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EPISTEMIC EVALUATION IN FACTUAL CONTEXTS IN ENGLISH

Agnès Celle

1 INTRODUCTION¹

The aim of this paper is to account for the use of *should* and *would* in factual contexts where there is no doubt as to the actualisation of the modalised proposition. We concentrate on two types of utterances: *why*-questions, in which a question is asked about the cause of a state of affairs, and content clauses introduced by predicative lexemes indicating surprise or evaluation as in *It's surprising that he should have been so late*. This use of *should* is called “emotive” by Huddleston and Pullum (2002), “meditative-polemic” by Behre (1950, 1955), “theoretical” by Leech (1971: 112). These various labels reflect the relation between modality and speaker’s stance. In contrast to *should*, *would* in content clauses embedded in a superordinate clause expressing emotion or evaluation has scarcely been described in studies of modality in English - with the notable exceptions of Jacobsson (1988), Larreya (2015) and Furmaniak & Larreya (2015). The use of *would* and *should* in these contexts raises several questions. Firstly, what is the nature and function of epistemic modality when it is put into service to evaluate a proposition not in terms of likelihood, but in terms of appropriateness? Secondly, what is the connection between affect, and more specifically surprise, and epistemic modality? While acknowledging the emotive function of *should* in content clauses, Huddleston and Pullum (2002: 187) classify this use under the heading “low degree modality”, which they further define as “with little discernible modal meaning of its own”. We argue that the modal forms under study combine layers of modality, possibly including dynamic modality, which makes their modal meaning not weaker or lower, but more elusive. Finally, we aim to explain why *would* is used in such contexts, especially - but not only - in American English, a fact that goes unaccounted for in English grammars. Although a few linguists (Jacobsson (1988), Larreya (2015)) have examined this use of *would*, they did not attempt to account for the distribution of *should* and *would* in subordinate position.

2 WOULD AND SHOULD: LAYERS OF MODALITY

Before examining the factual uses this paper is about, let us outline the meaning(s) of *should* and *would*.

¹ I would like to express my thanks to the anonymous reviewers and to Bernard Comrie for their valuable comments and suggestions. Any remaining errors are my sole responsibility.

Epistemic evaluation in factual contexts in English

Would and *should* are preterite forms of the modal auxiliaries *will* and *shall* respectively. *Will* expresses a relation of inference that depends on some inherent conformity between the subject and the predicate based on the volition, the willingness, or the propensity of the subject to carry out the eventuality expressed by the verb base.² *Shall* expresses necessity. Contrary to the preterite forms of lexical verbs, the meaning of preterite modals cannot be derived from the combination of past meaning with the meaning of the present tense modals, as pointed out by Bybee (1995: 503). Past tense modals are unlikely to have past meaning. If they do, there are restrictions on their use. The preterite forms of modal auxiliaries are commonly subdivided into three categories (see Coates (1983: 111; 211), Bybee (1995: 503-504)):

- Hypothetical uses, which are the most frequent uses:

- (1) *If I knew a lady of birth such as her in person and mind, I **would** marry her tomorrow.* (BNC)
- (2) *Well, Mistress Pamela, I can't say I like you so well as this lady does for I **should** never care, if you were my servant, to have you and your master in the same house together.* (BNC)

In (1) and (2), the relation of inference between the protasis and the apodosis is framed in a remote conditional by the *if*-clause in the preterite tense. The modal in the apodosis is therefore to be interpreted as a modal preterite.

- Present context uses, where the past form introduces modal remoteness (Huddleston & Pullum 2002: 148-151; 196-201), possibly, but not necessarily, with tentative meaning:

- (3) *I **would** suggest a counter-proposition: that we are living in a society that is sick and tired of information.* (BNC)
- (4) *Er that's our reduced one. That **would** be sixty nine pounds.* (BNC)
- (5) *A valid passport is essential when you travel abroad. You **should** allow at least 12 weeks to obtain a British passport.* (BNC)
- (6) *With departure from Vanov scheduled for 9.30am, you **should** be in Decin for 1.00pm.* (BNC)

Modal remoteness as defined by Huddleston and Pullum covers a great variety of uses. They point out that the modal meaning of the preterite is highly frequent with modal auxiliaries (2002: 196). In (3) and (4), the meaning of *would* can be derived from *will* + past inflection. In (3), the volitional sense of *will* is weakened by the past form and the act of suggesting is performed at the time of utterance in a tentative way. In (4) however, the past form does not introduce tentative meaning, as the speaker's certainty

² There is general agreement that *will* expresses the speaker's confidence based on knowledgeability (Palmer 1979: 47; Joos 1964: 156-157). This "adequate assurance of eventual occurrence", to use Joos's terminology, is assured by the properties of the predication. In contrast, *shall* expresses "contingent casual assurance", i.e. the eventual occurrence is not congruent with the properties of the predication.

about the price is not weakened. There is no doubt at all as to the truth of the proposition. However, the speaker does not commit herself to the truth of the proposition, as shown by Celle (2012). The past form introduces affective hedging rather than epistemic hedging (Dixon & Foster 1997: 3) by anticipating potential disagreement or discordance. In (5) and (6), it is questionable whether the meaning of *should* can be derived from *shall* + past inflection, as *shall* cannot be used in such contexts. Compared with *must*, the past form *should* conveys a weakened sense of obligation in (5), and the meaning is one of advice given to anyone preparing to travel abroad. In (6), the past form expresses logical necessity qualified by a sense of doubt. Noteworthy is the fact that *should* cannot express just any kind of logical relation. As shown by Rivière (1981), *should* cannot be used to express an inferential judgement about the cause of a state of affairs (**There is light in his room. He should be back home*) while it may express a deductive judgement about the consequence of a state of affairs (*He is back home. He should be able to help you*).

- Past time uses, further subdivided into two categories:
- Backshift:

(7) *Bradford North Labour MP Terry Rooney said he **would** send Simon some cash personally.* (BNC)

In this backshifted report, the preterite indicates that the past situation referred to by the main verb *said* functions as the time of utterance.

- Past time reference:

Past time uses are the least common with modal auxiliaries. They always involve dynamic modality (see Huddleston & Pullum 2002: 197):

(8) *It was the start of a genuine friendship. I told Frankie about my deafness and my Dad being away. And we **would** go for walks together or just sit in the garden, talking. I told him how I had to go for special lessons and how other kids **would** sometimes laugh or pick on me. And he **would** listen and try to talk up my confidence.* (BNC)

(9) *After her mother died she went on many trips abroad with him. She was always impressed by his fame and **would** have liked a theatrical career. She did appear in amateur shows just as he had, but he **would** not allow any of his children to become professional performers. So Jessie became a secretary to a Manchester solicitor and eventually fell in love with and married an officer during the First World War.* (BNC)

In (8), *would* expresses a propensity of the subject. This typical behaviour is actualised in a series of situations iterated in the past. In (9), volitional *would* is negated, so that the preterite form of *would* expresses the subject's refusal in the past.

As noted by Bybee (1995: 504) and Huddleston & Pullum (2002: 197), *should* has no past time uses at all, unlike *would*.

The addition of the preterite to *shall* and *will* may thus be said to create layers of modality, one of them being modal remoteness in present context uses. An important feature of modal remoteness is that it is perfectly compatible with the speaker's absolute

certainty in factual contexts. This is the case in (4), where the proposition holds despite the use of the past morpheme. Interestingly, epistemic *would* in factual contexts cannot be accounted for in terms of tentativeness, as pointed out by Birner et al. (2007), Ward et al. (2003), Ward & al. (2007) and Ward (2011). Birner & al. (2007: 326-327) and Ward & al. (2003: 71) claim that epistemic *would* conveys commitment to the truth of the modalised proposition because it expresses a higher level of confidence than any other epistemic modal. They also contend that this epistemic use requires an open proposition, i.e. “a proposition with one or more underspecified elements” (2003: 72). However, Ward et al. limit their study of *would* to equative constructions such as “That would be X” where an open proposition is necessarily implied.

