

A constructional account of the modal particle ‘ja’ in Texas German

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The last decade has seen the expansion of systematic study of spoken language within Construction Grammar (Fried & Östman 2005, Östman 2006, Günthner 2006, Imo 2007). While most studies have only noted that a specific syntactic pattern may have different manifestations in spoken language and in ‘standard’ grammar, the emphasis in these studies has been on the domain of the sentence/utterance as the appropriate context of analysis (e.g. Lambrecht & Lemoine 2005). To overcome this bias, this paper presents a case study of a constructional representation and analysis of a regular patterning in natural discourse, namely the modal particle *ja* in Texas German, a critically endangered dialect (see Boas 2009, Boas & Pierce 2011).

Keywords: modal particle, language contact, Construction Grammar, Texas German

1. Introduction

Speakers of Texas German employ modal particles (MPs) such as *doch*, *mal*, and *ja* to express their stance and attitude in conversation (Salmons 1990, Boas & Weilbacher 2007, Boas 2010). This paper presents a constructional account of the MP *ja* as in the following examples.¹

1. In this study I use the term “modal particle” for *ja* (and *mal*, *eben*, etc.). Terms like “discourse marker”, “pragmatic particle”, or “contextualization cue” are also used in the literature. I do not wish to make any theoretical assumptions associated with the use of any of these terms. For an in-depth study of discourse particles, see Fischer (2000).

- (1) Die Kleinste must mir ja noch dragen und alles.
 the smallest had-to we actually still carry and everything
 ‘The smallest we actually had to carry and everything.’ (1-28-1-3)²
- (2) Die bringen ja gudes Geld mit, bauen Häuser, schöne neue Häuser.
 they bring really good money with build houses beautiful new house
 ‘They really bring good money (along), they buy new houses, beautiful new
 houses.’ (1-45-1-6)

In (1), the MP *ja* (‘actually’) signals assertion on the part of the speaker.³ In (2), *ja* (‘really’) signals astonishment or marveling on the part of the speaker. Both examples illustrate how MPs are employed to signal the speaker’s stance towards the content of their statement. But what are the exact differences and similarities between *ja* in (1) and (2)? Are they really the same MP, or should they be classified as different senses with distinct functions and distributions? Based on examples such as (1) and (2), this paper examines how the notion of *construction* can be extended in a dialogical direction to account for some of the complexities of spoken language. Furthermore, this paper aims to show how the notion of construction can help to account for the distribution of MPs such as *ja* in contact languages.

The paper is structured as follows. Part two provides a short summary of the history of Texas German, including on-going documentation efforts by the Texas German Dialect Project at the University of Texas at Austin. Part three summarizes the distribution of some German-origin MPs such as *ja*, *mal*, and *doch*, and some borrowed Discourse Particles (DPs) from English such as *you know*, *well*, and *so*. Based on corpus examples, we show that they are polysemous and that each of the different senses of a DP and MP implies distinct types of background knowledge

2. Numbers following examples are unique file IDs that point to the location of the examples in the Texas German Dialect Archive. For details, see Boas (2006) and Boas et al. (2010).

3. Throughout this paper I cite examples containing the relevant DPs and MPs without discussing the entire dialogue sequence in which these sentences are embedded. An anonymous reviewer points out that this methodology is less than ideal because it does not apply truly dialogical criteria (Bakhtin 1981, Hutchby & Wooffitt 1998) for the analyses of the different functions of DPs and MPs in TxG. While a discussion of longer dialogical sequences would certainly be ideal, it is impractical given the space constraints of this paper (each dialogue sequence is about a half page long). Because the functions of DPs and MPs in TxG are equivalent to those of Standard German (see Salmons 1990), I relied on my own native speaker intuitions when analyzing their use and functions in my corpus of TxG. To this end, I applied the definitions of individual senses of MPs as described by Weydt et al. (1983) (see Section 3) for Standard German. In addition, I checked my native speaker intuitions with five other native speakers of German. Note that each corpus example cited in this paper contains a unique file ID number which enables the interested reader to find the individual sentence and the entire dialogue sequence in the freely available on-line archive of Texas German (<http://www.tgdp.org>).

on the part of the speaker and the hearer. For example, some of the functions of *ja* include marveling and astonishment, warning and threatening, assertion, and short commentary (Weydt 1989). Similarly, *you know* is used to indicate awareness of shared knowledge, to clarify common knowledge, to indicate hesitation, and to appeal for a hearer's understanding (Schiffrin 1987).

