Maj-Britt Mosegaard Hansen*

Revisiting bridging contexts in language change: core properties and the role of frequency vs. salience

Abstract: This paper discusses bridging contexts in language change. Bridging contexts have been treated as central to meaning change and grammaticalization, but their definition – and, by implication, their identification – is not uniformly agreed upon, and there are open questions regarding their empirical status, the mechanism through which they trigger change, and whether they apply to all forms of change involving meaning. I critically review existing definitions and propose a revised one, arguing also that bridging contexts are principally a second-order phenomenon. I argue, further, that bridging contexts are not relevant to all forms of change, but principally – perhaps exclusively – to hearer-driven and metonymy-based forms. Finally, I discuss what specific mechanism allows bridging contexts to trigger change. Some recent studies have proposed that frequency is key, and that an expression will only undergo change if at least 50 % of its uses occur in bridging contexts. Adducing empirical support in the form of two case studies, one from the lexicon and one from grammar, I show that this is unnecessary and propose that a more relevant factor is the salience of the innovative interpretation made available in bridging contexts, a hypothesis for which recent experimental work offers initial support.

Keywords: bridging contexts; language change; types of change; frequency; salience

1 Introduction

In this paper, I discuss the notion of bridging contexts in language change. For more than two decades, the literature has treated bridging contexts as central to meaning change and grammaticalization, in particular. However, the definition – and, by implication, the identification – of bridging contexts is not uniformly agreed upon,

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*Corresponding author: Maj-Britt Mosegaard Hansen, Department of Linguistics & English Language, School of Arts, Languages and Cultures, The University of Manchester, Oxford Road, Manchester M13 9PL, UK, E-mail: Maj-Britt.MosegaardHansen@manchester.ac.uk

and there are open questions regarding the empirical status of contexts, the mechanism by which they trigger change, and whether they apply to all forms of change involving meaning. This paper attempts to deal with each of these questions.

I start by a close examination of the most prominent existing definitions in Section 2, before proposing an amended definition of my own in Section 2.1, justifying the suggested amendments with select empirical examples of change. In Section 3, I argue that bridging contexts are not relevant to all forms of language change, but only to changes that are plausibly seen as hearer-driven and metonymy-based. Section 4 focuses on the role – if any – played by the frequency with which bridging contexts occur prior to a change. Whereas some recent papers have hypothesized that, in order for a given expression to undergo change, a minimum of 50 % of all its uses must occur in bridging contexts in the period leading up to the change, I show in Sections 4.1 and 4.2 that such a high frequency of occurrence is not necessary. In Section 4.3, I propose instead that a more relevant factor is the salience to hearers of the innovative interpretations that bridging contexts make available. Section 5 summarizes the main findings and draws conclusions.

2 What is a bridging context?

The notion of bridging contexts, and the idea that they play a role in language change, was first (briefly) introduced by Evans and Wilkins (1998: 5, 2000: 549–550).[1] The most in-depth treatments of bridging contexts are, however, found in Diewald (2002) and Heine (2002), although the former author makes use of a different terminology, dividing the notion of bridging contexts into two stages, which she calls "untypical contexts" and "critical contexts", respectively (Diewald 2002: 103). Other early – but brief – definitions are proposed by Evans (2003: 22) and by Enfield (2003: 29).

In this section, I discuss these early definitions together, pointing out the main differences between them. I then propose an amended definition and demonstrate its empirical relevance in Section 2.1.

All the authors cited above agree that in bridging contexts, an innovative interpretation is contextually/conversationally implicated (Diewald 2002: 103; Enfield 2003: 29; Evans 2003: 22; Evans and Wilkins 1998: 5, 2000: 549) or invited by the speaker (Heine 2002: 96), through the use of a linguistic expression with a different

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[1] It is worth pointing out that Benveniste's (1966 [1954]: 290) idea of a usage that unifies two different senses of a polysemous item ("un emploi où [l]es deux sens recouvrent leur unité") appears to essentially prefigure the notion of bridging contexts, insofar as the author discusses this idea specifically as a tool for semantic reconstruction, emphasizing the importance of considering context as a motivating factor in semantic change (Benveniste 1966 [1954]: 295).

conventional source meaning.[2] For Evans and Wilkins (1998: 5, 2000: 550) and Enfield (2003: 29), however, the interpretation derived by the hearer may not be identical to that intended by the speaker. Although I agree with this view, it does appear to contradict the notion that the innovative interpretation could be an implicature, in so far as conversational implicatures are by definition assumed to be intended by the speaker (Grice 1989: 31).[3]

Most authors suggest, furthermore, that bridging contexts are a delimitable stage of change (Diewald 2002: 103; Enfield 2003: 29; Evans 2003: 22; Heine 2002: 86), and all agree that, where change takes place, the bridging-context stage will be followed by the conventionalization of the innovative meaning, and thus by the emergence of a type of context where the innovation is the only possible interpretation of the expression (Diewald 2002: 103; Enfield 2003: 29–30; Evans 2003: 22; Evans and Wilkins 1998: 5, 2000: 550; Heine 2002: 86). This latter context type is called "isolating contexts" in Diewald (2002: 103) and "switch contexts" in Heine (2002: 86). Henceforth, I will use Heine's term to refer to them.

We also find points of difference between the definitions, however. Thus, Evans and Wilkins (1998: 5, 2000: 550) and Enfield (2003: 29) suggest that the two possible interpretations found in bridging contexts must be functionally equivalent, even though they are semantically distinct, while Heine (2002: 86) proposes instead that they stand in a foreground/background – i.e., metonymical – relationship to one another. I will show in Section 2.1 below that Heine's proposal is the more accurate one, as metonymy does not always imply that the two interpretations are functionally equivalent, or even mutually compatible.

Heine (2002: 84, 86) suggests that, in bridging contexts, the innovative interpretation will be more plausible than the conventional one. Enfield (2003: 29) goes one step further and suggests that the innovative interpretation will be non-defeasible in the specific context. Below, I adduce examples showing that Heine's proposal is too strong. As for Enfield's proposal, it is incompatible with the idea that the innovative interpretation is still only an implicature; on the contrary, its non-defeasibility is a sign of conventionalization, and must hence be a feature of switch contexts, rather than bridging contexts.

Diewald (2002: 103) posits "multiple structural and semantic ambiguities" as a feature of bridging contexts. I will argue below that ambiguity is not a necessary (or even a plausible) characteristic.

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2 Note that Diewald (2002: 103) claims only that the new interpretation "*may* arise as a conversational implicature" (emphasis mine), not that it always does.

3 Strictly speaking, Evans and Wilkins (1998: 5, 2000: 549–550) talk about "contextual", rather than conversational, implicatures. It is unclear however whether, and if so how, such implicatures differ from the better-known conversational type.

Finally, Diewald (2002: 103) and Evans and Wilkins (1998: 5, 2000: 550) explicitly mention the frequency of bridging contexts as a factor in triggering change. All these early studies remain vague about the exact degree of frequency with which bridging contexts must occur in order to trigger change; Evans and Wilkins talking merely about "regular" occurrence, while Diewald requires a rise in frequency during an unspecified time period preceding a change. As we will see in Section 4, however, the recent literature has attempted to identify a more precise frequency benchmark that would be required for bridging contexts to trigger change. These attempts will be the focus of critical discussion in the second half of the paper.

2.1 An amended definition of bridging contexts

I propose the following amended definition of bridging contexts, which builds on Hansen (2021: §5.2), but takes into account insights from Hansen and Terkourafi (2023):

A bridging context is a context that underspecifies the meaning of a given linguistic expression used in an utterance, such that it allows for both a conventional and an innovative interpretation as being plausibly perceived by hearers as communicated. In a bridging context, the innovative interpretation will typically – perhaps always – be facilitated via some kind of metonymical (foreground/background) relationship to the conventional sense of the expression. The inference to the innovative interpretation need not be invited by the speaker, although, in some cases, it may be. Bridging contexts may trigger change at the levels of both lexicon and grammar.

Where bridging contexts are attested prior to change – i.e., prior to the appearance of switch contexts – the innovative interpretation arises as a context-based inference and does by definition not yet exist as a conventionalized part of the grammar or lexicon of the language in question. It follows that bridging contexts that precede change cannot, as such, be characterized by ambiguity (either semantic or structural), cf. De Smet (2009: 1729), given that ambiguity can obtain only if there is a choice between two already conventionalized expressions. Instead, a bridging context is one that fails to sufficiently constrain the interpretation of a particular element of a given utterance.[4] It may therefore lead hearers to attribute certain salient inferences that are compatible with, but go beyond, the conventional meaning of the expression to the

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[4] Mauri and Giacalone Ramat (2012: 196) are similarly critical of the use of the notion of ambiguity to describe bridging contexts, suggesting that it is more appropriate to talk about "multilayered readings". This term seems to take for granted, however, that the possible interpretations will be mutually compatible, which – as we shall see shortly – they may not always be.

expression itself, or even – as we shall see below – to completely misinterpret the speaker's communicative intention.

