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Subjective syntax: Fronted and non-fronted French *de nouveau* ('again')

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While the left periphery of French sentences has been associated with pragmatic functions such as focalization and topicalization, a unified account of fronting phenomena is still lacking. This study examines the fronting of the iterative adverbial *de nouveau* ('again'), a construction whose discourse-pragmatic contribution has received little attention. We argue that fronting of *de nouveau* functions as a syntactic strategy for epistemic reinforcement, strengthening the speaker's authority over a proposition rather than introducing new information.

A quantitative corpus analysis of 21st-century French shows that fronted *de nouveau* occurs significantly more often in subjective contexts characterized by asymmetric access to evidence between speaker and addressee. By contrast, fronting is comparatively rare in contexts where a person's or object's repeated state is publicly observable, suggesting that epistemic reinforcement is interactionally risky in epistemically symmetric environments. A follow-up perception experiment confirms this interpretation: while fronting has little effect on perceived speaker stance in subjective contexts, it leads to more negative evaluations of the utterance in objective contexts.

Taken together, the findings indicate that speakers front *de nouveau* in subjective contexts where such reinforcement is interactionally safe, and that listeners infer corrective or reproachful meanings in objective contexts. We propose that fronting of *de nouveau* belongs to a broader class of constructions that reinforce the truth of a proposition under conditions of epistemic asymmetry, thereby indexing speaker authority rather than contributing to information structure.

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1 Introduction

Across languages, speakers may optionally place adverbials or other constituents at the left edge of the clause. While such fronting constructions have often been analyzed in terms of information structure, such as focus, topic, or frame setting, many cases of fronting do not introduce new information and are prosodically non-focal. This raises the more general question of what pragmatic work fronting performs when it is not straightforwardly reducible to information-structural needs.

French provides a particularly interesting testing ground for this question, as it exhibits a restricted but productive set of fronting constructions. In this language, temporal (1a), locative (1b), causal (1c), modal (1d), or concessive (1e) adverbials may occur in the left sentence periphery.

(1) a. ***Hier**, Paul est arrivé.*
'Yesterday, Paul has arrived.'
b. ***Dans le jardin**, les enfants jouent.*
'In the garden, the kids are playing.'
c. ***Grâce à ton aide**, j'ai réussi.*
'Thanks to your help, I succeeded.'
d. ***Sans hésitation**, elle a accepté.*
'Without hesitation, she accepted.'
e. ***Malgré la fatigue**, il continue à travailler.*
'Despite his fatigue, he continues to work.'

Against this general background, aspectual adverbials constitute a particularly revealing case. Whereas the fronted adverb *dans le jardin* in (1b) fulfils a frame-setting function, delimiting the spatio-temporal domain within which the proposition is to be interpreted (Charolles 2005), fronting of aspectual adverbials appears to give rise to more subtle pragmatic effects. This contrast is illustrated by the alternation between fronted and non-fronted uses of *de nouveau* 'again' in (2).[1]

(2) a. *Je suis **de nouveau** fatigué.*
'I am tired again.'
b. ***De nouveau**, je suis fatigué.*
'Once again, I am tired.'

[1] The related adverbial *à nouveau* is not included in the present study. Although *de nouveau* and *à nouveau* partly overlap (Camus 1992; Rosemeyer 2022), fronting is considerably less frequent with *à nouveau* in the FRANTEXT data: out of $n = 8031$ tokens of à *nouveau*, only $n = 246$ occur in sentence-initial position, corresponding to approximately 3.1%. By contrast, $n = 1491$ out of $n = 25495$ tokens of *de nouveau* are sentence-initial, corresponding to approximately 5.8%. The present study therefore focuses on *de nouveau*, where the fronted construction is more robustly attested. One possible reason for this difference is that *de nouveau* is the older variant and may therefore have had more time to develop from content-level toward context-level readings. This possibility remains to be tested directly.

The fronted variant of *de nouveau* is non-focal and does not appear to introduce new information. Rather, the fronted use of *de nouveau* in (2b) appears to carry an evaluative component; it appears slightly reproachful, evoking a context in which what is repeated is not the expressed state itself, but the speaker's assertion that they are tired.

In this paper, we investigate to which extent fronting of *de nouveau* can be described as an instance of subjective syntax. We propose that the use of fronting of this construction responds to considerations of the speakers' common ground, defined as the shared beliefs of the discourse participants (Stalnaker 1973; 2002). In particular, fronting of *de nouveau* serves to strengthen the speaker's epistemic authority (Heritage 2012) regarding the proposition. Consequently, fronting of *de nouveau* typically occurs in subjective contexts, in which the speaker's utterance constitutes the sole evidence for the truth of the proposition. By contrast, fronting is comparatively rare in objective contexts, in which the proposition is expected to be common ground, because in these contexts, strengthening of the speaker's epistemic authority signals that (a) this fact is not known to the hearer and (b) it should be. Both on account of (a) and (b) fronting of *de nouveau* may therefore threaten the hearer's face in interaction.

To test this proposal, we use a mixed-methods approach, combining a quantitative analysis of production data and a perception experiment that tested the participants' intuitions as regards the valence of speakers' utterances. In line with cognitive approaches to the study of subjectivity (Wiebe 1994; Niewiarowski & Karylowski 2015), we define subjectivity as a latent property of an utterance: it is not directly observable but must be inferred from observable evidence, such as a speaker's linguistic choices, in a given usage context. According to this perspective, an utterance is subjective when the state cannot be assessed by an external observer but depends on the speaker's internal perspective, feelings, evaluations, and intentions. By contrast, an utterance is objective when it describes states that are directly observable and can be experienced in the same way by both speaker and hearer.

In the corpus analysis, we consequently used Latent Class Analysis, a type of structural equation modeling, to operationalize subjectivity on the basis of a number of observable contextual parameters: predicate type, person, tense, mood, and genre. We then used regression analysis to analyze the correlation between the resulting latent classes and fronting. Fronted *de nouveau* was more likely to be used in subjective contexts than in objective contexts. This distributional asymmetry suggests that fronting may carry a context-dependent pragmatic meaning, but corpus data alone cannot establish how such uses are interpreted by listeners, in particular with respect to the speaker's affective stance.

Therefore, a perception experiment was conducted to examine the pragmatic function of fronting of *de nouveau* in subjective versus objective contexts. Specifically, we hypothesized that in objective contexts, fronting serves the pragmatic function of

expressing a reproachful attitude, which can be considered as interactionally risky. Participants completed a valence judgment task in which they rated how positive or negative a speaker sounded when uttering sentences containing either fronted or non-fronted *de nouveau* together with objectively observable versus subjective states of a person. Accordingly, the experimental stimuli conformed to a 2×2 within-subjects design crossing fronting (fronted vs. non-fronted) with predicate type (subjective vs. objective), allowing us to directly assess whether the social meaning of fronting depends on the epistemic status of the predicate. Participants evaluated each sentence using a standardized affective scale, enabling us to measure the perceived negativity associated with the utterance. Fronting had minimal effect in subjective contexts. By contrast, in objective contexts, where the repetition of the event is publicly observable, fronting made utterances sound significantly more negative, suggesting that speakers' insistence on iterativity is interpreted as corrective or reproachful. This result is consistent with our proposal that fronting enhances epistemic authority.

Together, the corpus and experimental findings suggest that speakers tend to front *de nouveau* where it is interactionally safe to do so, and listeners attribute negative connotations to fronting in contexts where the hearer is in a position to evaluate the truth of the proposition. Fronting of aspectual adverbs in French thus reflects not only the expression of iterativity but can also serve the management of epistemic authority and social meaning within the discourse. We propose that fronting of *de nouveau* belongs to a broader class of constructions that realize epistemic reinforcement, comparable to prosodic and morphological verum markers discussed under the Lexical Operator Thesis (Gutzmann et al. 2020), rather than contributing to information structure.

2 Fronting, iterativity, and epistemic access

The central claim of this paper is that fronting of *de nouveau* functions as a strategy of epistemic reinforcement, or *verum* (Gutzmann et al. 2020): by positioning the iterative adverbial at the left edge of the clause, the speaker presents the truth of the proposition as not requiring further negotiation. This strategy is not interactionally neutral, however. Its pragmatic cost depends critically on whether the hearer has independent access to the evidence that grounds the proposition. Where the hearer can assess for themselves whether the proposition is true, fronting acquires a marked, potentially corrective or reproachful character because it signals that the proposition should be common ground. Where the hearer has no independent access to the relevant evidence because the state of affairs in question is subjectively accessible only to the speaker, the proposition is structurally unchallengeable, and the reinforcement strategy carries no interpersonal risk. It is this asymmetry in epistemic access that constitutes what we call a *subjective context* and that, we argue, licenses and motivates fronting.

This section develops the theoretical basis for this proposal. We first situate fronting of *de nouveau* within the broader landscape of adverbial fronting in French and describe our proposal of the role of epistemic reinforcement for this syntactic process (Section 2.1). We then show

how the notion of subjectivity can be used to explain why in some contexts, fronting of *de nouveau* leads to a corrective or reproachful tone (Section 2.2). Finally, we review the relevance of these considerations for the change from content- to context-level readings of *de nouveau* (Section 2.3), relate epistemic reinforcement to the Lexical Operator Thesis (Section 2.4), and derive the predictions tested in the empirical sections of the paper (Section 2.5).

2.1 The mechanism: epistemic reinforcement under asymmetry

Many studies have associated the positioning of constituents in the left periphery, which has been defined as "the most leftward positional slot of the utterance, outside the dependency structure of the verb" (Degand 2014: 154), with specific pragmatic effects such as frame-setting, topicalization and focusing. In cartographic approaches, these different effects are mapped onto specific syntactic positions within the left periphery; frame-setting functions are restricted to the "higher" periphery and information-structural functions to the "lower" periphery (see Wolfe 2022: 236–240 for details and references). These studies have shown that Romance languages vary in terms of the degree to which they allow for fronting. Modern colloquial French shows the most restrictions regarding fronting of constituents in comparison to other Romance languages such as Italian (Lahousse & Lamiroy 2012), Venetan (Wolfe 2022: 260) or Spanish (Leonetti 2011: 344). Moreover, word order variability has decreased in French over time (Wolfe 2022), possibly as the result of a grammaticalization process affecting the relation between word order and information structure (Lahousse & Lamiroy 2012). To our knowledge, however, the fronting of iterative adverbials has not yet been studied in detail.

Leonetti (2017: 907–915) argues that fronting of adverbials in examples such as (3) is an instance of resumptive preposing (Cinque 1990: 86–94). In resumptive preposing, "the fronted constituent [...] contains an anaphoric element that creates a textual connection with a discourse antecedent" (Leonetti 2017: 908). In (3), for example, *ainsi* 'in this way' refers to the preceding sentence, in which Alexandre's manner of writing is described in detail.

(3) *Il [Alexandre] écrivait avec une sorte de distraction concentrée, comme on crayonne sur le bloc du téléphone: on écoute de moins en moins et c'est le dessin qui s'impose.*
'He [Alexander] wrote with a kind of concentrated distraction, like when you doodle on a phone notepad: you listen less and less and it's the drawing which takes over.'
[...] ***Ainsi*** *écrivait Alexandre.*
'That's how Alexandre wrote' (Lahousse 2015)

Rosemeyer (2022) proposes to treat fronted *de nouveau* as an instance of resumptive preposing. He argues that in example (4), the fronted adverbial links the sentence to a previous utterance by the author.

