveys may co-occur with any modal item performing an epistemic quantification. Such a quantification exclusively concerns the degree of probability of the event; it gives no indication about the source of the information verbally expressed. The second difficulty raised by Kronning’s analysis resides in the artificial differentiation between *in absentia* and *in praesentia* premises. The possibility of identifying the specific nature of the premises involved allows Kronning to make the distinction between the epistemic value of *devoir* and its so-called “mediative alethic future” value. The problem is that such a dissociation, if we may speak of one, has no impact whatsoever on the value of *devoir*. It is difficult to base the distinction between the values assumed by this verb in (27) and (28) on the status of the premises involved.

- (27) Le ciel se découvre. Le temps *doit(A-FUT)³ s’améliorer.
The sky is clearing up. The weather ‘must’ get better.
- (28) D’après les prévisions météo, le temps doit(A-FUT) s’améliorer demain.
According to the weather forecast, the weather ‘must’ get better tomorrow.

³ We take over the notation used by Kronning (forthcoming), who speaks of a “devoirA-FUT auxiliary of the ‘alethic future’”, labeled by him “mediative alethic future”.

The distinction Kronning makes relies on an “alethic future” value that is inappropriate for *devoir* in the context provided by (27). But how may one prove that in (28) *devoir* assumes this very value? The argumentation lying behind this opinion posits that the weather forecast is equivalent to the mediation of an inference; if such is the case, how could one differentiate between the mediation of an inference and the perception itself (i.e., visual or auditory) through which a speaker may get into contact with both the content of the weather forecast and the color of the sky? Besides, in our opinion, defining the very notion of “mediation of an inference” may prove very problematic.

Our analysis posits a single value for all the above-mentioned uses of *devoir*, namely that of indicating that the information conveyed by the utterance has a specific source. In the precise contexts provided by (27) and (28), this source is explicitly mentioned (*the sky is clearing up, according to the weather forecast*). *Devoir* signals a conclusion derived from these elements.

The analyses provided by Dendale and De Mulder (1996), Desclés and Guentchéva (2001) and Kronning (forthcoming) share the idea of placing an inferential process at the core of the meaning of *devoir*. In our view, this theoretical option raises a difficulty. How could one prove that it is *devoir* itself that triggers the inferential reading, since inference as such constitutes an interpretative mechanism activated when decoding utterances in general? Let us examine the following context: the speaker sees that Marie’s car is no longer in the car park. Under these circumstances, she/he says:

(29) Marie est partie.

Marie has left.

(30) Marie doit être partie.

Marie must have left.

Both (29) and (30) are the fruit of an inference, therefore the specific contribution of *devoir* is not to be sought at this level. In this respect, our analysis is consistent with that provided by De Haan (1999) when discussing the use of the modal *must* in a similar context:

(31) a. John must be at home.

b. The light is on.

De Haan demonstrates that the responsibility for the inferential interpretation of the utterance is not carried by the modal. The proof in this sense is the fact that, in the same context, the utterance (a) may as well use no modal at all or replace it with another one:

(32) c. John is at home, because the light is on.

d. John may be at home, because the light is on.

The conclusion he draws is that the indication given by *must* is not of an evidential nature but is related to the notion of commitment to the truth of the utterance. However, we do not share his conclusion as far as the French modal *devoir* is concerned. *Devoir* conventionally signals the

existence of a source behind the information expressed by the speaker, namely the absence of Marie's car from the car park, whereas the utterance where *devoir* does not occur is completely neutral in this respect. We might even go as far as to say that *devoir* is anaphoric. It compels the addressee to figure out the source that has allowed the speaker to express that information.

A similar view is proposed in Drubig (2001: 2) for *must*. He endorses and summarizes Westmoreland (1998) as follows: "epistemic *must* is not a modal but must be analyzed as an evidential marker labeling the proposition in its scope as a deduction. It relates a proposition ϕ to some other information that serves as evidence for ϕ ". We share the assumption that the proposition is related to some other information; however, we do not consider the inferential process as belonging to the semantics of *devoir*. This process is part of the interpretative mechanisms used in order to decode utterances in general.