My notion of an underspecifying context is thus very close to Denison's (2017: 293) use of the notion of vagueness, which applies "where a linguistic analysis is in some relevant respect underdetermined at least for [the hearer …], but no further information is needed for interpretation". I differ from Denison (2017) in two ways, however: firstly, I include "wrong" readings (i.e. ones that are not compatible with the speaker's intentions) as a possible outcome of contextual underspecification (*pace* Denison 2017: 294). Secondly, I treat underspecification specifically as a feature of certain contexts, rather than as a feature of certain linguistic expressions. That means that it becomes possible for a given expression to have a quite specific meaning, but for the derivation of that meaning to nevertheless be insufficiently supported by a given context.

Consider a couple of comparatively simple examples of lexical expressions that have relatively recently become polysemous, indeed auto-antonymical, in contemporary Danish:

Let us look first at the figurative expression *X VERB op ad bakke* ('X VERB uphill').[5] The older sense of this expression, which is becoming obsolete, is one where something or someone is evolving in a positive direction (for instance, towards increased wealth, improved well-being, etc.), as in (1) below. The newer sense illustrated in (2) is one where some activity is described as difficult, effortful, and not necessarily tending towards a particularly positive result.

(1)   *Mogens har været syg længe, men nu går <u>det op ad bakke</u> og lægen mener han snart bliver rask igen.*
      'Mogens has been ill for a long time, but now <u>his condition is improving</u> [lit.: his condition is going uphill] and the doctor believes he'll soon be well again.'

(2)   *Siden omstruktureringen <u>har vores arbejde været op ad bakke</u> hele tiden og det ser ikke ud til at blive bedre foreløbig.*
      'Since the restructuring, <u>our work has been difficult and effortful</u> [lit.: our work has been uphill] all the time, and it doesn't look like things will get better anytime soon.'

Clearly, embodied experience suggests that walking up a hill is typically harder than walking on level ground. At the same time, the idea of progress towards a positive outcome is fully compatible with having to expend substantial effort in order to

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5 Cf. *Den danske ordbog* [The Danish dictionary] online: https://ordnet.dk/ddo/ordbog?query=op%20ad%20bakke, as well as the historical *Ordbog over det danske sprog* [Dictionary of the Danish language] online: https://ordnet.dk/ods/ordbog?query=bakke#suppl-6434 (both last accessed 26 November 2024). Both are considered authoritative.

achieve that outcome. Hence, it is not difficult to imagine contexts like the one in (3), which displays a metonymical relationship between the older and the newer sense of *X* VERB *op ad bakke*, and where at least some hearers may well perceive the effort involved as more important than the progress towards promotion as such, even if the speaker's focus is on the latter:[6]

(3)   *Anne-Sofie er for nylig blevet forfremmet til professor. <u>Det har</u> virkelig <u>været</u> <u>op ad bakke</u> for hende i de sidste 5–10 år.*
        'Anne-Sofie has recently been promoted to Full Professor. <u>Things have</u> really <u>been going well</u> for her/<u>She's</u> really <u>had to work hard</u> [Lit.: 'It has really been uphill for her'] in the last 5–10 years.'

The fact that the old and the new interpretation stand in such a metonymical relationship does not mean, however, that the two must necessarily be mutually compatible as in the case of (3). Hansen (2021: 7) adduces the example of another auto-antonymical expression in contemporary Danish, namely the transitive verb *for-fordele*, which to older speakers means 'to give someone <u>less</u> than their fair share of something', but which tends to mean the exact opposite ('to give someone <u>more</u> than their fair share of something') to speakers born from the mid-1960s onwards.[7] These two interpretations do stand in a metonymical relationship to one another in so far as the idea that one person is given less than their fair share of something will normally imply that one or more others are receiving more than their fair share. At the same time, the two are evidently not communicatively equivalent. It is therefore essentially inconceivable that any speaker for whom the older interpretation is the conventional one could plausibly ever have intentionally invited the newer interpretation. As Hansen (2021: 7) argues, the rise of this polysemy is likely to have been triggered by contexts of use in which the notion of unfairness towards a subset of a group of people was evidenced, but where the identity of the particular subset involved was underspecified by the context, as when a speaker – assuming that the conventionalized sense of the verb is familiar to the hearer – simply utters (4):

(4)   *Uddelingen af julegratialer er så uretfærdig. Nu er medarbejderne i afdeling 3 igen blevet <u>forfordelt</u>.*

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6 In so far as the emergence of the negative sense of *op ad bakke* appears to be relatively recent, it is conceivable that contamination from the English adjective *uphill* has played a role in making the originally backgrounded assumption of a difficult effort more salient to Danish language users, cf. the entry for the adjective *uphill,* §2b, in the online *Oxford English Dictionary*: https://www.oed.com/dictionary/uphill_n?tab=meaning_and_use#16193794 (last accessed 26 November 2024).

7 Cf. *Den danske ordbog* online: https://ordnet.dk/ddo/ordbog?query=forfordele (last accessed 17 July 2025).

> 'The allocation of Christmas bonuses is so unfair. Now the staff in division 3 have been <u>given less/more than their fair share</u> again.'

Consequently, changes triggered by bridging contexts must be conceived as fundamentally hearer-based. Expressions that have acquired new auto-antonymical senses constitute clear evidence of this, as speakers need not (and probably typically will not) be at all aware that the context makes an alternative interpretation available. This type of change therefore cannot plausibly be seen as driven by speakers. And even in (non-auto-antonymical) cases where a speaker may in fact be using an expression in the hope of communicating something over and above its conventional sense, hearers must still pick up on the invited inference in order for it to trigger change.[8] That said, it is of course important to point out that any reanalysis triggered by a given bridging context will, in the first instance, effect change only to the grammar(s) of the hearer(s) making the reanalysis. Hearers who have made the reanalysis are then in a position to propagate it in their role as speakers by using it in switch contexts. For that reason, we would expect that, by default, a given expression will have to occur in more than a single instance qualifying as a bridging context, such that the reanalysis can be made by multiple hearers, in order for the change to take hold across the speech community. This does not imply that a very large number of individual reanalyses need be involved, however, as language change can be triggered by a relatively small number of individuals who happen to enjoy significant social prestige (Labov 2001).

As implicitly suggested by examples (3) and (4), "context" is not limited to linguistic "co-text" on the present understanding of bridging contexts. The literature has naturally tended to focus on co-text, as that is typically all that is available for the purpose of diachronic analysis, and this focus may go some way towards explaining why semantic/structural ambiguity has been thought to be a necessary feature of bridging contexts. Examples (3) and (4), as well as several other examples below, show that this is not so, however. Hearers who reinterpret linguistic expressions in actual communication situations may in principle do so on the basis of any aspect of context in its broadest possible sense, including:

(i) the (para)linguistic behavior by co-interactants and third parties who are known to be present;

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8 In other words, in order for a bridging context to trigger change, the hearer must always be involved. The speaker, on the other hand, cannot plausibly be involved in some cases. In other cases the speaker *may* be involved, but there's no strong reason to suppose they ever *need* to be. Classifying all changes triggered by bridging contexts as hearer-based is therefore the simpler hypothesis, hence by default preferable to assuming that they are sometimes hearer-based and sometimes speaker-based.

 (ii) the physical context, comprising the environment at large, as well as non-verbal behaviors by co-interactants and third parties;

(iii) the knowledge context, comprising knowledge and assumptions about co-interactants, about ways of doing things (including – but not limited to – linguistic and interactional norms, text types, and speech events), and about the world more generally (i.e., encyclopedic knowledge).

Now, objectively speaking, the elements of (ii) and (iii), in particular, are infinite in number. Language users therefore cannot, and do not, pay equal attention to all objectively identifiable aspects of the context of communication. As argued by Sperber and Wilson (1986: 15–16), in order to be useful in accounting for the interpretation of utterances, context must be understood as a cognitive phenomenon. Utterance context, on such an understanding, consists of the subset of assumptions about (i)–(iii) that individual language users bring to bear in interpreting a given utterance. Context, in other words, is not "out there", but is something that is subjectively constructed in the process of interpretation.