Part four presents a brief overview of some of the principles of Construction Grammar (CxG), which aims to account for all linguistic tokens of a language. CxG sees itself as a grammar of language as a whole – both of its “core” structures (what traditional grammars, including most generative grammars, have aimed for) and of its so-called “periphery” (including what traditional grammars call sentence fragments, and various non-clausal phrases).

Part five of the paper presents a constructional analysis of *ja* as in (1) and (2). I show that this MP constitutes a rich inventory of distinct senses, each of which is associated with a particular cluster of properties, amounting to distinct pragmatic functions that are highly context-dependent. Based on insights from Frame Semantics (Fillmore 1982) and Implicit Anchoring (Östman 2006), I argue that each of the individual senses of a MP evoke different semantic frames, together with distinct discourse patterns that make reference to grammatical constructions. Part six summarizes the main findings of the paper and presents suggestions for further research.

2. Texas German: History and documentation

Texas German is a mixed dialect that is the result of German immigrants bringing different dialects of German to Texas beginning in the 1840s. One of the crucial features that sets TxG apart from other German-American dialects is that it is a mix of at least four or five different German dialects, including Hessian, Palatinate, Low German, Thuringian, and Saxon (see Gilbert 1972, Boas 2009).

From the 1840s to the early 1900s, Texas Germans were relatively isolated, thanks to a number of political and social factors, ranging from the anti-slavery views held by most German settlers to deliberate attempts at self-sufficiency. German immigrants and their descendants maintained their language and culture through a variety of German-speaking institutions, including churches, schools, social organizations, and newspapers (Nicolini 2004, Salmons & Lucht 2006, Boas 2009, Kearney 2011). By the early 20th century there were approximately 100,000 Texas Germans (Eichhoff 1986).

This situation changed dramatically with the entry of the U.S. into World War I in 1917 and the resulting increase in anti-German sentiment, along with the passage of an English-only law for public schools (Salmons 1983: 188), which led to

the stigmatization of Texas German and the beginning of its decline. World War II reinforced the stigmas attached to Germany, Texas Germans, and the German language. As a result, institutional support for the widespread maintenance and use of German in public venues was largely abandoned, with devastating consequences for TxG. German-language newspapers and periodicals stopped publishing, some German-language schools closed and German instruction was dropped in others; and German-speaking churches replaced German-language services with English-language ones (Nicolini 2004, Boas 2009, Boas & Pierce 2011).

After World War II, the increasing migration of non-German speakers to the traditional German enclaves and the general refusal of these newcomers to learn German led to the large-scale abandonment of German in the public sphere. The increased use of English in the public domain pushed German even further into the private domain. Texas Germans also increasingly married partners who could not speak German, and in such linguistically mixed marriages, English typically became the language of the household.

In the 1960s approximately 70,000 TxG speakers remained in the “German belt” of central Texas. Today, however, only an estimated 8–10,000 Texas Germans, primarily in their sixties or older, still speak the language of their forbearers fluently (Boas 2003, 2009), and English has become the primary language for most Texas Germans in both private and public domains. With no signs of this language shift being halted or reversed and fluent speakers almost exclusively above the age of 60, Texas German is now critically endangered and is expected to become extinct within the next 30 years.