It is argued in Celle (2012) that this use is possible independently of an open proposition and with verbs other than the copula. Celle (2012) also stresses that the modal contribution of *would* in factual contexts should not be underestimated. Even if the speaker’s confidence in the truth of the proposition is not at stake, it does not mean that this use conveys commitment to the truth of the proposition. Celle (2012) argues that epistemic *would* expresses modal remoteness because it is not for lack of knowledge or confidence that the speaker does not ascribe actuality to some fact, but for pragmatic reasons. Celle upholds the view that *would* in itself is truth-neutral, and that information about the actualisation of the verb can only be provided by its contextual environment. The following example yields two readings which are made explicit with more context in (a) and (b):

(10) *‘How old is Benjamin?’*

*‘Benjamin was born in 2006. He **would** be ten.’*

a. *Benjamin was born in 2006. He **would** be ten if he were still alive.*

b. *Benjamin was born in 2006. So he **would** be ten.’*

In (a), the protasis sets an unreal condition. Consequently the apodosis is interpreted as counterfactual, the implicature being that Benjamin is dead. In (b), the existence of Benjamin is presupposed by the *how*-question. On the basis of objective evidence, that is, his year of birth, it is possible to infer Benjamin’s age.

To our knowledge, the only full account of all modals used in factual contexts as opposed to non-factual contexts is the one offered by Larreya (2015). Larreya (2015) makes a systematic distinction between a priori and a posteriori modalisation that cuts across the distinction between epistemic and root modality. Larreya defines modalisation as “the way modality is used”: a) “depending on the speaker’s state of knowledge of the modalised fact” and b) “depending on the addressee’s state of knowledge of the modalised fact as assumed by the speaker”.³ When the speaker does

³ Our translation.

not present himself / herself as knowing the truth value of the modalised proposition, modality is used a priori (as in (1), (2), (3), (5), (6) and (7)). In contrast, when the speaker presents himself / herself as aware of the truth value of the proposition, modality is used a posteriori under Larreya's account (as in (8) and (9), where the modal expresses dynamic modality, and as in (4), where the epistemic use of the modal is not motivated by the speaker's uncertainty). Larreya further distinguishes between two cases of a posteriori modalisation: constative uses, and evaluative uses. Constative modalisation is concerned with hearer-new facts that the speaker modalises when reporting them, as in (4), (8) and (9). Evaluative modalisation presupposes the existence or the non-existence of a modalised fact and is typically conveyed in predicative expressions that have scope over a content clause. Section 3 is devoted to a special case of constative modalisation (the one illustrated in (4)), and section 4 deals with evaluative uses.

3 *WOULD* AND *SHOULD* IN *WHY*-QUESTIONS

3.1 EPISTEMIC *WOULD* IN ANSWER TO A QUESTION

As mentioned above, the use of epistemic *would* in factual contexts is documented in several studies by Birner & al., Ward & al., Celle (2012), Furmaniak & Larreya (2015) and Larreya (2015). These studies are concerned with declarative sentences, in which epistemic *would* – as opposed to *should* – may convey evidence-based modalised assertions, as in the following example:

(11) *'Ew, what smells?'*

*'That **would** be me, or more specifically, my patient's insides all over me.'*

(cited in Celle 2012: 153)

In (11), the speaker does not express the slightest doubt about himself being the source of a bad smell. In answer to a question asked by the addressee, the speaker supplies a piece of information that *will* predictably sound surprising to the addressee. Epistemic *would* signals that the proposition was expected to be unlikely. The speaker anticipates that reality contradicts the addressee's expectations and distances himself from the situation of utterance for purely pragmatic reasons. As pointed out by Bybee (1998: 267) in her definition of the irrealis, modal categories may perform an illocutionary "discourse-oriented function", rather than express the speaker's stance on objective reality. The choice of the past tense modal exhibits the fact that the speaker is not asserting the truth of the proposition, even if he does not have the slightest doubt about it: "epistemic moods mollify the strength of a statement so that it is not a bald assertion." (Bybee 1998: 268).

There is no similar pragmatic use for *should*.⁴ In (11), the modalised proposition expresses the speaker's knowledge that he is the source of the foul smell. The assertion

⁴ However, Larreya & Rivière (2010: 119-120) note that under certain circumstances, *should* implies actualisation: *'He's in good shape.'*

'So he should be, after three weeks' holiday!' (Larreya & Rivière 2010: 120)

is qualified by the past tense modal form in order to anticipate and defuse the addressee's surprise, not to weaken the speaker's level of certainty. The context implies too high a level of certainty on the part of the speaker to license *should*. In (12), however, *should* may substitute for *would*, but with a different implicature:

- (12) A. 'How old is Benjamin?'
B. 'Benjamin was born in 2006. He **should** be ten.'

The second proposition in B's utterance is presented as the result of an inference. Unlike *would*, *should* weakens the level of certainty associated with the modalised proposition. This explains why only epistemic *would* is attested in factual contexts where the speaker's judgement is based on available evidence.

3.2 WHY-WOULD QUESTIONS

Why-questions are about the cause of a proposition. In combination with *would*, the actual validity of that cause is challenged by modal remoteness. As mentioned above, *would* is truth-neutral per se. It is the context that allows either a factual reading or a hypothetical one. *Why-would* questions may cast doubt on a prior proposition. They may also do the exact opposite in factual contexts and convey the speaker's surprise at some event without calling that event into question. Any kind of variable question may be found in factual contexts. Our focus will be on *why*-questions that bear on the cause of a state of affairs. In the following pair of examples, *would* is hypothetical:

- (13) A. 'Are you sure you don't mind?'
B. 'Why **would** I mind?' (BNC)
- (14) A. 'Louis probably started that rumour himself.'
B. 'She rubbed her temples. 'I don't understand. Why **would** he do that?' (BNC)

In the first utterance of (13), the speaker seeks confirmation of non-*p*: "you don't mind". The rhetorical *why-would* question indirectly confirms non-*p* by undermining the belief that the causal grounds for *p* are justified. As a result, non-*p* sounds self-evident, and "I don't mind" is implied. As pointed out by Furmaniak (2014), in such cases, the preceding proposition modalised by *would* conforms to the speaker's expectations, and non-*p* is viewed as not surprising. This implicitly suggests that *p* would run counter to B's norm.

In (14), the cause for *p* (*Louis started that rumour himself*) is called into question in a context where speakers do not understand each other and disagree. The epistemic status of *p* is an issue for both speakers: A's utterance is modalised by the adverb *probably*, and B's question indicates that this proposition does not make sense to her. *Would*

They analyse this utterance as a case of understatement. Although *should* is used in an independent clause, we argue that this use is evaluative and comparable to the use of *should* in content clauses, as the following paraphrase suggests: "It is normal that he should be in good shape after three weeks' holiday."

conveys the meaning that no actual existence can be assigned to that cause, which amounts to denying *p*. The question implies *Louis did not start that rumour himself* and signals that speaker B does not believe in the truth of *p*. It is the discordant status of *p* that triggers B's epistemic judgement.