Hence, there is no necessary identity between the individual cognitive contexts thus constructed by different participants in any communicative event. Given that bridging contexts are a subtype of utterance contexts, this means that they need not actually be perceived *as* bridging contexts, i.e., as involving two different possible interpretations of any given expression, by all – or even any – of the participants in the communicative event. As shown by (4), what counts as a bridging context for the purpose of explaining language change may be one where both participants most plausibly perceive one and only one specific interpretation of the expression in question, but the hearer's interpretation happens to differ from that of the speaker. For this reason, bridging contexts are best seen as a second-order, or analyst's, concept. In other words, while linguists can empirically identify instances in corpora where two possible interpretations of a given expression, which is known to be either synchronically or diachronically polysemous, are contextually possible, we cannot know whether the actual discourse participants perceived things in that same way in all cases.[9]

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9 An anonymous reviewer queries this, arguing that analysts are hearers, too, so if we can see alternative interpretations of a given expression, then the original hearers must have been able to see them, as well. What is crucial here, however, is that analysts have the benefit of hindsight: we normally only aim to account for changes that are already known to have taken place (or at least to be ongoing at the time of analysis). That means that, in the analytical process, we will necessarily be acutely aware of the existence of two (or more) conventionalized meanings of the expression under study. It follows that, while analysts can be conceived as (over)hearers, we are different from the hearers who reanalyzed the expression. It is the latter who are of interest here.

   As suggested by examples like (4), it is quite conceivable that, prior to conventionalization of a new

Despite what has been suggested in the previous literature (cf. Section 2 above), bridging contexts are not a clearly demarcated stage of change. For one thing, such contexts can continue to be found after change has taken place, provided the original use of the expression continues to be available. Indeed, it is the normal case for the original use to remain current for at least some time (in some cases, indefinitely) following any given change. To take a stock example, the French compound future tense is formed by the present indicative of the motion verb *aller* ('go') used as an auxiliary, followed by the infinitive of the lexical verb, as in (5):

(5)   [At the dinner table] *Je* [*ne vais*$_{Aux}$ *rien manger*$_{LexV}$]$_{CompFut}$ *ce soir; je ne me sens pas bien.*
        'I'[m not going to eat anything] tonight; I don't feel good.'

This construction arose towards the end of the 15th century, in bridging contexts where *aller* functioned as a lexical verb describing actual movement on the part of the subject and was followed by an infinitival clause indicating the purpose of the movement (Togeby 1974: §231). As in the preceding lexical examples, this change involves metonymy, in as much as the purpose adjunct necessarily designates a future state-of-affairs whose realization is made plausible by the fact that, at reference time, the subject is moving to a place where the purpose can be fulfilled. In other words, in the source construction, purposeful movement in the present is foregrounded, whereas the (plausible) future realization of the purpose is backgrounded. The target construction, where *aller* has been grammaticalized as a future-tense auxiliary, on the other hand, foregrounds the futurity of the state-of-affairs described, while any sense of physical movement is backgrounded, indeed very frequently altogether absent.

As seen in (6), the source construction is still in use more than 500 years later:

(6)   *Tous les dimanches, je* [vais]$_{LexVPresInd}$ [*voir*$_{Inf}$ *ma mère*]$_{PurposeAdjunct}$.
        'Every Sunday, I [go] [to see my mother].'

Conversely, as we shall see in Sections 4.1 and 4.2, contexts that are compatible with two different interpretations of a given expression may be instantiated across very

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meaning, it may not even occur to one or more participants in a given speech event that this meaning is available as a plausible – let alone an intended – inference to be derived from a particular utterance. Conversely, when a hearer encounters a given expression for the first time, and reanalyzes it in a way that seems to make sense in the context, but which is actually at odds with its conventional meaning, then that hearer may be completely oblivious to the fact that this conventional interpretation is also available.

To account for this, we must assume that, although bridging contexts have second-order empirical reality (i.e., they can be identified as such by analysts), they do not necessarily have first-order empirical reality (i.e., they may not be identified as bridging contexts by all – or even any – of the participants to a given speech event).

long time periods, even centuries, *without* triggering change. Language users are never compelled to avail themselves of changes made possible by bridging contexts, so the attestation of such contexts cannot, in and of itself, be taken as evidence that change is in progress (cf. Heine 2002: 85).

In other words, bridging contexts may or may not be followed by switch contexts, in which only the innovative interpretation is possible. The attestation of switch contexts is clear evidence that, for at least some language users, change has indeed taken place. Unlike bridging contexts, the first appearance of switch contexts is therefore a more or less clearly delimitable stage in the process of change.[10]

3 What forms of change rely on bridging contexts?

Importantly, not all forms of change require bridging contexts; indeed, some forms of change will be largely incompatible with them. In this section, I consider what subtypes of change are most likely to involve bridging contexts vs. types of change that are most likely not to involve them. In doing so, I follow Hansen's (2021: §7) suggested tri-partition of changes into (i) hearer-driven, (ii) speaker-driven, and (iii) externally imposed ones.[11]

Starting with **externally imposed changes**, as intuitively the least frequent type, these do not arise in naturalistic speaker-hearer interaction but are initially triggered by explicit and deliberate top-down requests/demands for specific changes to current usage. Externally imposed changes are probably most common in the lexicon. For instance, the Danish word *bil*, which is the standard term for 'car', is the result of a public competition held in 1902, with the aim of finding a "snappier" name for the new kind of vehicle that could officially replace the original, more

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10 I argued above that bridging contexts do not involve ambiguity when they precede a change. Where bridging contexts are attested following a change, on the other hand, as in the case of (i) if uttered in the present day, the expression that has undergone change has, however, become ambiguous in such contexts *as a result of* the change:

(i)   A [speaking from an adjoining room]: *Tu fais quoi là ?* – B: *Je <u>vais fermer</u> la fenêtre.*
         A: 'What are you doing?' – B: 'I'<u>m going to close</u> the window.'
         'B is moving away from their present location for the purpose of closing the window' vs. 'B is about to close the window' (which – for all A knows – may be within reach and may thus not require B to move away from their present location).

11 As bridging contexts involve competing interpretations of a given expression, I leave out of consideration types of change that involve only sounds (such as the ongoing fronting of /u/, e.g., in words like *food*, to something approaching [y:] in many dialects of British English), but not meaning and/or morpho-syntactic structure.

cumbersome, term *automobil* ('automobile').[12] There is, however, at least some evidence that externally imposed changes can also be found in grammar: a contemporary example of this is the increasing tendency of – typically younger – British speakers to avoid the gendered pronouns *he* and *she* in favor of singular *they* when referring to a referentially specific other, even where they know that referent personally and have no reason to believe that the individual may self-identify as non-binary. Example (7) below (quoted from memory), for instance, was produced in email correspondence by a youngish member of my university's support staff, who – like me – was working relatively closely with "Janet" (not her real name). This usage can fairly confidently be attributed to the speakers' desire to follow top-down language-usage guidelines produced by transgender advocates.

(7)   I asked Janet$_i$ for advice about [X]. <u>They$_i$</u> suggested that […].

In both lexical and grammatical instances of externally imposed change, such guidelines are the result of a metalinguistic process that takes place in relevant *fora* (which may be formal or informal) prior to their being disseminated to a wider audience. Externally imposed changes thus do not involve bridging contexts.

With respect to **speaker-driven changes**, Hansen (2021: §7) includes such phenomena as changes driven by the actualization of a preceding reanalysis,[13] as well as spontaneous (as opposed to externally imposed) coinages, calques, loanwords, and euphemisms. As with externally imposed changes, these do not involve bridging contexts. They are, however, the result of bottom-up decisions made by individual speakers in the context of a particular communicative event.

To this original list of subtypes of speaker-driven change, we must add clippings. More importantly in terms of the present paper's focus on change involving meaning, we must also add metaphorical changes as a subtype that not only does not need bridging contexts, but which is, at least in most cases, incompatible with them. The reason is that metaphorical usage normally relies on a qualitative leap from one conceptual domain (the source domain) to another (the target domain), which are separate and non-overlapping (e.g., Lakoff and Johnson 1980). It will therefore rarely (if ever) be the case that one and the same utterance context can accommodate both a

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12 Cf. https://da.wikipedia.org/wiki/Bil (last accessed 6 January 2025).

