

Domain-sensitive weather phraseology from a constructionist perspective: A case study based on Dutch dialects in Flanders

Vince Liégeois^{1,2} and Laurent Gautier¹

¹ Université de Bourgogne | ² HHU Düsseldorf

Abstract This paper looks at weather phraseology in Dutch dialects in Flanders from a CxG perspective. In this regard, our paper is situated at the interface between CxG research into phraseology, on the one hand, and CxG research into specialised discourse, on the other. More concretely, we checked the productivity of phraseological patterns across different dialects and considered which specialised needs these patterns fulfilled. Results show that three phraseological patterns appear across the three main dialect groups: WEATHER-VP + DIRECT OBJECT ('t rint oude wuvn), WEATHER-VP + COMP + VP ('t rint da't zikt) and IMPERSONAL-VP + NP ('t is kerremesse in d'helle). Since these patterns (i) share an intensifying function and (ii) concern 'bad' or 'unpleasant' weather situations, we conclude that there is a specialised need for intensification.

Keywords Construction Grammar, phraseology, paremiology, domainsensitive discourse, LSP studies, weather discourse

Article history

Received: August 3, 2022 Accepted: November 18, 2024 Online: April 10, 2025

Corresponding author

Vince Liégeois, Vince.Liegeois@ube.fr

Author contributions
Data availability
Funding information
Statement of interest
Statement of technology use
Supporting information
See p. 18

1 Introduction

Construction Grammar (henceforth "CxG") is one of the main research paradigms within cognitive linguistics. At the heart of this cognitive theory lies the idea that constructions – originally conceptualised as form-meaning pairs whereby some form- or meaning-aspect is not strictly predictable from their component parts (cf. Goldberg, 1995, p. 4) – make up a great deal of our language. Although in the beginning CxG theory mainly concerned semantics and syntax, it quickly extended to other linguistic areas and disciplines such as pragmatics, morphology, prosody, and historical and discourse linguistics.

This paper is situated at the interface between two CxG approaches: CxG research into phraseology on the one hand, and into specialised discourse on the other. The former approach dates back to the beginning of CxG and deals with the formal, semantic and pragmatic features underlying different types of phrasemes (cf. [2.1]). The latter, more recent approach builds upon the assumption that if all our knowledge about language is indeed captured by the construction (Goldberg 2003, p. 219; 2006 p. 18), this should include knowledge about domains and discourse traditions as well. A domain is defined as a thematically determined area of communication that includes various text genres and

communicative situations. Examples of such domains are law, linguistics, football and the weather (Roelcke, [1999] 2020). Additionally, we can distinguish between domain-specific communication, which pertains to professional contexts (e.g., meteorologists discussing the weather situation), and domain-sensitive communication, which pertains to non-professional contexts (e.g., lay persons talking about the weather – Bach, 2021). As such, this CxG approach examines the potential domain-specific features of general constructions and their function in different specialised text genres (cf. [2.2]).

Our own study departs from the observation that specialised discourse encompasses not only specialised terminology and text genres, but also phraseology (Roelcke, [1999] 2020). Within LSP studies,¹ it is argued that this specialised phraseology, like other domain-related language structures, frequently fulfils certain specialised needs. These specialised needs can be seen as communicative functions inherent to the domain (cf. Gautier, 2021). For example, in legal texts, many constructions serve to regulate or prohibit actions. Similarly, in empirical scientific disciplines, one will find recurring constructions that are used to highlight the falsifiability of scientific data.

The scientific relevance of this combinatory CxG/LSP approach is twofold. First, the methodological apparatus of CxG is a useful tool to study phraseology with respect to the previously mentioned specialised needs, since constructions are described with respect to form (syntax), meaning (semantics) and function (pragmatics). The last category, which is the most important one with respect to specialised needs, has even been getting more and more attention since Goldberg's (2006) second monograph. As such, a constructionist analysis can provide detailed insights into how we communicate about/within a certain domain. Second, specialised communication² serves as an interesting experimental field for the epistemological component of CxG theory. If, as previously argued, our entire language consists of constructions (Goldberg, 2006, p. 18), the framework should be able to account for domain-related language features, such as these specialised needs. If it cannot, a revision of the theory imposes itself.

The objective of this paper is to illustrate both the methodological utility of CxG and the epistemological hypothesis through a case study on weather discourse, i.e., communication about the weather. We chose this domain because weather is a universal phenomenon that can be studied across all languages. Moreover, there exist different types of specialised communication regarding the weather (e.g., meteorological studies, weather reports, lay talk), which can all be analysed in future CxG studies.

More specifically, we considered weather phrasemes (i.e., phrasemes used to communicate about weather situations) in Dutch dialects in Flanders as a first case study on the matter. As such, we are dealing with "domain-sensitive phraseology" (cf. Bach, 2021), since these phrasemes are being used by lay persons and not by specialists.

For our analysis, we departed from a dataset – collected by the meteorological news service of the Flemish public broadcaster – containing such phrasemes from the three main Dutch dialect groups in Flanders: Flemish, Brabantic and Limburgian (cf. [3.1]). The analysis itself (cf. [3.2]) focused on the following two research questions:

RQ1 Which phraseological patterns appear in weather phrasemes across the three main dialect groups in Flanders?³

RQ2 Which specialised needs do these phraseological patterns fulfil?

The fact that we are dealing with dialects also brings some new perspectives to the field of CxG. Even though there has been a certain interest in language variation in CxG (cf. e.g., Barðdal et al., 2015), CxG approaches into phraseology and specialised discourse have not yet been conducted at the level of dialects. In this regard, rather than checking the productivity of a construction within one language variety, we checked the productivity of phraseological patterns and their features across different language varieties.⁴ This, in turn, gave us access to a wider range of phrasemes, since many phrasemes are dialect-specific and thus not part of the standard Dutch language.

The structure of our contribution is as follows. In [2] a state of the art is given regarding CxG research into phraseology [2.1] and specialised discourse [2.2]. Our methodology is set out in [3], in which the dataset [3.1] and procedure [3.2] are laid out in more detail and some critical remarks are formulated as well [3.3]. In [4] we discuss the three most frequent phraseological patterns from our dataset. A summary and notes for future research are formulated in [5].

2 State of the art

This section discusses the CxG research traditions at the heart of this contribution: CxG research into phraseology [2.1] and CxG research into specialised discourse [2.2]. The former discussion depicts the added value that CxG brings to phraseology. The latter focuses on specialised constructions within the meteorological domain.