In factual contexts, *p* corresponds to an actualised proposition. The past tense morpheme is not counterfactual. Note that *would* is time-neutral and compatible with past reference as well as present reference. In the following examples, *why-would* questions refer to a past event:

- (15) *'He's a politician: Northern Ireland Office.'* *'House-sweeps on a regular basis, mirrors under the car each morning, a discreet bodyguard and,'* Pascoe added, *'a gun.'* *'He's on their list; not high, but he's there.'* *'How did you get it?'* *'I went to see him one evening and asked to borrow it.'* *'He handed it over?'* *'Yes.'* *'Why **would** he do that?'* *'We're divorcing. I'm being nice about it. Apart from other things, I'm not bringing into court the fact that he liked to beat me. One time, he cut me.'* (BNC)
- (16) *'Why were you offended? Even if you think me the most immoral bastard ever to walk the face of the earth, why **would** you react so personally? And why **would** you have set out to humiliate me?'* (BNC)

It is the context that tells us how to interpret the temporal reference of these questions. In (15), *do that* refers to the past situation framed by the event *He handed it over*. The context is less clear in (16), where the first *why-would* question can be interpreted either as referring back to the past situation set up by the question *why were you offended?*, or as referring to a generic present. This ambiguity can only be lifted with the addition of the perfect aspect as in the second *why-would* question, which unambiguously refers to the past.

In the following examples, *why-would* questions refer to the present:

- (17) *'Then who's the woman in the photographs?'* Robbie was still sceptical. *'My sister - Fenella. She's a photographic model. Those were copies of two of her recent portfolio photographs.'* *'Why **would** you keep photos of your sister in your cabin?'* (BNC)
- (18) *'If there is one thing I definitely need at this moment, it is a commentary on Italian traffic from a girl from the American midwest.'* Caroline's brows lifted in puzzlement. *'Why **would** you think that?'* *'Only one born to the insanity of Italian traffic should make observations about it,'* he answered tersely. *'I meant, why **would** you think I'm from that part of America?'* (BNC)

In (17) and (18), the *why-would* question is formed in reaction to the addressee's discourse content, which violates the speaker's expectations. In (18), the discourse content referred to by *that* is viewed as the reflection of the addressee's erroneous thinking. Verbs of saying are frequently used this way:

- (19) [...] *she interrupted eventually, 'why **would** you be telling me these things when I know them already?'* (BNC)
- (20) *'Where were you last night, McKenzie?'*

*'Are you asking if I have an alibi, Mr. Donatucci? Why **would** you ask?'* (COCA)

In (19) and (20), the *why-would* questions seek information about the cause of the addressee's speech act.

In these factual contexts, the speaker's judgement is based on evidence provided by some surprising discourse content. Emotionally, these *why-would* questions convey the speaker's surprise. This emotional experience activates a cognitive process whereby the speaker adapts to the unexpected situation, as stated by Miceli and Castelfranchi (2015: 52):

[S]urprise is likely to induce epistemic causal search and consequent belief revision, thus favoring a more coherent (and hopefully reliable) predictive belief system, and in so doing a long-term adaptation to unexpected events through future adaptive action.

This adaptation process involves an abductive inference. Epistemic modality is here characterised by the speaker's attempt to account for unexpectedness in an abductive evidence-based judgement that goes from a discordant state of affairs to its cause.⁵ Although the starting point of abductive reasoning is some surprising observation made at the time of utterance, the past form of the modal is used. This mirative stance is adopted in reaction to some surprising information that the speaker has not fully assimilated yet⁶.

However, not all *why-would* questions in factual contexts are induced by a reaction of surprise. If these questions are anaphoric to propositions that convey discourse-old information, they seek the cause of some tendency, propensity or behaviour that is evaluated. In that case, *would* refers to the past:

(21) A. ...*Once something like that has happened there's always another disaster coming behind that actually takes over the headlines, so, about six months, a year, two years afterwards they were still finding that in parts of Europe the general level of nuclear activity was higher than it had been before Chernobyl, why **would** that happen?*

B. *Erm ...*

A. *Welsh Wales, in Wales and in the Lake District they found that the level of nuclear activity on the surface of, of the field as it were and therefore reached the animals is higher than it has been, how **would** they manage to do that?* (BNC)

(22) Kendall: *You just found out that your real dad is not the guy who abused you, but someone who would take a bullet for you.*

⁵ Based on Peirce (1966), Desclés and Guentchéva (forthcoming) distinguish abduction from two other inferential processes, i.e. deduction and induction. They define abduction as follows: "Abduction (or retroduction) is based on facts (observed or known) and the law of inference (relation of implication) across propositions, states the plausibility of a hypothesis." They also stress that abduction is characterised by "a certain disengagement on the speaker's part" and that the hypothesis suggested may be contradicted: "stating that a hypothesis is plausible leaves the field open for competing explanations (often unknown as yet)."

⁶ On the mirative stance, see Celle and Lansari (2014), Celle and Lansari (2015) and Celle et al. (2017).

Ryan: *Exactly! He took a bullet for me. I know that. That's the point. That's the point. Why **would** he do that?*

Kendall: *Well, maybe because he cares whether you live or die?*

Ryan: *Or maybe because it's just in his training. (CASO)*

In (21) and (22), the underlined sequences correspond to actualised past events which are in focus in discourse. This information being shared by speaker and addressee, the questions cannot be motivated by a feeling of surprise on the part of the speaker at the time of utterance. In (21), the *why*-question seeks the cause of a physical phenomenon, namely the high level of nuclear activity in parts of Europe long after the Chernobyl accident. The *how*-question asks about the manner in which the investigation was carried out. What is questioned in both cases is how and why these events conform to some congruent property – be it a physical principle in the first case or the propensity of the subject in the second. The question is thus about the predictability of these propositions. The epistemic meaning of predictability associated with these propositions is grounded in the properties of the subject, which shows that epistemic modality and root modality are closely intertwined.

Similarly in (22), the speaker wonders why it was predictable that the referent of the subject would take a bullet for him. In this example, predictability is based on the subject's willingness to adopt that attitude. In all these questions, the speaker attempts to account for past events with hindsight. He wonders why such events were predictable on the basis of the properties of the subject. This epistemic judgement intersects with root modality. The following example can be accounted for along the same lines:

(23) Lee: *Why **would** you let her watch something called "Bloody stranger two"?*

Gaby: *I know, I know. I'm an idiot. Now she's having nightmares and crawling into our bed every night. (Desperate Housewives)*

Although there is no prior discourse the question can be anaphoric to, the proposition challenged by the question is discourse-old information. Lee is reacting not to something that unexpectedly arises in the situation of utterance, but to a past event he already knows about and disapproves of. The question is rhetorical and not informative. More specifically, the question is not about the cause of a past event – as would be the case with *why did you let her watch something called "Bloody stranger two"?*. The rhetorical question implies rather that there is no justification for the addressee's foolish behaviour and invites the addressee to commit herself to that point of view. This reading is confirmed by Gaby's answer, *I know, I know, I'm an idiot*, which does not supply a cause, but "a shared sense of absurdity", to use Rohde's expression (2006: 140).

Significantly, Rohde (2006: 152) correlates the lack of surprise in rhetorical questions with their un informativity. We further suggest that the lack of surprise in *why-would* questions about discourse-old information hinders abductive reasoning⁷. The

⁷ As such, rhetorical questions are not an obstacle to the expression of surprise. It is argued in Celle (forthc.) that rhetorical questions may indeed serve a mirative function in English, which is not predicted by Rohde's (2006) theory.

state of affairs may well be discordant, which explains why a modalised question is asked. And yet, if the question is about discourse-old information, however discordant the state of affairs, the root foundation of the proposition will be challenged, rather than its epistemic character. Furthermore, this discordant state of affairs is in a past situation. The behaviour of the subject in a past situation may be evaluated and indirectly criticised, as in (23). Crucially, the evaluation of some past event is made possible by the ability of root *would* to refer to the past. By contrast, the starting point of abductive reasoning is some surprising observation made at the time of utterance.

3.3 WHY-SHOULD QUESTIONS

Why-questions have the form of open interrogatives. However, *why-should* questions are not ordinary information questions about a cause. They may question modality in three different ways.