13 Actualization (Timberlake 1977) refers to the gradual spell-out of the (morpho-)syntactic consequences of a reanalysis. For instance, once French *aller* + INF (cf. Section 2.1 *in fine*) was reanalyzed as a compound future, it could be extended to subject/verb combinations that would not have been possible in the motion verb + purpose adjunct source construction, such as (i):

(i)   *Cet arbre <u>va</u> bientôt <u>mourir</u>.*
         'This tree <u>is going to die</u> soon.'

"literal" and a metaphorical interpretation of a given expression with anything approaching equal plausibility (cf. Blank 1997: 161).

It is to **hearer-driven forms of change** that bridging contexts are most relevant. Hearer-driven changes comprise what Hansen (2021) calls, respectively, reanalysis and rebracketing without meaning change. Reanalysis on Hansen's (2021) definition principally involves the context-driven reinterpretation of the meaning of a linguistic expression, and as suggested by the examples adduced in Section 2.1, hearers who reanalyze an expression make use of forms of inference that are based on metonymy.

Reanalysis often also leads to (morpho-)syntactic rebracketing, as in the case of the evolution of French *aller* + INF from Full V + Purpose Adjunct to Aux + Main Verb. As suggested by the examples of Danish *op ad bakke* and *forfordele*, however, it need not do so. Conversely, rebracketing need not involve reanalysis of the meaning contribution of the elements of a multiword expression. Thus, for instance, the English noun *apron* originally took the form *napron* (< OldFr *naperon*), its present-day form being the result of rebracketing of the indefinite NP *a napron* into *an apron*.[14] This kind of rebracketing is evidently purely formal and does not alter the meaning of either element. It does, however, seem to presuppose the existence of bridging contexts that underspecify the precise location of a given structural boundary: thus, in the case of *apron*, definite or plural NPs like *the/that/her napron* or *New naprons are nice* would be unlikely to give rise to the innovative form without the initial consonant.

4 The role of frequency vs. salience of bridging contexts in triggering language change

As we have seen in Section 2, the notion of bridging contexts originates in the work of scholars representing usage-based frameworks. It is well-known that such frameworks have for some time taken a keen interest in frequencies of usage. A question that arises naturally therefore is whether, and if so to what extent, bridging contexts need to be frequent in order to trigger change.

We saw in Section 2 that some of the earliest discussions of bridging contexts (Diewald 2002: 103; Evans and Wilkins 1998: 5, 2000: 550) suggest that bridging contexts must either recur regularly or rise in frequency prior to a change. None of those

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14 Cf. the online *Oxford English Dictionary*: https://www.oed.com/dictionary/apron_n?tab=etymology#48918 (last accessed 4 December 2024).

early studies specify exactly how regular they must be, however, or how much of a rise in frequency is necessary for them to trigger change.

A couple of quite recent papers by Larrivée and Kallel (2020) and Winter-Froemel (2021), respectively, have taken up this challenge. Both these studies propose that at least 50 % of all occurrences of an expression undergoing change must or will occur in bridging contexts (Larrivée and Kallel 2020: 447; Winter-Froemel 2021: 26). It is unclear, however, that there is, in the case of either study, a principled justification for this estimate, which in both cases seems to be based on the results of (in the case of Larrivée and Kallel 2020) one or (in Winter-Froemel's 2021 case) two case studies of individual expressions, all of them from French. Because no principled justification for the 50 % benchmark is offered, the reader is left to wonder why evidence from a few isolated cases should be seen as sufficient to make such a strong prediction. This concern is strengthened by the fact that there are some methodological/data-related issues with the case studies adduced in support of the suggested benchmark.

Larrivée and Kallel (2020) study the development of so-called n-words (Laka Mugarza 1990: 107), or "negative concord items" (henceforth NCIs) (Breitbarth et al. 2020: 14) in present-day French, such as *rien* ('nothing/anything'), *personne* ('nobody/anybody'), *jamais* ('[n]ever'), etc. They assume that these NCIs evolved out of what were originally negative polarity items (NPIs), whose usage corresponded closely to that of items like *anything, anybody, ever*, etc. in English. In other words, their assumption is that the present-day NCIs were at the outset items that were compatible with negation, but which could not in themselves express negation in the absence of a fully negative element scoping over them.[15] Larrivée and Kallel (2020: 432) suggest that so-called "strong negative polarity contexts" – i.e., contexts where an NPI is governed directly by a negative item within the same clause – may constitute the relevant bridging context for this change to happen. They then proceed to test their prior prediction that bridging contexts will see a rise in frequency in "the period immediately before an NPI turns into an n-word" (Larrivée and Kallel 2020: 428).

What is of importance here is that, when quantifying the proportion of bridging contexts preceding the change from NPI to NCI in the relevant items, Larrivée and Kallel (2020: 434) choose to look for a rise in bridging contexts, not during the period preceding the initial attestation of switch contexts (i.e., those contexts where a given item can only be interpreted as an NCI, and no longer as an NPI), but rather during the period before the NCI function becomes the dominant one, which they suggest is a "more revealing" measure of the importance of bridging contexts.

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15 A detailed explanation of the notions of NCIs/n-words vs. NPIs would take us too far afield in the context of the present paper, so readers unfamiliar with these concepts are referred to the literature cited above.

The problem with this way of assessing the frequency of bridging contexts is twofold:

First, it is unclear from Larrivée and Kallel's (2020: 434) discussion why the gradual propagation of an innovative use, following the initial attestation of *switch* contexts, should affect the frequency of *bridging* contexts.

Secondly, the method suggested evidently cannot be applied to cases of change where the innovative use does *not* become the dominant one. Such cases are, however, not at all uncommon across languages, so our theories ought ideally to account for them, too. Indeed, the (randomly chosen) case studies adduced in Sections 4.1 and 4.2 below both instantiate changes where the innovative uses of the relevant expressions has thus far failed to reach the level of frequency of their older – and still extant – uses, despite the innovative uses having been fully conventionalized for a substantial length of time.[16]

Turning to Winter-Froemel's (2021) paper, this author presents two case studies in favor of the 50 %+ benchmark for bridging contexts. Her first case study concerns the change undergone by the French term for 'turkey', which was originally *poule/coq/poulet/… d'Inde*, lit. 'hen/rooster/chicken/… from India', and which becomes *dinde* (or *dindon* in the case of the male) in the 17th–18th century. First attestations of the new use are found in 1603, but only in the work of one specific author. The innovative use is then not found again until the second quarter of the 18th century (Winter-Froemel 2021: 33).

Winter-Froemel quantifies all instances of the PP *d'Inde* ('from India') in the Frantex database[17] from 1450 to 1774, and takes utterances containing the expression 'N designating a type of poultry' + *d'Inde* to be the relevant bridging context (Winter-Froemel 2021: 28). Intuitively, it might, however, be more plausible to suggest that *poule d'Inde > d'Inde* may originally have been a speaker-driven clipping eventually followed by reanalysis + rebracketing of PP [*d'*]+[*Inde*] to NP [*dinde*]. If that is the case, it is not the ultimate source expression *poule d'Inde*, but only the PP *d'Inde* itself – and exclusively when used to refer to turkeys – that would be appropriately analyzed as a bridging context.[18]

Be that as it may, the fact that, between 1575 and 1724, Winter-Froemel (2021: 35) finds that at least 75 % and, in both the periods 1625–1649 and 1700–1724 as many as 100 %, of occurrences of *d'Inde* in her database constitute bridging contexts seems

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16 For further examples of innovations that have clearly become entrenched, but not particularly frequent, let alone dominant, involving a range of word classes, see, e.g., Hansen (2008, examples from French), Hansen and Visconti (2009: §2.2, example from Italian), or Denison (2012, 2017, examples from English), as well as numerous other sources.

17 For more details about this database, see Section 4.1 below.

18 As Winter-Froemel (2021: 27) herself points out, there was no standardized orthography in the relevant period, so spelling and apostrophe use would be of no help in settling this question.

intuitively quite odd and raises the strong suspicion that her findings may principally reflect the type of texts that happen to be included in the database, rather than reveal any necessary general frequency of bridging contexts around the time of a change.