4. THE ROMANIAN PRESUMPTIVE MOOD AS AN INDICATION OF ABSENCE OF SOURCE

Romanian has a set of evidential markers which seem to code the opposite of what is coded by *devoir* in French. We are referring to the presumptive construction made up of *o fi* + gerund or past participle. This construction, considered by Friedman (1998) as a marker of non-confirmativity and by Squartini (2005) as a marker of potentiality, may be used in the declarative or the interrogative mood. Typically, it may be used in a context such as follows:

- (33) [Paul is knocking at Max's door and Max is not answering. Paul says:]
 O fi dormind. /O fi dormind?
 Peut-être qu'il est en train de dormir. /Serait-il en train de dormir ?
 He might be sleeping. /Might he be sleeping?

The marker *o fi* + gerund indicates that the speaker puts forward a hypothesis which is not based on an observation. In order to mark the same nuance in French, we may have recourse either to a declarative form with the completive construction *peut-être que* or to an interrogative form with the conditional. The use of *devoir* in this context would entail a drastic change in the interpretation of the utterance:

- (34) [Paul is knocking at Max's door and Max is not answering. Paul says:]
 Il doit être en train de dormir.
 He must be sleeping.

Devoir signals that the hypothesis is based on the absence of an answer. The form *o fi* + gerund could not be used in this case. The indication of a random hypothesis is highlighted when the

utterance is preceded by *I don't know/I don't have the slightest idea*, following a question. The marker *o fi* + past participle is perfectly appropriate with this type of preface:

(35) Ce-a făcut Max aseară ?

N-am nici cea mai vagă idee. O fi fost la cinema, o fi fost la niște prieteni, o fi stat acasă...

What did Max do yesterday evening?

I don't have the slightest idea. He might have gone to the cinema, he might have gone to some friends, he might have stayed at home...

The use of *devoir* would be totally incompatible with such a preface.

(36) Qu'a fait Max hier soir ?

*Je n'en ai aucune idée. Il doit être allé au cinéma, il doit être allé chez des amis, il doit être resté chez lui ...

What did Max do yesterday evening?

I don't have the slightest idea. He must have gone to the cinema, he must have gone to some friends, he must have stayed at home...

On the contrary, the construction with *peut-être que* is possible:

(37) Qu'a fait Max hier soir ?

Je n'en ai aucune idée. Peut-être qu'il est allé au cinéma, peut-être qu'il est allé chez des amis, peut-être qu'il n'est pas sorti...

What did Max do yesterday evening?

I don't have the slightest idea. Maybe he went to the cinema, maybe he went to some friends, maybe he stayed at home...

Mention should be made of the fact that the same preface is absolutely incompatible with an adverb such as *probablement*.

(38) Qu'a fait Max hier soir ?

*Je n'en ai aucune idée. Probablement qu'il est allé au ciné, probablement qu'il est allé chez des amis, probablement qu'il n'est pas sorti...

What did Max do yesterday evening?

I don't have the slightest idea. He probably went to the cinema, he probably went to some friends, he probably stayed at home...

So, there is a form of evidentiality related to the indication of the absence of source, conventionally marked in Romanian by the construction *o fi* + gerund or past participle. As far as French is concerned, only a minute study of the two constructions that we have identified (the reversed interrogative with the conditional and the construction with *peut-être que*) could allow us to state whether this type of evidentiality is also coded or just induced by meaning effect. The conclusion we can draw from these observations is that hypotheses are formulated

differently according to whether the speaker wants to indicate the presence or the absence of source.

5. THE COUNTERPARTS OF *DEVOIR* IN ROMANIAN

Unlike what we have noticed for the indication of absence of source, the Romanian system does not contain any conventional form coding the presence of a source. There is no Romanian counterpart of the French modal verb *devoir*. Instead, there are two systems assuming the indications specific to this verb. The first one is the equivalent of *devoir* as used to refer to a rule, in an utterance representing one of the possible modes of expression of this rule. The second one concerns *devoir* as referring to a fact and signaling that the utterance is the expression of one of the conclusions drawn from this fact. The first system is based on the modality of necessity. The verb preferred in this case is *a trebui*; its signification includes that of *devoir* and of *falloir* (*have to, need*). The second system is based on epistemic indications corresponding to *je crois que* (*I think that*), *probablement* (*probably, maybe*), etc. When *devoir* signals that the information has its source in a fact or a series of facts, it is rendered by these epistemic indications.