2.1 CxG and phraseology

At the very beginning of the CxG framework, construction grammarians were mainly interested in (phraseological) idiomatic expressions (cf. Croft & Cruse, 2004, p. 225; Gries, 2008, p. 14). Examples include the Comparative Correlative ((1), Fillmore et al., 1988) and Way Construction ((2), Goldberg, 1995):

- (1) Eng.: *The more carefully you do your work, the easier it will get.* (Fillmore et al., 1988, p. 506)
- (2) Eng.: Pat fought her way into the room. (Goldberg, 1995, p. 16)

The analysis of these idiomatic structures was relevant for two reasons. First, whereas within Universal Grammar it was argued that such idiomatic expressions were merely

an addendum to the lexicon, very much like proverbs, CxG analyses highlighted the productivity – meaning they could feature in different contexts and appear with different lexical units and grammatical categories (= open slots and semi-open slots) – of many such structures, implying that speakers have to learn certain rules to be able to use them. Second, CxG researchers pointed out the frequency of such idiomatic structures in language, which was an important counterargument against UG-theory, in which they were treated as marginal phenomena of language (cf. Fillmore, 1989, p. 34; Imperiale & Schafroth, 2016, pp. 106–108; Ziem, 2018; Schafroth, 2020, p. 175).

With the Goldbergian research tradition (Goldberg, 1995, 2006, 2019), CxG moved away from solely considering idiomatic expressions and started to look at so-called argument constructions like the ditransitive (e.g., he gave me a letter) and the caused-motion constructions (e.g., he blew the letter of the table). Yet, CxG research into phraseology continued and even expanded to other types of phrasemes, including both less idiomatic (e.g., light verb constructions) and more idiomatic ones (e.g., proverbs and other paremiological sayings).

Originally, the latter did not seem particularly interesting from a CxG point of view, since they did not appear to allow for the kind of productivity and frequency of the constructions explained in (1) and (2) (cf. Dalmas & Gautier, 2018, p. 147). Nevertheless, CxG analyses into proverbs and paremiological sayings proved to be very useful. On the one hand, construction grammarians were able to pinpoint that such phrasemes could also share constructional features in terms of meaning, form and function (cf. De Knop & Mollica, 2018, p. 23; Schafroth & Imperiale, 2019, p. 94). On the other hand, CxG provided phraseologists with (a) elaborate theoretical mechanisms to link these phrasemes to cognitive linguistic theory and (b) a usage-based methodology to inquire about their formal, pragmatic and semantic features (cf. De Knop & Mollica, 2018, p. 23; Ivorra, 2021a, p. 31). Finally, within contrastive phraseology, CxG methodology proved particularly useful to pinpoint differences between similar phrasemes in different languages (Dobrovol'skij, 2018, pp. 151–152; Schafroth, 2020).

2.2 CxG and specialised discourse

The second CxG approach discussed here examines specialised discourse. This research tradition, however, is much younger than the phraseological one and has its foundations in German linguistics, where there exists a strong cognitive tradition within LSP studies (cf. Bücker et al., 2015; Roelcke, [1999] 2020). Here, the main assumption is that language is often used with regard to a certain domain, be it in a professional context or not. Consequently, a valid (cognitive) theory about language should take this domain-specificity/-sensitivity into consideration (Bach, 2021; Bach et al., 2022a, 2022b). Accordingly, this research tradition revolves around the domain-specific features that general constructions can have, and which constructions appear frequently in which domain (cf. Liégeois et al., 2023). In doing so, the pragmatic dimension of

constructions becomes particularly relevant. Within LSP studies, namely, it is argued that specialised language is established to fulfil specialised needs (cf. Gautier, 2021). Therefore, the constructions that appear frequently in a given domain should do the same.

Regarding the weather domain, Liégeois et al. (2023) examined these specialised needs in their constructionist analysis of existential constructions (e.g., er is/zijn, het is in Dutch) within a trilingual corpus of Swedish, Norwegian and Dutch newspaper weather reports. For their analysis, they departed from the following structure (3) provided by Bentley et al. (2013, p. 1):

- (3) PROFORM + COPULA + PIVOT + CODA
- (3') Eng.: There (+) are (+) some books (+) on the table

Bentley et al. (2013) regard this as a cross-linguistic formal representation of EXISTENTIAL CONSTRUCTIONS, while highlighting that variations can occur not only between languages but also across different communicative contexts. In the analysis of their weather report-corpus, Liégeois et al. (2023) observed that in this specialised text genre EXISTENTIAL CONSTRUCTIONS merge with the discourse patterns (cf. Östman, 2015) in (4), where an indicator of time or place occupies the preverbal field, the weather functions as the nominal predicate, and another indicator of time or place appears at the end of the clause.

- (4) a. [time]COMMENT + [weather]TOPIC + [place]COMMENT b. [place]COMMENT + [weather]TOPIC + [time]COMMENT
- (4') a. Dt.: <u>Maandag</u> is het <u>wisselend tot zwaar bewolkt</u> in de noordelijke landeshelft. 'Monday it will be variably to heavily cloudy in the northern half of the country.'
 - b. Dt.: <u>Morgenochtend zijn er nog brede opklaringen</u> mogelijk <u>in het zuidoosten van</u> het land.

'Tomorrow morning there are still broad sunny spells possible in the southeast of the country.'

They noted that these structures are highly significant in weather reports, as there exists a specialised need to situate the weather in time and space. Thus, the weather functions as the topic, i.e., the main subject of the clause, while time and place serve as comment elements, i.e., the elements that contextualise the topic (cf. Brinker et al., [1985] 2018). This, in turn, imposes both a nominal syntax (since weather, time, and place markers are primarily nouns and adjectives) and an inversive syntax. In this regard, Liégeois et al. (2023) observed that in the reference corpora of the three languages, EXISTENTIAL CONSTRUCTIONS were predominantly found with an inversive

syntax, often featuring a time or place indicator in the preverbal field. They concluded that, in the case of weather reports, those constructions are selected that are most suitable for addressing the specialised needs, i.e., to explain future weather situations in relation to different times and places. By merging with the discourse patterns in (4), these specialised needs then impose additional formal features on the constructions, namely:

- (i) a stronger tendency towards inversion than in the reference corpora;
- (ii) existential clauses containing two coda time and place (4') rather than one (3);
- (iii) the verb having an inchoative future reading due to presence of a temporal marker in the clause.

A first CxG study concerning weather phraseology was conducted by De Knop et al. (2015). They looked at L2 German meteorological patterns for native speakers of French, Dutch and Italian, for which they departed from the observation that to talk about the weather, one does not only need a specific meteorological vocabulary, but also a certain formulaic/idiomatic competence (De Knop et al., 2015, p. 170). However, their research showed that most modern German textbooks only considered weather expressions when it came to valency and pseudo-actants, and not other constructions, such as phraseological impersonal and adjectival ones (De Knop et al., 2015, p. 171). This led to students making phraseological errors (De Knop et al., 2015, pp. 181–189), which is why De Knop et al. (2015, p. 189) advocate for the benefits of a CxG based learning approach on the matter.