The second case study presented by Winter-Froemel concerns the evolution of the French present participle *pendant* ('hanging/pending') into a temporal preposition ('during'), which when followed by the complementizer *que* is also grammaticalized as a subordinate conjunction meaning 'while'. The author quantifies different uses of *pendant* between 1125 and 1449, taking the relevant bridging context to be *pendant* + NP, e.g., *pendant ce plait* ('this process pending/during this process') (Winter-Froemel 2021: 38). The new temporal sense of *pendant* seems to unambiguously emerge in the second quarter of the 14th century (Winter-Froemel 2021: 41), which is also the period in which bridging contexts are found to make their appearance, constituting 59 % of all uses of *pendant*. In the immediately following period, from 1350 to 1374, bridging contexts are a very small minority, whereas the new use has already become dominant. Potential problems with the data in this case are that *pendant* appears to see an approximately tenfold increase in absolute frequency in the database in the period where both bridging and switch contexts are first attested, after having been very rare from 1200 onwards, and indeed completely unattested for 25 years between 1275 and 1299. Moreover, Winter-Froemel does not further subdivide the period from 1325 to 1349, so readers cannot tell whether the bridging contexts that emerge in this period actually do precede the switch contexts she identifies.[19] As in the case of *poule d'Inde > dinde*, this may suggest that the Frantex database is not ideally suited to this particular inquiry.

In any case, Larrivée and Kallel's (2020) and Winter-Froemel's (2021) hypothesis that bridging contexts must constitute a minimum of 50 % of all uses of a given expression in order to trigger change is apparently based solely on the results of the three abovementioned individual case studies. As such, the hypothesis seems at the very least to invite further empirical investigation before it can be adopted as a normative assumption about change.

The hypothesis is in fact already called into question by an earlier paper, by Peng (2012),[20] who is also explicitly concerned with the frequency of bridging contexts (although – following Diewald 2002, rather than Heine 2002, he refers to them as

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19 Winter-Froemel's (2021: 41) Figure 9 actually shows *pendant* to be unattested between 1275 and 1325, but this appears to be a misprint, as subsequent columns in the same figure do show attestations in 1300–1324 and 1325–1349. In other words, the column marked "1275–1325" ought no doubt to have been marked as "1275–1299". This is the more plausible as all other columns in Figure 9 represent periods of only 25 years, whereas the problematically named column purports to represent a period of 51 years.

20 This study was brought to my attention by Ezra la Roi (Ghent) after the original version of the present paper had been submitted.

"critical contexts"; cf. Section 2). Using corpus data from Chinese, Peng shows that the frequency with which items occur in bridging contexts prior to grammaticalization may be very low, indeed, and he argues that the threshold for bridging contexts to trigger grammaticalization is item-specific, rather than universal.

If, however, no generalizations can be made regarding the frequency with which individual linguistic expressions have to occur in bridging contexts in order for change to take place, that suggests that the frequency of bridging contexts may not be criterial at all, and that it might be preferable to look for an alternative mechanism to explain how bridging contexts may be instrumental in triggering change.

Before proposing such an alternative mechanism in Section 4.3 below, however, I adduce, in Sections 4.1 and 4.2, two diachronic case studies, drawn from French like those of Larrivée and Kallel (2020) and Winter-Froemel (2021). Both these case studies show that high-frequency bridging contexts are not, in fact, a pre-requisite for change, even within that language.

4.1 Case study 1: the rise of auto-antonymy in the French verb *sanctionner*

My first case study relates to the lexicon. It concerns the French transitive verb *sanctionner* ('to sanction'), which is synchronically polysemous between two more or less auto-antonymous senses.

According to the *Trésor de la langue française informatisé, sanctionner* is first attested in 1777, with a sense that may be paraphrased as 'to ratify a legal arrangement'.[21] In other contexts, this original sense, which is still in use, paraphrases variably as '(formally or officially) approve of/attest to/confirm the status of/provide support for' etc. Very broadly speaking, *sanctionner* used with this sense thus describes an action that is beneficial to the entity filling the role of theme or patient. An example from a Modern French text is found in (8) below, where the meaning is that the giving of presents confirms the cultural status of the holidays in question:

(8)   *Que pensez-vous de nos fêtes de Noël, fêtes des Mères, des Pères, généralement sanctionnées par des cadeaux?* (1978)[22]
        'What do you think of our Christmas holidays, Mother's Day, Father's Day, which are usually <u>sanctioned</u> by the giving of presents?'

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21 Cf.   http://stella.atilf.fr/Dendien/scripts/tlfiv5/advanced.exe?8;s=417801690   (last   accessed   12 November 2024).
22 Where nothing else is indicated, all examples in this and the following section are taken from the Frantex database. (See below for details.)

In the early 20th century, *sanctionner* gains a new and very different sense, namely 'to penalize/take disciplinary action against'. According to the *Trésor de la langue française informatisé*, the first attestation of this sense dates from 1930, and this is also what I find in my corpus data.[23] A more recent example is given in (9), where the meaning is that the owner of the bicycle was penalized for their errors by having use of the bicycle withdrawn:

(9)   *Il fallut des mois pour que le nombre des erreurs – assez sévèrement
        sanctionnées par le retrait de la bicyclette - commençat à diminuer.* (1975)
        'It took months for the number of errors – which were fairly severely
        <u>sanctioned</u> by the temporary withdrawal of the bicycle – to decrease.'

Compared to the older sense, this newer sense thus roughly describes an action that is detrimental to the theme/patient. While these two senses are not logically opposed in the same way as the two senses of the Danish verb *forfordele* adduced in Section 2.1 above, they are to some extent auto-antonymical. Both senses of *sanctionner* are found in contemporary French and, unlike the Danish verb, the use of *sanctionner* is subject not just to inter-speaker variation, but also to intra-speaker variation. Thus, the two different senses may occasionally be found within one and the same text.

      For both this and the following case study (cf. Section 4.2 below), I made use of the electronic Frantex database. Frantex is the largest extant database of synchronic and diachronic written French. It spans the entire history of the language, from 950 to the present day. At the time of writing, it contains a total of 5,679 texts (272,389,277 words), representing a variety of different written genres, although with an emphasis on literary text.

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23 Interestingly, the same two senses are found in cognates of *sanctionner* in several other European languages, including English. An anonymous reviewer suggests that the polysemy may therefore have been the result of language contact. While that obviously cannot be excluded, it seems to be not uncommon for expressions with similar source meanings in different languages to develop similar polysemies, presumably because they are susceptible to occurring in similar types of bridging contexts.

      This reviewer also suggests that the polysemy of the noun *sanction* may have been the driver of the development of polysemy in the verb. That seems highly unlikely, however, for the following reason: according to the *Trésor de la langue française informatisé* (http://stella.atilf.fr/Dendien/scripts/tlfiv5/advanced.exe?8;s=1453926360; last accessed 17 July 2025), the noun *sanction* is first attested in the 14th century, with the sense 'precept' or 'approbation'. This sense is thus closest to the earliest of the two senses of the verb. From 1765, the noun is attested with a 'penalty' sense, i.e., a sense close to the more recent sense of the verb. In other words, the noun becomes polysemous 12 years before the verb is even attested. Yet, as we have seen, it takes more than 150 years for the 'penalize' sense of the verb to be attested in switch contexts. That strongly suggests that the verbal polysemy emerged largely independently of its nominal counterpart.

Table 1: Diachronic distribution of tokens of the lemma *sanctionner* in the modern French subcorpus of Frantext.

Period	Tokens
1800–1824	68
1825–1849	77
1850–1874	63
1875–1899	49
1900–1924	30
1925–1949	82
1950–1979	289

For the study of *sanctionner*, I confined my analysis to the Modern French subcorpus, which comprises texts from the period 1800–1979. The total number of words in this subcorpus is 151,948,368. I performed an automated search for the lemma *sanctionner*, yielding a total of 658 tokens, all of which were analyzed manually. Dividing the corpus into 25-year periods (with the exception of a final 30-year period), the 658 tokens were distributed diachronically as shown in Table 1.

I classified each example in the database as representing (i) the source meaning, (ii) the target meaning, or (iii) a bridging context, where both interpretations were potentially available. Clear bridging contexts were found both before and after the first attestation of switch contexts in 1930, from the earliest period and up until the present day. Example (10) is taken from approximately a quarter-century before the change took place, (11) follows the change by four decades, thus illustrating the point made in Section 2.1 above that bridging contexts are not a strictly delimited stage of change:

(10)   *Puis, en 1894–1895, la catastrophique guerre contre le Japon et le dur traité de Shimonoseki, qui sanctionne la défaite chinoise, font définitivement perdre sa légitimité à la dynastie Qing […]. (1902)*
'Then, in 1894–1895, the catastrophic war against Japan and the harsh treaty of Simonoseki which sanctions ['ratifies' or 'constitutes a punishment for'? MBMH] the Chinese defeat, make the Qing dynasty lose it's legitimacy definitively […].'

(11)   *[S]on incapacité à maîtriser des signes conventionnels, abstraits, futiles, sans charge fatale, fut sanctionnée par son échec à l'examen de caporal, […]. (1970)*

> 'His inability to master conventional, abstract, futile signs without concrete import, was <u>sanctioned</u> ['attested to' or 'penalized'? MBMH] by his failing the corporal's examination […].'