- (39) Avec cette chaleur, tu dois être fatigué.
You must be tired with this heat.
 Cred că [je crois que]/probabil că [probablement que] ești obosit pe căldura asta.
I think (that)/You are probably tired with this heat.
- (40) Il doit y avoir 150 personnes dans l'auditoire.
There must be 150 persons in the auditorium.
 Cred că/probabil că sunt 150 de persoane în amfiteatru.
I think (that) there are 150 persons in the auditorium.
- (41) Marie doit être partie.
Marie must have left.
 Cred că/probabil că Maria a plecat.
I think (that) / Maybe Marie has left. / Marie has probably left.
- (42) (En voyant que Caroline a mauvaise mine) Elle doit être malade.
(On seeing that Caroline doesn't look well) She must be ill.
 Cred că/probabil că/poate [peut-être] e bolnavă.
I think (that) she is ill. / She is probably ill. / Maybe she is ill.
- (43) Jean a beaucoup travaillé aujourd'hui. Il doit être fatigué.
John has worked a lot today. He must be tired.
 Ion a muncit mult azi. Cred că/probabil că e obosit.
John has worked a lot today. I think (that) he is tired. / He is probably tired.

- (44) Ce garçon doit être un fan de l'équipe du Brésil.

This boy must be a fan of the Brazilian team

Cred că/ probabil că băiatul ăsta e fan al echipei Braziliei.

I think (that) this boy is a fan of the Brazilian team. /This boy is probably a fan of the Brazilian team.

The use of *a trebui* in these contexts is not impossible, but it noticeably changes the interpretation, shifting it towards the necessary consequence. Thus, the use of *a trebui* in these examples would correspond in French to a signification such as *It can't be otherwise than ...* The French *devoir* can also convey this interpretation. In this case, the modal verb refers to a rule and the utterance is one of the modes of expression of this rule. Each of the utterances given under (39)–(44) may be related to a rule if we admit that the latter can be perfectly *ad hoc*: *hot weather causes tiredness, every man belonging to my father's generation is in his fifties, each time Mary switches on her answerphone she is not at home, the fact that Caroline doesn't look well is a sure sign of illness, if John works a lot he gets tired, wearing a yellow-green tee-shirt indicates that its owner supports the Brazilian team*. It is of no importance for the semantics of the verb *devoir* whether the rule is shared by the interlocutors or if it is *ad hoc*. Nevertheless, mention should be made of the fact that in contemporary French, in equal contexts, this interpretation is much less usual. The epistemic value corresponding to the interpretation “expression of a conclusion” seems to be activated by default.

The uses illustrating the fact that *devoir* refers to a rule are systematically translatable by *a trebui*

- (45) Paul doit dormir.

Paul trebuie să doarmă.

Paul must sleep.

- (46) Le bébé doit consommer au minimum 500 ml de lait chaque jour.

Bebelușul trebuie să consume minim 500 ml de lapte în fiecare zi.

A baby must eat at least 500 ml of milk a day.

- (47) Paul doit se laver les dents.

Paul trebuie să se spele pe dinți.

Paul must brush his teeth.

- (48) Tout homme doit mourir un jour.

Orice om trebuie să moară într-o bună zi.

Every man must die one day.

- (49) Pour être aux normes ISO, cette chaise doit supporter un poids de 120 kilos.

Pentru a fi conform standardelor ISO, acest scaun trebuie să suporte o greutate de 120 kg.

In order to comply with ISO standards, this chair must be able to support a weight of 120 kilos.

(50) Tu dois aller voir un médecin.

Trebuie să mergi la medic.

You must see a doctor.

(51) Tu dois lui être reconnaissant.

Trebuie să îi fii recunoscător.

You must be grateful to him.

The value of *devoir* in these examples may shift towards that of necessity, conventionally conveyed in French by specific forms such as *il faut que, il est nécessaire que (need (to), have to, it is necessary that)*, etc.