TxG is not only interesting because of its various donor dialects (see above) and its heavy contact with English over the past century. It is also special in that it never evolved into a focused new-world variety, preserving significant dialectal features from its original donor dialects up to the present day. Boas (2009) discusses the emergence and formation of TxG in detail by applying Trudgill’s (2004) model of new-dialect formation to TxG. He comes to the conclusion that TxG as spoken in the 21st century is essentially a koiné, not much different from what it sounded like in the early 20th century. Because of the considerable variation in the phonology, morpho-syntax, and the lexicon, TxG cannot be conceived as a homogenous variety (in contrast to Standard German) (Boas 2009, Boas & Pierce 2011, Roesch 2012). Even though TxG exhibits significant variation today, it is almost mutually intelligible with Standard German, depending on the pronunciation of individual speakers (which varies considerably) and the topic of conversation: about 5–7% of TxG vocabulary has been borrowed from English (see Boas & Pierce 2011 for details), and if a Standard German speaker does not know any English, it might be difficult to completely understand a speaker of TxG.

In 2001, Hans Boas founded the Texas German Dialect Project (TGDP) at the University of Texas at Austin to record, document, and archive the remnants of TxG before it dies out. Over the past 17 years, members of the TGDP have interviewed close to 700 speakers of TxG, resulting in about 1,200 hours of recordings. Besides eliciting TxG words, phrases, and sentences based on the lists in Eikel (1954) and Gilbert (1972), TGDP members collect biographical data (in English) capturing speakers' use of language throughout their lives, their language attitudes, and other relevant personal information. The main bulk of data collected by the TGDP consists of open-ended sociolinguistic interviews conducted in German. Using ELAN (<http://tla.mpi.nl/tools/tla-tools/elan/>), these interviews are transcribed and translated into English and then stored in the Texas German Dialect Archive (<http://www.tgdp.org>), together with the other interview data, where they are freely accessible.

The archived interviews are associated with only minimal meta-data, such as age of speaker, gender, place of birth, and language spoken at home before entering elementary school. We hope to be able to enlarge our electronic metadata inventory in the not too distant future.⁴ The archive is used for teaching, research, and outreach activities. For more details, please see Boas (2006) and Boas et al. (2010). The data in this paper come from the open-ended interviews stored in the Texas German Dialect Archive.

Before turning to the distribution of *ja* in TxG, a word about the speakers of TxG is in order. The recordings in the Texas German Dialect Archive are based on interviews with roughly equal percentages of male and female speakers ranging in age from 54 to 98 years. Texas German was their first language and about a fourth of the speakers had some knowledge of English before entering elementary school. All speakers are bilingual TxG – English speakers. Almost all of the speakers grew up on farms, attending rural country schools before going to work on the farm or transferring to high school in larger towns such as New Braunfels, Fredericksburg, San Antonio, Weimar, or Seguin. A quarter of speakers finished 7–9 years of school before beginning with full-time work, three quarters graduated with a high school degree, and only 8% graduated from college. A quarter of our TxG speakers had formal German instruction in high school or college, and about 5% have traveled to Germany. The speakers have a variety of occupational backgrounds: ranchers, farmers, semi-skilled workmen, technicians, teachers, house

4. Since the interviews are not extensively tagged with the relevant sociolinguistic variables, this paper does not offer any insights into the correlation between linguistic performance and the sociolinguistic stratification of our speakers. Anecdotal evidence suggests that the use of DPs and MPs in TxG is roughly the same among our speakers. Clearly, this point needs to be addressed in more detail by future research.

wives, business owners, mayors, professionals, and members of the armed forces. Based on Campbell & Muntzel's (1989) scale, our group can be characterized as consisting of roughly 50% strong speakers and roughly 50% imperfect speakers. With this overview, we now turn to the distribution of *ja* in TxG.

3. Distribution of English and German DPs and MPs in Texas German

Particles are often borrowed in language contact situations, thereby affecting the particle marker system of the recipient language (Matras 1998, Fuller 2001). Depending on the intensity and length of contact, only selected DPs and MPs are borrowed. In other cases, entire discourse-marking systems can be borrowed from one language into another (Fuller 2003, Clyne 2003, Maschler 2000). Like many other German-American dialects, TxG exhibits a mixed particle system consisting of both German-origin DPs and MPs as well as DPs borrowed from English (Salmons 1990, Boas & Weilbacher 2007, Boas 2010).