3 Analysis

The discussion in [2.2] suggests that CxG analyses into phraseology can deliver valuable insights into specialised discourse, regarding both linguistic theory (Liégeois et al., 2023) and more practical approaches to LSP (De Knop et al., 2015). Our own study adds to the existing literature on weather phraseology by looking at domain-sensitive weather phrasemes in Dutch dialects in Flanders. We considered (a) whether certain phraseological patterns appeared across different dialects/dialect groups, and (b) which specialised needs these patterns addressed (cf. [3.2]). Said analysis is innovative for two reasons. First, it treats phraseology from both an LSP and CxG perspective. As such, the pragmatic dimension of such phraseology is given particular attention (cf. [2.2]). Secondly, instead of checking the productivity of phraseological patterns within one language variety, we were able to check their productivity across different varieties.

In this section, the methodology of our analysis is set out. Our dataset is discussed in [3.1] and in [3.2] the procedure of our analysis is explained. Finally, in [3.3] some critical remarks regarding our analysis are formulated.

Table 1 Dataset

Dialect group	Entries	Localities
Flemish	191	43
Brabantic	108	45
Limburgian	128	20
total	427	108

3.1 Dataset

For our dataset we acquired a list of dialectal weather phrasemes which was collected by the meteorological news service of the *VRT* (*Vlaamse Radio- en Televisieomroeporganisatie*), the public broadcaster for the Flemish Community. These data were collected in order to cite local weather-related phrasemes at the end of each weather report from 2018 to 2019. More specifically, each day a new phraseme was visualised in the credits of the broadcast, intended to enhance the aesthetic appeal of the weather report.

These phrasemes were collected through a widely publicised open call. According to the meteorological news service, this open call mainly – though not exclusively (cf. [3.3]) – attracted dialect speakers and individuals interested in local customs and heritage. The contributors were asked not only to list local weather phrasemes but also to elaborate on their figurative meanings. Additionally, some contributors provided information on the literal meanings and functions of the phrasemes. All three main dialect groups of Flanders – Flemish, Brabantic and Limburgian (cf. Belemans et al., 1998) – were represented in the list. In statistics, the dataset counts a total of 427 phraseological entries from 108 different localities (cf. Tab. 1).

3.2 Procedure

The procedure for our data-analysis was corpus-based, meaning that we described the dataset from both a quantitative and qualitative perspective (cf. Weisser, 2016). The analysis itself consisted of four steps:

- (i) First, we considered the different weather phenomena around which the phrasemes revolved. In doing so, we were able to deduce which weather phenomena often surfaced in weather phrasemes.
- (ii) For the second step, we annotated the 427 phraseological entries in our list from an inductive CxG point of view, describing their syntactic features. Based on this,

- we singled out the most frequent formal phraseological patterns, which were then analysed in further detail (RQ1).
- (iii) We then considered (a) with which weather phenomena these formal patterns were used (for which a comparison with the results of step 1 was established), (b) whether they had a fixed meaning (semantics) or function (pragmatics), (c) their productivity, and (d), whether they corresponded to any known constructional pattern with which they may also share functional aspects. Their productivity concerned the lexical units and grammatical categories/forms which could be found in the pattern, as well the number of dialects in which it appeared (see footnote 5).
- (iv) Finally, similarities in form, meaning and function between our three main phraseological patterns were highlighted and discussed with respect to the different weather situations (step 1) and possible specialised needs. Following previous cognitive LSP methodology (cf. Bach, 2021), we checked our data with the cognitive semantic representation of the 'weather' in the Berkeley FrameNet⁵ and DiCoEnviro-project.⁶ By establishing both hierarchical and associative relationships between different concepts, these databases try to capture how we communicate about a certain concept (e.g., 'weather'). As such, they form a valid reference point for our own observations with respect to the function of these phraseological patterns (RQ2).

The results of step (i) are discussed in [4.1], those of steps (ii) and (iii) in [4.2] and those of step (iv) in [4.3].

3.3 Limits of the analysis

Some corpus-linguistic (i) and sociolinguistic remarks (ii, iii, iv) are in order regarding our analysis, and more specifically our dataset:

- (i) First, the compilers of the dataset did not register whether a phraseme was mentioned by different speakers of the same dialect. This means that we are exclusively dealing with 'types' and have no information about which phrasemes were mentioned more frequently than others. However, the news service registered for all variants of a certain phraseme (orthographical, lexical, grammatical, and syntactic) if these were present or pointed out by the participants. This is illustrated by the examples in (5), for which different lexical variants were registered.
 - (5) a. 't go mollejoengn reegn
 - b. 't go mollejoengn braakn
 'lit.: it is going to rain/vomit baby moles; fig.: it is going to rain a lot' (Flemish, Ostend, West Flanders)
- (ii) We also have no information regarding the informants, since the meteorological news service promised anonymity and did not record data on the number of people involved, their age, gender or professional status. This means that we are not neces-

sarily dealing with the prototypic 'ideal speakers' (old rural men who did not travel too much during their lives) used in other sociolinguistic inquiries (cf. Chambers & Trudgill, 1980, p. 33; Britain, 2017). However, as previously mentioned (cf. [3.1]), the meteorological news service stated that most respondents were dialect speakers themselves and/or closely invested in local heritage.

- (iii) The participants were asked to send in written versions of the dialectal phrasemes, whereas normally a sociolinguist would have transcribed oral recordings according to the International Phonetic Alphabet.
- (iv) We have no data on the diffusion of these phrasemes from a usage-based perspective, i.e., regarding the extent to which these phrasemes are used in everyday discourse, which can differ greatly between different phrasemes (cf. Corpas Pastor, 2014).
- (v) Finally, since the data were collected via an open call, our conclusions are specific to this dataset and may not hold true for the entire linguistic region of Flanders.

It should be noted, however, that since our analysis was mainly interested in the productivity of the phraseological patterns, problems (i) and (ii) are less relevant than they would be within traditional dialectology, since this productivity is expected to also show itself in different variants and across different vertical stages of a language variety (cf. Berruto, [1987] 2012, p. 24).

4 Results

4.1 Weather phenomena

As explained in [3.2], the first step of our analysis consists in singling out the different weather phenomena around which the different phrasemes revolve (Tab. 2).

A total of 13 weather phenomena can be distinguished, with the phenomenon of 'temperature' being further divided into 'cold temperature' and 'extreme heat'. When comparing these data to the overview of the dataset in [3.1], we notice that only 305 of the 427 phraseological entries are relevant for this part of the analysis. Within the other 122 phraseological entries, the weather is used as a source domain for a different target domain, meaning they do not communicate anything about the weather situation.⁸ Within the 305 phraseological entries from Tab. 2 on the other hand, the weather is always the target domain. In phraseological terms, most of these entries can be regarded as fully lexicalised idioms (cf. the constructional patterns in [4.2]).