Why-should questions may seemingly ask about the cause of a weak obligation while they actually aim to persuade the addressee to accept that obligation:

- (24) *ARRANGING YOUR AFFAIRS AND MAKING A WILL # A GUIDE FOR PEOPLE WITH AIDS OR HIV INFECTION # The Terrence Higgins Trust # Why **should** you make a will? # If you die without making a will (sometimes called 'dying intestate'), strict rules govern who will inherit your property, including money and personal possessions. (BNC)*
- (25) *Your investment will buy units in that fund and you will therefore have access to a far wider-ranging portfolio of investments than most individuals could realistically set up and manage on their own. # WHY **SHOULD** I INVEST IN A PEP NOW? # History has shown that investing in the stock market during times of economic recovery has proved rewarding for investors who are looking for a good return over the longer term. Most commentators agree that, with interest rates and inflation at a low level, the UK economy is now well placed to emerge out of recession. (BNC)*

These questions are not genuine directives because they do not attempt to get the addressee to do something. They may, however, be considered directive in the sense that they aim to get the addressee to accept the presupposed deontic modality. Schematically, they may be represented by “Why (obligation) *p*?” and imply “(obligation) *p*”. They are not ordinary questions as they do not request an informative answer from the addressee. In (24) and (25), *why* could be followed by *for what reasons*: *why and for what reasons should you make a will?*; *why and for what reasons should I invest in a PEP now?*. In answer to these questions, the reasons for investing straight away in (25), for making a will in (24) are listed. It is worth noting that the answers are provided by the speaker, not by the addressee, the latter being not expected to know the answers. *Why-should* questions are used as directives in guidelines that formulate advice for patients or customers. These spurious questions imply “you should make a will”, “you should invest in a PEP now.” This reveals both the deontic meaning of *should* and the directive nature of the question, which prompts the addressee to

accept the following: “I should invest in a PEP now because...” and “I should make a will because...”, hence to fulfill an obligation and to commit to the causal link suggested by the speaker.

However, in their overwhelming majority, *why-should* questions have an evaluative function in an anaphoric context. They serve to characterise a state of affairs as absurd. In first-person questions, *should* tends to cancel the question-answer presupposition. The necessity applied to the proposition is rejected by the speaker.

First, it should be stressed that *should*, like *would*, is truth-neutral:

(26) *He said Vera could have her job back if she apologised. Angry Vera replied: 'Why should I apologise for helping charity? I am not going back.'* (BNC)

(27) PAMELA: *Sir, sir, as you please, I can't... I can't... be displeased...*

BELVILLE: *Displeased? Why that word? And why that hesitation?*

PAMELA: *Why should I hesitate? What occasion is there for it?* (BNC)

As in the previous examples, these questions may be schematically represented by “Why (obligation) *p*?”. However, they imply “there is no obligation for *p*, hence *p* does not hold”. In (26), the question refers back to a condition expressed by the addressee. The condition requires that Vera apologise. Vera’s question cancels that prerequisite. The *why-should* question amounts to cancelling that obligation and implies “I will not apologise”. In first-person *why-should* questions with an agentive verb, deontic modality is prone to appear. It is precisely that sense of obligation that is called into question. The question is used rhetorically and implies that there is no logical reason for Vera to apologise. In (27), deontic modality is also called into question. However, no obligation such as “you should hesitate” can be recovered from the context. On the contrary, Belville assumes that Pamela should not be hesitating. It is the addressee’s choice of words, and more specifically his choice of the word *hesitate* that is challenged by the *why-should* question. The speaker argues that this word is wrongly applied to her behaviour. It is not, then, the actual de re event that is called into question by the speaker, but the addressee’s de dicto statement. This use of *should* is compared by Arigne (2007) and Larreya & Rivière (2010: 121) with the use of *vouloir* in second person questions in French.⁸ *Why should I hesitate*, like *pourquoi voudrais-tu que j’hésite*, is a metalinguistic question. It does not presuppose the obligation for the subject to hesitate. It does, however, presuppose the existence of some necessity wrongly applied by the addressee to characterise the subject’s attitude. It is the addressee’s speech act itself that is being modalised. This can be paraphrased as follows: “why is it necessary for you to *say* that I am hesitating?”.

To sum up, the presupposition of a de re proposition is cancelled by the *should* question in (26), while the presupposition of a de dicto proposition is cancelled in (27).

⁸ Milner and Milner (1975) analyse the syntax and function of quotative second person *pourquoi*-questions with *vouloir*. They show that in such questions, *vouloir* does not convey the subject’s volition. It is to be understood metalinguistically. They also stress that the proposition anaphorically referred to is taken up as a *dictum*.

But *should* does not always cancel the presupposition derived from the addressee's prior statement. In second person questions, the actuality of the modalised proposition is not necessarily challenged:

- (28) *He made no attempt at any civility, and left Elizabeth to do the talking. She said, 'I cannot imagine why you have returned here, Mr Bodenland. Do you have any more messages to bring me from Victor Frankenstein?' 'Am I so unwelcome, ma'am? I did you a small service once by delivering a letter. Perhaps it is fortunate for my own sake that I have no further letter now.' 'It is unfortunate for you that you brazenly appear at all.' 'Why **should** you say that? I had not intended to trouble you on this occasion. Indeed, I may say it was not my wish to see you at all.'* (BNC)
- (29) *'He tells me he is going straight on to Australia to see Greg,' Hugo said. 'Let's hope the whole thing ends there. Though somehow I doubt it.' 'Why? Why **should** you doubt it?' Sally demanded. Harriet noticed her hands were shaking. 'Because the son of a bitch won't let up while he thinks there is the slightest chance of getting back his quarter of a million,' Hugo said.* (BNC)
- (30) *'You've heard the news, of course.' 'Yes.' Even without the simple affirmation his face would have given her the answer; he looked pale and drawn, as if he had slept even less than she had. 'I tried to call you but there was no reply from your flat.' 'I was in Paris on a job. I saw a newspaper there. I rushed back to London, packed a few fresh things and came straight here.' 'Harriet... I'm so sorry.' 'Why **should** you be sorry?' 'It must have been a terrible shock for you...' 'And for you!' she said hotly. 'After all this time - it's almost unbelievable. Do you suppose there's any truth in it?' He spread his hands helplessly. 'I wish I knew. But I can't see why anyone should invent a story like that.'* (BNC)

Strikingly, the existence of *p* is not affected by the question on modality. *Why should you say that, why should you doubt it* and *why should you be sorry* presuppose *you said that, you doubt it* and *you are sorry* respectively. These questions imply “*p* holds, although there is no obligation for *p*”. In these second-person questions, *should* is based on logical necessity and conveys a sense of evaluation. These questions typically appear in dialogue and are anaphoric to a prior statement made by the addressee. They clearly have a quotative function, referring back either to some discourse content or to the addressee's speech act. The speaker challenges either the discourse content or the speech act itself. *Why-should* questions request a justification for the logical necessity of the proposition. They are triggered by a sense of surprise on the part of the speaker, because the addressee's statement violates their expectations. These examples are very close in meaning to the *why-would* questions examined above. However, it should be stressed that this quasi-equivalence in meaning results from different modal judgements. The logical necessity expressed by *should* is evaluated according to the speaker's moral standards, hence the evaluative judgement. With *would*, on the other hand, the inherent conformity between subject and predicate is checked against evidence in an unexpected situation, hence the abductive inferential judgement. In an evidence-based *why-would* question, the speaker attempts to account for a surprising state of affairs that they fail to

understand by seeking its cause. In dialogue, such abductive questions are not quotative (see (17)). The quotative function, however, is typically served by *should*-questions. Such questions do not ask about the cause of a proposition. They cancel the addressee's commitment to the truth of a prior proposition and invite them to justify themselves. This is particularly clear in (30), where the validity of the proposition *I am sorry* is disclaimed by the modalised question, which forces the addressee to justify his statement. Note that a *because*-answer introduces the justification requested in (29) as in the following example. As the proposition to be justified refers to a past event in (31), the perfect aspect is required:

- (31) *'I'm pleased with it,' Maria responded warily, reminding herself that she worked for the man. 'And you feel the people here are pleased with you?' Luke probed. 'I believe they are.' She was cautiously confident. 'Although it's not so much I who has to please them as my ideas, since a lack of support would hamper or even prevent their implementation - but those I've already mooted have met with even less resistance than I anticipated.' 'Why **should** you have anticipated any, if they're good ideas?' Briefly, his interest was in her as a person with opinions and particular professional attitudes of her own, rather than as a female body he wanted to possess, and Maria responded with relief. 'Because any changes, however positive, require adjustment, and most people feel more comfortable with the familiar.'* (BNC)

Should having no past time reference, past time reference can only be marked by the perfect aspect. As we have seen in (16), past time reference is not as clear-cut with *would*, which may, or may not, combine with the perfect aspect to refer to the past. However, past time reference need not be marked with *should*:

- (32) *'She looked an interesting girl. I had a sort of fellow feeling for her.'* 'Really?' Hargazy looked at her sharply. *'Why **should** you have a fellow-feeling for her?'* (BNC)

The statement quoted is in the preterite. Without the perfect aspect, the quotative question does not refer to that past situation. This signals that *should*-questions may abstract away from a spatio-temporal situation. What is being referred to here is the fact of having a fellow-feeling rather than the corresponding actual event anchored to a past situation. The metalinguistic use illustrated in (27) points in the same direction.

A further argument to support this claim is provided by rhetorical *should*-questions. In the following example, *should* is followed by the verb base *suffer*, not by the perfect infinitive *have suffered*. It indicates that the *should*-question does not refer to the past situation defined by *yesterday*, but rather to some idea or conception that runs counter to the speaker's norm. This rhetorical question can be construed as a present comment on some misconception, rather than as a judgement on a past event:

- (33) *HOSPITAL patients were given a COLD lunch yesterday - because the cooks were too busy preparing a HOT one for a royal visit. The Duchess of Kent and 60 guests sat down to a delicious fish meal while patients had to make do with quiche or ham salad. Last night NUPE official Alex Rennie slammed the bosses of Milton Keynes Hospital,*

*Bucks. 'I think it is outrageous,' he stormed. 'If anyone had to have the cold meal, it should have been the bigwigs. Why **should** the patients suffer because one of the royal family is invited to a junket? The hospital is for patients, not just for a load of hangers-on.' The Duchess visited the 358-bed hospital, which got NHS Trust status in April, to open an 18 million extension. (BNC)*

This question does not request a causal answer. Interestingly, the cause for the patients' suffering is supplied in the question in the form of a *because*-clause. The rhetorical question implies that this cause is no good reason. The logical necessity that seems to have prevailed is in contradiction with the speaker's ethics and is presented as outrageous. In other words, there is no justification at all for the causal relationship expressed in the rhetorical question. This purely evaluative function is exploited in the following example drawn from a speech:

(34) *That's quite ridiculous. He says seventy to seventy five percent are being directed towards the private sector (pause) so why. I thought our social services people did that (pause) if they run that why **should** they direct people away from their own livelihoods. That's quite ludicrous, why **should** they shoot themselves in the foot (pause) and is Mr (-----) seriously suggesting the same thing? I mean apart from a monstrous attack on our own officers who can't answer for themselves in this place. Why **should** they be prejudicing the the jobs of the their colleagues, I, it doesn't make any sense whatsoever. (BNC)*

In (34), *why-should* rhetorical questions repeatedly suggest that there is no logical explanation to be found. These questions collocate with assertive statements that also evaluate an idea as absurd. No accurate temporal reference, whether past, present or future, can be assigned to the modalised propositions because what matters is some idea rather than some precise event. The figurative expression *shoot oneself in the foot* also indicates that it is an attitude that is being criticised, not a specific event, even if some event may be the source of this generalisation.

Why-should questions and *why-would* questions both have an evaluative dimension. However, only *why-would* questions may go from an observation to its cause in abductive reasoning. By contrast, *should*-questions may abstract away from a specific event and evaluate an idea.

4 WOULD AND SHOULD IN CONTENT CLAUSES

Would and *should* may both be used in content clauses introduced by evaluative impersonal superordinate expressions such as *it is strange that*, *it is surprising that*, *it is odd that*, *it is natural that*, *it is inevitable that*, or *I find it strange that*. Such content clauses are extraposed subject clauses or complement clauses respectively.

It should be stressed that the use of these modals is not compulsory in this syntactic position.⁹ The distribution of the modals in the fiction subcorpora of the British

⁹ For lack of space, we leave aside the use of *should* after directive superordinate expressions.

National Corpus (BNC) and the Corpus of American Contemporary English (COCA) is represented in the following figures.

Table 1: Distribution of the modals in content clauses

BNC CORPUS	<i>surprisng</i>	<i>odd</i>	<i>strange</i>	<i>natural</i>	<i>inevitable</i>
<i>Would</i>	0	1; 2%	2; 3%	2; 7%	7; 29%
<i>Should</i>	6; 17%	13; 22 %	21; 36%	21; 75%	13; 54%
bare infinitive	0	0	0	0	0
other ¹⁰	29; 83%	44; 76%	36; 61%	5; 18%	4; 17%

COCA CORPUS	<i>surprising</i>	<i>odd</i>	<i>strange</i>	<i>natural</i>	<i>inevitable</i>
<i>Would</i>	6; 7%	16; 9%	20; 9%	16; 18%	36; 53%
<i>Should</i>	8; 9%	8; 4%	28; 12%	23; 26%	10; 15%
bare infinitive	0	0	0	4; 5%	1; 1%
Other	72; 84%	156; 87%	179; 79%	45; 51%	21; 31%

These figures confirm Johannsson's observation that *would* is more frequently used in American English than in British English. After *it's surprising*, it may be hypothesised that the uses conveyed by *should* in British English are split between *should* and *would* in American English. The figures also show that the bare infinitive is used in American English after *it's natural* and marginally after *it's inevitable*, a fact that is not attested at all in British English.

Overall, there is a tendency to use the modal forms, and specifically *should*, much more frequently in British English than in American English. By contrast, the use of full verbs in the preterite, the past perfect and the present tense is statistically significantly higher in American English. In both varieties, the use of *should* and *would* is strikingly higher after *it's natural* and *it's inevitable*, a tendency that is even more pronounced in British English. *Would* and *should* are the majority only after these expressions in British English, and only after *it's inevitable* in American English. Interestingly, these figures suggest a similar correlation in American English and in British English between the semantic contribution of the superordinate expression and the use of modality in the content clause. If the superordinate expression evaluates the propositional content of the subordinate clause as contrary to expectations, the verb form in the subordinate clause appears less likely to be a modal. In contrast, if the superordinate expression evaluates the propositional content as being in accordance with the speaker's expectations, the subordinate clause is more likely to contain *should* or *would*. However, we will see that this counterintuitive observation will need to be qualified when the context is examined in more detail.

¹⁰ This category includes factual uses (present tense, preterite, past perfect) as well as non factual uses (*can*, *could*, *may*, *might*, *will*) which are not dealt with in this study.

For lack of space, the full description of the corpus data cannot be carried out in the present article. We limit ourselves to stressing some salient facts.

