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INTRODUCTION

Cognitive approaches to variation and change in the English modal domain: introduction

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1. Introduction

Modality is a fascinating – though at times complex – domain for linguists, one that has inspired a wide range of definitions and approaches aimed at tracing its variation as well as its historical development. Traditionally, it has been described either as the linguistic encoding of necessity and possibility in propositions (cf. van der Auwera & Zamorano Aguilar 2015: 21) or as the speaker's degree of personal commitment to a proposition, as highlighted in works such as Bybee, Perkins & Pagliuca (1994), Lyons (1995) and Nuyts (2006), among many others. The motivation for a new volume on modality and modal constructions in English stems from the desire to present a selection of state-of-the-art research on the topic from the viewpoint of language variation and change, including contributions by established and emerging specialists on these topics in the field of English linguistics. The theoretical frameworks showcased in the eight articles are generally cognitive and usage-based, most typically couched in a constructionist approach (Hoffmann & Trousdale 2013). However, the general aim of the issue is to provide an accessible collection of cutting-edge studies that will be of interest to any specialist in English linguistics and the expression of modality in this language. For example, the contributions will illustrate the range of methods relevant for the modern exploration of research questions on the form and meaning of modal constructions, including traditional corpus-based approaches (e.g. Basile, Lenoble & Ziegeler 2025; Daugs & Schneider 2025; Latouche, Laporte & Depraetere 2025), experiments (Rotter & Liu 2025) and blind annotation methods (Mikkelsen & Morin 2025). In addition, these diverse empirical studies will feed into targeted theoretical discussions, united by the common assumption that the inclusion of notions of variation and change is crucial for our growing understanding of English modal constructions (e.g. Leclercq & Trousdale 2025; Dietrich 2025).

In this special issue, we identify variation and change as relatively understudied factors in the structure and use of English modal constructions. Picking up on the recent efforts towards theorising modality in Construction Grammar (e.g. Cappelle & Depraetere 2016) and diachronic processes in modal constructions (Hilpert, Cappelle & Depraetere 2021), the contributions cohesively engage with the following series of research questions:

- How does variability and change in the expression of modal meaning in English reveal tensions between traditional categories of modality and other semantic domains, such as the future, mirativity (Celle & Tsangalidis 2017), or post-modal meanings, which potentially evolve towards expressive meanings rather than truth-conditional meanings (Celle 2024; Dietrich 2025; Leclercq & Trousdale 2025)?
- What is the relevance of sociolinguistic variation, social meaning, and language contact (Basile 2023, 2024) for our understanding of English modal constructions and their diachronic development (Basile, Lenoble & Ziegeler 2025; Latouche, Laporte & Depraetere 2025; Mikkelsen & Morin 2025; Rotter & Liu 2025)?
- How might variation in the semantic, pragmatic, and/or social meaning of contracted forms of modal constructions justify the postulation of these forms as emerging distinct constructions in their own right (Azorin 2025; Daugs & Schneider 2025; Mikkelsen & Morin 2025)?

The contributions to this special issue may be organized around three main axes: (i) studies focusing on collocational patterns and contextual factors as predictors of modal meaning; (ii) investigations into diachronic developments and change; and (iii) analyses of contractions and their constructional status. The following sections provide an overview of each of these three axes.

2. Summary of articles in this issue

2.1. Collocation patterns and context as predictors of modal meaning

The present special issue features three articles that investigate the specialisation of modal meaning in specific contexts. By using either corpus-based or experimental methods, these three articles offer empirical insight on what drives the development of modal meaning in certain constructions. From a theoretical viewpoint, this contributes to testing one of the foundational hypotheses of Construction Grammar, namely that linguistic expressions reflect the interaction of constructions and the linguistic material they are made up of. As stated by Fried & Östman (2004: 22), 'words … contribute specific semantic properties to any larger construction they occur in, but a construction may also modify some of those properties, as well as add features of its own'. Whether a specific sequence should be regarded as a construction or not depends on the degree of conventionalisation associated with the form–meaning pairing. Each of the three articles investigates how the contextual environment impacts this conventionalisation process, either synchronically or diachronically.