The three most pertinent weather phenomena are 'rain' with 111 phraseological entries, 'temperature' with 95 entries and 'variable weather' (meaning the weather situation constantly changes between rain and sunny spells) with 29 entries. Based on the data in Tab. 2, we also observe that these weather phrasemes mostly refer to weather situations that

Table 2 Relevant weather phenomena

Weather phenomenon	Phrasemes		
rain	111		
temperature	95		
 cold temperature 	71		
 extreme heat 	24		
variable weather	29		
frost	15		
bad weather	13		
storm	9		
wind	9		
good weather	6		
snow	6		
clouds	4		
sun	4		
mist	2		
sunny spells	2		
total	305		

are considered 'bad' or 'unpleasant'. This can be substantiated by the high(er) frequency of 'rain', 'cold temperature', 'extreme heat', 'variable weather', 'frost' and 'bad weather', on the one hand, and the low frequency of 'good weather', 'sun' and 'sunny spells', on the other.

4.2 Patterns

The next step is the formal annotation (cf. [3.2]), for which we only consider the 305 entries from Tab. 2. This process reveals three formal phraseological patterns which resurface in all three dialect groups (Tab. 3).

Since these patterns are the only ones present in all three dialect groups and in more than five localities, they are examined in greater depth in this paper. From a phrase-ological point of view, they can, again, be classified as fully lexicalised idioms. They are exemplified by the dialect from Ypres (dialect group: Flemish), for which all three patterns are mentioned in the dataset.

The results of the third part of the analysis (cf. again [3.2]) are discussed below for each of the patterns.

Table 3 Three most frequent formal patterns

Formal pattern	Example	Entries	Localities	Dialect groups
WEATHER-VP ⁹ + DIRECT OBJECT	't rint oude wuvn	43	27	3
WEATHER-VP + COMP + VP	't rint da't zikt	16	13	3
${\tt IMPERSONAL-VP}\left({\tt PROFORM} + {\tt COPULA}\right) + {\tt NP}$	't is kerremesse in d'helle	26	26	3

4.2.1 Pattern I: WEATHER-VP + DIRECT OBJECT

The first formal pattern, which is also the most frequent in terms of both phraseological entries and localities, consists in a weather verb phrase followed by a direct object. Some examples, other than the one in Tab. 3, are provided in (6):

- (6) a. 't regent mollejoengen
 'lit.: it rains little moles'
 (Flemish, Veurne, West Flanders)
 - b. 't regert aaw meujers'lit.: it rains old ladies'(Brabantic, Turnhout, Antwerp)

Within these phrasemes, the weather verb mostly designates rain (in 38 out of the 43 entries, Subpattern I.1) and thus is the dialectal variant of the Dutch verb *regenen* ('to rain'). The weather verb appears in 36 of the 38 cases as the finite verb of the sentence – this is also the case for the examples in (6). In the other two cases, it is an infinitive subcategorised by a copula. In 22 out of the 38 entries, the direct object is an animate one, like baby moles (6a) and old ladies (6b). Other animate objects include kittens, cats, goats and dogs. The most frequently used animate object are old ladies, which account for a total of 15 phraseological entries and appear in all three dialect groups. Inanimate objects are accounted for in 16 entries, and include, among other, human feces, pipe shanks and *frankstukken* (= formerly used Belgian coins). In total, 13 different objects appear as the direct object in this phraseological pattern.

From a constructionist perspective, this phraseological pattern can be explained on the basis of the phenomenon of coercion (cf. Goldberg, 1995, p. 159, 2006, p. 22). Though avalent verbs like weather verbs can only subcategorise an AdvP (e.g.: it rains really hard), here the avalent weather verb is embedded in a monotransitive construction in which it is followed by an NP as a direct object. This frequent argument construction makes the phrasemes easy to use and understand for dialect speakers.

Regarding their semantic and pragmatic dimension, we notice that all 38 entries state that it rains a lot (semantics), meaning they have an intensifying function (pragmatics). Hence, they can be called INTENSIFYING CONSTRUCTIONS (cf. Mellado-Blanco, 2015; Mollica & Schafroth, 2018; Ivorra, 2020a, 2021a, 2021b; Ivorra & Mellado-Blanco, 2021).

The five remaining phraseological entries (Subpattern I.2) concern the observation that it is very cold, ¹⁰ for which the dialectal variant of the verb *vriezen* ('to freeze') ¹¹ is used (7):

(7) 't vriest stejenen öt de groond
'lit.: it freezes stones out of the ground; fig.: it is very cold'
(Flemish, Veurne, West Flanders)

Three of these phraseological entries are found in the Flemish dialect group, one in the Brabantic, and one in the Limburgian group. The weather verb is always the finite verb of the clause. In four cases, the direct objects concerns stones, and in the other one monkey tails. Like the phraseological entries entailing rain, their formal features can be explained by the phenomenon of coercion. However, with the entries revolving around stones, the coercion happens with the CAUSED-MOTION CONSTRUCTION (cf. the examples in [2.1]), since the verb phrase has two arguments: *stejenen* and *öt de ground*, and the cold(/frost) causes the stones to rise from the ground (cf. Goldberg, 1995, 2006). Since all five entries are used to stress that it is very cold, they also count as INTENSIFYING CONSTRUCTIONS.

4.2.2 Pattern II: WEATHER-VP + COMP + VP

The second formal pattern is found in 16 phrasemes across 13 localities. Here, a weather verb phrase is followed by a complementiser, which introduces a comparison, and a second verb phrase. Some examples are given in (8):

- (8) a. 't rint da't zikt
 'lit.: it rains so that it urinates; fig.: it rains a lot'
 (Flemish, Ypres, West Flanders)
 - b. *het raengert dattet gats*'lit.: it rains so that it pours; fig.: it rains a lot'
 (Limburgian, Munsterbilzen)

Like the patterns in [4.2.1], these entries mostly concern the rain (13 out of the 16 entries, Subpattern II.1). Both the first and second verb phrase are always a finite one. The first verb phrase always includes the dialectal variant of the Dutch verb *regenen* ('to rain'). The second verb phrase then includes a verb used to designate other forms of fluidic motion.

In 11 of the 13 entries, this is a dialectal variant of the Dutch verb *zeiken* ('to urinate') and in the other two a dialectal variant from the verb *gieten* ('to pour out'). ¹²

Based on their formal features, these entries can be regarded as Consecutive constructions from a CxG perspective, since the second verb refers to a consequence of the first verb. The semantics and pragmatics of this phraseological pattern, in turn, equal those of the Weather VP + Direct object-pattern in [4.2.1]: here as well the phrasemes state that it rains a lot making them instances of intensifying constructions.