This construction combines two levels of modality, whose linear order does not reflect chronological order. Firstly, the content clause – which appears in extraposed position – contains discourse-old information. The modal that appears in this subordinate clause combines epistemic modality and evaluative modality exactly in the same way as in the *why-would* and *why-should* clauses examined in section 3. Secondly, the superordinate expression appears in focus and conveys an evaluative judgement about the content clause. Even at the superordinate level, evaluative and epistemic modality can hardly be disentangled. On the one hand, the adjectives *surprising*, *strange*, *odd*, *natural* and *inevitable* evaluate the content clause. On the other, this evaluation has to do with the expected or unexpected character of the propositional content, which allows for assessing its likelihood in retrospect. This use of past tense modals in content clauses is discourse-oriented. As Bybee (1998: 268) writes:

[I]t is not perceived reality or unreality that is at issue, but rather how the speaker is positioning the proposition in the discourse.

4.1 DISCORDANCE BETWEEN THE SUPERORDINATE EXPRESSION AND THE CONTENT CLAUSE

We first examine the relationship between the superordinate clause and the content clause when they stand in contradiction to each other.

4.1.1 SURPRISING THAT

The use of *should* in content clauses introduced by the adjective *surprising* amounts to 17% in the BNC subcorpus. In the COCA subcorpus, modalised content clauses with either *should* or *would* amount to 16%.

However, this raw figure should be qualified in view of the fact that in the BNC as well as in the COCA corpus, this adjective is systematically negated or questioned. In the BNC, 67% of the *surprising* type superordinate expressions contain the negated adjective *not surprising*, which we analyse as an instance of concordance between the two clauses. In the other examples, the discordant character of the content clause is questioned (*is it surprising that...*). Likewise, *would* and *should* are found after the negative adjectival phrase *not surprising* in the COCA corpus.

If the propositional content is said to have been felt surprising in a past situation, past tenses of full verbs are used in both varieties of English:

- (35) *It was surprising that she **did** not feel embarrassed at being caught in floods of tears.* (BNC)
- (36) *All the same, it was surprising that Nick **dealt** with him, Kelly thought to herself as she drove her car.* (BNC)
- (37) *He'd told me that Danforth did not give interviews, so it was quite surprising that **I'd been singled out** for this audience.* (COCA)

The preterite is systematically found in the superordinate clause, indicating that the evaluative judgement was formed in the past. The content clauses in the preterite or past perfect are purely factual. Although each content clause is embedded in a superordinate clause, the evaluative phrase exerts no modal influence on the subordinate clause. The two clauses can be coordinated without any significant change in meaning, but for the information structure:

- (35') *She did not feel embarrassed at being caught in flood of tears, and it was surprising.*
 (36') *Nick dealt with him, and it was surprising.*
 (37') *I'd been singled out for this audience, and it was quite surprising.*

This suggests that each proposition is an assertion the speaker commits himself to at the time of utterance.

4.1.2 STRANGE THAT

Non-modalised content clauses are the majority after a superordinate expression containing the adjective *strange*. They are comparable to the ones examined in 4.1.1.:

- (38) *I greet the mothers, but they look past us. It's strange that they **don't think** us strange.* (COCA)
 (39) *It seemed strange that John **didn't want** to transform George, y'know.* (COCA)

The two clauses may be viewed as two separate assertions:

- (38') *They don't think us strange. That's strange.*
 (39') *John didn't want to transform George. It seemed strange, y'know.*

However, the use of modalised forms is higher than it is with the adjective *surprising*. In the BNC, *should* is found in 36% of the content clauses. In the COCA subcorpus, 9% of the content clauses contain *would* and 12% *should*.

In the BNC, 40% of these superordinate clauses are verbless, possibly exclamative. In the COCA, this figure drops to 21%. Another 17,5% of these superordinate clauses are modalised with the copular verb *seem* in the BNC, against 25% in the COCA corpus. All in all, 57,5% of the superordinate clauses are not assertions in the BNC, against 46% in the COCA corpus. In the COCA corpus, *would* and *should* are evenly distributed after the modalised superordinate clause. After a verbless superordinate expression, however, *should* is systematically preferred to *would* – the corpus yields only one instance of *would* after *strange that*. Let us start with *would*. The salient feature of *would* is that epistemic modality in the content clause is assigned in retrospect to the content clause in relation to the evaluative judgement expressed in the superordinate expression:

- (40) *It might seem strange that a person so young **would** deny herself those things that most of the rest of the world took for granted: a husband, a child, a family of her own.*

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But Old World customs were strange, and stranger still were the traditions that had been formed in the small villages that nestled in the rolling hills of Avellino. (COCA)

- (41) *Neither of them had much information that I could use. My interview with the Media Lab Director also didn't help. He knew about Gerber's research, of course, and was extremely cooperative, but he had nothing to add to what he had already told the Cambridge police. He found it strange that Gerber **would** commit suicide, but he did hazard a guess as to what might have caused it. 'Perhaps he was worried about what might happen to his research,' he said. (COCA)*

It is still possible to derive the following paraphrases, which reveal the modal meaning of *would*:

- (40') *Predictably, she denied herself those things that most of the rest of the world took for granted: a husband, a child, a family of her own. It might seem strange.*
- (41') *Predictably, Gerber committed suicide. He found that strange.*

These content clauses are very close in meaning to the *why-would* questions analysed in the previous section:

- (40") *Why would she deny herself those things?*
- (41") *Why would he commit suicide?*

In these examples, *would* refers to the past and its epistemic meaning is not affected by the superordinate predicate. The construction highlights discordance between an unlikely state of affairs and reality by stressing that the predictability of the modalised proposition runs counter to expectations. As pointed out by Larreya (2015), epistemic modality appears as part of an a posteriori modalisation in a judgement that goes "from effect to cause". Epistemic modality is reconstructed in an evaluative judgement that aims to account for a discordant state of affairs. We further suggest that epistemic modality is fictitiously and provisionally assigned to the content clause for the sake of evaluation. Indeed, in (41), the cause of Gerber's death is unclear, and suicide is far from predictable *prima facie*.

The relation between the superordinate expression and the content clause is different in the case of *should*:

- (42) *He is just sitting there, in deep meditation, staring into the glowing yellow and red coals, examining each burning log looking for an answer, or looking for some personal satisfaction. It seems strange that he **should** find this answer, or satisfaction, written in a fire. As he keeps staring into the fire, the crackling becomes louder and the burning more intense. (COCA)*
- (43) *'Can I get you some coffee?' inquired the visitor. 'Strange that you **should** ask,' said Perera. 'Got my thermos here.' (COCA)*
- (44) *How strange that such an excellent king **should** not take the chance I was offering him! (BNC)*

Modality in the content clause cannot be understood separately from modality in the superordinate clause. The following paraphrases would not be correct:

- (42') # *He should find this answer, or satisfaction, written in a fire. It seems strange.*
 (43') # *You should ask. Strange.*
 (44') # *The king should not take the chance I was offering him. How strange!*

In these examples, the superordinate expression indicates that the state of affairs expressed in the content clause violates the speaker's expectations. In addition, as pointed out by Behre (1950) and Arigne (2007), the subordinate clause is presented as an instance of "fatal necessity": "the thing or event referred to by the proposition was originally felt as being imposed or imposing itself upon the subject" (Arigne 2007). Arigne argues that this inverted relation produces a sense of conflict that is reflected in the superordinate clause.

A parallel may here again be drawn with the corresponding *why*-questions:

- (42") *Why should he find this answer, or satisfaction, written in a fire?*
 (43") *Why should you ask?*
 (44") *Why should the king not take the chance I was offering him?*

Both constructions are motivated by a sense of puzzlement and an attempt to account for some discordant state of affairs. However, content clauses contain discourse-old information, unlike questions. The specific contribution of superordinate expressions is that they verbalise the speaker's evaluative judgement and put it in focus, content clauses being presupposed. This is particularly clear in exclamative constructions, which imply that the degree of strangeness applied to the presupposed proposition exceeds the speaker's expectations. Exclamative as well as verbless superordinate clauses are not assertions. They express a purely evaluative judgement about a propositional content abstracted away from a referential situation. In (42), what matters is not whether the subject actually found an answer or some personal satisfaction written in a fire. It is the fact that the subject may find an answer or some personal satisfaction that is being evaluated. As stressed by Arigne (2007), a fact should not be confused with an event, as it is the representation of an event.