Nadine Dietrich's contribution, entitled 'Motivations for specialisation: Testing the feasibility of polysemous pre-emption in the competition between *will* and *must*', considers when these modals are in competition in functionally equivalent expressions, and one may be preferred over the other and eventually specialise in conveying a certain meaning. Dietrich delves into the functional differences that might account for the specialisation of these modals for the specific contexts of command and inference. She sets out to test the value of three types of motivation for specialisation, namely construal pre-emption, statistical pre-emption and polysemous pre-emption. She argues that differences in construal and connotation (which she labels construal pre-emption) cannot account for specialisation. In the case of near synonymy, as illustrated in particle placement alternation, for instance, competing expressions do not imply a different construal, since alternations are functional equivalents. When a pattern is better entrenched in a specific meaning than a competing pattern with the same meaning, specialisation might result from statistical pre-emption, such as we see in the case of the ditransitive pattern with *explain*, where **explain me*

this is pre-empted by the better entrenchment of the *to*-dative pattern (*explain this to me*) (Goldberg 2019). However, Dietrich points out that this explanation of specialisation is circular because it takes usage as evidence. She puts forward polysemous pre-emption as a more relevant motivation for construal differences. Polysemous pre-emption means that a pattern is prevented from being used with a certain meaning in a specific context because that pattern is already entrenched in that context with another meaning. She examines the competition between *will* and *must* with two specific meanings: the deontic 'command' meaning (e.g. *you must listen to me!)* and the epistemic 'inference' meaning (e.g. *you must be tired*). For each meaning, she identifies the collexemes that *will* and *must* collocate with and tests whether each of the three types of pre-emption may account for specialisation. Based on a quantitative analysis of the final period of the *Corpus of Late Modern English* (CLMET 3.1; De Smet *et al.* 2011), she provides quantitative evidence for the inferential specialisation of *must* and *will* in collocation patterns such as *must be/know* and *will remember.* The command meaning of *must* is more frequent in *must remember/forgive/excuse*, while the prediction meaning is better entrenched in *will remember/forgive/excuse.* This supports Dietrich's claim that in addition to construal pre-emption, polysemous pre-emption is a plausible motivation for specialisation.

The other two articles in the set investigate the impact of the co-occurrence of adverbs with modal verbs. In their contribution entitled 'A register approach to modal (non-)concord in English: An experimental study of linguistic and social meaning', **Stephanie Rotter** and **Mingya Liu** revisit modal concord in American English in a register approach, addressing the linguistic and social meanings of *may possibly* and *must certainly* both with and without context. Modal concord is generally understood as a phenomenon whereby two modal elements with the same flavour and force give rise to a single modality, which implies that a modal adverb co-occurring with a modal verb is modally harmonic (Lyons 1977) and semantically vacuous (Zeijlstra 2007). An alternative analysis has recently been proposed by Giannakidou & Mari (2018), emphasising the 'modal spread' through adverbs that may strengthen the commitment associated by default with modal verbs. Building on these results, Rotter and Liu explain how interpretive differences between modal concord constructions – *may possibly* and *must certainly* – and their single modal counterpart can challenge the principle of semantic equivalence which is at the core of the modal concord analysis. Their results show that the linguistic meaning of modal concord constructions differs from that of single modal constructions in terms of speaker commitment. In addition to the strengthening effect predicted by the modal spread analysis, Rotter and Liu uncover a weakening effect in *may possibly.* The perceived social meaning of modal concord constructions is also reported to be different from that of single modal constructions. Modal concord constructions are perceived as less friendly, warm and cool than single modal constructions, especially in necessity conditions as compared to possibility conditions. Formality and confidence are reported to be stronger for necessity modal concord *must certainly* compared to single modal *must.* By contrast, confidence is reported to be weaker for possibility *may possibly* compared to single modal *may.* Modal concord constructions are rated as less grammatical than single modal constructions but do not appear to be sensitive to register. Overall, the results suggest that necessity modal concord constructions increase the speaker commitment ratings, in contrast to possibility modal concord constructions, and that modal concord constructions have distinct linguistic and social meanings. These results challenge the core assumption of semantic equivalence that underlies the concord analysis.

Benoît Leclercq and **Graeme Trousdale**'s contribution, entitled 'Investigating diachronic shifts within a domain of English modality: A study of collocates with *well*', points in the same direction by highlighting the role of certain collocation patterns in semantic change. Using data from the *Corpus of Historical American English* (COHA; Davies 2010) that span each decade from 1830 to 1970, they present a corpus-based account of recent