In identifying bridging contexts, I deliberately chose to be relatively liberal, so as to give the proposals made by Larrivée and Kallel (2020) and Winter-Froemel (2021) the benefit of the doubt, as it were. Thus, I included examples like (12) below, where it is clear to a careful reader that only the source meaning could plausibly have been intended (insofar as rules are not entities that can be subject to penalization), but where the general tenor of the passage and the syntactic structure of the host clause is such that I could imagine that a not-so-careful reader, or a reader who was unfamiliar with the genre, might understand the target meaning to be the most relevant one:

(12)   *On ne saurait donc dresser une liste des sentiments dont la violation constitue l'acte criminel; ils ne se distinguent des autres que par ce trait, c'est qu'ils sont communs à la grande moyenne des individus de la même société. Aussi les règles qui prohibent ces actes et que <u>sanctionne</u> le droit pénal sont-elles les seules auxquelles le fameux axiome juridique nul n'est censé ignorer la loi s'applique sans fiction.* (1893)

         'It is therefore not possible to draw up a list of the feelings whose violation constitutes a criminal act; they are not distinct from other feelings except by the fact that they are shared by the mass of people within a given society. Thus, the rules that prohibit these acts and which are <u>sanctioned</u> by criminal law [lit.: which$_{DirObj}$ sanctions criminal law$_{Subj}$] are the only ones to which the famous axiom that ignorance of the law is no excuse applies without fiction.'

The three categories of examples were quantified across the seven time periods in Table 1, and the results are shown in Figure 1. As the figure shows, there is no subperiod where the proportion of bridging contexts comes anywhere near the 50 % of all occurrences suggested by Larrivée and Kallel (2020) and by Winter-Froemel (2021).[24] Not only that, but we see no marked increase in the proportion of bridging contexts in the 25-year period (1900–1924) preceding that in which the change takes place. On the contrary, a fairly substantial decrease in bridging contexts can be observed, compared to the period from 1875 to 1899.

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24 The significance of these results is confirmed by a one-sided test for binomial proportions, in which $p < 0.001$ in each period.
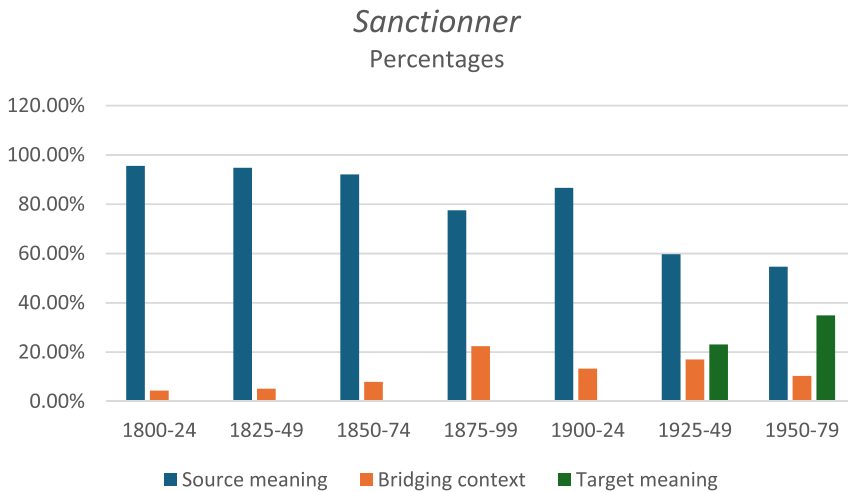
Figure 1: Classification and evolution of the uses of *sanctionner* across time periods.

4.2 Case study 2: the reanalysis of the French *pas plus (X)* (*que*)

My second case study is grammatical, rather than lexical, in nature. It concerns the change undergone by the French negative analytic comparative construction *pas plus (X) (que)* ('not more (X) (than)'), which has been reanalyzed as a negative connective ('neither/nor/not either'). As in the case of *sanctionner* in Section 4.1, the source construction is still in (very common) use in contemporary French, so together the two uses constitute a case of what Hopper (1991: 22) calls "layering".

The original comparative meaning of the construction is illustrated in (13):

(13)   *[…] et que la Vierge Marie n'a <u>pas plus de valur qu'</u>une autre femme.* (1542)
         '[…] and that the Virgin Mary has <u>no greater value than</u> any other woman.'

Here, what is negated in the source construction is simply the existence of a *difference* between the focus of comparison (= the entity being compared to something, *in casu* the Holy Virgin) and the baseline (= the entity that serves as a benchmark for comparison, *in casu* all other women). Importantly, (13) thus does not negate the possibility that either entity has value, but remains neutral on that point. Whether or not the speaker believes that either or both have value in and of themselves is something that the hearer will have to work out from the wider context in which the construction is used. In other words, the use of *pas plus* (*X*) *que* is fully compatible with both the Virgin Mary and women in general being seen as having great value.

The newer negative connective meaning is illustrated in (14):

(14) *Perec **ne** composera **pas** pour autant de texte pour la machine, <u>pas plus qu'il</u>
      <u>n'essaiera de faire produire par elle ses textes combinatoires.</u>* (G 1980)
      'Perec nevertheless wo**n't** write any text for the machine, <u>nor</u> will he
      attempt to make it produce his combinatory texts.'

Here, the speaker is not denying that there's a difference between Perec writing text
for the machine and him trying to make the machine write text for him. Instead, each
of the two clauses is negated independently, and in addition to negating the second
clause, *pas plus que* functions as a connective, instructing the hearer to process the
contents of two negative clauses, both of which represent new information in the
context, as related in terms of some relevant umbrella category (such as "things that
Perec will not do in relation to the machine"). Crucially, a "literal" comparative
interpretation would not make sense in this instance: once one has asserted that a
state-of-affairs X (here, 'Perec writing text for the machine') does *not* obtain, it is
communicatively pointless to go on to add that X does not obtain to a greater degree
than another state-of-affairs Y (here, 'Perec making the machine write text for him'),
particularly when the degree to which Y obtains has not been stated elsewhere in the
context. The negative connective processing instruction, on the other hand, is part
and parcel of what is communicated by *pas plus que* here.

    An example of a plausible bridging context is seen in (15):

(15) *Fatmé […] fut la première à s'ennuyer du sentiment. Le bramine, à qui il ne*
      plaisoit <u>pas plus qu</u>'à elle, le quitta bientôt aussi. (1742)
      'Fatmé […] was the first to become bored by the sentiment. The Brahmin,
      who did<u>n't</u> like it <u>any more than</u> she did/who did<u>n't</u> like it, <u>either</u>, soon
      abandoned it, too.'

Notice the difference between the clear use of the target meaning in (14) and the
bridging context in (15): in (14), the idea that Perec will not himself compose text for
the machine is explicitly coded in the negative clause preceding *pas plus que*.
Furthermore, the clause marked by *pas plus que* introduces new information, viz. the
idea that Perec will also not attempt to make the machine in question produce text. In
(15), on the other hand, the idea that Fatmé may not have liked the sentiment at all is
not explicitly expressed, but is merely a plausible inference: it is possible to like a
sentiment at least a little bit and still ultimately be bored by it. Moreover, in this case,
the constituent following *pas plus que* expresses old information, namely the idea
that Fatmé liked the sentiment to a low degree (or perhaps not at all).

    As this case study grew out of a broader ongoing study of negative connectives in
French, I included all of the Frantex database, from Old French up to the present day,

Table 2: Historical periodization of the French language.

Period name	Time span
Old French	950–1299
Middle French	1300–1549
Pre-classical French	1550–1649
Classical French	1650–1799
Modern French	1800–1979
Contemporary French	1980–present

in order to study the rise of that use of *pas plus (X) (que)*. The periodizations used follow those of the database itself, and they are seen in Table 2.

All instances occurring in Old and Middle French texts were analyzed. As the use of *pas plus* (*X*) (*que*) is highly frequent across all subsequent time periods, I had to sample the data from the Pre-Classical period onwards to make qualitative analysis feasible. Depending on the total number of examples in each period, the data from that period were randomly sampled at regular intervals ranging from every 5th instance in Pre-Classical French, through every 25th instance in both Classical and Contemporary French, to every 100th instance in Modern French. The distribution of the sample across the six time periods is shown in Table 3.