(52) Il faut que Paul dorme.

It is necessary that Paul should sleep.

(53) Il faut que le bébé consomme au minimum 500 ml de lait chaque jour.

It is necessary that a baby should eat at least 500 ml of milk a day.

(54) Il faut que Paul se lave les dents.

It is necessary that Paul should brush his teeth.

(55) Il est nécessaire que tout homme meure un jour.

It is necessary that every man should die one day.

(56) Pour être aux normes ISO, il faut que cette chaise supporte un poids de 120 kilos.

In order to comply with ISO standards, this chair needs to be able to support a weight of 120 kilos.

(57) Il faut que tu ailles voir un médecin.

You need to see a doctor.

(58) Il faut que tu lui sois reconnaissant.

You have to be grateful to him.

The proximity between the value of *devoir* in these contexts and the forms *il faut que, il est nécessaire que* allows the interpretation of the Romanian form *a trebui* as related to the modality of necessity. This verb shares with the French *falloir* a certain kind of defectivity in the sense that the same verbal form is associated with the whole pronominal paradigm. Thus we have a construction equivalent to [tu faut que tu te laves les dents] for “il faut que tu te laves les dents”, and a construction equivalent to [nous faut que nous nous lavions les dents] for “il faut que nous nous lavions les dents”.

The uses of *devoir* referring to a contingent rule of the type *if everything goes well, the event x will happen* can be translated by *a trebui* in the indicative present tense if they are compatible with an interpretation in the sense of necessity. Example (15) resumed below is compatible with such

an interpretation:

(59) Paul doit venir me voir demain.

[Il faut que Paul vienne me voir demain. / Il est nécessaire que Paul vienne me voir demain.]

Paul needs to come and talk to me tomorrow. / It is necessary that Paul should come and talk to me tomorrow.

Paul trebuie să treacă pe la mine mâine.

On the contrary, example (16) repeated below is not compatible with this kind of interpretation:

(60) Il doit faire beau demain.

[??Il faut qu'il fasse beau demain.]

The weather needs to be nice tomorrow.

??Trebuie să fie timp frumos mâine.

A paraphrase of the type *il faut que/il est nécessaire qu'il fasse beau demain* signals a speaker's wish and is not a necessity comparable to the one illustrated by example (59). In this case, in Romanian we use the present conditional of the verb *a trebui* in order to highlight the prospective character of the event.

(61) Ar trebui să fie timp frumos mâine.

The weather should be nice tomorrow.

The comparison with the Romanian system brings out a proximity between the uses in which *devoir* refers to a rule and those where it refers to a fact from which a conclusion is drawn. For example, we have seen that an utterance such as (41) can take a value of necessity if *devoir* is understood as referring to an *ad hoc* rule of the type *every time Mary switches on her answer-phone she is not at home*. Treating *devoir* as referring to an information source allows us to easily establish a link between the epistemic value and the value of necessity. Most remarkably, in present day French the uses where *devoir* refers to a fact prevail. In the absence of clues (a strongly marked prosody, a very precise context) *devoir* is interpreted as having an epistemic value.

6. DIACHRONIC PERSPECTIVE

By examining the data dating back to Latin, we can establish that lexical and modal values are linked by a process of metaphorical extension.

Devoir derives from Latin *debere*, which is itself a contracted form of *dehibere*, a compound verb formed from the preposition *de* and the verb *habere*. The following utterances are drawn

from the Latin-Italian dictionary *IL Vocabolario della lingua latina*:⁴

Pecuniam alicui debere – devoir de l'argent à quelqu'un (to owe money to someone)

(figurative sense) *Gratiam alicui debere – devoir de la reconnaissance à quelqu'un (to owe gratitude to someone)*

Africam obtinere debebat – il devait administrer l'Afrique (he had to govern Africa)

Illa aestimari debere – ces choses doivent être considérées (these things have to be considered)

Cui regnum Italiae Romanae tellus debentur – auquel sont dus le royaume d'Italie et la terre de Rome (to whom the kingdom of Italy and the land of Rome are due)

Debemur morti nos nostraque – nous et nos choses sommes dus à la mort (we and our things are due to death)

By modifying the parameters of the predicate *debere* in its lexical sense, we can establish a link between such a sense and the emerging of an obligation value and a necessity value. The parameters involved are the following: what is due (always expressed), an agent (expressed or not expressed), a receiver (expressed or not expressed), and the active or passive form. The possibility to fill these valencies or not generates the different semantic values that *devoir* can have.