developments in a set of constructions involving adverbs and modal verbs, namely *well may/ might* and *may/might well.* Their aim is to determine whether the four patterns have undergone a functional shift and possibly contributed to the development of *may* and *might* in concessive constructions, which are known to have emerged from the epistemic uses of *might* and *may.* In previous studies, *well* is viewed as serving to strengthen the epistemic value of *may*, as in *He may well have left it downstairs* (Huddleston & Pullum *et al.* 2002). Hoye (1997) contrasts the idiomatic meaning of *may well*, which conveys epistemic probability, with that of *well may*, which reinforces epistemic possibility. Leclercq and Trousdale's findings reveal a substantial shift from non-epistemic meanings to epistemic meanings. However, none of the four patterns display a significant association with concessive meaning. In terms of frequency, the use of the *well may* and *well might* in subject–auxiliary inversion (SAI) patterns have gradually declined, probably as a result of the weakening of modal force and the increasing use of modals as hedging devices over the period considered. The shift towards the epistemic meaning also appears to have triggered a change in collocational preferences by widening the semantic profiles of the lexical verbs used in the four patterns beyond verbs of locution and cognition. Leclercq and Trousdale's study of collocation patterns that show a shift from the deontic to epistemic domain thus confirms a well-known trend in the evolution of modal meaning (Sweetser 1990; Bybee, Perkins & Pagliuca 1994).

2.2. Diachrony and change

Two articles in the special issue provide in-depth diachronic analyses of modal constructions in spoken and written English, arguably offering the most historically oriented perspectives in the volume. Both contributions adopt a Construction Grammar framework to trace the development of specific modal expressions, highlighting recent changes in use across contemporary spoken varieties. Methodologically, the studies align in their use of large-scale corpora and mixed-methods approaches, combining quantitative techniques such as regression modelling with qualitative analyses of semantic and pragmatic shifts. This dual focus enables the authors to map not only the frequency and distribution of emerging patterns, but also the evolving communicative functions these modals perform. Both articles thus contribute to the large body of scholarship on the historical development of modality in English, including foundational studies (Palmer 1990) and those rooted in grammaticalisation (Bybee, Perkins & Pagliuca 1994; Krug 2000; Traugott & Dasher 2002; Narrog 2012, *inter alia*), as well as more recent work situated within Construction Grammar (Hilpert, Cappelle & Depraetere 2021).

The article by **Lucie Latouche**, **Samantha Laporte** and **Ilse Depraetere**, 'Hedged performatives in spoken American English: Recent change and variation in their use', investigates the diachronic development of hedged performatives (HPs) in spoken American English. HPs, first analysed by Fraser (1975), consist of a (semi-)modal verb and a performative verb, as in *I have to say*, *I must admit*, etc. While the discursive functions of HPs have been studied, their development as constructions over time has not been addressed. The novelty of this article lies in its approach to examining HPs through a Diachronic Construction Grammar perspective, which differentiates between macro-level constructions (e.g. [I + MODAL + Vperf]), modal-specific meso-level constructions (e.g. [*I must* Vperf]), and micro-level constructions (e.g. [*I must say*]). More precisely, the authors aim to address four key research questions. The first question investigates whether the diachronic trend observed at the macro-level is mirrored in the development of individual meso-level constructions or whether divergent trends exist at this level. The second question examines whether modal-specific constructions at the meso-level follow the frequency changes of their respective

modal verbs or exhibit distinct trajectories. The third question explores whether micro-level constructions align with their respective meso-level trends or show idiosyncratic variation related to specific performative verbs or their illocutionary categories. Finally, the fourth question assesses whether the same diachronic trends appear across scripted and unscripted speech. The analysis draws on three corpora based on data spanning from the 1950s to 2019: *The TV Corpus* (Davies 2019b), *The Movie Corpus* (2019a; see also 2021) and the spoken subpart of the *Corpus of Contemporary American English* (COCA; Davies 2008–). The results reveal that HPs exhibit divergent diachronic trends depending on the modal used: *[I must Vperf]* constructions show a decline, *[I have to Vperf]* constructions are on the rise, and *[I can Vperf]* constructions remain relatively stable. Interestingly, the diachronic patterns of HPs do not simply mirror the changes in the base modal verbs themselves, thereby reinforcing the argument for their status as constructions. Changes in HPs involving *must* and *have to* are shown to occur predominantly at the meso-level, reflecting a shift in discourse norms away from authoritative modality. In contrast, HPs involving *can* show more idiosyncratic changes at the micro-level. Another significant finding presented by the authors is the difference in register: HPs are more prevalent in scripted rather than unscripted speech, though the observed diachronic trends remain consistent across different registers. The article's key contribution is highlighting that the evolution of HPs can be driven at different constructional levels depending on the base modal, providing new insights into the intersection of modality, discourse and constructional change.