(4) ***De nouveau,*** *c'est sans doute le mélange létal d'alcool et de froid qui aura été doublement fatal.*
'In this case, too, the deadly mixture of alcohol and cold must have proven doubly fatal.' (Rosemeyer 2022: 13)

We accept this characterization as a starting point, but argue that it does not exhaust the pragmatic work performed by fronted *de nouveau*. By fronting *de nouveau* in example (4), the author does more than link the sentence to a previous utterance, namely *La vague de froid qui frappe le Sud-Est a tué par deux fois la semaine dernière* 'The cold snap hitting the Southeast claimed two lives last week' (https://www.humanite.fr/societe/-/misere-en-quelques-jours-huit-sdf-ont-ete-victimes-des-temperatures-glaciales-en-france, accessed 1 July 2026). Rather, they foreground the repetition itself. This is the *epistemic reinforcement* function: the speaker uses fronting to strengthen their epistemic authority over the construal of the situation as recurrent.

Crucially, the insistence on the truth of the repetition leads to a specific rhetorical effect. In (4), fronting of *de nouveau* frames the explanation (*c'est sans doute le mélange létal d'alcool et de froid*) as another instantiation of an already established pattern. In this sense, the construction has an epistemic effect at two levels: it reinforces the validity of the author's inference by presenting the current explanation not as an isolated conjecture, but as the recurrence of a recognizable fatal configuration.

As another example of this effect, consider example (5) below, taken from the FRANTEXT corpus (see Section 3). The penultimate sentence, with postverbal *de nouveau*, presents the repetition at a relatively abstract level: the speaker once again invents a parallel love story. The following sentence, introduced by fronted *de nouveau*, does not merely repeat this information. It substantiates it by describing the whole recurrent experiential pattern: silent love, suffering, self-hatred. The fronted adverbial thus gives discourse prominence to the recurrence and retrospectively reinforces the validity of the preceding characterization.

(5) *J'ai un peu déprimé, c'était ridicule et je le savais. Je suis comme ça, pas la peine de m'étendre. Avec Alima, je me suis inventé de nouveau une histoire d'amour parallèle.* ***De nouveau,*** *j'ai aimé en silence, j' ai souffert, je me suis détesté.*
'I got a little depressed; it was ridiculous, and I knew it. That is how I am; no point going on about it. With Alima, I once again invented a parallel love story for myself. Once again, I loved in silence, I suffered, I hated myself.'
(*Des impatientes*, Sylvain Pattieu, 2012)

The inferential mechanism underlying epistemic reinforcement can therefore be formulated in two steps. First, utterance-initial *de nouveau* foregrounds the recurrence and presents it as a salient interpretive frame. Second, this foregrounded recurrence is used to validate a broader proposition that is at issue in the discourse. In (4), the repeated fatal configuration supports the

causal inference that the combination of alcohol and cold is responsible; in (5), the repeated affective sequence supports the speaker's preceding self-characterization as having once again invented a parallel love story. Thus, the construction appears to strengthen the truth of the repetition itself, but its rhetorical force lies in using that repetition to reinforce the truth, plausibility, or experiential validity of a larger proposition.

2.2 Epistemic access and the interactional cost of fronting

Having described the epistemic reinforcement strategy in 2.1, we can now proceed to ask ourselves in which interactional contexts such a strategy is called for. In our view, the concept of at-issueness (Koev 2018) is key to answering this question. In particular, epistemic reinforcement is necessary in contexts in which the truth of the proposition of the *de nouveau* clause is at issue. Crucially, however, this strategy may come at an interpersonal risk. It depends critically on whether the hearer is in a position to challenge the truth of the proposition at all. Consider two scenarios. In the first, the speaker fronts *de nouveau* in a context where the repeated event is publicly observable: both participants have, or could have, perceptual access to the evidence. Here, the hearer is not only in a position to evaluate the proposition, but may well have done so already. Treating such a proposition as unchallengeable common ground is therefore an interactionally risky move: the hearer can push back, and the fronting may be perceived as insistent, corrective, or even confrontational. In the second scenario, the repeated event concerns an internal state or evaluation accessible only to the speaker, such as a feeling, an attitude, or a subjective experience. In this case, the hearer simply has no independent means of verifying whether the state holds, let alone whether it has held before. The proposition is, in this sense, structurally unchallengeable, and fronting carries no comparable interpersonal cost.

This asymmetry in epistemic access is precisely what we capture with the distinction between *objective and subjective contexts*. Objective contexts are those in which the relevant state of affairs can be assessed through shared perceptual or epistemic means: rain falls visibly, a door closes audibly, a fact is verifiable (Wiebe 1994: 235). Subjective contexts are those in which the relevant state of affairs is epistemically private to the speaker: how one feels, what one finds significant, how one evaluates a situation.

Consider the minimal pairs in (6) and (7). A context such as *je suis heureux* 'I am happy' is subjective in the sense that it conveys the speaker's inner perspective (Traugott & Dasher 2002: 20). The subjectivity of the context can be derived from at least two manifest linguistic indicators: (a) the adjective *heureux*, which refers to a (speaker-internal) mental state, and (b) first-person reference. Consequently, when a hearer encounters an utterance like (6a), they have no or little independent means of verifying its truth and must simply take the speaker's word for it. The situation is different for a context such as *je suis mouillé* 'I am wet' (7). Its truth is assessable through shared sensory perception: both speaker and hearer are, or could be, in a position to observe whether the speaker is wet.

(6) a. *Je suis* ***de nouveau*** *heureux.* 'I am happy again.'
b. ***De nouveau****, je suis heureux.* 'Once again, I am happy.'

(7) a. *Je suis* ***de nouveau*** *mouillé.* 'I am wet again.'
b. ***De nouveau****, je suis mouillé.* 'Once again, I am wet.'

This difference in epistemic access determines the interactional cost of fronting, at least partially. In (6b), where the predicate describes an internal state accessible only to the speaker, the proposition is structurally unchallengeable if the speaker has not yet communicated that they are happy: the hearer cannot independently verify whether the speaker was happy before, let alone dispute the claim. Fronting here is therefore interactionally safe in the sense that the speaker reinforces a proposition the hearer is in no position to contest, and no reproachful reading arises.

In (7b), by contrast, the proposition concerns a publicly observable state of affairs. The hearer either has, or could have, independent access to the relevant evidence independently of whether the speaker has previously communicated that they are wet. Treating iterativity as unchallengeable common ground in this context is an interactionally risky move: the hearer may not have acknowledged that the speaker is wet, or may actively disagree, and fronting will then be read as insistent or reproachful.

2.3 From content-level to context-level readings

Our description of the contrast between fronted and non-fronted *de nouveau* in Section 2.2 carries a further implication: if fronting is systematically associated with subjective contexts (i.e. contexts in which the speaker's epistemic access is private and the proposition structurally unchallengeable), then fronted *de nouveau* is, in a precise sense, the more subjective of the two variants. This observation connects to a well-established trajectory in pragmatic change. Traugott (1995; 1999 *et passim*) has argued that grammaticalizing expressions tend to shift from *content-level meanings*, which pertain directly to states of affairs in the world, toward *context-level meanings*, which encode the speaker's commentary on or attitude toward those states of affairs, a process she terms subjectification. If the fronted variant of *de nouveau* has come to be associated with subjective contexts, it is therefore to be expected that this association reflects, or is the product of, a broader diachronic shift from content-level to context-level readings.

To give but one example that exemplifies the relevance of these considerations for the analysis of *de nouveau*, consider Hansen's (2018) analysis of the diachrony of Middle French *or* 'now'. *Or* originally expresses temporal uses (Hansen 2018: 134–135). Over time, however, it developed discourse-marking functions and in particular, topic shifts. Crucially for our purposes, Hansen explicitly states that this change went hand in hand with an increase in the frequency of *or*-fronting: "There is little doubt that position is relevant, given that […] increasing pragmaticalization results in *or* becoming fixed in initial position" (Hansen 2018: 136).

The parallel with *or* is instructive for the analysis of *de nouveau* in two respects. First, it suggests that the association of a lexical item with utterance-initial position need not be a syntactic accident, but may itself be the product of pragmaticalization: as an expression develops context-level functions, the left periphery becomes its preferred, and eventually its fixed, position. Second, and more directly, it provides a diachronic motivation for the synchronic pattern described in Section 2.2. If fronted *de nouveau* has developed a context-level reading through pragmaticalization, then its systematic association with subjective contexts is not merely a distributional preference but reflects an ongoing semantic-pragmatic shift: the construction is in the process of becoming a marker of epistemic reinforcement in its own right, rather than a positional variant of the adverbial. From this perspective, the corpus finding that fronting of *de nouveau* is more frequent in subjective contexts (Section 3) and the experimental finding that it triggers marked interpretations in objective contexts (Section 4) can be read not only as synchronic evidence for the epistemic reinforcement function, but also as a snapshot of a construction undergoing pragmaticalization.

2.4 Epistemic reinforcement and the Lexical Operator Thesis

If fronted *de nouveau* is developing into a marker of epistemic reinforcement, a natural question arises: how does this function relate to other, better-described realizations of the same communicative strategy? The Lexical Operator Thesis (LOT; Gutzmann et al. 2020) provides a useful theoretical comparator here, as it offers a cross-linguistically grounded account of constructions whose primary function is precisely to reinforce the truth of a contested proposition.

Under the LOT, verum is not a special case of focus but an independent use-conditional operator. Its function is to intervene in the current Question Under Discussion (Roberts 1996) by explicitly asserting the truth of a proposition in contexts where its denial is salient or epistemically at stake. Crucially, verum marking does not affect the propositional content of the utterance; it operates at the level of use conditions, signaling the speaker's commitment to the truth of a contested proposition. Gutzmann et al. (2020) argue that this operator is cross-linguistically realized through a range of prosodic and morphological strategies, including nuclear stress shift, particles, and inflectional categories.

We propose that fronting of *de nouveau* constitutes a syntactic realization of a verum-like epistemic reinforcement function. Like prosodic or morphological verum markers, fronted *de nouveau* is non-focal, does not introduce new information, and does not alter the truth conditions of the utterance. Instead, it signals the speaker's insistence on the truth of a proposition, in contexts where that proposition is or could be at issue. The parallel is not coincidental: both verum marking and fronting of *de nouveau* are interactionally costly when the addressee has independent access to the relevant evidence, and interactionally neutral when they do not. This parallel motivates treating fronted *de nouveau* as part of a broader, cross-linguistically relevant

class of epistemic reinforcement constructions, rather than as an idiosyncratic property of French word order. We return to this connection and the empirical evidence bearing on it in the General Discussion (Section 5).

2.5 Predictions

The theoretical framework developed in this section generates two testable predictions. The first concerns production: if fronting of *de nouveau* functions as an epistemic reinforcement strategy whose interactional cost depends on the distribution of epistemic access, then speakers should prefer fronting in subjective contexts, where the proposition is structurally unchallengeable, and avoid it in objective contexts, where it carries interpersonal risk. The second concerns interpretation: if listeners are sensitive to this asymmetry, then fronting in objective contexts, where reinforcement appears unwarranted, should give rise to marked, potentially negative inferences about the speaker's stance, while fronting in subjective contexts should pass largely unremarked. These predictions are formalized in (8) and tested, respectively, in the corpus study (Section 3) and the psycholinguistic experiment (Section 4).

(8) Predictions

P1 Fronted *de nouveau* should be more frequent in contexts in which evidence for the asserted state of affairs and its recurrence is asymmetrically distributed, because epistemic reinforcement is less interactionally risky when the addressee lacks independent access to the relevant evidence.

P2 When the relevant evidence is publicly accessible, fronted *de nouveau* should be perceived as more marked or negative than non-fronted *de nouveau*, because reinforcement of an independently verifiable recurrence may suggest that the addressee has failed to recognize something they should have recognized.