4.2 CONCORDANCE BETWEEN THE SUPERORDINATE EXPRESSION AND THE CONTENT CLAUSE

4.2.1 NOT SURPRISING THAT

At first sight, it might seem a bit of a paradox that modal verbs are used so frequently with superordinate clauses containing the adjectives *natural* and *inevitable*, which do not convey a sense of discordance per se. And yet, these adjectives indicate that the state of affairs expressed in the content clause is being reconsidered and positively evaluated after being first negatively evaluated. These stages in the reasoning process are explicit with *not surprising*. In addition, the adjective *surprising* is modified by degree words (*so*, comparative *less*):

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- (45) *There are some very pertinent reasons why this memory has remained with me, as I wish to explain. Moreover, now that I come to think of it, it is perhaps not so surprising that it **should** also have made a deep impression on Miss Kenton given certain aspects of her relationship with my father during her early days at Darlington Hall. (BNC)*
- (46) *Once over the first fright of finding out that this was an unconventional arrangement, Alexandra found it less surprising that her mother **should** have married her father, than vice versa. (BNC)*

The state of affairs expressed in the content clause is not self-evident. It only comes to be partly accepted after being initially rejected. The underlined segments signal a change in the speaker's emotional state or in her cognitive ability to account for some state of affairs.

4.2.2 NATURAL THAT

Likewise, *natural* is typically found in collocation with *only* and *perfectly*, i.e. adverbs which indicate that a conclusion is reached after considering the opposite proposition:

- (47) *I thought I saw a face in one of the windows - a queer, white face... It scared me - I don't know why. But it's only natural that one **should** see things after eating mousetrap cheese! (BNC)*
- (48) *The rules of the local game didn't apply to us. I didn't appreciate this freedom until I lost it. I took it for granted that I could associate with people from all walks of life, from every background. It seemed perfectly natural that I **should** spend one evening being waited on by uniformed retainers at the home of an important industrialist whose son I taught, and the next in a seedy bar drinking beer with a group of workers from the factory where I gave private courses in technical English. (COCA)*

In (47), the proposition *see a face in one of the windows* is first presented as scary. It is only once the connection with a potential cause, *eating mousetrap cheese*, has been established that this idea can be deemed natural. What was assumed to be discordant is deemed minimally natural on second thought. Minimal concordance is attained as a result of reasoning.

A similar reasoning process is at stake in (48), but it is reversed. The proposition *spend one evening being waited on by uniformed retainers...* is first assumed to be perfectly natural, "taken for granted". Once some change has occurred – i.e. the loss of freedom – the speaker is led to reevaluate that proposition, which can no longer be deemed natural. "Perfectly natural" is then evaluated as applying to the past, not to the present. What seemed to be perfectly in accordance with the speaker's norm is eventually considered discordant.

The use of *should* in such contexts gives credence to Behre's claim (1950) that *should* expresses "mental resistance". Even when the orientation of the superordinate

clause seems to be in accordance with that of the content clause, *should* conveys “mental resistance” and indicates that the modalised proposition cannot be straightforwardly asserted.

As opposed to the utterances examined in 4.1, these utterances cannot be paraphrased using a *why*-question. A *why*-question would imply a feeling of surprise on the part of the speaker that is not present when the superordinate clause expresses a seemingly positive evaluation. This suggests that epistemic modality is not only triggered by a sense of surprise. It can also be motivated by the persistence of some mental resistance, which prevents the subordinate clause from being asserted.

4.2.3 INEVITABLE THAT

When the superordinate clause is in the present (*it is / seems inevitable that*), the verb forms that appear in the content clause are in the present:

- (49) *It becomes inevitable that my mother **packs** food in more than one lunch box for me.* (COCA)
- (50) *Whenever a man swears not to love, it becomes almost inevitable that he **will**.* (COCA)

In contrast, *would* and *should* are systematically found after superordinate clauses in the preterite. The preterite indicates that the evaluative judgement is formed in retrospect. On the one hand, the propositional content is said to be predictable, but only in hindsight. In other words, the propositional content is not assumed to have been taken for granted. On the other hand, it is evaluated negatively.

It is with this superordinate expression in the past that the modals *should* and *would* are most frequently found both in American English and in British English. This superordinate expression also exhibits the contrast between the two varieties of English: *would* accounts for 29% of the modalised content clauses in British English, and for 53% in American English. *Should* accounts for 54% of the modalised content clauses in British English, and for 15% in American English.

The retrospective comment conveyed by the preterite in the superordinate clause explains the systematic use of modality in the content clause. *Would* tends to be used when the retrospective evaluative judgement is emphasised:

- (51) *Looking back, it seemed inevitable that Evelyn **would** go down with some sort of psychological trouble.* (BNC)
- (52) *I guess it was inevitable that Clavius **would** charm her. He had won me over the same way.* (COCA)

It is the predictable character of the propositional content that is stressed. By contrast, *should* is preferred when the proposition is contrary to what might have been predicted:

- (53) *It might have been predictable, and yet few saw the answer coming. In a later day of harder times, of short resources and mandatory recycling, it was inevitable that those landfills **should** draw the eyes of innovators, looking for ways to get rich.* (COCA)

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- (54) *But then she had never met a man like Damian Flint before; a man who was as masculine as she was feminine. Perhaps it was inevitable that an attraction **should** have blazed between them from the first.* (BNC)

The context here implies that the propositional content cannot be taken for granted. In hindsight it can be assessed as predictable. But this retrospective evaluation stands in contrast to a prior assessment.

However, when it is not possible to recover such a clear contrast from the context, the default form is *would* in American English, *should* in British English:

- (55) *In the air, they introduced an element of beauty and grace. It was inevitable that new religions **should** develop round them.* (BNC)

- (56) *It was inevitable that there **would** be serious problems.* (COCA)

This suggests that the evaluative judgement is formed along different lines of epistemic reasoning in American English and in British English. The more the content clause is claimed to be in accordance with the speaker's expectations, the more problematic its assertion. In British English, *should* signals the speaker's "meditative" attitude adopted in reaction to a proposition that may give rise to controversy. Although the content clause is seemingly in accordance with the evaluative judgement expressed in the superordinate clause, it is not vouched for by the speaker. The speaker only asserts the evaluative judgement expressed at the superordinate level. In this complex argumentative process, the speaker "may be anticipating some sort of reluctance in the mind of the hearer to accept a proposition" (Behre 1955: 149). The use of *should* is thus motivated by pragmatic considerations. In American English, *would* stresses the predictability of the content proposition and the content proposition has the same orientation as the superordinate expression, the predictability of the latter being evaluated as inevitable in the former. *Would* is used as a result of backshift. The evaluative judgement expressed in the superordinate clause prevails and is not assumed to enter into conflict with potentially different points of view.

5 CONCLUSION

We hope to have shown that *would* and *should* used in *why*-questions and in content clauses combine different layers of modality. In *why*-questions, epistemic modality is part of an evaluative judgement that requests either the cause of a surprising state of affairs (with *would*) or the justification of an event or a speech act (with *should*). In content clauses, epistemic evaluation comes under the scope of an evaluative superordinate expression. The use of *would* and *should* is far from obligatory. It depends on the nature of the evaluative judgment expressed at the superordinate level and on its temporal location. If a content clause is evaluated as concordant with the speaker's expectations, the fact that it is said to be normal, natural or not surprising is indicative that the speaker cannot commit himself or herself to the truth of that proposition, hence the use of *would* or *should* in the subordinate clause. In that position,

should marks what Arigne (2007) calls “fatal necessity” and is not in line with the evaluative judgement expressed at the superordinate level. *Would* marks predictability and has the same orientation as the superordinate proposition.