1. An agent owes a concrete object to someone

Quelqu'un doit de l'argent à quelqu'un d'autre (Someone owes money to someone else)

2. An agent owes an abstract object to someone

Quelqu'un doit de la reconnaissance à quelqu'un d'autre (Someone owes gratitude to someone else)

3. An agent owes an action to a non-expressed receiver. The action can be expressed by a verb in the infinitive mood. This configuration shows the emerging of a sense of obligation by meaning drift.

Il devait administrer l'Afrique [= il devait l'administration de l'Afrique à une instance supérieure] (He had to govern Africa [= he owed the administration of Africa to a superior entity])

4. A non-expressed agent owes an action to a receiver. The receiver is in the subject position.

This configuration shows the emerging of a sense of obligation and necessity by meaning drift.

Ces choses doivent être considérées [= quelqu'un doit à ces choses de les considérer] (These things have to be considered [= someone owes consideration to these things])

⁴ We chose a Latin-Italian dictionary because it turned out to be the most complete in terms of number of examples and translations. Our translations are the closest to the literal meaning, but they remain compatible with the syntax of French.

5. An object is due to a receiver. *Devoir* is in the passive form. Its interpretation in this configuration varies between lexical and necessity value depending on the actants associated with it.

[L'empereur] auquel sont dus le royaume d'Italie et la terre de Rome ([The emperor] to whom the kingdom of Italy and the land of Rome are due)

Nous et nos choses sommes dus à la mort (We and our things are due to death)

The dictionaries we consulted – *IL Vocabolario della lingua latina*, the *Lexicon Totius Latinitatis* and the *Thesaurus Linguae Latinae* – do not record any instance of epistemic value for *debere*.⁵ The bilingual dictionary renders this value by periphrases such as *certe, mihi videtur, non dubito*. These observations lead to the suggestion that *devoir* draws its lexical sense from the Latin *debere*. The obligation and the necessity values can be conceived both as the result of lexical loans from Latin and as the result of an evolution process. The use of *debere* in a sentence like: *Africam obtinere debebat* can be literally translated in French as follows: *Il devait administrer l'Afrique* (he had to govern Africa), whereas in such a case as *debemur morti nos nostraque*, the translation we proposed earlier for *debere* (*nous et nos choses sommes dus à la mort*) would not be suitable. Modern French would instead resort to an active form such as *on doit tous mourir* (we all have to die).

On the basis of these data, we can posit that the acquisition of modal obligation/necessity values for *devoir* is based on the possibility to differently fill the valency of the Latin form. The possibility to extend the domain of the verb's arguments to different semantic configurations seems to have modified the meaning of the verb itself. The emergence of these values may be explained by taking into consideration the process of metaphorical extension. Literature on the subject of modal verbs has mostly drawn attention on the acquisition of the epistemic value. The main problem in this respect is whether this value, depending on different forms, is acquired through conventionalized implicature or through metaphorical extension (cf. Bybee *et al.*, 1994: 196ff.). The analysis we propose shows a possible link between lexical and modal values. As far as the modal use is concerned, we have seen that, in its obligation/necessity value, *devoir* indicates that the utterance depends on a source and that this source is a rule. As for the lexical use, we can posit that there is a source involved too. In all its occurrences, the lexical meaning of the Latin *debere* conveys the idea of an entity owing something to another entity. Such a semantic pattern implies a moral obligation, which is itself related to the existence of a source being at its origin. The mechanism of metaphorical extension may explain how it is possible to move from moral obligation as a source in the case of the lexical value to a rule as a source in the case of the obligation/necessity value.⁶

⁵ Kronning (1990) underlines the difficulty which arises in taking a position on the matter of this possible value in Latin texts. Bolkestein (1980) (quoted by Kronning), in contrast with traditional interpretations, assumes it is attested, whereas Kronning points out that the cases taken as examples are to be interpreted as alethic.