3 Corpus study

In order to verify the first prediction, concerning the relative frequency of fronting of *de nouveau* by subjectivity, we extracted all tokens of *de nouveau* from the collection of texts dated after 2000 from the FRANTEXT corpus (ATILF, CNRS & Université de Lorraine 2024). The FRANTEXT corpus features a strong predominance of literary texts such as novels, autobiographies, personal journals, theatre, poetry, and essays, while approximately 10% consists of scientific or technical writing. This query resulted in $n = 2852$ tokens, of which $n = 211$ tokens were sentence-initial. However, as will be described in Section 3.1, it was necessary to implement data reduction procedures to ensure true variability between fronted and non-fronted *de nouveau*. These elimination procedures resulted in a final dataset of $n = 461$ tokens, of which $n = 113$ tokens were sentence-initial.

3.1 Determining the variable context

For a variationist approach of the alternation between fronted and non-fronted *de nouveau* to succeed, it was necessary to determine the variable context, i.e. the contexts in which there is flexibility as regards the positioning of *de nouveau*. Including contexts where fronting was impossible would artificially overrepresent non-fronted tokens and bias the analysis (Labov 1972: 72). To achieve this, we carefully inspected the syntactic configurations in which *de nouveau* occurred in our data.

We began with a broad exclusion of environments in which the left periphery was already occupied by other material. In French, sentence-initial *de nouveau* can co-occur with locatives or discourse markers, as in (9).

(9) a. [*À Paris,* ***de nouveau,***]$_{LP}$ *je suis heureux.*
'In Paris, I am happy once again.'
b. [*Donc,* ***de nouveau,***]$_{LP}$ *je suis heureux.*
'So, I am happy once again.'

The exact positioning of *de nouveau* in such contexts may be subject to concerns such as the processing cost and length of constituents in the left periphery, leading to interactions that are difficult to control for in the variationist paradigm. In particular, postverbal use of *de nouveau* sounds more natural in the sentences in (9) due to the presence of other elements in the left periphery. This complexity effect escapes our generalization about the effect of subjectivity on fronting *de nouveau*, potentially obscuring the factors we aimed to study. These cases were therefore excluded to avoid conflating fronting preferences with constituent-length or processing effects.

From there, we narrowed the operational definition of fronted *de nouveau* to tokens that were strictly sentence-initial (marked in big caps), involved a finite verb, and to main clause uses. Embedded clauses or clauses following conjunctions, commas, or colons were excluded, since in cases such as (10), fronted *de nouveau* could never be sentence-initial.

(10) *à Gerberthe qui lui adressait* ***de nouveau*** *une œillade perplexe*
'to Gerberthe who again gave him a perplexed glance'
(*C'est ainsi que les hommes vivent*, Pierre Pelot, 2003)

With this definition in place, we applied a series of fine-grained restrictions to the non-fronted tokens, retaining only those that could plausibly occur in a fronted configuration. First, *de nouveau* had to be syntactically anchored to a finite verb or auxiliary in the non-fronted version or to a participle fulfilling the same syntactic role. Non-finite clauses, as in example (11), were excluded because fronting *de nouveau* is impossible in this syntactic context.

(11) […] *en analysant* ***de nouveau*** *leurs photos d'identité* […]
'while reanalyzing their ID photos' (*Le rapport chinois*, Pierre Darkanian, 2021)

We also restricted the dataset to affirmative declarative clauses, since sentence-initial *de nouveau* was unattested in negative polarity contexts such as the invented example (12). In addition, we limited the dataset to declarative clauses only, omitting interrogatives, exclamatives, and imperatives, in order to maintain functional comparability across tokens.

(12) ***De nouveau,*** *Jean n'a pas accepté.*
'Once again, Jean hasn't accepted.'

A further restriction concerned the material preceding the subject in fronted contexts. We allowed at most one adverb or prepositional phrase to intervene, provided there was a clear clause boundary (such as a full stop) before *de nouveau*. For example, (13a) could correspond to the fronted variant (13b).

(13) a. *Soudain, elle a* ***de nouveau*** *envie de hurler.*
'Suddenly, she feels like screaming again.'
(*Les Heures souterraines*, Delphine de Vigan, 2009)
b. ***De nouveau,*** *soudain, elle a envie de hurler.*
'Once again, she suddenly feels like screaming.'

By contrast, clause-internal insertions without a boundary, as in example (14), were excluded because fronting *de nouveau* is impossible in such contexts.

(14) *Perdu dans la contemplation des flèches rouges, Walter m'a* ***de nouveau*** *gentiment tiré par la manche.*
'Lost in contemplation of the red arrows, Walter once again gently pulled me by the sleeve.' (*Un homme de passage*, Serge Doubrovsky, 2011)

As a final step, we also controlled for text-level characteristics that could otherwise distort the comparison between fronted and non-fronted tokens. To avoid genre effects, we retained only non-fronted *de nouveau* tokens drawn from the same texts in which at least one instance of sentence-initial *de nouveau* occurred. This ensured that both variants were compared within equivalent stylistic and discourse contexts. In addition, the small number of tokens from poetry ($n = 8$) was removed. Poetic syntax licenses word orders unavailable in prose, which may artificially inflate fronting rates. Finally, we eliminated cases from texts whose dating was unreliable, particularly historical editions of journals, memoirs, or similar works, where the recorded date referred to the edition rather than the original text production.

In sum, the variable context was defined as environments in which *de nouveau* could occur either fronted or non-fronted without syntactic or genre-based constraints. This was achieved by

excluding tokens in occupied left peripheries, embedded or non-finite clauses, negative polarity, and non-declarative sentence types, and by matching non-fronted tokens to texts containing at least one fronted counterpart. Additional exclusions targeted poetry and texts with unreliable dating. The final dataset contained 461 tokens drawn exclusively from two genres: (short) novels (n = 390) and personal writing (n = 71). The dataset, as well as the corpus analysis presented in this section, are available for replicability at https://osf.io/et2uh/.

3.2 Operationalizing subjectivity

Having established the dataset for the corpus study, we proceeded to operationalize the distinction between subjective and objective usage contexts established in Section 2. In our description of the minimal pairs in (6) and (7), we hinted at the fact that subjectivity is not a criterion that can be defined on the basis of one contextual parameter alone. Rather, different contextual parameters such as predicate type and personal morphology, but also tense, mood and text genre can be seen as contributing to the subjectivity-objectivity distinction. From this perspective, subjectivity can be defined as a latent construct, i.e. a concept that is not directly observable, but rather inferable from linguistic choices in usage contexts. Subjectivity can thus be approached by analyzing associations between the aforementioned contextual parameters in sentences involving use of *de nouveau*. These parameters are summarized in **Table 1**.

Variable	Levels	Prediction	Motivation
PredicateType	Objective (n = 380)	– subjective	The truth of subjective predicates such as 'to love' cannot be evaluated objectively
	Subjective (n = 81)	+ subjective	
Person	2/3 (n = 348)	– subjective	First person utterances are more likely to express propositions whose truth cannot be evaluated objectively
	1 (n = 113)	+ subjective	
Tense	PresentPerfect (n = 69)	+ subjective	Past events are frequently observable / known to all speakers and can therefore be evaluated objectively
	Present/Future (n = 130)	– subjective	
	Pluperfect (n = 30)	– subjective	
	PerfectivePast (n = 144)	+ subjective	
	ImperfectivePast (n = 88)	– subjective	

(Contd.)

Variable	Levels	Prediction	Motivation
Mood	Indicative (n = 450)	– subjective	Speaker stance cannot be evaluated objectively
	Conditional (n = 11)	+ subjective	
Genre	Novels (n = 390)	– subjective	Personal writing may be more likely to involve expression of speaker stance[2]
	Personal writing (n = 71)	+ subjective	

Table 1: Parameters and predictions for the Latent Class Analysis. Coding of objective and subjective predicate types was implemented manually on a case-by-case basis. Please refer to the appendix (**Table 5**) for an overview of these coding decisions. Present and future tense were collapsed on the basis of the predictions and the small number of tokens inflected for future tense (n = 14). Note that the indicators differ in their theoretical proximity to subjectivity. Predicate type and person are relatively direct indicators of epistemic access, whereas we assumed tense and genre function to be weaker probabilistic cues.

Latent Class Analysis (LCA) is the most suitable statistical framework for modeling unobservable constructs such as subjectivity. As a variant of structural equation modeling tailored to categorical data, LCA enables the identification of unobserved subgroups or categories within a population (here, variation in subjectivity) by examining their associations with a set of observed variables, in this case, the subjectivity-triggering features listed in **Table 1** (Lazarsfeld 1950; Lazarsfeld & Henry 1969; Hagenaars & McCutcheon 2002; Nylund-Gibson & Choi 2018). This method computes the probability that each individual in the dataset belongs to a specific latent class, based on indicators relevant to that class. A key assumption of the model is local independence: once the latent class variable is controlled for, correlations between indicators are assumed to vanish, as any association is attributed to membership in the same latent class (Nylund-Gibson & Choi 2018: 442). For recent applications of this method in linguistics, see Rosemeyer (2024a; 2025), Groß & Rosemeyer (2026), and Gipper (2026).

The present study adopts the LCA-based approach to identifying situated meanings in corpus data using the published R code in Rosemeyer (2024b). Two contextual profiles of fronted and non-fronted *de nouveau* were distinguished using the variables outlined in **Table 1**, implemented via the poLCA package (Linzer & Lewis 2011) in R (R Core Team 2024, version version 4.4.1). The analysis generated posterior probabilities of class membership for each token, and class

[2] Genre functions as a probabilistic contextual proxy rather than a deterministic indicator of subjectivity: subjectivity-marking is not confined to a single genre but varies in density across genres, with narrative simply offering a higher concentration of prototypical instances (cf. Wiebe 1994: 238). While we assume that personal writing is on average more likely to encode speaker-oriented epistemic access, individual tokens from novels may of course also instantiate subjective contexts. Moreover, as the dataset contains only two genres, the genre variable captures a relative contrast between personal writing and novels rather than an absolute classification.

interpretation was guided by the average probability of each contextual predictor within a given class. Models with up to five classes were tested without including additional covariates. Following the recommendations in Linzer & Lewis (2011: 6–7), a two-class solution—associated with the lowest Bayesian information criterion (BIC) value—was selected. For descriptive purposes, the discrete class assignments were employed to illustrate class composition.