The article by **Carmelo Alessandro Basile**, **Christophe Lenoble** and **Debra Ziegeler**, 'The emergence of BHT: A cognitive-functional account', investigates the rise of the *be having to* (BHT) construction within the English modal system, focusing on its semantic and functional traits, as well as its (recent) diachronic emergence. Their study – the first to introduce BHT in the literature on English modality – highlights the innovative combination of the progressive aspect with modal necessity – a development that sets it apart from traditional semi-modals like *have to.* The novelty of this study lies indeed in its analysis of BHT as an emerging construction, a claim that challenges established assumptions regarding the compatibility of progressive forms with modal verbs, given that modal verbs are typically considered stative and non-progressive. The study addresses three research questions. First, it explores to what extent BHT and *have to* differ semantically. Second, it investigates the factors prompting the diachronic emergence of BHT within the English modal system. Third, it examines why BHT is predominantly observed in British English rather than in postcolonial varieties. The article's approach combines qualitative and quantitative corpus analyses to identify patterns of use and variation, particularly focusing on British English. The findings reveal that BHT is semantically distinct from the semi-modal *have to* by emphasising contingency, intensity, and a lack of control over the situation of the subject referent. It conveys a sense of external necessity imposed on the subject, contrasting with the future-oriented necessity projected by *have to.* This distinction underscores BHT's non-compositional meaning, which does not simply result from combining the progressive aspect with the modal verb. The study also highlights that the emergence of BHT can be linked to the grammaticalisation cycle of *have to*, which originally expressed possession but evolved to encompass dynamic and deontic modal functions. The higher production of BHT in British English than in postcolonial varieties of English today is attributed to 'negative retentionism' – the tendency of contact-based varieties to lack linguistic features that emerged after colonisation (as shown in the investigation of diachronic data from the CLMET corpus). The article's contribution lies in documenting the BHT construction's rise and establishing its role within the English modal system, offering new insights into the interaction between modality and aspect. The authors suggest future research on the potential spread of BHT to other varieties of English and its productivity as a future marker, emphasizing the need for further diachronic and cross-varietal investigations.

2.3. Contractions and constructional status

The final axis of this issue includes a set of articles examining contracted modal constructions, a phenomenon that has emerged as a particularly vibrant area of enquiry within cognitive linguistics and Construction Grammar (e.g. Lorenz 2013a; Daugs 2021, 2022). These three contributions, each offering distinct theoretical and empirical insights on modal contractions, can be understood as forming a coherent progression from formal to functional considerations. On the formal dimension, researchers continue to grapple with fundamental questions regarding the granularity of constructional representation: specifically, at what point contracted variants achieve sufficient phonetic and morphosyntactic autonomy from their source constructions to warrant status as independent constructions in their own right (Krug 2000, 2001; Lorenz 2020). These questions take on particular significance when we consider that the synchronic variation we observe between contracted and full forms may represent a snapshot of diachronic constructional specialisation in progress (Traugott & Trousdale 2013). Turning to meaning, while recent scholarship has made significant strides in documenting semantic and collocational distinctions between contracted modals and their full-form counterparts (Lorenz 2013b; Nesselhauf 2014; Flach 2021), there remains considerable scope for exploring the full constructionist conception of encyclopaedic meaning. This broader perspective encompasses pragmatic dimensions and, crucially, the social indexicalities that contracted forms carry in actual usage contexts (Levshina & Lorenz 2022; Morin, Desaguilier & Grieve 2024; Leclercq & Morin 2025). By attending to these understudied aspects of meaning, we can appreciate just how fine-grained constructional differences can become, even between such formally subtle variants as contracted and full modal forms.

In her contribution 'Breaking free from the BE *going to* / *gonna* dichotomy: A study of variation in an emerging English modal', **Leela Azorin** examines the BE *going to* / *gonna* paradigm through a morphosyntactic analysis of two corpora: the *Santa Barbara Corpus of Spoken American English* (Du Bois *et al.* 2000–5) and a Twitter corpus of climate change discourse (Littman & Wrubel 2019). The study identifies eight distinct variants beyond the traditional binary, including *gunna, gon'*, and the 'hypercontraction' *I'ma/Imma*, where the first-person pronoun, copula and modal have fused into a single morphological unit. The analysis employs four distributional criteria: subject choice, presence or absence of BE, negation patterns and following verb types. Results show that BE is more frequently contracted or elided with *gonna* than with *going to*, with elision rates highest in the most contracted variants like *gon'* and monosyllabic forms [gə] and [nə]. The hypercontracted *I'ma* variant displays categorical constraints, occurring exclusively with first-person subjects due to morphological incorporation of the pronoun. The study finds that certain variants derive from *gonna* rather than from BE *going to* (notably *gon'* and *I'ma*), suggesting that *gonna* functions as an independent source for further grammaticalisation. Distributional differences emerge between forms: *gonna* appears without a following verb three times more frequently than *going to*, which the author suggests may indicate metadiscursive functions in conversation. Additionally, *gonna* shows stronger associations with contracted BE forms and exhibits distinct collocational preferences, particularly with motion verbs such as *go* and *come*. Through this formal analysis, Azorin argues that variants traditionally characterised as 'phonetic realizations' or 'non-standard spellings' represent morphosyntactically distinct constructions at various stages of autonomisation. The findings support a Constructionist perspective where formal variation reflects cognitive differentiation, with *gonna* achieving sufficient independence to generate its own network of variants.