⁶ We thank our anonymous reviewer for his/her insightful remarks on this point.

We will not argue here on the existence of such a mechanism at the origin of the epistemic value. We would nevertheless like to emphasize that the epistemic value is by no means to be linked to the lexical value through the same explanation. Since it is not contemporaneous to the other modal values, it seems difficult to posit that its actualization could be the result of different ways to fill the verbal valency of *debere*.

Our position in this respect joins that of Kronning (1990), who does not associate the epistemic value of *devoir* with the one *debere* is sometimes thought to have: “Vu la rareté relative de l’interprétation épistémique de *debere* en latin classique, il se peut que l’interprétation épistémique ait occupé une position marginale en latin tardif, et que les locuteurs du français aient été obligés, les uns indépendamment des autres, de la réinventer (...)” (Kronning, 1990: 305). (*Since the epistemic interpretation of debere is relatively rare in classic Latin, it is possible that this interpretation had a marginal role in late Latin, and that speakers of French were forced to re-invent it, independently of one another.*) On the contrary, we do not agree with his analysis of the mechanisms that are to be considered as being at the origin of the development of modal non-epistemic values. Kronning sees them as “des opérations de restriction et d’abstraction en passant par la conventionnalisation d’une implication” (Kronning, 1990: 306) (*operations of restriction and abstraction through conventionalization of implicature*). We have associated these values with a more classical mechanism of generalization of contexts of use, assuming that the change takes place by metaphorical extension.

As far as the evolution of *devoir* in French is concerned, according to the TLF the verb is firstly attested in its modal sense, featuring the obligation and necessity value (842, *Serments de Strasbourg*), under the form *dift* (present indicative, third person singular).⁷ The lexical meaning is attested in 1155 and the epistemic value approximately at the same time (about 1100, *Roland*, ed. J. Bédier, 389: *Li soens orgoiz le deveit bien confondre*). The corpus we have collected takes into consideration the evolution of the use of these forms after 1100. It has been drawn from Frantext considering texts which date back to three different epochs (1200, 1500–1600, 1900) and belong to the same literary genre (novel). We took 100 occurrences for each epoch. The rate of the occurrence of *devoir* in its lexical sense remains steady throughout the ages. What varies is the relationship between the number of occurrences of the verb in its modal necessity/obligation value and the number of occurrences of the verb in its modal epistemic value. During the first and second period of time, the ratio between occurrences with a necessity/obligation value and occurrences with an epistemic value is definitely in favor of the first one. During the third lapse of time, the quantity of epistemic occurrences is prevalent on the quantity of necessity/obligation occurrences. If we exclude the occurrences of *devoir* in its lexical sense, on an average of 100 occurrences per epoch we have found 7 epistemic and 80 necessity/obligation occurrences in 13th-century texts.

⁷ This same occurrence is attested by Kronning (1990): “salvarai eo cist meon frade Karlo (...) si cum om per dreit son frada *salvar dift*” *Serm.*

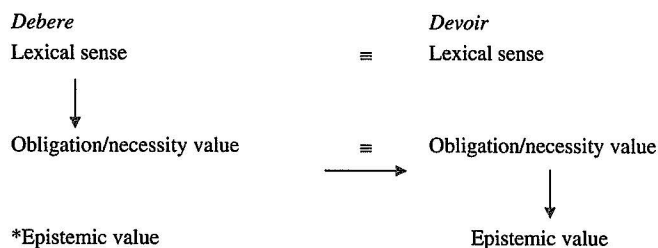


Figure 6.1. The evolution of the different senses of *devoir* from Latin to French

Texts from 1500 and 1600 show 11 epistemic occurrences and 80 obligation/necessity occurrences. For the most recent period of time, the ratio is reversed (35 obligation/necessity occurrences and 56 epistemic ones, of which 7 have a prospective value).