To interpret the outcomes of the LCA, it is useful to examine the probabilities of membership in each of the two latent classes (LCs), as determined by the design-related and contextual variables outlined in **Table 1**. **Figure 1** presents these probabilities, showing how tokens in

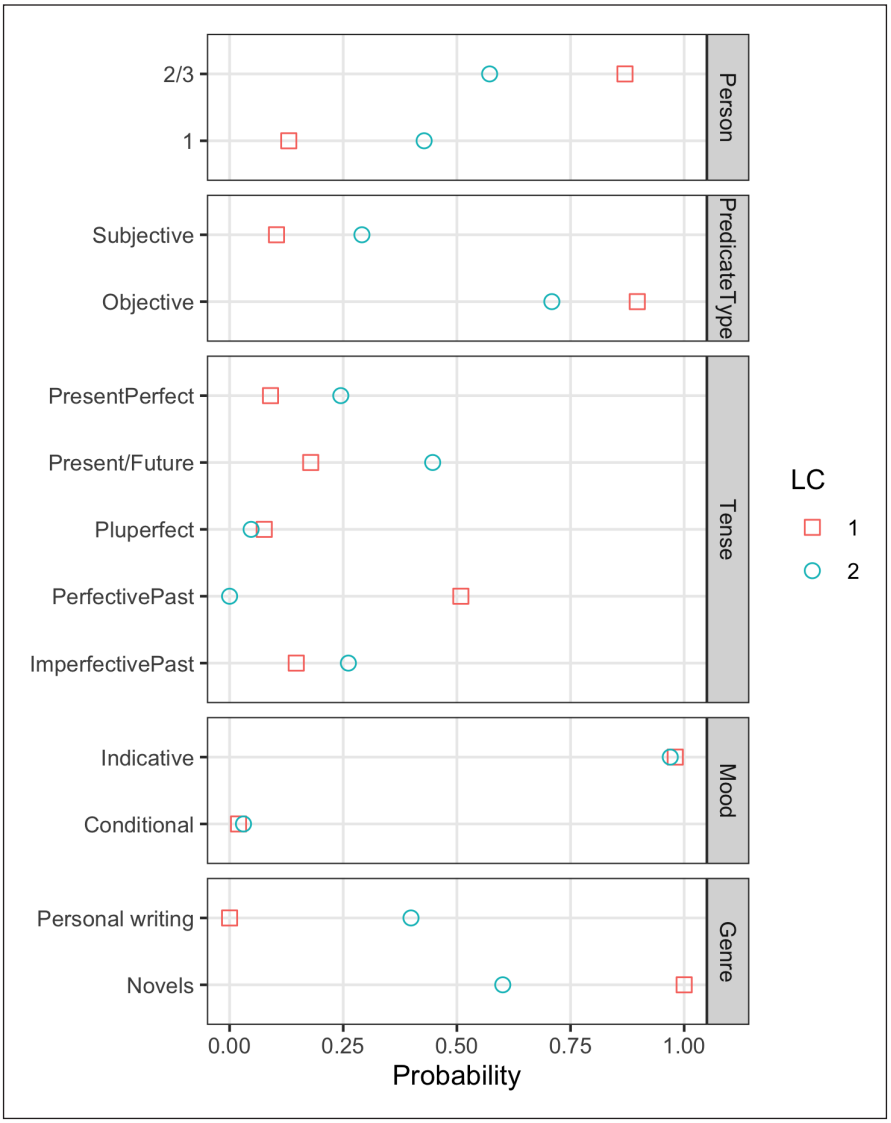

Figure 1: Probability of assignment of *de nouveau* tokens to one of the two latent classes, by contextual features.

the dataset are allocated to the respective LCs according to the indicators. This representation facilitates an interpretation of the two LCs within our population of *de nouveau* tokens in terms of their relative subjectivity.

With $n = 306$ cases, a greater number of cases of *de nouveau* was assigned to LC 1, whereas only $n = 155$ cases were assigned to LC 2. We interpret the results from the LCA in terms of the distinction between subjective and objective contexts, where LC 1 is more likely to represent objective contexts and LC 2 is more likely to represent subjective contexts. With the exception of mood, the parameters listed in **Table 1** are clearly relevant to the distinction of the two latent classes in our data. LC 1 was typically assigned to sentences in third person involving objective predicates and perfective past in novels. For instance, example (15) has the maximum probability (=1) of assignment to LC 1. In contrast, LC 2 tokens of *de nouveau* typically involve first person morphology, subjective predicates, present perfect, present or future tense, and occur in personal writing. As a prototypical example for LC 2, consider (16), which has the maximum probability (=1) of assignment of LC 2. Whereas in (15) the repetition is clearly evident for all discourse participants (the female character is likely aware of the fact that she looked at the protagonist before), in (16) it is only accessible to the protagonist, whose thoughts are reported.

(15) *Au bout d'un moment, elle me regarda* ***de nouveau***
'After a while, she looked at me again.'
(*Les Bienveillantes*, Jonathan Littell, 2006)

(16) *Je voudrais entendre* ***de nouveau*** *le bruit de ses pas dans l'escalier.*
'I would like to hear the sound of his footsteps on the stairs again.'
(*Jeanne et les siens*, Michel Winock, 2003)

To summarize, LC 2 captures the type of subjective contexts discussed in Section 2: contexts in which the hearer lacks independent access to the truth of the repeated event and must rely on the speaker's internal perspective, whereas LC 1 captures objective contexts.

3.3 Subjectivity and fronting

The relationship between subjectivity, epistemic asymmetry and fronting of *de nouveau* is easily visible in examples such as (17–19), drawn from our dataset. In (17), *avoir quelqu'un à soi* describes an intimate, emotionally private state of affairs that is epistemically accessible only to the narrator. The addressee and the reader are in no position to challenge or verify this evaluation. Fronting of *de nouveau* in this context is therefore interactionally safe: the speaker reinforces a proposition that the addressee cannot contest, and accordingly no reproachful or corrective reading arises. The effect is one of affective intensification rather than epistemic imposition.[3]

[3] Camus (1992: 21) presents a similar description when proposing that "*de nouveau* implique en tout état de cause le point de vue d'un sujet sur la répétition". He attributes this perspectival effect to the contrast between de nouveau

(17) *Ils t'avaient libéré. Nous partagions ma chambre. Toi et moi.* ***De nouveau****, je t'avais à moi.*
'They had set you free. We shared my room. You and I. Once again, I had you to myself.'
(*La Fente d'eau*, Mourier-Casile, 2011)

In (18), by contrast, clearing one's throat is a publicly observable physical action to which all discourse participants have equal perceptual access. With the relevant state of affairs symmetrically accessible, *de nouveau* appears in-situ and the sentence reads as a neutral narrative description. Together, (17) and (18) are in line with P1: fronting tends to occur where epistemic access is asymmetric, while in-situ placement is the default in objective contexts.

(18) *Il se racla* ***de nouveau*** *bruyamment la gorge; l'autre se mit à tousser à son tour.*
'He cleared his throat noisily once again; the other started coughing in turn.'
(*C'est ainsi que les hommes vivent*, Pelot, 2003)

The examples also offer a preliminary illustration of P2, which we will test experimentally in Section 4. P2 predicts that when the relevant evidence is publicly accessible, fronted *de nouveau* should be perceived as more marked or negative than non-fronted *de nouveau*, because reinforcement of an independently verifiable recurrence may suggest that the addressee has failed to recognize something they should have recognized. Like (18), example (19) involves an objective context: the narrator has been trying to reason with his father throughout the passage, making the iterativity fully salient to both parties. Because the father is the co-present addressee of these reasoning attempts and consequently has independent access to the same shared situation, the use of fronted *de nouveau* presents the iterativity as something he should already have acknowledged, producing exactly the corrective force that P2 predicts will arise when epistemic access is symmetric.

(19) *Un soir, devant le Grand Théâtre de Bordeaux, je me mets à courir pour le semer. Et puis j'ai pitié de lui.* ***De nouveau****, je tente de le raisonner.*
'One evening, in front of the Grand Théâtre de Bordeaux, I started running to shake him off. And then I felt sorry for him. Once again, I tried to reason with him.'
(*Un pedigree*, Patrick Modiano, 2005)

While these three examples are necessarily illustrative rather than systematic, they motivate the quantitative analyses in the remainder of this section and in Section 4, which test our two predictions respectively across the full dataset. We turn first to test the prediction that fronting of *de nouveau* is relatively more likely in subjective contexts than in objective contexts (P1). We applied linear mixed-effects regression modeling using the *lme4* and *lmerTest* packages in R

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and à nouveau, rather than to fronting. However, one of his own examples involves a fronted token: *Karl s'était arrêté, il fouilla, retrouva l'animal, le lâcha et, de nouveau, il disparut dans un baiser frisant* 'Karl had stopped; he rummaged around, found the animal again, released it, and once more it vanished into a fleeting kiss'. We take this as converging evidence that fronting gives discourse prominence to a subject-bound construal of recurrence.

(Bates et al. 2015; Kuznetsova et al. 2017) to calculate the effect of four predictor variables on the probability for a token to be assigned to LC 2, representing subjective contexts (dependent variable LC 2). Using the posterior probability of LC 2 membership as the dependent variable preserves the graded nature of subjectivity as estimated by the LCA, rather than forcing a discrete classification. This specification follows the approach described in Rosemeyer (2024a) and reflects our theoretical interest in the association between fronting and subjective contexts rather than in the prediction of fronting per se: the model asks whether fronted tokens are more subjective than non-fronted tokens, not whether subjective contexts predict the choice to front.

The predictor variables are described in **Table 2**. To test our prediction, we included the predictor variable DNPos, which operationalizes fronting vs. non-fronting of *de nouveau*. To increase reliability of the results, we also included three control variables: Adverbial to control for whether or not another adverbial was present in the sentence, SentenceLength to control for possible processing effects and Year to control for a possible diachronic trend. Given that we sampled only a random number of verb lemmas on the basis of their occurrence with *de nouveau*, we included verb lemma as a random effect. Including random effects has been shown to substantially increase model quality (see Gries 2015).

Variable	**Variable type**	**Description**	**Levels**
LC 2	Dependent	Posterior probability of assignment of a token to LC 2 (dependent variable)	Numerical variable ranging between 0 (minimal probability) and 1 (maximal probability)
DNPos	Predictor	Fronting or non-fronting of *de nouveau* (DN)	–Non-fronted (reference level) –Fronted
Adverbial	Predictor	Presence of an adverbial	–No adverbial (reference level) –Adverbial
SentenceLength	Predictor	Sentence length in words	Numerical variable ranging between 5 and 47
Year	Predictor	Year of publication of the text	Numerical variable ranging between 2001 and 2023
Lemma	Random	Verb lemma	239 distinct verb lemmas (cf. also **Table 5** in the appendix)

Table 2: Variables used in the mixed-effects linear regression model.

Table 3 summarizes the results from the linear mixed-effects model. The model explained 21% of the variance in LC 2 assignment probability via fixed effects (marginal $R^2 = 0.21$), and 35% when including random effects (conditional $R^2 = 0.35$).

Fixed effects	**Level**	**Estimate (β)**	**Std. Error**	**t-value**	**p-value**
Intercept		–10.18	5.05	–2.02	.0443*
DNPos	Non-fronted	(reference level)			
	Fronted	0.08	0.04	2.02	.0436*
Adverbial	No adverbial	(reference level)			
	Adverbial	0.00	0.04	0.10	.9189
SentenceLength		0.00	0.00	1.21	.2281
Year		0.01	0.00	2.08	.0385*
Random effects					
σ^2	.11				
τ_{00}	$.02_{Lemma}$				
* p < .05, ** p < .01, *** p < .001					

Table 3: Fixed effects estimates from linear mixed-effects model predicting the probability of assignment to LC 2.

While no significant effect was found for the control variables Adverbial and SentenceLength, both the effect of DNPos and Year were significant at $p<.05$*. As predicted, fronting of *de nouveau* significantly increased the likelihood for a token to be assigned to LC 2, representing subjective contexts. We visualize this effect in **Figure 2**. The effect of fronting is modest in size, which is expected given that subjectivity is modeled as a multifactorial latent construct rather than as a deterministic property of any single constructional choice.

Finally, the model predicted assignment to LC 2 to increase over the 22-year time span covered by our dataset. While the specific reasons for this change need to be explored in more detail, note that the directionality of the change would seem to be compatible with the hypothesis of an ongoing pragmaticalization of *de nouveau* to context-level readings.

To summarize, the corpus analysis shows that fronting of *de nouveau* is systematically associated with subjective contexts, characterized by asymmetric access to evidence between speaker and addressee. This distributional pattern supports Prediction 1, according to which fronting is relatively more likely in contexts where the proposition cannot be independently verified by the addressee. Taken together, these findings suggest that fronting is not a purely syntactic option, but a pragmatically constrained choice sensitive to epistemic asymmetries in discourse.