The three other phraseological entries (Subpattern II.2) make use of the verb *vriezen* ("to freeze," cf. [4.2.1]) to denote that it freezes a lot or that it is very cold (9):

(9) 't vries tottet krok (Limburgian, Munsterbilzen)
"lit.: it freezes so that it cracks"

Their features are the same as those of the other 13 entries, making them INTENSIFYING CONSTRUCTIONS as well.

4.2.3 Pattern III: IMPERSONAL-VP + NP

The third pattern entails an impersonal verb phrase (i.e., a proform and a copula) followed by a noun phrase. Mostly, the noun phrases either mean, when literally translated, that it is carnival in hell (10a, c) or that it is the devils' carnival (10b). In the former case, the noun phrase is a collocation consisting of an NP (10a: *kérmis*) and a PP (10a: *èn de hel*), and in the latter case it includes only a compound noun (10b: *duweltjeskermis* = *duweltjes + kermis*). Unlike the first two patterns (cf. [4.2.1] and [4.2.2]), the source domain lies entirely outside of the weather domain.

- (10) a. 't ès kérmis èn de hél 'lit.: it's carnival in hell' (Limburgian, Bilzen)
 - b. 't is duuveltjeskermis'lit.: it's devils' carnival'(Brabantic, Antwerp, Antwerp)

The first formal subpattern (with a collocation as NP) is found 22 times, whereas the second formal subpattern (with a compound noun as NP) is found only three times and only mentioned for Brabantic localities. These phrasemes are used when the weather situation keeps changing between rain and sunny spells. They therefore indicate that the weather is very variable. In constructionist terms, they are manifestations of the so-called IMPERSONAL CONSTRUCTION (cf. Malchukov & Siewierska, 2011), from which they inherit their formal and various semantic features, such as the absence of a canonical subject and the presence of an empty one. It is specific to their semantics, in contrast to

other IMPERSONAL CONSTRUCTIONS, that this pattern expresses gradation (= the weather is very variable). The phrasemes again have an intensifying function, conveyed through a strong-sounding metaphor that draws on the ultimate symbols of evil (devils and hell) from Christian religion.

One phraseological entry does not refer to the variable weather situation but rather to the fact that it is very cold (11):

(11) 't is punaisekermesse

'lit.: it's pushpin carnival; fig.: it is very cold' (Flemish, unspecified locality, West Flanders)

From a formal perspective, this phraseme corresponds to the second subpattern, since the NP is a compound noun. In this phraseme, the pushpin carnival refers to the nipples of the female body, which become hard and more visible due to the cold, giving a vulgar connotation to the phraseme. ¹³ Its semantics and pragmatics are in line with our previous observations regarding intensification.

4.3 Discussion

4.3.1 Features

Drawing from sections [4.1] and [4.2], we can establish the following overview of our three patterns (Tab. 4).

The above weather phrasemes revolve around rain (Pattern I and II), cold (Pattern I and II), frost (Pattern II) and variable weather (Pattern III). As such, the most frequent constructions refer to the most frequent weather phenomena (cf. [4.1]). This points towards a specialised need for phrasemes about said phenomena. Frost, which is designated by one of the subpatterns of Phraseme II and is mentioned as a possible meaning with one entry from Phraseme I, also shows a relatively high frequency in the results from [4.1] (15 entries).

Regarding RQ1, we can confirm that, even though all entries considered here count as fully lexicalised idioms, similar phraseological patterns do indeed appear across different dialects and even across all three dialect groups. These patterns concern both the syntax, semantics and pragmatics of the phrasemes. The three formal 'main patterns' are listed in the leftmost column in Tab. 4. Semantically, these patterns express that it rains/freezes a lot, that it is very cold or that the weather is very variable. From a pragmatics perspective, this means that all main patterns have an intensifying function and thus count as INTENSIFYING CONSTRUCTIONS.

Furthermore, various subpatterns can be singled out as well (cf. Tab. 4). Pattern I can refer to both the rain (Subpattern I.1) and the cold (Subpattern I.2). With the former, the dialectal variant of the verb *regenen* occupies the slot of the WEATHER VP, whereas with the latter the slot is occupied by the dialectal variant of *vriezen*. Both subpatterns

Table 4 Overview

Formal pattern	Function	Weather situation	Subpattern	E.g.	Construction type
Pattern I: WEATHER-VP + DIRECT OBJECT [4.2.1]	intensification	rain	I.1: RAIN-VP + DIRECT OBJECT	(6)	MONOTRANSITIVE CONSTRUCTION
[****]		cold	I.2: FREEZE-VP + DIRECT OBJECT + PREPOSITIONAL OBJECT	(7)	DITRANSITIVE and CAUSED-MOTION CONSTRUCTION
Pattern II: WEATHER-VP + COMP + VP [4.2.2]	intensification	rain	II.1: RAIN-VP + COMP + VP	(8)	CONSECUTIVE CONSTRUCTION
		frost/cold	II.2: FREEZE-VP + COMP +VP	(9)	
Pattern III: IMPERSONAL-VP + NP [4.2.3]	intensification	variable weather	III.1: IMPERSONAL- VP + COLLOCATION	(10a)	IMPERSONAL CONSTRUCTION
			IV.1: IMPERSONAL- VP + COMPOUND	(10b)	

are also instances of different constructions: with the former, coercion occurs with the MONOTRANSITIVE CONSTRUCTION, and with the latter, with both the DITRANSITIVE and CAUSED-MOTION CONSTRUCTION, for which an extra argument appears in the phraseme. Pattern II entails a subpattern for designating rain (Subpattern II.1) and one for designating frost/cold (Subpattern II.2), in which the dialectal variants of *regenen* and *vriezen* respectively occupy the WEATHER VP-slot. Finally, the subpatterns for Pattern III are situated on a more morphological level, since the difference between the two subpatterns is that one entails a collocation (Subpattern III.1) and the other a compound noun (Subpattern III.2).

4.3.2 Specialised needs

We now arrive at RQ2: "Which specialised needs do these phraseological patterns fulfil?" In this regard, it was already established that all three main patterns share an intensifying function. It thus appears that there is a specialised need for intensification. ¹⁵ Considering our dataset in its entirety, it can be observed that many other phraseological entries are instances of intensifying constructions as well – cf. the examples in (12). Out of the 305 entries for which the weather was the target domain, a total of 230 can be attributed an intensification function.