The data supplied by this corpus are consistent with the idea that the epistemic use of *devoir* derives from its other modal uses. Furthermore, such data show the stabilization of the epistemic value in recent French. The observations on the close relationship between epistemic and obligation/necessity value to which we were led by the comparison with Romanian indicate the probability of an evolution going from the latter to the former. On this point, our analysis is in agreement with that of Kronning (1990). The author also proposes a shift from alethic to epistemic value rather than from deontic to epistemic value, which is the explanation given by classical analyses (see among others Bybee *et al.*, 1994).

Figure 6.1 synthesizes the links between lexical sense and modal values, as well as the links between Latin and French. The arrow represents an evolution link and the equivalence sign a loan link.

Our analysis, which reduces to two the number of modal values for *devoir*, is consistent both with the data drawn from Latin and with the chronology of the uses we pointed out in a corpus that is representative of ancient and modern states of the French language.

7. CONCLUSIONS

Starting from *devoir* and its correspondents in Romanian, our analysis leads to results concerning the evidential system of Romanian and French as well as the process involved in the developing of the modal values of *devoir* from its lexical value.

The evidential system of French does not seem to code inference, but rather the presence of a source which represents the reason of an utterance. Inference is a principle of interpretation which can be activated to get information about what enables a speaker to pronounce an utterance in any given case. Epistemic modalization is not part of the evidential system either. The indications it gives are not related to the source of a given piece of information, but to the worlds which verify the information uttered. As for Romanian, it suggests that one more kind of evidential coding should be

taken into consideration: the coding which signals the absence of source. Interrogative structures containing conditionals and the constructions with *peut-être que* suggest such a coding in French.

Regarding the semantic evolution of *devoir*, it has been observed that it is possible to establish links between its different values, both lexical and modal. In addition to its lexical value, we have assigned *devoir* two modal values. The first one, traditionally associated with the notion of obligation/necessity, takes place when the source refers to a rule; the second one, traditionally associated with the notion of epistemicity, takes place when the source refers to a fact. Our comparison between French and Romanian highlights the proximity between these two values. The possibility for Romanian to use the verb *a trebui* in epistemic configurations has shown a possible interpretation in which *devoir* refers to an *ad hoc* rule. Such an interpretation allows a value which is close to necessity.

Diachronic data from Latin show another close relationship, that is the link which can be established between the lexical and modal obligation/necessity value. The different possibilities of valency saturation for the lexical verb foreshadow the modal shades of the meaning of *devoir*. The acquisition of modal values in Latin seems consistent with a process of metaphorical extension. As for the epistemic value, it appeared after the obligation/necessity values. The epistemic use of the verb is not recorded in Latin, it is rare in ancient and medieval French, whereas it is common in contemporary French. These data are consistent with the idea of an evolution of this kind: shared rule as information source (obligation/necessity value) > *ad hoc* rule as information source (necessity value) > fact as information source (epistemic value).

BIBLIOGRAPHY

- Blakemore, Diane (1994). "Evidence and modality", in R. Asher (ed.), *The encyclopedia of language and linguistics*. Oxford: Pergamon Press, 1183–1186.
- Bolkestein, Machtelt (1980). *Problems in the description of modal verbs. An investigation of Latin*. Assen: Van Gorcum.
- Bybee, Joan, Revere Perkins and William Pagliuca (1994). *The evolution of grammar: Tense, aspect and modality in the languages of the world*. Chicago: The University of Chicago Press.
- Bybee, Joan and Suzanne Fleischman (eds.) (1995). *Modality in grammar and discourse*. Amsterdam: John Benjamins.
- Conte, Maria-Elisabeth (1995). "Epistémico, deontico, anankástico", in A. Giacalone-Ramat and G. Crocco-Galéas (eds.), *From pragmatics to syntax*. Tübingen: Narr, 3–10.
- Dendale, Patrick and Walter De Mulder (1996). "Déduction ou abduction: le cas de *devoir* inférentiel", in Z. Guentchéva (ed.), *L'Enonciation médiatisée*. Paris/Louvain: Peeters, 305–318.
- Dendale, Patrick (2000). "*Devoir* épistémique à l'indicatif et au conditionnel: inférence ou prédiction?" in A. Englebert, M. Pierrard, D. Van Raemdonck and L. Rosier (eds.), *Actes du XIIe Congrès International de Linguistique et de Philologie Romanes*, Bruxelles, 23–29 juillet 1998, vol. VII. Tübingen: Niemeyer, 159–169.
- Desclés, Jean-Pierre and Zlatka Guentchéva (2001). "La notion d'abduction et le verbe *devoir* 'épistémique'", *Cahiers Chronos* 8, Rodopi, Amsterdam, 103–122.