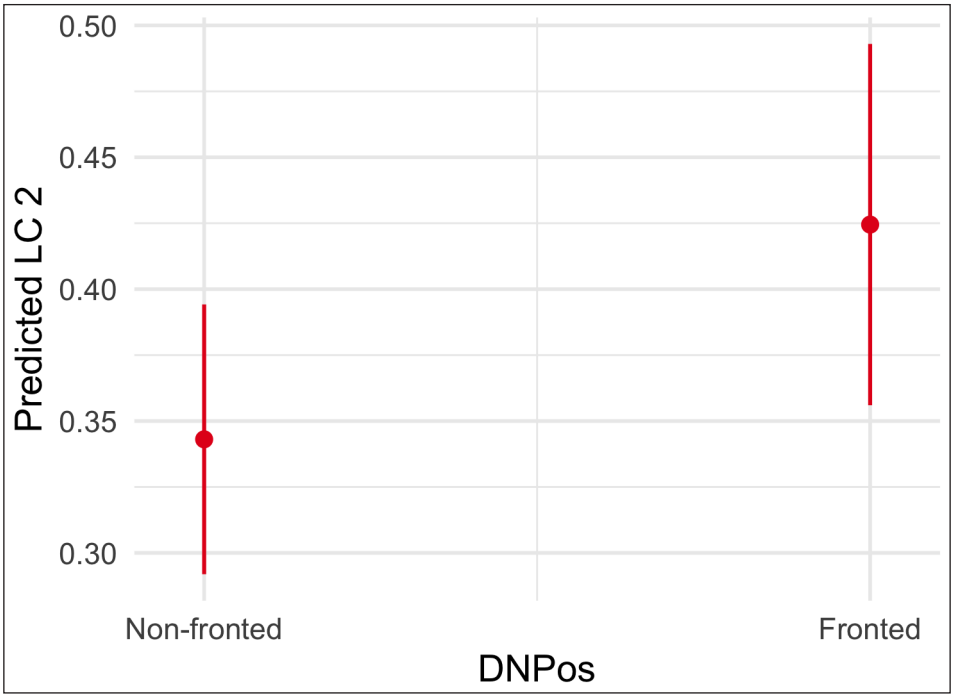

Figure 2: Predicted probability of LC 2 assignment by fronting of *de nouveau*. Plot was generated using the sjPlot package (Lüdecke 2018).

4 Experiment

Whereas the corpus analysis was carried out to test our first prediction, suggesting that fronting of *de nouveau* is relatively more likely in subjective contexts than in objective contexts, the experimental part of the present study was designed to test our second prediction: fronting of *de nouveau* was assumed to be more likely to lead to a negative connotation in objective contexts than in subjective contexts, explaining why this construction occurred less frequently in pragmatically risky objective contexts. Following a 2 × 2 within-subjects design, French native speakers were asked to provide judgments on sentences including (i) predicates differing in predicate-based epistemic accessibility, operationalized as subjective versus objective traits and (ii) *de nouveau* presented either in fronted or in non-fronted position. If our second prediction holds true, fronting should lead to more negative interpretations of the stimuli with objective predicates, whereas this effect should be reduced for subjective predicates.

4.1 Pre-study

Prior to the main study, a pre-study was conducted to match items from the objective and subjective conditions on their average valence while ensuring sufficient contrast in their degree of subjectivity. 26 potentially objective and 21 potentially subjective items that did not exhibit

strong positive or negative valence (e.g., *habillé* – dressed, *stoïque* – stoic) were initially pre-selected. In addition, three reference items (*triste* – sad, *joyeux* – happy, *furieux* – furious) were included to provide positive and negative baselines for valence judgments.

Pre-selected items were subsequently evaluated by 25 native French speakers (age 18 to 39, $M = 28.88$ years, $SD = 5.96$; 16 female, 9 male) with respect to both valence and objectivity. For valence, participants judged the extent to which a state could be considered positive or negative for a person. The valence rating scale, ranging from 1 (very positive) to 5 (very negative), followed the valence scale of the Self-Assessment Manikin (SAM; see **Figure 3**) as originally introduced by Bradley & Lang (1994). To assess objectivity, participants were instructed to evaluate for each pre-selected item how far external observers would be able to assess the respective states of a person on a scale from 1 (impossible to assess) to 5 (very easy to assess). The objectivity rating scale additionally included an option to indicate that the expression is not sensible.

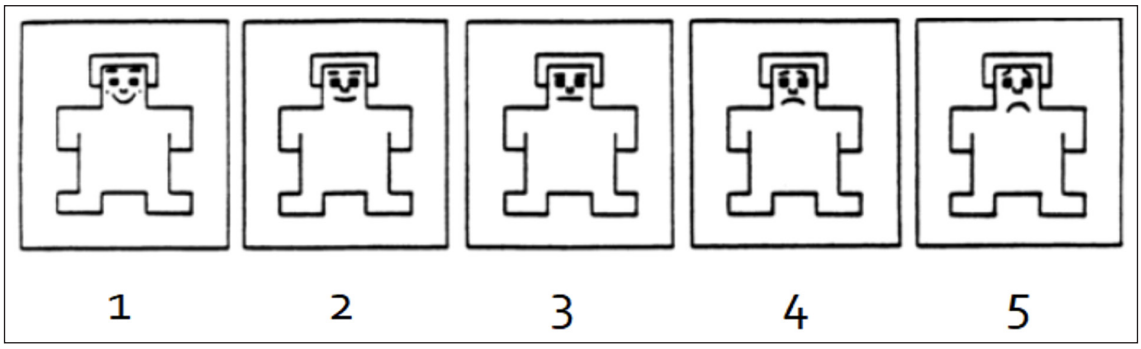

Figure 3: Valence rating scale used in the pre-study, based on Bradley & Lang's (1994) Self-Assessment Manikin (SAM).

The survey was programmed on PsyToolkit (Stoet 2010; 2017) and distributed via *Prolific*. Based on these judgments, 14 items were selected for each condition (subjective vs. objective) of the Main Experiment, resulting in 28 items overall. None of the selected items were judged as not sensible by more than one participant. The two sets of items were on average comparable in valence ratings (objective mean = 2.75, SD = 0.71; subjective mean = 2.83, SD = 1.03) but differed in their mean objectivity ratings (objective mean = 4.55, SD = 0.22; subjective mean = 2.97, SD = 0.33; see **Figure 4**).

Note that whereas items' objectivity ratings differed between conditions, objective items were frequently judged as mid-scale items, as the internal states they described could still be inferred by external observers to some extent through facial expressions. An overview of all selected items and their rating properties is provided in the appendix (**Table 6**).

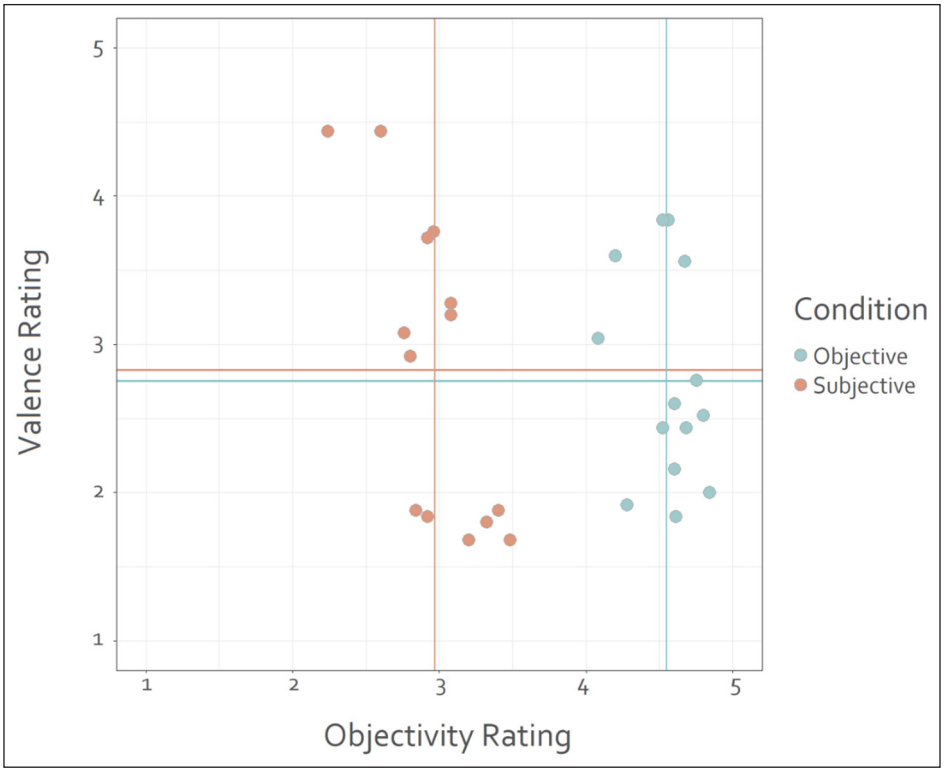

Figure 4: Rating properties of items selected for the main experiment. Horizontal and vertical lines correspond to the mean valence (horizontal) and objectivity (vertical) ratings for selected objective (teal) and subjective (salmon) items.

4.2 Main experiment

4.2.1 Participants

Following recommendations for 2 × 2 within-subjects designs by Brysbaert (2019), 120 native French speakers (29.18 years, SD = 7.07, range 18 to 45 years; 50 female, 69 male, 1 gender not reported) were recruited via *Prolific*. A pre-screening setting on *Prolific* was selected to ensure that none of the participants from the Main Experiment had previously taken part in the pre-study. In line with a pre-registered control procedure, 2 participants were excluded from the analysis, as they judged more than one out of four control items (2 positive control items, 2 negative control items) above or below the respective mid-scale value. The final sample thus consisted of 118 participants (age M = 29.14 years, SD = 6.97; 49 female, 68 male, 1 gender not reported), all currently residing in France. None of the participants reported language disorders and all participants had normal or corrected-to-normal vision and hearing. Participants were compensated at a rate of £9 per hour via *Prolific*. The study, including the sample size, was pre-registered at https://osf.io/et2uh/. Full experimental data and results are also available under this link.

4.2.2 Procedure

Preceding the Main Experiment, participants read the digital information sheet, provided informed consent, and completed a demographic questionnaire. The survey and the subsequent experiment were programmed on *PsyToolkit*.

For each trial of the experiment, participants were presented with a fixation cross at the centre of the screen for 500 ms, followed by a screen showing one stimulus sentence at a time, with the question *Le locuteur veut-il dire cela de façon positive ou négative?* (Does the speaker mean this in a positive or a negative way?) and the rating scale below the question. As in the pre-study, the rating scale corresponded to the Self-Assessment Manikin (SAM; Bradley & Lang 1994); in addition, the endpoints of the scale were labeled *très positive* and *très négative* (see **Figure 3**). Participants were instructed to respond within five seconds by clicking on one of the five figures, which corresponded to an underlying scale from 1 (very positive) to 5 (very negative) in the output data. Following each response, an "x" was displayed at the selected scale section for 300 ms, followed by the fixation cross of the next trial. If no response was made, the next trial's fixation cross was presented after 5 s. All participants completed the task on a desktop computer or laptop; participation via other devices (e.g., smartphones) was not permitted.

To implement a within-subjects manipulation of the variable *Position* (of *de nouveau*) without repeating items for the same participant, two stimulus lists were created and items were rotated across these lists. Consequently, all subjective and objective items appeared in sentences with and without fronting of *de nouveau*. For instance, the item *stoïque* was presented as *De nouveau, je suis stoïque* in the fronted condition, and as *Je suis de nouveau stoïque* in the non-fronted condition. All stimulus sentences followed the same structure (*je suis* + item, with fronted or non-fronted *de nouveau*) to make sentences comparable between conditions of the main experiment, and to allow for maximal subjectivity in the subjective condition that involved unobservable traits.