 $(12)\,$ a. $de\,kassaasti$ enen vrieze omoog

'lit.: the cobblestones are freezing up; fig.: it is very cold' (Brabantic, Sint-Katelijne-Waver, Antwerp)

b. snoek gevangen emmen

'lit.: having caught pike; fig.: being very wet (due to heavy rainfall)' (Flemish, Moerzeke, East Flanders)

This specialised need for intensification can be linked back to our observation in [4.1], where we argued that phrasemes are mostly used to talk about 'bad' and/or 'unpleasant' weather situations. This is true for all 230 phraseological entries which were attributed this intensification function. Thus, it can be argued that it is not the weather phenomena as such that are focused on, but the way in which they are experienced in a given situation. Consequently, INTENSIFYING CONSTRUCTIONS are very well suited to talk about such situations and even to underscore the annoyance of the speaker.

Within cognitive LSP studies, such claims on specialised needs are validated against cognitive-semantic representations of the domain. Since these representations seek to capture (i) those semantic categories which frequently appear when talking about the domain, and (ii), the different perspectives one can take when talking about said domain, they are argued to form a valid point of reference for research on specialised discourse. Our own analysis therefore considers the frame-semantic information provided by the Berkeley FrameNet (BFN)¹⁶ on the WEATHER-frame, and the frame-based¹⁷ information from the DiCoEnviro-database on that same frame.

When it comes to the BFN, two frame elements are considered as core frame elements for the weather: time (= when the weather happens) and space (= where the weather happens). Additionally, specification is singled out as a non-core frame element which provides details on the state of the weather. In the database, specification is an umbrella term for various other frame elements, like frequency, manner, rate and quantity, which, in discourse, all fulfil an intensifying function (BFN – Frame Index: weather, precipitation).

In the DiCoEnviro-database, a distinction between two types of weather is provided, namely unstable weather situations (whereby the weather changes a lot), on the one hand, and extreme weather situations (whereby a certain weather phenomenon is particularly intense or even dangerous), on the other. For both, Judgments of intensity are laid out as an important feature when talking about the weather (DiCoEnviro: weather).

Comparing these entries to our own observations about the main patterns' specialised needs, we can say that both databases agree that intensification counts as an important feature when communicating about the weather. However, contrary to the SPECIFICATION-feature mentioned by the BFN as well as other intensifying construc-

tions (Mellado-Blanco, 2015, p. 114; Mollica & Schafroth, 2018, p. 104), our patterns solely regard upward intensification (e.g., "it rains a lot"). Furthermore, the three main patterns discussed here regard either extreme (Pattern I and II) or unstable weather situations (pattern III). This is in line is in line with the data provided by the DiCoEnvirodatabase. When looking at the annotation reports from the BFN, we also find that, when used for intensification, specification is almost exclusively featured in statements of extreme weather situations (e.g., storm, blizzard) (BFN – Frame Index: weather). Thus, the entry from the DiCoEnviro-project and examples from the BFN also point towards the idea that this intensification is needed to talk about what we have come to call 'bad'/'unpleasant' weather situations.

5 Summary and notes for future research

Our current study was situated at the interface between CxG approaches into phraseology, on the one hand, and CxG approaches into domain-specific/-sensitive discourse, on the other, and treated weather phrasemes in Dutch dialects in Flanders as a case study. More specifically, we considered whether similar phraseological patterns appeared in different dialects/dialect groups (RQ1), and which specialised needs these patterns addressed (RQ2).

Concerning RQ1, we established that similar phraseological patterns did indeed occur across different dialects and dialect groups (cf. [4.2]). This applied to their form, meaning, function and their respective weather phenomena. The functional aspect was particularly relevant with respect to RQ2, since all three main patterns shared an intensifying function. Consequently, it was argued that there exists a specialised need for intensification (cf. [4.3]). This observation was then connected to our analysis of the weather phenomena involved in the phrasemes of our dataset, which mostly regarded 'bad' or 'unpleasant' weather situations. As such, it was argued that these phrasemes, in fact, deal with how we perceive such 'bad/unpleasant' weather. Finally, we checked our data with the cognitive-semantic entries of the WEATHER-frame from the BFN- and DiCoEnviro-databases. This also pointed towards also pointed towards intensification as an important feature when talking about such 'bad'/'unpleasant' weather.

A word of caution is, however, required. Even though various arguments were found in favour of intensification as a specialised need, it should be noted that many CxG studies into phraseology make mention of intensifying constructions (cf. Mellado-Blanco, 2015; Mollica & Schafroth, 2018; Ivorra, 2020a, 2021a, 2021b; Ivorra & Mellado-Blanco, 2021). Consequently, future research needs to verify the extent to which we are, in fact, dealing with a feature inherent to the weather-domain or simply with a recurring feature for phrasemes. Such verification can be done in two ways:

- (i) By looking at phraseology from other domains from a CxG perspective;
- (ii) By looking at lay weather phraseology in different languages and linguistic repertoires. This seems particularly relevant for Pattern I, for which similar phrasemes can be found in, e.g., French (*il pleut des cordes*) and English (*it's raining cats and dogs*).

Other than this, three further indications for future research can be formulated. First, as mentioned in [3.3] and at various points in our paper, it is important to consider these phrasemes from a usage-based perspective. Secondly, from a more sociolinguistic perspective, Subpattern III.2 (*'t is duuveltjeskermis*) appears to be exclusive to the Brabantic dialects (cf. [4.2.3]). Since we only had three entries on the matter, this needs to be examined in more depth. Finally, from a more eco- and cultural linguistics perspective, it would be interesting to consider whether different phrasemes with different functions occur in places with different climates (e.g., in mountain or desert areas) – cf. Regier et al. (2016).

Author contributions

Vince Liégeois: conceptualisation, methodology, investigation, resources, data creation, writing – original and second draft; Laurent Gautier: conceptualisation, investigation, writing – review, supervision, project administration.

Data availability

The dataset can be obtained by contacting the authors and upon agreement from the meteorological news service of the VRT.

Funding information

This research was completed with the support of the Interlanguages Center (Université de Bourgogne) and the Ministère de l'Enseignement supérieur et de la Recherche's doctoral scholarship awarded to Vince Liégeois (2019).

Statement of interest

The authors have declared that there were no conflicting interests.

Statement of technology use

No AI-based generative technology was used in the preparation of this manuscript and the execution of the research that the manuscript reports upon.