- De Haan, Ferdinand (1999). "Evidentiality and epistemic modality: Setting boundaries". *Southwest Journal of Linguistics* 18: 83–10.
- De Haan, Ferdinand (2001). "The relation between modality and evidentiality", in R. Müller and M. Reis (eds.), *Modalität und Modalverben im Deutschen*. Hamburg: Linguistische Berichte, Sonderheft 9. H. Buske.
- Drubig, Hans Bernhard (2001). "On the syntactic form of epistemic modality". Available at <http://www.sfb441.uni-tuebingen.de/b2/papers/DrubigModality.pdf>
- Friedman, Victor (1998). "The grammatical expression of presumption and related concepts in Balkan Slavic and Balkan Romance", in M. Flier and A. Timberlake (eds.), *American Contributions to the 12th International Congress of Slavists*. Bloomington: Slavica, 390–405.
- Kronning, Hans (1990). "Modalité et diachronie: du déontique à l'épistémique. L'évolution sémantique de *debere/devoir*". Actes du XI^e Congrès des Romanistes Scandinaves, Trondheim, 301–312.
- Kronning, Hans (1996). *Modalité, cognition et polysémie: sémantique du verbe modal devoir*. Acta Universitatis Upsaliensis (Studia Romanica Upsaliensia 54).
- Kronning, Hans (forthcoming). "Les auxiliaires 'médiatifs' en suédois à la lumière du conditionnel épistémique et du futur aléthique en français", in C. Muller (ed.), *Mélanges André Rousseau*. Lille: Presses du Ceges.
- Nuyts, Jan (2001). "Subjectivity as an evidential dimension in epistemic modal expressions". *Journal of Pragmatics* 33: 383–400.
- Peirce, Charles Sanders (1974). *Collected Papers*, vol. 1–6. Ed. C. Hartshorne and P. Weiss. Cambridge, MA: Harvard University Press.
- Rossari, Corinne, Corina Cojocariu, Claudia Ricci and Adriana Spiridon (2007). "*Devoir* et l'évidentialité en français et en roumain". *Discours* 1. Revue de linguistique, psycholinguistique et informatique. Available at <http://discours.revues.org/index116.html>
- Squartini, Mario (2004). "Disentangling evidentiality and epistemic modality in Romance". *Lingua* 114: 873–895.
- Squartini, Mario (2005). "L'evidenzialità in rumeno e nelle altre lingue romanze". *Zeitschrift für romanische Philologie* 121: 247–268.
- Traugott, Elizabeth Closs (1989). "On the rise of epistemic meanings in English: An example of subjectification in semantic change". *Language* 65(1): 31–55.
- Van der Auwera, Johan and Dendale, Patrick (eds.), (2001). *Modal verbs in Germanic and Romance languages*. Amsterdam: John Benjamins. (*Belgian Journal of Linguistics*, 14.)
- Von Fintel, Kai and Sabine Iatridou (2002). "The meanings of epistemic modality". *Sinn und Bedeutung* 7. Universitaet Konstanz, October 5.
- Westmoreland, Robert R. (1998). "Information and intonation in natural language modality". Ph.D. dissertation. Indiana University.

General reference works

- Castiglioni, Luigi and Scevola Mariotti (1996). *IL vocabolario della lingua latina: latino-italiano, italiano-latino*, Loescher, Torino.
- Forcellini, Egidio (1965 [1864]). *Lexicon totius latinitatis*. Bologna: A. Forni.
- Thesaurus linguae latinae* (1900). Leipzig : Teubner.
- Trésor de la Langue Française Informatisé* (TLF). Available at <http://atilf.atilf.fr/>