Each list additionally contained an equal number of filler items, including the four control items (see **Table 7** in the appendix for an overview of all stimuli including filler and control items). Participants were randomly assigned to one of the two lists, and trials were presented in random order.

After the experiment, participants were asked about the suspected purpose of the study and any problems encountered during the experiment. The experimental setup is illustrated in **Figure 5**.

4.2.3 Results

Data were analyzed in R (R Core Team 2024, version 4.4.1). After excluding two participants based on the pre-registered outlier procedure (see Section 4.2.1.), rating data were visualized and subsequently analyzed in a linear mixed-effects model.

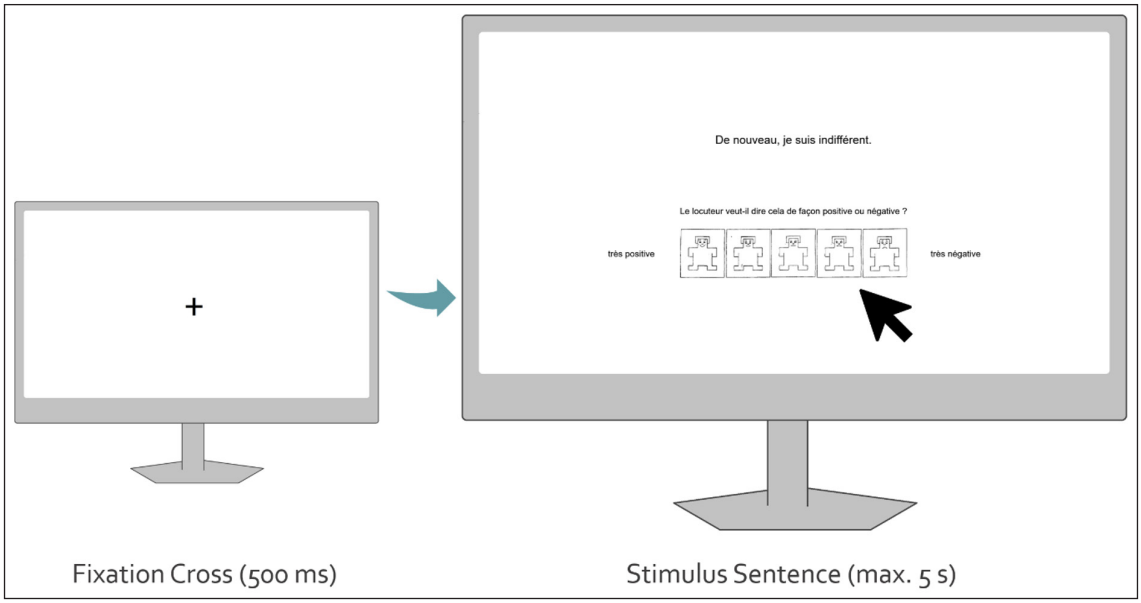

Figure 5: Experimental setup of the main experiment.

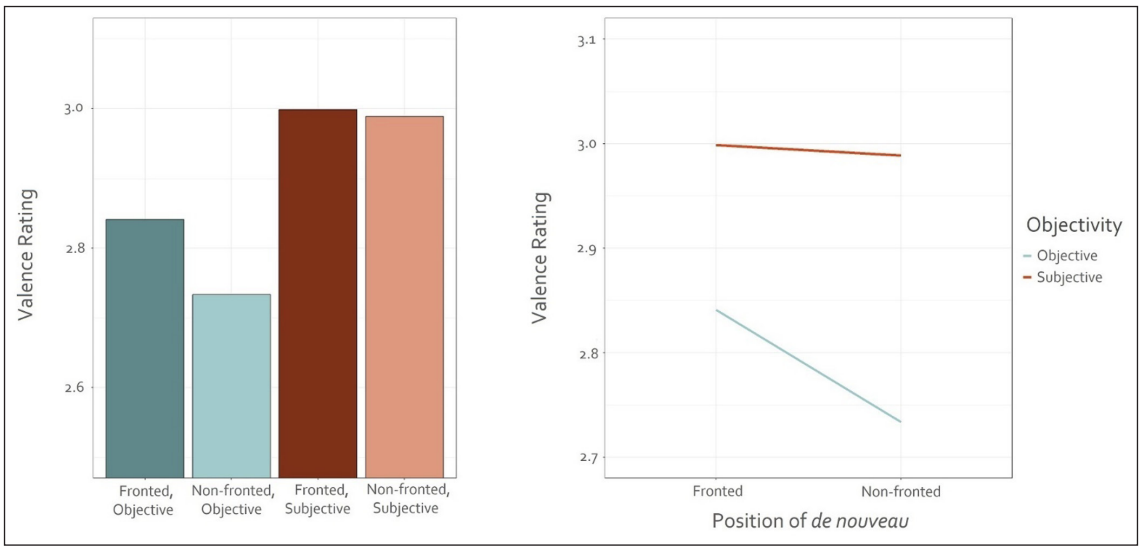

Figure 6: Valence ratings for subjective (red) and objective (green) items in the main experiment.

A total of 2.06% of trials were excluded, as they were not responded to within the five-second window. Visual inspection of the graphs (see **Figure 6**) suggested that, consistent with the prediction, fronting of *de nouveau* elicited more negative interpretations, with a significantly more pronounced effect for objective items.

To test the significance of this descriptive finding, a linear mixed-effects model was implemented using the *lme4* package (Bates et al. 2015). All categorical predictor variables were sum-to-zero coded. To balance type I and type II error risks, a balance between a data-driven and a hypothesis-driven approach to model selection was sought (e.g., Cunnings 2012; Barr et al. 2013; Matuschek et al. 2017). Accordingly, the best-fitting random effects structure was selected first by establishing an intercept only model with the maximal random structure justified by the design. This initial model was subsequently optimized through the *step* function (lmerTest package; Kuznetsova et al. 2017). Finally, the fixed effects *Objectivity* and *Position* (of *de nouveau*), including their interaction, were added to directly assess the prediction. The resulting best-fitting model was:

*Valence Rating ~ Objectivity * Position + (Position | Participant) + (1 | Item)*

Visual inspection of the model's residual plot did not indicate a violation of the homoscedasticity assumption. P-values were obtained through the *lmerTest* package, whereas random effects estimates were calculated using the *get_variance* function (insight package; Lüdecke et al. 2019). Full model results are reported in **Table 4**.

Fixed Effects	**Estimate (β)**	**Std. Error**	**t-value**	**p-value**
Intercept	2.89	.15	19.63	**<.001*****
Objectivity	–.11	.15	–.73	.474
Position	.03	.01	2.17	**.032***
Objectivity: Position	.02	.01	2.09	**.037***
Random Effects				
σ^2	.63			
τ_{00}	$.02_{Participant}$			
	$.60_{Item}$			
τ_{11}	$.01_{Participant.Position}$			
ρ_{01}	$-.18_{Participant}$			
* p < .05, ** p < .01, *** p < .001				

Table 4: Results table of the main experiment.

Items were rated as significantly more negative when they were presented in a sentence in which *de nouveau* occurred in sentence-initial position, as indicated by a main effect of *Position* ($\beta = .03$, $p = .032$). Crucially, and in line with the prediction, a significant interaction between *Objectivity* and *Position* ($\beta = .02$, $p = .037$) confirmed that this tendency was significantly more pronounced for objective than for subjective items. The effect sizes are small, but they are theoretically informative because the manipulation involved a minimal word-order contrast within otherwise highly controlled stimuli.

None of the participants reported any problems completing the experiment. When asked about the presumed purpose of the study, most participants either reiterated the instructions, referred to a general role of emotions, or suggested that individual differences could influence how specific traits of a person are perceived. Only two participants mentioned a possible role of sentence structure, and two additional participants pointed to a potential influence of adverbials. Moreover, only two out of the 118 participants in the final sample explicitly noted the repeated exposure to *de nouveau*.

4.2.4 Discussion

The results of the Main Experiment provide clear support for Prediction 2. Fronting of *de nouveau* led to more negative valence ratings overall, and crucially, this effect was significantly stronger in objective contexts than in subjective contexts. Thus, when iterativity is publicly observable and epistemic access is symmetric between speaker and addressee, fronting is perceived as pragmatically marked.

This interaction suggests that listeners are sensitive to the epistemic appropriateness of fronting. In subjective contexts, where the addressee lacks independent access to evidence for the proposition, fronting does not substantially affect perceived speaker stance. This is consistent with the theoretical model developed in Section 2: in subjective contexts, the reinforcement move is structurally unchallengeable, and fronting therefore produces no additional pragmatic cost that listeners would register as negativity. The valence task is sensitive to the mismatch between reinforcement and epistemic access, not to reinforcement per se. By contrast, in objective contexts, fronting is interpreted as insistence on a proposition that the addressee could in principle verify independently, which gives rise to corrective or mildly reproachful interpretations.

Importantly, these results do not imply that fronting of *de nouveau* encodes negative meaning. Rather, the observed negativity arises as a pragmatic inference that depends on contextual factors, in particular the distribution of epistemic access between speaker and addressee. In the experiment, this distribution was operationalized through predicate-based epistemic accessibility within a minimal sentence frame: subjective predicates restrict independent access to the relevant state, whereas objective predicates make such access more readily available. The experiment thus shows that perceived valence is sensitive to the epistemic appropriateness of fronting,

supporting the view that fronting functions as an interactionally sensitive strategy rather than a marker with fixed affective content. Note that the valence task provides an indirect diagnostic for epistemic reinforcement effects; it measures perceived negativity as a downstream consequence of the mismatch between fronting and epistemic access, rather than directly measuring epistemic authority or stance.

5 General discussion and conclusions

This paper set out to investigate the pragmatic function of fronting the iterative adverbial *de nouveau* in French. Combining a corpus-based analysis with a perception experiment, we argued that fronting of *de nouveau* is not straightforwardly reducible to information-structural requirements such as focus or topic, but functions as a strategy of epistemic reinforcement that is sensitive to asymmetries in access to evidence between speaker and addressee.

The corpus study showed that fronted *de nouveau* is significantly more frequent in subjective contexts, where the addressee lacks independent evidence for the truth of the proposition. This finding supports our Prediction 1 and indicates that speakers preferentially use fronting in interactionally safe environments, that is, contexts in which reinforcing the truth of the proposition does not challenge what the addressee can reasonably be expected to know. By contrast, fronting is comparatively rare in objective contexts, where the event described by the proposition is publicly observable and epistemic access is symmetric.

The perception experiment complements these production data by showing how such distributional differences are reflected in interpretation. While fronting had little effect on perceived speaker stance with subjective predicates, it led to significantly more negative interpretations with objective predicates, confirming our Prediction 2. Crucially, this interaction demonstrates that the social meaning of fronting is context-dependent; fronting is not inherently negative, but gives rise to corrective or reproachful inferences when used in contexts where epistemic reinforcement appears unwarranted. The present experiment deliberately used a minimal sentence frame in order to isolate the contribution of predicate-based epistemic accessibility to the interpretation of fronted *de nouveau*. An interesting direction for future work would be to extend this design to richer discourse contexts in which prior mention, common-ground status, and addressee uptake are manipulated directly.

Taken together, the corpus and experimental findings support the view that fronting of *de nouveau* serves to reinforce the truth of a proposition rather than to introduce new information. In subjective contexts, where the addressee cannot independently verify the repeated event, such reinforcement is expected. In objective contexts, however, the same strategy implicitly positions the speaker as epistemically authoritative and the addressee as inattentive or insufficiently informed, which explains both the avoidance of fronting in production and its negative interpretation in perception.