As in the case of *sanctionner* above, each example was then classified as instantiating the source construction, a bridging context, or the target construction. The same principle of generosity in attributing bridging-context status was followed as in the case study involving *sanctionner*. As shown in Figure 2, bridging contexts are found already in Middle French (albeit represented by only a single instance), whereas we have to wait until the Classical French period for the target meaning to appear.

Moreover, just as in the case of *sanctionner*, we see that occurrences of the *pas plus* (*X*) (*que*) construction in bridging contexts never reach an overall frequency even approaching the 50 % benchmark suggested by Larrivée and Kallel (2020) and by Winter-Froemel (2021) in any time period.[25]

That said, Classical French is a 150-year period, and in principle much may happen during that length of time. In a second step, I therefore divided the Classical French period into 25-year intervals and quantified the uses of *pas plus (X) (que)* separately within each interval. The results are shown in Figure 3. The figure reveals that the target meaning is attested only in the last third of the overall period, and that

25 As with Case Study 1, a one-sided test for binomial proportions shows that these results are significant at $p < 0.001$ in each period, except in 1650–1674, where $p = 0.006$.

**Table 3:** Distribution of the sample across time periods.

Period	Sample total
Old French	19
Middle French	111
Pre-classical French	104
Classical French	187
Modern French	140
Contemporary French	146
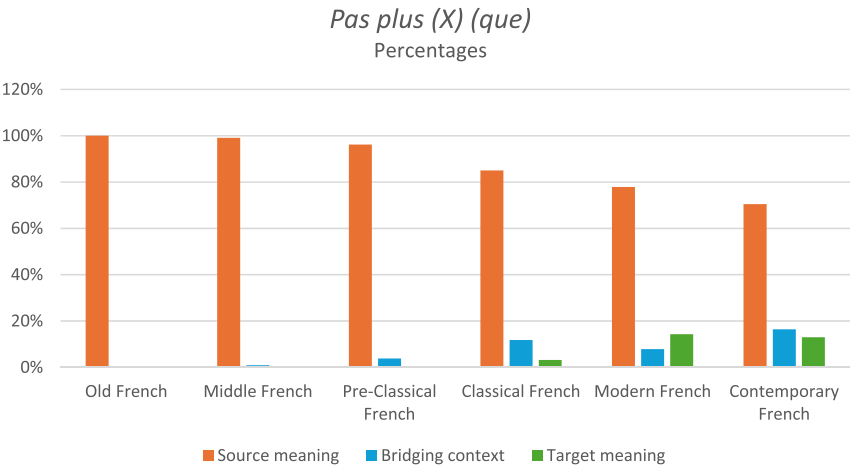
Figure 2: Classification and evolution of the uses of *pas plus* (*X*) (*que*) across time periods.

the proportion of bridging contexts does not reach as much as 20 % in any interval. While a slight rise in bridging contexts can be observed in the interval immediately preceding the change (i.e., 1725–1749), they still constitute a mere 12.8 % of uses in that interval, and the slight rise does not appear to be part of an overall rise in bridging contexts across Classical French. Indeed, the proportion of bridging contexts is at its highest (17.6 %), not in the later intervals, but in the earliest one from 1650 to 1674. If the frequency of bridging contexts were the main driver of reanalysis, the change should thus have been more likely to take place in the period from 1675 to 1699, rather than as late as 1750–1774.

This second case study, from grammar, thus reinforces the conclusion drawn from the lexical case study in Section 4.1, that high frequency of bridging contexts does not appear to be a pre-requisite for change.

Pas plus (X) (que)
Classical French (in %)
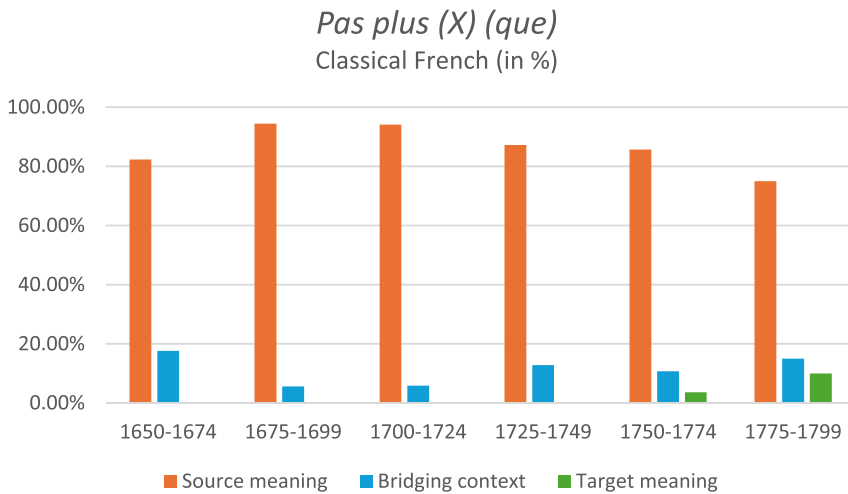
Figure 3: Classification and evolution of the uses of *pas plus* (*X*) (*que*) across sub-periods of classical French.

4.3 Salience of the innovative interpretation in bridging contexts

The alternative hypothesis that will be defended here is that the frequency of bridging contexts as such is, in fact, not centrally important to whether or not such contexts end up triggering change. Instead, what is more likely to be important is the contextual salience, to hearers, of the innovative interpretation they make available.

There are two related aspects to the salience of an innovative interpretation of a given linguistic expression: (i) how accessible is that interpretation given the context of utterance?, and (ii) how much attention do hearers pay to it as a possible alternative to the conventional interpretation, once they have accessed it?[26]

In the first instance, the salience of an innovative interpretation seems like a strong candidate for an alternative triggering mechanism because reanalysis implies the acquisition, on the part of hearers, of a new meaning for the reanalyzed expression. Intuitively, it is plausible that more salient (*a fortiori* highly salient) phenomena would be more easily acquired than less salient or non-salient ones.

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26 These two aspects of salience seem to invite closer study of the interrelations between salience, on the one hand, and, on the other hand, the grammar of "engagement" (Evans et al. 2018a, 2018b) and of the notion of "grounding", understood as the negotiation of intersubjective understandings in interaction (e.g., Clark 1992). Such an endeavor falls outside the scope of the present paper, however.

Secondly, not only is salience an already widely used concept within cognitive, usage-based approaches to linguistics (e.g., Evans 2019: passim), but it has for a long time been acknowledged as an important factor in language users' acquisition and evaluations of sociolinguistic variants, and of so-called social meanings more generally (Labov 2001: 196–197). Sociolinguists have pointed out that not only may degrees of salience vary across different social meanings/variants, but the salience of a given meaning/variant may also vary across different language users (Johnstone 2016: 638–639). I argued in Section 2.1 above that language users' awareness of bridging contexts may similarly vary across time and across individuals. This difference in awareness can be described in terms of how salient hearers perceive the availability of more than one interpretation of a given linguistic expression to be in such contexts.

The existing literature (e.g., Auer 2014; Divjak 2019; Ellis 2017; Giora 2003; Kerswill and Williams 2002; Rácz 2013) has proposed a variety of different characterizations of salience, and of what makes a given (socio)linguistic phenomenon salient. Some of these involve frequency considerations. However, when examined together, the different approaches suggest that the relationship between salience and frequency is far from straightforward. Schmid and Günther (2016: 1), in a short, but very helpful paper, systematize the available characterizations into four types, based on the interaction between sources of hearer expectation (i.e., long-term memory vs. the current context) and two mechanisms of salience, viz. the confirmation vs. the violation of expectations. This interaction and the four types of salience it gives rise to are represented in Table 4, which should be read as follows:

–   Where the linguistic input matches expectations derived from knowledge stored in long-term memory about language usage in general, we get what Schmid and Günther (2016: 2) call "salience by context-free entrenchment". Linguistic expressions that trigger this type of salience are usually highly frequent in general usage.

Table 4: Types of salience and their correlation with frequency.

	Long-term memory	**Current context**	**Correlation with frequency**
Confirmations of expectations	(1) Salience by context-free enrichment: highly familiar and strongly entrenched	(2) Salience by contextual entrenchment: highly expected in a given context	Typically high frequency
Violations of expectation	(3) Salience by novelty: totally unfamiliar	(4) Salience by surprisal: highly unexpected in a given context	Typically low frequency

- Where the linguistic input matches expectations based on knowledge of the particular type of context in which an utterance is produced, the result is "salience by contextual entrenchment". Expressions that are salient in this way are not necessarily highly frequent in general usage, but will typically occur with substantial frequency in this particular context type.
- If the input fails to match expectations derived from knowledge stored in long-term memory of usage patterns across context types, we have "salience by novelty". Only expressions that have overall low frequency will normally trigger salience by novelty.
- Finally, if the input fails to match expectations associated with the context type, the type of salience that may be triggered is "salience by surprisal". Here, the triggering expression will normally occur with only low frequency in the specific kind of context in question (but may occur with higher frequency elsewhere).