In their contribution 'Negate me not, negate me never: Cross-varietal distributional skews in modal negation from a diachronic perspective', **Robert Daugs** and **Ulrike Schneider** examine the negation and contraction patterns of *will* and *would* through a diachronic analysis

of British and American English fiction from the nineteenth and twentieth centuries. The study employs Configural Frequency Analysis (CFA) to investigate nearly one million tokens extracted from multiple corpora, including COHA, *Nineteenth-Century Fiction* (Karlin & Keymer 1999–2000) and the *British National Corpus* (BNC, 1995). The analysis tracks the emergence and spread of contracted forms (*'ll*, *'d*) alongside their full counterparts, with particular attention to their interaction with different negation strategies (*not*, *n't*, *never*). Results reveal that while contraction rates increased similarly in both varieties following typical S-curve patterns of language change, the contracted forms developed distinctive distributional preferences that suggest functional differentiation rather than simple phonetic reduction. Most strikingly, the study finds that *'ll* and *'d* strongly avoid negation with *not/n't* but show marked attraction to *never*, with contraction rates reaching 70–75 per cent for *'ll never* and 35–40 per cent for *'d never* by the late twentieth century. CFA uncovers specific collocational patterns: *'d* emerges as strongly associated with first-person subjects and emotion verbs (*I'd like*, *I'd wish*), while retaining *will* in its full form with third-person subjects and stative verbs (*it will be*). The hypercontracted *won't* dominates negative contexts while *'ll not* remains marginal, particularly in American English. Through this configurational analysis, Daugs and Schneider argue that these patterns represent not mere pronunciation variants but 'emancipated sub-schemas' with distinct syntactic environments and modal meanings, supporting a network-based model of linguistic representation where associative links between elements become differentially entrenched through usage.

Finally, in their contribution 'Register as a source of non-equivalent contracted constructions: *going to* and *gonna* in British English', **Olaf Mikkelsen** and **Cameron Morin** echo Azorin by investigating the relationship between the modal constructions *going to* and *gonna*, through a corpus-based analysis of British English data from the LiveJournal blogging platform (Speelman & Glynn 2012). The study employs both Collostructional Analysis and a Behavioural Profile Analysis based on a logistic regression model of blind annotations, assessing semantic, pragmatic and social meaning factors alongside processing constraints. Working with 8,331 tokens from informal personal online narratives spanning 2002–12, the authors operationalise meaning across three dimensions: semantic (communicative function such as 'future intention' vs 'future prediction'), pragmatic (temporal proximity, speaker certainty, contingency) and social (topic of discourse, degree of formality). Results reveal that register formality emerges as the only significant meaning predictor for the alternation, with *gonna* strongly associated with informal contexts while semantic and pragmatic variables show no significant effects. The distinctive collexeme analysis shows relatively low association measures overall, though *gonna* exhibits preferences for personal-sphere verbs (*hang*, *pick*, *drink*) and emotion verbs (*love*, *hate*, *scar*), while *going to* associates with more formal verbs (*become*, *attempt*, *provide*). The regression model achieves acceptable discrimination (C=0.76) with minimal lexical effects, confirming that the alternation is driven by register sensitivity rather than verb-specific constraints. Through this analysis, Mikkelsen and Morin argue that social meaning constitutes an intralinguistic predictor central to constructional meaning, validating the proposed Principle of No Equivalence (Leclercq & Morin 2023) whereby formally distinct constructions must differ semantically, pragmatically and/or socially. The findings support the constructionhood of contracted modal forms and demonstrate that 'colloquial' status is not peripheral but central to *gonna*'s meaning as a distinct construction, emphasising register-based variation as a crucial mechanism for meaning differentiation between formally similar constructions.