First, consider the distribution of German-origin MPs, which do not have direct English translation equivalents such as *mal* ('once'), *halt* ('just'), *ja* ('really'), *eben* ('even/just'), and *doch* ('really'). Table 1 summarizes the distribution of these MPs in a pilot study of the distribution of MPs in TxG.

Table 1. Distribution of German-origin MPs in TxG corpus (Boas & Weilbacher 2006)*

Modal particle	Number of occurrences	Number of speakers	Number of functions
<i>mal</i>	115	26	3/3
<i>halt</i>	150	25	2/2
<i>ja</i>	142	19	2/4
<i>eben</i>	171	3	1/3
<i>doch</i>	108	38	3/4

* An anonymous reviewer points out that the data in Table 1 is not very informative because they do not contain actual analyses of excerpts leading to decisions concerning the number of functions for each MP TxG vs. Standard German. While this is certainly an important point, it is important to remember that the data in Table 1 are a summary of the analyses of MPs carried out by Boas & Weilbacher (2006). The interested reader can consult the extensive data in Boas & Weilbacher (2006), which also contain unique file IDs that enable the retrieval of the entire sequence in which the individual MPs are embedded.

Present-day TxG appears to have a well-functioning, if somewhat limited, system of German-origin MPs, whose functions and meanings are similar to those found in Standard German today (see Boas & Weilbacher 2006/2007).⁵ More

5. See Salmons (1990) for a different view of the TxG system and Durrell (2002) or Donahue (2009) for overviews of DPs in Standard German.

specifically, the functions of TxG MPs match up nicely with their different functions in Standard German (cf. Weydt 1989, who calls them *Abtönungspartikel*). These include request, reminder, assertion, prompting, marveling, astonishment, warning, threatening, objection, supposition, and wishful thinking, among others (see Boas 2010). The column for “number of functions” indicates how many functions the German-origin MP fulfills in TxG vis-à-vis its Standard German counterpart. For example, *mal* in TxG has three different functions as in Standard German, namely to indicate a request for a small favor, to elicit a particular type of information, and to mark an event as having already occurred once. In contrast, German-origin MPs such as *ja* and *eben* have a somewhat more limited distribution of functions than their counterparts in Standard German.

Consider, for example, *ja*, which in Standard German has four different functions as a MP (besides its obvious function as the affirmative ‘yes’-word). The first function identified by Weydt et al. (1983) is to express marveling and astonishment as in *Du hast ja ein neues Auto!* (‘You really do have a new car!’). Second, it can be employed as a part of a warning or a threat as in *Mach das ja nicht noch einmal!* (‘Don’t think of doing that ever again!’). Third, it can be used to express assertion as in *Du weißt ja, dass ich morgen Geburtstag habe* (‘Of course you know that my birthday is tomorrow’). Fourth, it can mark a sentence as a short commentary about what has been said previously as in *Soll ich dir mal ‘La Paloma’ vorsingen? Ja nicht!* (‘Should I sing ‘La Paloma’ for you once? Absolutely not!’) (see Weydt et al. 1983: 166). Of these four functions of *ja* in Standard German only two are attested in our TxG corpus, namely assertion and short commentary.⁶

Next, consider English DPs in TxG that have no direct German translation equivalent, such as *well* in (3). When translating such DPs into German, the choice of translation equivalents depends on the context and the content of the utterance. Bublitz (1978) and Johansson (2006) show that *well* has between 10 and 15 different German translation equivalents (often depending on context), for example:

- (3) Well, you know, da waren andere Kinder ...
 well you know there were other children
 ‘Well, you know, there were other children.’ (1-94-1-11-a)

Finally, certain English DPs have been borrowed into TxG despite the presence of a German-origin counterpart. Boas & Weilbacher (2007) discuss the distribution of

6. Even though the two other functions of *ja*, marveling/astonishment and warning/threatening, do not occur in my corpus, we have heard them used in conversations among speakers of TxG on several occasions. I suspect that the absence of these two functions in our corpus might be attributed to the fact that they do typically not occur in normal open-ended sociolinguistic interviews of the type that form the basis for our corpus.

you know and its German counterpart *weisst du/weisste*. They show that although both DPs exhibit the same range of senses and functions as shown in Table 2, *you know* is much more widely used than its German counterpart.