Supporting information

None

Notes

- 1 Language for Specific Purposes-studies.
- 2 In this paper, "specialised communication/discourse" is meant as a hypernym for both "domain-specific" and "domain-sensitive discourse."
- In cognitive discourse linguistics, a pattern is an (abstract) language structure with fixed semantic and/or pragmatic properties (Stein & Stumpf, 2019). For instance, the proverbs *Wie niet werkt, zal niet eten* ('lit.: he who does not work, will not get to eat; fig.: if you want to accomplish something, you'll have to work for it') and *Wie wind zaait zal storm oogsten* ('lit.: he who sows wind, will reap storm; fig.: if someone causes discord, he will have to bear the consequences') are instances of the phraseological pattern *Wie* VP *zal* INFP, which expresses a hypothetical cause-effect scenario.
- This conception differs from the canonical notion of productivity, which considers the occurrence of a structure across different tokens and types (cf. [3]). Unless stated otherwise, this paper uses productivity in this non-canonical sense.
- 5 ICSI International Computer Science Institute (n.d.). *BFN Berkeley FrameNet* [Database]. https://framenet.icsi.berkeley.edu/fndrupal/. Last accessed on April 20, 2022.
- 6 L'Homme, M.C. (n.d.). *DiCoEnviro Le dictionnaire fundamental de l'environnement* [Database]. http://olst.ling.umontreal.ca/cgi-bin/dicoenviro/search_enviro.cgi. Last accessed on January 30, 2022.
- One might also question whether certain phraseological entries such as the constructional pattern discussed in [4.2.3] are merely phonetic variants of phrasemes found in Standard Dutch.
- A good example of this is the Antwerpian phraseme 't is stil woar dat noeit woijt ('lit.: it is silent where the wind does not blow; fig.: occasional arguments in a relationship are not necessarily a bad thing').
- 9 "Weather verbs" is used here in reference to verbs which designate weather phenomena, like *to rain* and *to snow* in English.
- For the locality of Veurne, it can also mean that it freezes a lot. This example also presents an intensifying function.
- 11 Since rain and frost are distinct weather phenomena the former being a type of precipitation and the latter a result of cold temperatures we labelled the verbal field of the pattern as WEATHER-VP. The same reasoning applies to the pattern in [4.2.2].
- In Dutch, both verbs can also be used to refer to the rain, independent from this phraseological pattern.
- Such a vulgar connotation is, arguably, also present with those phraseological entries referring to old ladies (cf. [4.2.1]) and making use of the Dutch verb *zeiken* ("urinate", cf. [4.2.2]).
- 14 The phraseme in (12) also designated cold. However, since only one such phraseological entry was found, it was not considered in this list.
- 15 One of the reviewers questioned whether the recurrence of the patterns could be explained

- by their formal features, i.e., because they sounded particular. However, no such formal peculiarities appear to exist.
- There is also a Dutch FrameNet (http://dutchframenet.nl). Here, however, the data are not freely accessible, and the frames are based on a much smaller dataset than the BFN.
- 17 Since the DiCoEnviro-database does not strictly adhere to frame-semantic methodology, it counts as a frame-based rather than as a frame-semantic database (cf. Faber, 2009; Ferraro et al., 2017; Smirnova et al., 2021).

References

- Bach, M. (2021). Vers une sémantique discursive cognitive: Réflexions théoriques et applications empiriques sur un corpus de langue allemande [Unpublished doctoral disseration]. University of Burgundy.
- Bach, M., Fernández-Cruz, J., Gautier, L., Koch, F. & Llorca, M. (2022a). Néologismes en discours spécialisé: Analyse comparée des noms de stades de football dans quatre pays Européens. *Estudios Románicos*, 31, 309–327. https://doi.org/10.6018/ER.510481.
- Bach, M., Gautier, L. & Maazaoui, H. (2022b). L'approche constructionnelle comme méthodologie d'analyse textuelle: Propositions À partir d'un corpus de textes de conjoncture Économique. *Echo des études romanes*, 18(2).
- Barðdal, J., Smirnova, E., Sommerer, L. & Gildea, S. (Eds.). (2015). *Diachronic construction grammar*. Benjamins.
- Belemans, R., Kruijsen, J. & Van Keymeulen, J. (1998). Gebiedsindeling van de zuidelijk-Nederlandse dialecten. *Taal en Tongval*, 50, 25–42.
- Bentley, D., Ciconte, F.M. & Cruschina, S. (2013). Existential constructions in crosslinguistic perspective. *Rivista di Linguistica*, 25(1), 1–13.
- Berruto, G. ([1987] 2012). Sociolinguistica dell'italiano contemporaneo. Carocci.
- Brinker, K, Cölfen, H. & Pappert, S. ([1985] 2018). *Linguistische Textanalyse. Eine Einführung in Grundbegriffe und Methoden.* 9., durchgesehene Auflage. Schmidt.
- Britain, D. (2017). Which way to look? Perspectives on "Urban" and "Rural" in dialectology. In E. Moore & C. Montgomery (Eds.), *A Sense of Place: Studies in Language and Region* (pp. 171–188). Cambridge University Press.
- Bücker, J., Günter, S. & Imo, W. (Eds.). (2015). Konstruktionen im Spannungsfeld von sequenziellen Mustern, kommunikativen Gattungen und Textsorten. Stauffenburg.
- Chambers, J.K., & Trudgill, P. (1980). *Dialectology*. Cambridge University Press.
- Corpas Pastor, G. (2014). El fraseólogo internauta: Cómo pasarlo pipa en la red. In V. Durante & C. Tschann (Eds.), *Fraseología y paremiología: enfoques y aplicaciones* (pp. 133–152). Centro Virtual Cervantes.
- Croft, W. & Cruse, A. (2004). Cognitive Linguistics. Cambridge University Press.
- Dalmas, M. & Gautier, L. (2018). Zur idiomatischen Komponente auffälliger kausativer Konstruktionen im Deutschen. *Linguistik online*, 90(3), 145–162. https://doi.org/10.13092/lo.90.4321.