3. Conclusion

In conclusion, the contributions to this special issue shed new light on the dynamics of modality in English by emphasising the importance of variation and change in

understanding the development, structure and meaning of modal constructions in general. Collectively, the articles enrich our theoretical perspectives on modality through constructionist and cognitive-linguistic frameworks (Basile, Lenoble & Ziegeler 2025; Dietrich 2025; Leclercq & Trousdale 2025), while also broadening the methodological toolkit with innovative combinations of corpus analyses, experiments and annotation-based approaches (Azorin 2025; Daugs & Schneider 2025; Latouche, Laporte & Depraetere 2025; Mikkelsen & Morin 2025; Rotter & Liu 2025). The studies show how collocational environments, diachronic developments and contraction patterns interact to shape modal meaning, often challenging traditional categorisations of modality and pointing to processes of constructional differentiation and speciation. By addressing social meaning, register and language contact as key factors, the issue situates English modal constructions within broader patterns of linguistic variability and change across the variables of time and space. Beyond their individual insights, the contributions together push forward the theoretical and methodological agenda of cognitive approaches to modality and encourage further research in this complex grammatical domain.

References

Azorin, Leela. 2025. Breaking free from the BE *going to / gonna* dichotomy: A study of variation in an emerging English modal. *English Language and Linguistics* 29(3) (special issue, Carmelo Alessandro Basile, Agnès Celle & Cameron Morin (eds.), *Constructional approaches to variation and change in the English modal domain*). https://doi.org/10.1017/S136067432510049X

Basile, Carmelo Alessandro. 2023. Necessity modal development in Singapore English: An investigation of substratist and contact grammaticalisation approaches. *English World-Wide* 4(2), 276–302.

Basile, Carmelo Alessandro. 2024. *Modality in contact: Necessity and obligation in New Englishes.* Berlin: Mouton de Gruyter.

Basile, Carmelo Alessandro, Christophe Lenoble & Debra Ziegeler. 2025. On the rise of *be having to*: A cognitive functional account. *English Language and Linguistics* 29(3) (special issue, Carmelo Alessandro Basile, Agnès Celle & Cameron Morin (eds.), *Constructional approaches to variation and change in the English modal domain*). https://doi.org/10.1017/S1360674325100348

BNC = *The British National Corpus.* 1995. Version 1.0. BNC Consortium/Oxford University Computing Services.

Bybee, Joan, Revere Perkins & William Pagliuca. 1994. *The evolution of grammar: Tense, aspect, and modality in the languages of the world.* Chicago: University of Chicago Press.

Cappelle, Bert & Ilse Depraetere 2016. Introduction. *Constructions and Frames* 8(1) (special issue, Bert Cappelle & Ilse Depraetere (eds.), *Modal meaning in Construction Grammar*), 1–6. https://doi.org/10.1075/cf.8.1.01cap

Celle, Agnès. 2024. Aspect, modality, interrogativity: A semantic study of *aller* and *venir (de)* + infinitive in an open interrogative. In Astrid De Wit, Frank Brisard, Carol Madden-Lombardi, Michael Meeuwis & Adeline Patard (eds.), *Beyond aspectual semantics*, 29–55. Oxford: Oxford University Press.

Celle Agnès & Anastasios Tsangalidis (eds.). 2017. *The linguistic expression of mirativity.* Special issue of *Review of Cognitive Linguistics* 15(2). https://doi.org/10.1075/rcl.15.2

Daugs, Robert. 2021. Contractions, constructions and constructional change: Investigating the constructionhood of English modal contractions from a diachronic perspective. In Martin Hilpert, Bert Cappelle & Ilse Depraetere (eds.), *Modality and Diachronic Construction Grammar*, 47–76. Amsterdam: John Benjamins.

Daugs, Robert. 2022. English modal enclitic constructions: A diachronic, usage-based study of *'d* and *'ll*. *Cognitive Linguistics* 33(1), 195–231.

Daugs, Robert & Ulrike Schneider. 2025. Negate me not, negate me never: Cross-varietal distributional skews in modal negation from a diachronic perspective. *English Language and Linguistics* 29(3) (special issue, Carmelo

Alessandro Basile, Agnès Celle & Cameron Morin (eds.), *Constructional approaches to variation and change in the English modal domain*). https://doi.org/10.1017/S1360674325100312

Davies, Mark. 2008–. *The Corpus of Contemporary American English* (COCA). www.english-corpora.org/coca/ (accessed 30 June 2025).