The present findings also allow us to situate fronted *de nouveau* more precisely within the framework of the Lexical Operator Thesis (LOT; Gutzmann et al. 2020). Gutzmann et al. argue that verum is best analyzed not as focus on a covert predicate, but as a use-conditional operator that intervenes in the Question Under Discussion in contexts where the truth of the current proposition is at stake. Crucially for our purposes, this decoupling of verum from focus immediately raises the question of why, in languages like German or English, the same formal strategy (focus accent) is used for both ordinary focus and verum marking, and whether this reflects a deeper conceptual connection between the two rather than mere homonymy (Gutzmann et al. 2020: 43). Our data on fronted *de nouveau* suggest that this question extends beyond the prosodic and morphological domains their paper addresses. In French, left-peripheral fronting is the canonical syntactic locus for focus-related operations such as contrastive focus (20a) and cleft constructions (20b) (Stark 2002: 305–306):

(20) a. *BLEU je veux.*
'I want BLUE.'
b. *C'est la NUIT que Pierre travaille.*
'It is at NIGHT that Pierre works.'

The present study suggests that the same position has developed a verum-like epistemic reinforcement function. This parallel with the German and English pattern suggests that the conceptual affinity between focus and verum may systematically favor the recruitment of focus-marking strategies for verum expression across different grammatical domains. In this respect, the present study provides converging evidence for the kind of focus-verum connection that Gutzmann et al. identify as a key open question for future research.

Moreover, the findings invite cautious comparison with related constructions in other languages. Consider example (21), taken from the English subtitles of the TV series *Monk* (accessed via https://www.sketchengine.eu/opensubtitles-parallel-corpora/, 12 August 2025). The private investigator Adrian Monk has just accused Dereck Philby of murder. In Turn 1, Philby asserts that Monk cannot prove the woman was pregnant (*p*). Monk's response in Turn 2 ignores this assertion entirely, signaling that he has not accepted *p* as common ground. Philby's fronted 'again' in Turn 3 then presents *p* as a recoverable discourse antecedent that Monk should already have registered, but crucially, *p* has not been accepted by Monk. As in the second reading of example (2b), fronted 'again' here does not signal genuine shared knowledge but rather insists on iterativity that the addressee has failed to acknowledge, giving rise to the reproachful, corrective edge characteristic of the construction.

(21) 01 Philby: [*Unfortunately, you can't prove that, Mr. Monk*]$_p$. *Her body's already been cremated.*

02 Monk: *What did she do, threaten to tell your wife? You would have lost everything your new job, family…*
03 Philby: ***Again**, impossible to prove. I think you're failing this course, Mr. Monk.*
(https://www.sketchengine.eu/opensubtitles-parallel-corpora/, 12 August 2025)

While examples such as (21) suggest that fronted uses of iterative adverbials may also give rise to corrective or counterexpectational readings in other languages, systematic evidence for such effects across languages is still lacking. Rather than assuming uniform pragmatic behavior, a promising direction for future research is to investigate whether and to what extent epistemic reinforcement effects vary across languages. In particular, cross-linguistic differences in word order flexibility may play a role: If fronting is a relatively marked option, as in French, its pragmatic effects may be stronger than in languages with more flexible constituent order, such as German. Extending the present mixed-methods approach to such cases would allow for a more fine-grained understanding of how grammatical variability shapes the strength and conventionalization of epistemic reinforcement.

Finally, the analysis also bears on discussions of pragmaticalization in the left periphery. The association of fronted *de nouveau* with context-level readings and epistemic reinforcement is compatible with accounts that view left-peripheral positions as loci for the development of pragmatic markers (Beeching & Detges 2014; Dufter & de Toledo 2014; Haselow 2015). The observed diachronic increase in subjective uses further suggests that fronting of *de nouveau* may be undergoing an ongoing shift toward more discourse-oriented functions, although this hypothesis requires further diachronic investigation. More broadly, if this diachronic trajectory can be confirmed, it would shed light on the open question raised by Gutzmann et al. (2020): the recruitment of focus-marking strategies for verum expression may itself be the product of pragmaticalization: constructions that originate in focus-related left-peripheral positions gradually develop use-conditional, verum-like meanings as they become associated with increasingly subjective, speaker-oriented contexts.

In sum, this study shows that fronting of *de nouveau* in French is best understood as an interactionally sensitive strategy for reinforcing the truth of a proposition. By integrating corpus and experimental evidence, it highlights how grammatical form, epistemic access, and social meaning interact in shaping both speakers' choices and listeners' interpretations.

Appendix

Lemma	English	Objective	Subjective	Total	Coding
être	to be	40	3	43	Both
regarder	to look/watch	27	0	27	Objective
avoir	to have	10	7	17	Both
faire	to do/make	10	4	14	Both
sentir	to smell/feel	0	9	9	Subjective
lever	to raise/lift	7	1	8	Both
entendre	to hear/mean	0	7	7	Subjective
sourire	to smile	7	0	7	Objective
trouver	to find	6	1	7	Both
écrire	to write	7	0	7	Objective
tourner	to turn/film/go wrong	7	0	7	Objective
frapper	to hit/strike	5	0	5	Objective
prendre	to take	4	1	5	Both
saluer	to greet	5	0	5	Objective
neiger	to snow	4	0	4	Objective
poser	to put/set/pose	3	1	4	Both
retrouver	to find/meet again	4	0	4	Objective
rire	to laugh	4	0	4	Objective
songer	to think/ponder	0	4	4	Subjective
sonner	to ring	4	0	4	Objective
tendre	to stretch/extend	4	0	4	Objective
aller	to go	3	0	3	Objective
consulter	to consult	3	0	3	Objective

(Contd.)

Lemma	English	Objective	Subjective	Total	Coding
devoir	to have to/owe	0	3	3	Subjective
ouvrir	to open	3	0	3	Objective
partir	to leave	3	0	3	Objective
passer	to pass/spend (time)	4	0	4	Objective
tirer	to pull/shoot	3	0	3	Objective
tuer	to kill	3	0	3	Objective
accorder	to grant	2	0	2	Objective
aimer	to like/love	0	2	2	Subjective
arrêter	to stop/arrest	2	0	2	Objective
assaillir	to assail	0	2	2	Subjective
attendre	to wait/expect	2	0	2	Objective
cesser	to cease	0	2	2	Subjective
compter	to count/intend	1	1	2	Both
demander	to ask/request	1	1	2	Both
disparaître	to disappear	2	0	2	Objective
dormir	to sleep	2	0	2	Objective
désigner	to designate	2	0	2	Objective
enflammer	to inflame/ignite	2	0	2	Objective
entrer	to enter	2	0	2	Objective
errer	to wander	2	0	2	Objective
feuilleter	to leaf through	2	0	2	Objective
fixer	to fix/set	2	0	2	Objective
hausser	to raise	2	0	2	Objective
parler	to speak	2	0	2	Objective

(Contd.)

Lemma	English	Objective	Subjective	Total	Coding
pleuvoir	to rain	2	0	2	Objective
précipiter	to hasten/throw	2	0	2	Objective
quitter	to leave	2	0	2	Objective
racler	to scrape	2	0	2	Objective
ressentir	to feel	0	2	2	Subjective
régner	to reign	1	1	2	Both
tenter	to try/attempt	1	1	2	Both
toucher	to touch	1	1	2	Both
trahir	to betray	2	0	2	Objective
travailler	to work	2	0	2	Objective
échapper	to escape	2	0	2	Objective
abaisser	to lower	1	0	1	Objective
abattre	to slaughter/knock down	1	0	1	Objective
abriter	to shelter	0	1	1	Subjective
abîmer	to damage	1	0	1	Objective
accepter	to accept	1	0	1	Objective
adresser	to address/send	1	0	1	Objective
afficher	to display	1	0	1	Objective
agiter	to wave/shake	1	0	1	Objective
allonger	to lengthen/lie down	1	0	1	Objective
allumer	to turn on/light	1	0	1	Objective
amener	to bring	1	0	1	Objective
analyser	to analyze	1	0	1	Objective
apparaître	to appear	0	1	1	Subjective

(Contd.)

Lemma	English	Objective	Subjective	Total	Coding
applaudir	to applaud	1	0	1	Objective
apporter	to bring	1	0	1	Objective
approcher	to approach	1	0	1	Objective
arborer	to sport/wear	1	0	1	Objective
arriver	to arrive/happen	1	0	1	Objective
assigner	to assign	1	0	1	Objective
assombrir	to darken	1	0	1	Objective
baisser	to lower/fall	1	0	1	Objective
barrer	to bar/block	1	0	1	Objective
barrir	to trumpet (elephant)	1	0	1	Objective
boire	to drink	1	0	1	Objective
bouger	to move	1	0	1	Objective
braquer	to aim/hold up	1	0	1	Objective
braver	to brave/defy	1	0	1	Objective
brûler	to burn	1	0	1	Objective
casser	to break	1	0	1	Objective
circuler	to circulate/drive around	1	0	1	Objective
claquer	to slam/crack	1	0	1	Objective
cogner	to bang/knock	1	0	1	Objective
coincer	to jam/wedge	1	0	1	Objective
conduire	to drive/lead	1	0	1	Objective
connaître	to know	1	0	1	Objective
contempler	to contemplate	1	0	1	Objective
contracter	to contract	0	1	1	Subjective

(Contd.)

Lemma	English	Objective	Subjective	Total	Coding
contrarier	to upset/thwart	0	1	1	Subjective
convoquer	to summon/convene	1	0	1	Objective
coucher	to lay/put to bed	1	0	1	Objective
couler	to flow/sink	1	0	1	Objective
couper	to cut	1	0	1	Objective
coïncider	to coincide	0	1	1	Subjective
craquer	to crack/give in	1	0	1	Objective
crisper	to tense/irritate	1	0	1	Objective
croiser	to cross/run into	1	0	1	Objective
céder	to yield	1	0	1	Objective
dessiner	to draw/design	1	0	1	Objective
dispenser	to dispense/exempt	1	0	1	Objective
disposer	to arrange/have	1	0	1	Objective
drainer	to drain	1	0	1	Objective
décliner	to decline	1	0	1	Objective
découvrir	to discover/uncover	1	0	1	Objective
défaire	to undo	1	0	1	Objective
déployer	to deploy	1	0	1	Objective
dévorer	to devour	0	1	1	Subjective
effleurer	to brush/graze	1	0	1	Objective
embrasser	to kiss/embrace	1	0	1	Objective
encaisser	to cash/endure	1	0	1	Objective
encombrer	to clutter/obstruct	1	0	1	Objective
enfourner	to shove in/put in oven	1	0	1	Objective

(Contd.)

Lemma	English	Objective	Subjective	Total	Coding
enliser	to bog down	1	0	1	Objective
enregistrer	to record/register	1	0	1	Objective
enterrer	to bury	1	0	1	Objective
essayer	to try	1	0	1	Objective
examiner	to examine	1	0	1	Objective
falloir	to be necessary	1	0	1	Objective
fermer	to close	1	0	1	Objective
finir	to finish	0	1	1	Subjective
fléchir	to bend/wane	1	0	1	Objective
fonctionner	to function/work	1	0	1	Objective
fondre	to melt	1	0	1	Objective
frigorifier	to refrigerate	0	1	1	Subjective
froncer	to frown (brow)	1	0	1	Objective
fuir	to flee/leak	1	0	1	Objective
glisser	to slip/slide	2	0	2	Objective
glisser	to slip/slide	1	0	1	Objective
guetter	to watch/stalk	1	0	1	Objective
hocher	to nod	1	0	1	Objective
hospitaliser	to hospitalize	1	0	1	Objective
hurler	to yell/howl	1	0	1	Objective
immobiliser	to immobilize	1	0	1	Objective
incarner	to embody	1	0	1	Objective
inspecter	to inspect	1	0	1	Objective
inspirer	to inspire	1	0	1	Objective

(Contd.)