In other words, salience does not result directly from frequency, nor does it result from frequency alone. Indeed, salience can correlate with both high and low frequency, depending on what causes the salience.

If we apply this model to bridging contexts, it seems to follow that if bridging contexts are as frequent prior to change as Larrivée and Kallel (2020) and Winter-Froemel (2021) claim – i.e., if they constitute 50 % or more of all the contexts in which a given expression is used – then they should be highly familiar to hearers, and any salience achieved by the innovative meaning that is derivable in bridging contexts would therefore have to be of either Type (1) or Type (2).

This, however, raises the question why hearers should feel the need to attribute a new coded meaning to the expression in *langue*, if that meaning can quite standardly be inferred from the use of the expression in *parole*. The pragmatics literature contains a wide range of examples of expression types with highly frequent additional "non-literal" interpretations, such as expressions triggering Generalized Conversational Implicatures (or GCIs, for short) (cf. Levinson 2000). Now, GCIs are precisely *not* usually reanalyzed as coding the implicated interpretation; in fact, as pointed out by Hansen and Waltereit (2006: 240), the very frequency with which such implicatures are triggered may act to impede reanalysis.

An analogous argument might be made about very frequent bridging contexts, not least because the status of an innovative interpretation that is derivable in such a bridging context prior to the attestation of switch contexts seems in fact to be very similar to that of a GCI, given that it is not coded, but is rather the result of a common, but defeasible, inference.

Conversely, infrequent bridging contexts may in at least some cases be what pushes some hearers into attributing a new meaning to a given expression. This latter scenario would be consistent with both classic and more recent work in

learning theory (e.g. Rescorla and Wagner 1972; Stahl and Feigenson 2015), whereby organisms (presumably including language users) learn new things principally when events violate their expectations. When events conform to expectations, on the other hand, there is reduced, if any, *impetus* to learn from them.

With respect to language change, it is evidently not possible to accurately annotate historical corpora for the presumed salience to hearers of any innovative interpretations made possible by bridging contexts. That said, corpus data may in some cases provide at least speculative support for the role of salience. Thus, it is interesting to observe, in the data on *sanctionner* adduced in Section 4.1 above, that when looking at the overall frequency of the lemma, what we find is that, in both absolute and relative terms, it is at its lowest in the period from 1900 to 1924 – i.e., the period immediately preceding the one in which the innovative 'penalize' sense of the verb is first attested in switch context. The normalized frequencies of the lemma are shown in Table 5, and raw frequencies of the three categories of uses (and, by implication, of the lemma) are shown in Figure 4.

It is evidently possible that this observation is a mere artifact of the composition of the particular corpus used: it may simply be the case that the texts from 1900 to 1924 happen to treat topics where *sanctionner* is a less relevant verb to use than in the texts from other periods. However, as shown in Table 1, Section 4.1, *sanctionner* is a low-frequency verb in any period, suggesting that it may be relatively unfamiliar to many language users even at the best of times. The apparent further drop in frequency in the period preceding the change may have contributed to salience by novelty, particularly in bridging contexts, and thus helped facilitate its reanalysis.

Due to the inevitably speculative nature of considerations like this, however, empirical substantiation of my hypothesis about the role of salience in triggering change will have to be obtained principally through experimental work, rather than by looking at historical corpus data. Importantly, work of this nature has already

Table 5: Normalized frequencies of *sanctionner* across time periods.

Period	Normalized frequency per 10 000 words
1800–1824	0.072
1825–1849	0.031
1850–1874	0.032
1875–1899	0.023
1900–1924	0.016
1925–1949	0.021
1950–1979	0.066

Sanctionner
Occurrences
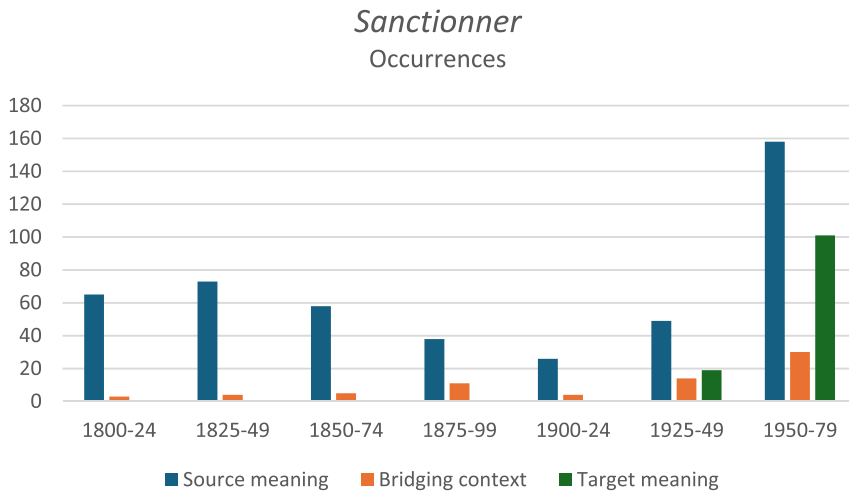
Figure 4: Absolute frequencies of *sanctionner* and its different uses across time periods.

been done on the acquisition of sociolinguistic variants, and the results point precisely in the direction of salience by novelty/surprisal being a key factor.

For instance, Sumner et al. (2014) find that atypical, i.e., less frequent, but socially salient pronunciations of words are remembered better than typical, i.e., more frequent, but socially less salient ones. The experiments carried out by Rácz et al. (2017) demonstrate that, at equal frequencies of exposure, people are better able to acquire and to generalize socially salient linguistic patterns in an invented language than otherwise comparable patterns that are not socially salient.

The results reported in Lai et al. (2020) seem particularly germane to the hypothesis defended in the present paper: in a nutshell, these authors use experimental data from an invented language to show that salience by both novelty and surprisal facilitates the acquisition of a (socially conditioned) innovative form for an already established linguistic meaning. The hypothesis I am proposing here is that salience by novelty/surprisal may be central to facilitating the acquisition of an innovative meaning for an already established linguistic form. It seems not unreasonable to expect that the two types of processes may have something (indeed, possibly much) in common.

5 Summary and conclusions

In Section 2.1 of this paper, I proposed a revised definition of bridging contexts, to take account of the facts that (a) the innovative interpretation does not have to be invited

(or even perceived as possible) by the speaker in order for change to be triggered; (b) bridging contexts do not involve semantic/structural ambiguity; instead, they underspecify the speaker's intended meaning, thereby allowing hearers to potentially derive an innovative interpretation, and (c) bridging contexts are not a clearly demarcated stage of change. Furthermore, I argued that bridging contexts are principally a second-order phenomenon, i.e., while they can be observed by outside analysts, they are not necessarily perceived as bridging contexts by all, or indeed any, participants in a particular communicative event. As a second-order phenomenon, they do, however, still have empirical reality.

In Section 3, I argued that bridging contexts are not relevant to all forms of language change, or even all forms of meaning change, but principally – perhaps exclusively – to hearer-driven forms of change. At the same time, I showed in Sections 4.1 and 4.2 (as well as passim) that bridging contexts can be observed in cases of change in both the grammar and the lexicon.

Finally, the two case studies in Sections 4.1 and 4.2 demonstrated that bridging contexts need not be particularly frequent in order to trigger change. Consequently, in Section 4.3, I argued that it is more likely that innovative interpretations arising in bridging contexts have to be salient to hearers in order to result in change. Such a hypothesis already finds support in existing work in variationist sociolinguistics, experimental psycholinguistics, and learning theory, but further empirical work – principally of an experimental nature – will be needed to test it in greater depth. In so far as salience is compatible with both high and low frequency of occurrence, the upshot of the hypothesis presented here is that there is probably little to be gained from looking for a particular frequency threshold for bridging contexts.

It is, of course, logically possible that bridging contexts might simply be irrelevant to change. That, however, raises the question of what else might be triggering reanalyses like the ones discussed in this paper. The answer to that question is not immediately obvious. In addition, given that we find bridging contexts to regularly occur in both of the case studies above, and that they have been found in a great many other cases of change analyzed in the existing literature, the more plausible assumption seems to be that they do play a central role.

on preliminary versions of this paper. Thanks are due also to Volker Gast and Andrea Nini for advice on the statistics tests. The usual disclaimers apply.

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