Davies, Mark. 2010. *The Corpus of Historical American English* (COHA). www.english-corpora.org/coha/ (accessed 30 June 2025).

Davies, Mark. 2019a. *The Movie Corpus.* www.english-corpora.org/movies/ (accessed 30 June 2025).

Davies, Mark. 2019b. *The TV Corpus.* www.english-corpora.org/tv/ (accessed 30 June 2025).

Davies, Mark. 2021. The TV and Movies corpora: Design, construction and use. *International Journal of Corpus Linguistics* 26(1) (special issue, Monika Bednarek, Valentin Werner & Marcia Veirano Pinto (eds.), *Corpus approaches to telecinematic language*), 10–37.

De Smet, Hendrik, Susanne Flach, Hans-Jürgen Diller & Jukka Tyrkkö. 2011. *The Corpus of Late Modern English Texts*, version 3.1. https://fedora.clarin-d.unisaarland.de/clmet/clmet.html (accessed 30 June 2025).

Dietrich, Nadine. 2025. Motivations for specialisation: Testing the feasibility of polysemous pre-emption in the competition between *will* and *must*. *English Language and Linguistics* 29(3) (special issue, Carmelo Alessandro Basile, Agnès Celle & Cameron Morin (eds.), *Constructional approaches to variation and change in the English modal domain*). https://doi.org/10.1017/S1360674325100403

Du Bois, John W., Wallace L. Chafe, Charles Meyer, Sandra A. Thompson, Robert Englebretson & Nii Martey. 2000–5. *Santa Barbara Corpus of Spoken American English*, parts 1–4. Philadelphia: Linguistic Data Consortium. www.linguistics.ucsb.edu/research/santa-barbara-corpus (accessed 24 August 2025).

Flach, Susanne. 2021. Beyond modal idioms and modal harmony: A corpus-based analysis of gradient idiomaticity in modal–adverb collocations. *English Language and Linguistics* 25(4), 743–65.

Fraser, Bruce. 1975. Hedged performatives. In Peter Cole & Jerry Morgan (eds.), *Syntax and Semantics* 3, 187–210. New York: Academic Press.

Fried, Mirjam & Jan-Ola Östman. 2004. Construction Grammar: A thumbnail sketch. In Mirjam Fried & Jan-Ola Östmann (eds.), *Construction Grammar in a cross-language perspective*, 11–86. Amsterdam: John Benjamins.

Giannakidou, Anastasia & Alda Mari. 2018. The semantic roots of positive polarity: Epistemic modal verbs and adverbs in English, Greek and Italian. *Linguistics and Philosophy* 41, 623–64.

Goldberg, Adele E. 2019. *Explain me this: Creativity, competition, and the partial productivity of constructions.* Princeton, NJ: Princeton University Press.

Hilpert, Martin, Bert Cappelle & Ilse Depraetere (eds.). 2021. *Modality and Diachronic Construction Grammar.* Amsterdam: John Benjamins

Hoffmann, Thomas & Graeme Trousdale (eds.). 2013. *The Oxford handbook of Construction Grammar.* Oxford: Oxford University Press.

Hoye, Leo. 1997. *Adverbs and modality in English.* London: Longman.

Huddleston, Rodney & Geoffrey K. Pullum *et al.* 2002. *The Cambridge grammar of the English language.* Cambridge: Cambridge University Press.

Karlin, Danny & Tom Keymer. 1999–2000. *Nineteenth-Century Fiction.* Chadwyck-Healey. ProQuest LLC. http://collections.chadwyck.com/marketing/list_of_all.jsp

Krug, Manfred G. 2000. *Emerging English modals: A corpus-based study of grammaticalization.* Berlin: Mouton de Gruyter.

Krug, Manfred G. 2001. Frequency, iconicity, categorization: Evidence from emerging modals. In Joan L. Bybee & Paul J. Hopper (eds.), *Frequency and the emergence of linguistic structure*, 309–36. Amsterdam: John Benjamins.

Latouche, Lucie, Samantha Laporte & Ilse Depraetere. 2025. Hedged performatives in spoken American English: Recent change and variation in their use. *English Language and Linguistics* 29(3) (special issue, Carmelo Alessandro Basile, Agnès Celle & Cameron Morin (eds.), *Constructional approaches to variation and change in the English modal domain*). https://doi.org/10.1017/S136067432510035X

Leclercq, Benoît & Cameron Morin. 2023. No equivalence: A new principle of no synonymy. *Constructions* 15(1) (special issue, Lotte Sommerer & Stefan Hartmann (eds.), *35 years of Constructions*). https://doi.org/10.24338/cons-535

Leclercq, Benoît & Cameron Morin. 2025. *The meaning of constructions.* Cambridge: Cambridge University Press.