Lemma	English	Objective	Subjective	Total	Coding
installer	to install/set up	1	0	1	Objective
interrompre	to interrupt	1	0	1	Objective
inventer	to invent	1	0	1	Objective
jeter	to throw	1	0	1	Objective
jouer	to play	1	0	1	Objective
jucher	to perch	1	0	1	Objective
laisser	to let/leave	1	0	1	Objective
lancer	to throw/launch	1	0	1	Objective
lire	to read	1	0	1	Objective
lâcher	to release/let go	0	1	1	Subjective
manifester	to demonstrate/show	1	0	1	Objective
marmonner	to mumble	1	0	1	Objective
marquer	to mark/score	1	0	1	Objective
menacer	to threaten	1	0	1	Objective
mettre	to put	1	0	1	Objective
monter	to go up/put together	1	0	1	Objective
mordre	to bite	1	0	1	Objective
multiplier	to multiply/increase	1	0	1	Objective
mêler	to mix/involve	1	0	1	Objective
noyer	to drown	0	1	1	Subjective
obliger	to oblige/force	1	0	1	Objective
observer	to observe	1	0	1	Objective
occuper	to occupy	1	0	1	Objective
offrir	to offer	1	0	1	Objective

(Contd.)

Lemma	English	Objective	Subjective	Total	Coding
oublier	to forget	0	1	1	Subjective
parcourir	to travel/browse	1	0	1	Objective
pencher	to lean/tilt	1	0	1	Objective
perdre	to lose	1	0	1	Objective
pincer	to pinch	1	0	1	Objective
pisser	to pee	0	1	1	Subjective
pointer	to point/punch in	1	0	1	Objective
porter	to carry/wear	1	0	1	Objective
pousser	to push	1	0	1	Objective
pouvoir	to be able/can	0	1	1	Subjective
produire	to produce	1	0	1	Objective
protester	to protest	1	0	1	Objective
prouver	to prove	1	0	1	Objective
préparer	to prepare	1	0	1	Objective
pénétrer	to penetrate/enter	1	0	1	Objective
raccrocher	to hang up	1	0	1	Objective
raconter	to tell/narrate	0	1	1	Subjective
ralentir	to slow down	1	0	1	Objective
raviver	to rekindle	0	1	1	Subjective
reculer	to move back	1	0	1	Objective
redresser	to straighten/raise	1	0	1	Objective
refuser	to refuse	1	0	1	Objective
regretter	to regret	0	1	1	Subjective
relire	to reread	1	0	1	Objective

(Contd.)

Lemma	English	Objective	Subjective	Total	Coding
remercier	to thank	1	0	1	Objective
remettre	to put back/deliver	1	0	1	Objective
remplacer	to replace	1	0	1	Objective
remplir	to fill	1	0	1	Objective
rencontrer	to meet	1	0	1	Objective
renverser	to knock over/overturn	1	0	1	Objective
renvoyer	to send back/fire	1	0	1	Objective
respirer	to breathe	1	0	1	Objective
ressembler	to resemble	0	1	1	Subjective
rester	to stay	1	0	1	Objective
retirer	to withdraw/remove	1	0	1	Objective
retomber	to fall again/subside	1	0	1	Objective
retourner	to return/go back	1	0	1	Objective
revenir	to come back	0	1	1	Subjective
rouer	to beat up	1	0	1	Objective
rougir	to blush	1	0	1	Objective
rouler	to roll	1	0	1	Objective
ruer	to kick (horse)	1	0	1	Objective
rythmer	to set the rhythm	1	0	1	Objective
régler	to adjust/settle	0	1	1	Subjective
rêver	to dream	0	1	1	Subjective
s'évaporer	to evaporate	1	0	1	Objective
saisir	to seize/grab	1	0	1	Objective
se démener	to struggle/bust a gut	1	0	1	Objective
serrer	to tighten/hold	1	0	1	Objective

(Contd.)

Lemma	English	Objective	Subjective	Total	Coding
subir	to undergo	0	1	1	Subjective
submerger	to submerge/overwhelm	0	1	1	Subjective
suivre	to follow	1	0	1	Objective
survoler	to fly over/skim	1	0	1	Objective
ternir	to tarnish	1	0	1	Objective
tinter	to tinkle/ring	1	0	1	Objective
toussoter	to cough a little	1	0	1	Objective
traverser	to cross	1	0	1	Objective
trifouiller	to rummage/fiddle	1	0	1	Objective
trinquer	to clink glasses	1	0	1	Objective
venir	to come	1	0	1	Objective
vibrer	to vibrate	1	0	1	Objective
voir	to see	0	1	1	Subjective
vouloir	to want	0	1	1	Subjective
voyager	to travel	1	0	1	Objective
vérifier	to verify/check	1	0	1	Objective
zapper	to zap/channel-hop	1	0	1	Objective
écarquiller	to open wide	1	0	1	Objective
éparpiller	to scatter	1	0	1	Objective
éterniser	to drag on	0	1	1	Subjective
étinceler	to sparkle	0	1	1	Subjective
étrangler	to strangle	0	1	1	Subjective
éveiller	to awaken	1	0	1	Objective
évoquer	to evoke/mention	1	0	1	Objective

Table 5: Subjective-objective coding of verbs in the corpus data.

OBJECTIVE			**SUBJECTIVE**		
Word	**Valence**	**Objectivity**	**Word**	**Valence**	**Objectivity**
habillé	2.00	4.84	*assoiffé*	4.44	2.24
pâle	3.84	4.56	*indifférent*	3.08	2.76
barbu	2.52	4.8	*convaincu*	1.88	2.84
musclé	1.92	4.28	*incertain*	3.76	2.96
moustachu	2.6	4.6	*stoïque*	2.92	2.8
brun	2.76	4.75	*affamé*	4.44	2.6
poilu	3.04	4.08	*curieux*	1.84	2.92
bronzé	2.16	4.6	*indécis*	3.72	2.92
rasé	2.44	4.68	*dubitatif*	3.28	3.08
maquillé	2.44	4.52	*intéressé*	1.68	3.2
coiffé	1.84	4.61	*concentré*	1.88	3.4
nu	3.56	4.67	*attentif*	1.8	3.32
ébouriffé	3.6	4.2	*sceptique*	3.2	3.08
boutonneux	3.84	4.52	*calme*	1.68	3.48
MEAN	**2.75**	**4.55**	MEAN	**2.83**	**2.97**

Table 6: Objectivity and valence ratings for items selected during the experiment's pre-study.

Condition	Stimulus
objective	*De nouveau, je suis musclé. / Je suis de nouveau musclé.*
objective	*De nouveau, je suis pâle. / Je suis de nouveau pâle.*
objective	*De nouveau, je suis barbu. / Je suis de nouveau barbu.*
objective	*De nouveau, je suis habillé. / Je suis de nouveau habillé.*
objective	*De nouveau, je suis moustachu. / Je suis de nouveau moustachu.*
objective	*De nouveau, je suis brun. / Je suis de nouveau brun.*
objective	*De nouveau, je suis poilu. / Je suis de nouveau poilu.*
objective	*De nouveau, je suis rasé. / Je suis de nouveau rasé.*
objective	*De nouveau, je suis bronzé. / Je suis de nouveau bronzé.*
objective	*De nouveau, je suis maquillé. / Je suis de nouveau maquillé.*
objective	*De nouveau, je suis coiffé. / Je suis de nouveau coiffé.*
objective	*De nouveau, je suis ébouriffé. / Je suis de nouveau ébouriffé.*
objective	*De nouveau, je suis boutonneux. / Je suis de nouveau boutonneux.*
objective	*De nouveau, je suis nu. / Je suis de nouveau nu.*
subjective	*De nouveau, je suis convaincu. / Je suis de nouveau convaincu.*
subjective	*De nouveau, je suis indifférent. / Je suis de nouveau indifférent.*
subjective	*De nouveau, je suis assoiffé. / Je suis de nouveau assoiffé.*
subjective	*De nouveau, je suis incertain. / Je suis de nouveau incertain.*
subjective	*De nouveau, je suis affamé. / Je suis de nouveau affamé.*
subjective	*De nouveau, je suis stoïque. / Je suis de nouveau stoïque.*
subjective	*De nouveau, je suis curieux. / Je suis de nouveau curieux.*
subjective	*De nouveau, je suis dubitatif. / Je suis de nouveau dubitatif.*
subjective	*De nouveau, je suis intéressé. / Je suis de nouveau intéressé.*
subjective	*De nouveau, je suis concentré. / Je suis de nouveau concentré.*
subjective	*De nouveau, je suis indécis. / Je suis de nouveau indécis.*
subjective	*De nouveau, je suis attentif. / Je suis de nouveau attentif.*
subjective	*De nouveau, je suis sceptique. / Je suis de nouveau sceptique.*
subjective	*De nouveau, je suis calme. / Je suis de nouveau calme.*

(Contd.)

Condition	Stimulus
Filler (negative control)	*J'ai reçu un diagnostic de cancer.*
Filler (positive control)	*J'ai gagné au loto.*
Filler	*J'ai acheté un nouveau livre hier.*
Filler	*J'ai vu un film passionnant ce soir.*
Filler	*J'ai préparé un bon dîner pour mes amis.*
Filler	*J'ai entendu une belle chanson à la radio.*
Filler	*J'ai trouvé une solution à mon problème.*
Filler	*J'ai écrit une longue lettre à ma grand-mère.*
Filler	*J'ai appris une nouvelle compétence cette semaine.*
Filler	*J'ai perdu mes clés ce matin.*
Filler	*J'ai pris une photo incroyable du coucher du soleil.*
Filler	*J'ai reçu un cadeau très spécial.*
Filler	*J'ai réparé mon ordinateur aujourd'hui.*
Filler	*J'ai compris enfin cette leçon difficile.*
Filler (negative control)	*Je suis allé à l'enterrement de mon meilleur ami.*
Filler (positive control)	*Je suis allé à un magnifique concert.*
Filler	*Je suis arrivé tôt ce matin.*
Filler	*Je suis devenu plus patient avec le temps.*
Filler	*Je suis parti très tôt de la maison.*
Filler	*Je suis resté longtemps à l'hôpital.*
Filler	*Je suis monté au dernier étage du bâtiment.*
Filler	*Je suis descendu trop vite dans l'escalier.*
Filler	*Je suis entré dans une pièce complètement sombre.*
Filler	*Je suis sorti avec mes amis hier soir.*
Filler	*Je suis passé chez mes parents en rentrant.*
Filler	*Je suis retourné à mon endroit préféré au bord du lac.*
Filler	*Je suis tombé dans la neige pendant la promenade.*
Filler	*Je suis venu immédiatement après avoir reçu l'appel.*

Table 7: Stimuli and filler items included in the experiment.

Data availability

The corpus dataset, analysis scripts, experimental materials, preregistration, and full experimental data are available at https://osf.io/et2uh/.

Ethics and consent

In compliance with Freie Universität Berlin's guidelines, the ethics checklist provided by Freie Universität Berlin was completed. The checklist confirmed that no extended ethical approval by the ethics committee of Freie Universität Berlin was required, as behavioral data from healthy adult participants were collected anonymously, and appropriate information and consent forms were provided.

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Author contributions

MR wrote the manuscript and conducted the analyses, except for Section 4, which was written and analyzed by JH. Both authors reviewed and revised the entire manuscript.

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Competing interests

The authors have no competing interests to declare.

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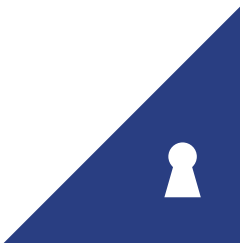
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