We have also shed light on two pragmatic uses of *should* and *would*. These uses serve a similar illocutionary function by anticipating and defusing potential disagreement between speaker and hearer. Assertion is prevented by the modal remoteness marked by the past tense morpheme. However, the two modals are not found under the same conditions. Pragmatic *should* is encountered in content clauses that convey hearer-old information. This use is ‘meditative-polemic’ and not generated by a sense of surprise. Pragmatic *would*, on the other hand, is found when hearer-new information is supplied by the speaker. For example, *would* is found in equative utterances that identify a variable on the basis of objective evidence. The modal does not assess the likelihood of a proposition, but signals that the speaker anticipates the hearer’s surprise. This epistemic use, called “brave new would” by Ward (2011), is supposedly recent. Although more investigations would be needed to substantiate this claim, we argue that this use is more frequently found in American English.

Finally, only *would* can mark abductive inference in questions about the cause of some surprising state of affairs. We contend that this type of modal inference is made possible by the ability of *would* to refer to the past. *Should* having no past time reference, its epistemic uses are much more limited.

CORPUS DATA

British National Corpus

<http://corpus.byu.edu/bnc/>

Corpus of Contemporary American English

<http://corpus.byu.edu/coca/>

Corpus of American Soap Operas

<http://corpus.byu.edu/soap/>

REFERENCES

- Arigne, Viviane. 2007. “Grammaticalization, polysemy and iterated modality: the case of *should*.” *Corela* [online], 5-1. <http://corela.revues.org/343> (accessed 29 October 2015).
- Behre, Frank. 1950. “The Origin and Early History of Meditative-Polemic *should* in *that*-clauses.” *Symbolae Philologicae Gotoburgenses, Göteborg Högsolas Arsskrift* 56. 275-309.
- Behre, Frank. 1955. *Meditative-Polemic should in Modern English that-clauses* (Studies in English 4). Stockholm: Gothenburg.
- Birner, Betty, Jeffrey Kaplan & Gregory Ward. 2007. “Functional compositionality and the interaction of discourse constraints.” *Language* 83/2. 317-343.
- Bybee, Joan. 1995. “The Semantic Development of Past Tense Modals in English.” In J. Bybee & S. Fleischman (eds.), *Modality in Grammar and Discourse*, 503-517. Amsterdam: John Benjamins.
- Bybee, Joan. 1998. “‘Irrealis’ as a grammatical category.” *Anthropological Linguistics* 40. 257-271.
- Celle, Agnès, 2012. “Epistemic *would* - a marker of modal remoteness.” *Faits de Langue* n°40, *Ultériorité dans le passé, valeurs modales, conditionnel*. 149-156.

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- Celle, Agnès (forthcoming) "Questions as indirect speech acts in surprise contexts." In D. Ayoun, A. Celle & L. Lansari (eds.), *Tense, aspect, modality, evidentiality: crosslinguistic perspectives*. Amsterdam, Philadelphia: John Benjamins.
- Celle, Agnès & Laure Lansari. 2014. "Uncertainty as a result of unexpectedness." *Language and Dialogue* 4/1: 7-23.
- Celle, Agnès & Laure Lansari. 2015. "On the mirative meaning of *aller* + infinitive compared with its equivalents in English." *Cahiers Chronos* n°27, *Taming the TAME systems*. 289-305.
- Celle, Agnès, Anne Jugnet, Laure Lansari & Emilie L'Hôte. 2017. "Expressing and Describing Surprise." In Agnès Celle & Laure Lansari (eds.), *Expressing and Describing Surprise*, 215-244. Amsterdam: John Benjamins Current Topics.
- Coates, Jennifer. 1983. *The Semantics of the Modal Auxiliaries*. London: Croom Helm.
- Desclés, Jean-Pierre & Zlatka Guentchéva (forthcoming) "Inference processes expressed by languages: deduction of a probable consequent vs. abduction." In Viviane Arigne and Christiane Migette, *Theorization and Representations in Linguistics*. Cambridge: Cambridge Scholars Publishing.
- Dixon, John & Don Foster. 1997. "Gender and Hedging: From Sex Differences to Situated Practice." *Journal of Psycholinguistic Research* 26(1). 89-107.
- Furmaniak, Grégory. 2014. "Entre logique et réalité: le cas des interrogatives en *Why would... ?*." In Catherine Moreau, Jean Albrespit and Frédéric Lambert (eds.), *Du réel à l'irréel. Travaux Linguistiques du CerLiCO*, Vol. 25 – 1. 341-360. Presses Universitaires de Rennes.
- Huddleston, Rodney & Geoffrey Pullum. 2002. *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Furmaniak, Grégory & Paul Larreya. 2015. "On the Uses of *Would* in Epistemic Contexts." In Juan Rafael Zamorano-Mansilla, Carmen Maíz, Elena Domínguez & M^a Victoria Martín, de la Rosa (eds.) *Thinking Modally : English and Contrastive Studies on Modality*, 105-124. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Jacobsson, Bengt. 1988. *Should and Would in Factual That-Clauses.* *English Studies* 69/1. 72-84.
- Joos, Martin. 1964. *The English Verb, Form and Meanings*. Madison and Milwaukee: The University of Wisconsin Press.
- Larreya, Paul & Claude Rivière. 2010. *Grammaire explicative de l'anglais*. Paris: Longman Pearson.
- Larreya, Paul. 2015. "Modalisations *a priori* et *a posteriori*: le cas de *would*." *Anglophonia* 19. <http://anglophonia.revues.org/457>; DOI: 10.4000/anglophonia.457 (accessed 05 November 2015).
- Leech, Geoffrey. 1971. *Meaning and the English Verb*. London: Longman.
- Miceli, Maria & Cristiano Castelfranchi. 2015. *Expectancy and Emotion*. Oxford: Oxford University Press.
- Milner, Jean-Claude & Judith Milner. 1975. "Interrogations, reprises et dialogue." In Julia Kristeva, Jean-Claude Milner & Nicolas Ruwet (eds.), *Langue, discours, société: Pour Emile Benveniste*, 122-148, Paris: Editions du Seuil.
- Palmer, Frank. 1979. *Modality and the English Modals*. London: Longman.
- Peirce, Charles S. 1966. *The collected papers of Charles Sanders Peirce [1839-1914]* (8 vols). Cambridge, MA: Harvard University Press.
- Rivière, Claude. 1981. "Is *should* a weaker *must*?" *Journal of Linguistics* 17. 179-195.
- Rohde, Hannah. 2006. "Rhetorical questions as redundant interrogatives." *San Diego Linguistic Papers*, Issue 2. <http://escholarship.org/uc/item/4xd7t5ww> (accessed 25 November 2013).

- Ward, Gregory, Jeffrey Kaplan & Betty Birner. 2003. "A Pragmatic Analysis of the Epistemic Would Construction." In Roberta Facchinetti, Manfred Krug & Frank Palmer (eds.), *Modality in Contemporary English*, 71-79. Berlin, New York: Mouton de Gruyter.
- Ward, Gregory, Jeffrey Kaplan & Betty Birner. 2007. "Epistemic *would*, open propositions, and truncated clefts." In Nancy Hedberg and Ron Zacharski (eds.), *Topics on the grammar-pragmatics interface: Papers in honor of Jeanette K. Gundel*, 77-90. Amsterdam & Philadelphia: John Benjamins.
- Ward, Gregory. 2011. "Brave new *would*: Demonstrative Equatives and Information Structure". In Christina Galeano, Emrah Görgülü and Irina Presnayakova (eds.), *Proceedings of the Fortieth Western Conference on Linguistics, volume 21, WECOL 2011*, 139-160. Fresno: Department of Linguistics, California State University.