- De Knop, S. & Mollica, F. (2018). Kausalkonstruktionen mit Adjektiv im freien und fixierten Gebrauch. *Linguistik online*, 90(3), 21–45. https://doi.org/10.13092/lo.90.4317.
- De Knop, S., Sambre, P. & Mollica, F. (2015). The constructional patterns of L2 German meteorological events by native French-, Dutch- and Italian-speaking L1 learners. *Yearbook of the German Cognitive Linguistics Association*, *3*(1), 169–194. https://doi.org/10.1515/gcla-2015-0010.
- Dobrovol'skij, D. (2018). Phraseme aus kognitiver und kontrastiver Sicht. In S. Engelberg, H. Kämper & P. Storjohann (Eds.), *Wortschatz: Theorie, Empirie, Dokumentation* (pp. 151–170). De Gruyter. https://doi.org/10.1515/9783110538588-007.
- Dutch FrameNet [Database]. http://dutchframenet.nl. Last accessed on October 1, 2024.
- Faber, P. (2009). The cognitive shift in terminology and specialized translation. *MonTI: Monografías de Traducción e Interpretación*, 1, 107–134. https://doi.org/10.6035/MonTI.2009.1.5.
- Ferraro, F., Poliak, A., Cotterell, R. & Van Durme, B. (2017). Frame-Based Continuous Lexical Semantics through Exponential Family Tensor Factorization and Semantic Proto-Roles. *Proceedings of the 6th Joint Conference on Lexical and Computational Semantics (SEM 2017)*, 97–103. http://dx.doi.org/10.18653/v1/S17-1011.
- Fillmore C.J. (1989). Grammatical Construction Theory and the familiar dichotomies. In R. Ditrich, & C.F. Graumann (Eds.), *Language Processing in Social Context* (pp. 17–38). North-Holland. https://doi.org/10.1016/B978-0-444-87144-2.50004-5.
- Fillmore, C.J., Kay, P. & O-Connor, M-C. (1988). Regularity and Idiomaticity in Grammatical Constructions: The Case of 'Let Alone'. *Language*, *64*(3), 501–538. https://doi.org/10.2307/414531.
- Gautier, L. (2021). Zur Produktivität des Musterbegriffs zur holistischen Charakterisierung von Fachtextsorten: Fallstudien am Beispiel des Finanzdiskurses. In A. Gondek, A. Jurasz, P. Staniewski & J. Szcęk (Eds.), *Aktuelle Trends in der phraseologischen und parömiologischen Forschung weltweit.* (Band I. pp. 15–35). Kovac.
- Goldberg, A.E. (1995). *Constructions: A Construction Grammar Approach to Argument Structure*. University of Chicago Press.
- Goldberg, A.E. (2003). Constructions: A new theoretical approach to language. *Trends in Cognitive Sciences*, 7(5), 219–224. https://doi.org/10.1016/S1364-6613(03)00080-9.
- Goldberg, A.E. (2006). Constructions at Work: The Nature of Generalization in Language. Oxford University Press.
- Goldberg, A.E. (2019). Explain Me This: Creativity, Competition, and the Partial Productivity of Constructions. Princeton University Press.
- Gries, S.T. (2008). Phraseology and linguistic theory: A brief survey. In S. Granger & F. Meunier (Eds.), *Phraseology: An interdisciplinary perspective* (pp. 3–25). Benjamins.
- ICSI International Computer Science Institute (n.d.). *BFN Berkeley FrameNet* [Database]. https://framenet.icsi.berkeley.edu/fndrupal/. Last accessed on April 20, 2022.
- Imperiale, R. & Schafroth, E. (2016). Fraseologia italiana per apprendenti L2 e specialisti: La pratica dell'approccio costruzionista. RICOGNIZIONI, 6(3), 105-132.
- Ivorra, P.O. (2020). Les comparacions i les seues variacions en 'la Plaça del Diamant' des de la Gramàtica de Construccions: Entre usualitat i creativitat. *Romanica Olomucensia*, 32(1), 73–90. https://doi.org/10.5507/r0.2020.004.

- Ivorra, P.O. (2021a). Comparative constructional idioms: A corpus-based study of the creativity of the [más feo que X] construction. In C.M. Blanco (Ed.), *Productive Patterns in Phraseology and Construction Grammar: A Multilingual Approach* (pp. 29–52). De Gruyter. https://doi.org/10.1515/9783110520569-002.
- Ivorra, P.O. (2021b). De construcciones fraseológicas a comparaciones fraseológicas: El rol de las microconstrucciones emergentes en la creación de comparaciones fraseológicas. eHumanista/IVITRA, 19, 440–455.
- Ivorra, P.O. & Mellado-Blanco, C. (2021). 'Más tontos que el novio de la Chelo'. La intensificación de la estulticia en foros y chats por medio de comparaciones creativas: Una aproximación desde la Gramática de Construcciones. Estudios Románicos, 30, 39–58. https://doi.org/10.6018/ER.471241.
- L'Homme, M.C. (n.d.). *DiCoEnviro Le dictionnaire fundamental de l'environnement* [Database]. http://olst.ling.umontreal.ca/cgi-bin/dicoenviro/search_enviro.cgi. Last accessed on January 30, 2022.
- Liégeois, V., Modicom, P.Y. & Bonne, L. (2023). Construction grammar in domain-specific discourse: A contrastive analysis of existential structures in Swedish, Norwegian and Dutch weather reports. In E. Coussé, S. Höder, B. Lyngfelt & J. Prentice (Eds.), *Constructional approaches to Nordic languages*. Benjamins. 145–178. https://doi.org/10.1075/cal.37.06lie.
- Malchukov, A.L. & Siewierska, A. (2011). *Impersonal Constructions: A cross-linguistic perspective*. Benjamins.
- Mellado-Blanco, C. (2015). Antiphrasis-Based Comparative Constructional Idioms in Spanish. *Journal of Social Sciences*. https://doi.org/10.3844/jssp.2015.111.127.
- Mollica, F. & Schafroth, E. (2018): Der Ausdruck der Intensivierung in komparativen Phrasem-Konstruktionen im Deutschen und im Italienischen: Eine konstruktionsgrammatische Untersuchung. In K. Steyer (Ed.): Sprachliche Verfestigung. Chunks, Muster, Phrasem-Konstruktionen (pp. 103–136). Narr.
- Östman, J.-O. (2015). Construction discourse: A prolegomenon. In J.O. Östman & M. Fried (Eds), Construction Grammars: Cognitive Grounding and Theoretical Extensions (pp. 121–144). Benjamins.
- Regier, T., Carstensen, A. & Kemp, C. (2016). Languages Support Efficient Communication about the Environment: Words for Snow Revisited. *PLOS ONE* 11(4). https://doi.org/10.1371/journal.pone.0151138.
- Roelcke, T. ([1999] 2020). Fachsprachen (4., neu bearbeitete und wesentlich erweiterte Auflage). Schmidt.
- Schafroth, E. (2020). Fraseologismi a schema fisso: Basi teoriche e confronto linguistico. *Romanica Olomucensia*, 32(1), 173–199. https://doi.org/10.5507/ro.2020.009.
- Schafroth, E. & Imperiale, R. (2019). Gebrauchsbasierte Phraseologie des Italienischen: Digitale Lexikographie zwischen Frame-Semantik und Konstruktionsgrammatik. *Lexicographica*, 35, 87–121. https://doi.org/10.1515/lex-2019-0004.
- Smirnova, O., Rackevičienė, S., & Mockien, L. (2021). Frame semantics methodology for teaching terminology of specialised domains. *Journal of Teaching English for Specific and Academic Purposes*, 9(4), 765–773. http://dx.doi.org/10.22190/JTESAP2104765S.

- Stein, S. & Stumpf, S. (2019). *Muster in Sprache und Kommunikation: Eine Einführung in Konzepte sprachlicher Vorgeformtheit*. Schmidt.
- Weisser, M. (2016). Practical Corpus Linguistics: An Introduction to Corpus-Based Language Analysis. Wiley & Sons.
- Ziem, A. (2018). Konstruktionsgrammatik meets Phraseologie: Eine Standortbestimmung. *Linguistik online*, 90(3). https://doi.org/10.13092/lo.90.4316.