Leclercq, Benoît & Graeme Trousdale. 2025. Investigating diachronic shifts within a domain of English modality: A study of collocates with *well*. *English Language and Linguistics* 29(3) (special issue, Carmelo Alessandro Basile, Agnès Celle & Cameron Morin (eds.), *Constructional approaches to variation and change in the English modal domain*). https://doi.org/10.1017/S1360674325100397

Levshina, Natalia & David Lorenz 2022. Communicative efficiency and the Principle of No Synonymy: Predictability effects and the variation of *want to* and *wanna*. *Language and Cognition* 14(2), 249–74.

Littman, Justin & Laura Wrubel. 2019. Climate change tweets Ids. Harvard Dataverse. https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/5QCCUU (accessed 24 August 2025).

Lorenz, David. 2013a. Contractions of English semi-modals: The emancipating effect of frequency. PhD dissertation, Albert-Ludwigs-Universität Freiburg.

Lorenz, David. 2013b. From reduction to emancipation: Is *gonna* a word? In Hilde Hasselgård, Jarle Ebeling & Signe Oksefjell Ebeling (eds.), *Corpus perspectives on patterns of lexis*, 133–52. Amsterdam: John Benjamins.

Lorenz, David. 2020. Converging variations and the emergence of horizontal links: *To*-contraction in American English. In Lotte Sommerer & Elena Smirnova (eds.), *Nodes and networks in Diachronic Construction Grammar*, 243–74. Amsterdam: John Benjamins.

Lyons, John. 1977. *Semantics*, vol. 2. Cambridge: Cambridge University Press.

Lyons, John. 1995. *Linguistic semantics: An introduction.* Cambridge: Cambridge University Press.

Mikkelsen, Olaf & Cameron Morin. 2025. Register as a source of non-equivalent contracted constructions: *Going to* and *gonna* in British English. *English Language and Linguistics* 29(3) (special issue, Carmelo Alessandro Basile, Agnès Celle & Cameron Morin (eds.), *Constructional approaches to variation and change in the English modal domain*). https://doi.org/10.1017/S1360674325100373

Morin, Cameron, Guillaume Desagulier & Jack Grieve. 2024. A social turn for Construction Grammar: Double modals on British Twitter. *English Language and Linguistics* 28(2), 275–303.

Narrog, Heiko. 2012. *Modality, subjectivity and semantic change: A cross-linguistic perspective.* Oxford: Oxford University Press.

Nesselhauf, Nadja. 2014. From contraction to construction? The recent life of *'ll*. In Marianne Hundt (ed.), *Late Modern English syntax*, 77–89. Cambridge: Cambridge University Press.

Nuyts, Jan. 2006. Modality: Overview and linguistic issues. In William Frawley (ed.), *The expression of modality*, 1–26. Berlin: Mouton de Gruyter.

Palmer, Frank R. 1990. *Modality and the English modals*, 2nd edn. London: Routledge.

Rotter, Stephanie & Mingya Liu. 2025. A register approach to modal (non-)concord in English: An experimental study of linguistic and social meaning. *English Language and Linguistics* 29(3) (special issue, Carmelo Alessandro Basile, Agnès Celle & Cameron Morin (eds.), *Constructional approaches to variation and change in the English modal domain*). https://doi.org/10.1017/S1360674325100361

Speelman, Dirk & Dylan Glynn. 2012. *LiveJournal Corpus of British and American English*. University of Leuven.

Sweetser, Eve. 1990. *From etymology to pragmatics.* Cambridge: Cambridge University Press.

Traugott, Elizabeth C. & Richard B. Dasher. 2002. *Regularity in semantic change.* Cambridge: Cambridge University Press.

Traugott, Elizabeth Closs & Graeme Trousdale. 2013. *Constructionalization and constructional changes.* Oxford: Oxford University Press.

van der Auwera, Johan & Alfonso Zamorano Aguilar. 2015. The history of modality and mood. In Jan Nuyts (ed.), *The Oxford handbook of modality and mood*, 9–28. Oxford: Oxford University Press.

Zeijlstra, Hedde. 2007. Modal concord. *Proceedings of SALT* 17, 317–32. https://journals.linguisticsociety.org/proceedings/index.php/SALT/article/view/2961/2701