Table 2. Summary of pragmatic contexts in present-day TxG (Boas & Weibacher 2007)

	You know	Weisst(e)/weisst du
Aware of knowledge shared	539	2
Clarification of common knowledge	22	2
Indication of hesitation	1	0
Self-repair	12	0
Appeal for understanding	25	1

So far we have shown that there are three categories: (1) German-origin MPs with no English counterparts, (2) English DPs with no German counterpart, and (3) DPs that have equivalents in both languages. The following section provides an overview of the main principles of Construction Grammar, the framework used for formalizing our insights about the meanings and functions of MPs in TxG. Section 4 presents our constructional analysis of the German-origin MP *ja*.

4. Construction Grammar and Frame Semantics

One of the main tenets of Construction Grammar (CxG) is that constructions are the basic building blocks of language. Constructions are regarded as pairings of form with meaning, which means that any difference in form typically indicates a difference in meaning (and vice versa).⁷ Figure 1 illustrates the basic architecture of constructions, where the form side of a construction may consist of syntactic, morphological, and phonological properties, while the meaning side of a construction may consist of semantic, pragmatic, and discourse-functional properties.

7. Goldberg's (1995: 4) defines 'constructions' as follows: "C is a CONSTRUCTION iff_{def} C is a form-meaning pair <F_i, S_i> such that some aspect of F_i or some aspect of S_i is not strictly predictable from C's component parts or from other previously established constructions." For a different definition that also considers frequency information, see Goldberg (2006).

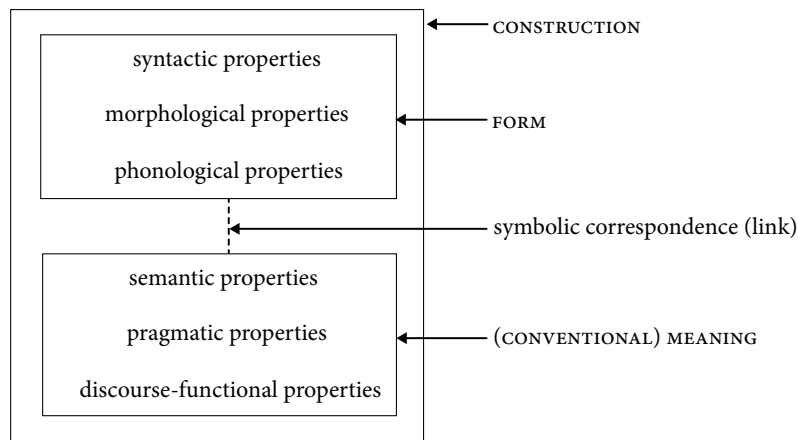


Figure 1. Anatomy of a construction (Croft 2001: 18)

CxG is a declarative, non-derivational approach that integrates all levels of linguistic structures. It is non-modular and does not differentiate between core and periphery, employing a uniform representation of all grammatical knowledge. In this view, any type of linguistic structure can be regarded as a construction, including complex and (mostly) schematic constructions such as subject-predicate constructions, passives, double object constructions, resultative constructions, support verb constructions, idioms of different types, and words and morphemes (see Croft & Cruse 2004, Boas 2011, and the contributions in Hoffmann & Trousdale 2013 for overviews of CxG). Constructions are not an unordered set, but rather form a structured inventory of a speaker's knowledge of the conventions of their language. This inventory is represented in terms of a taxonomic network of constructions where each construction constitutes a node in the taxonomic network of constructions (see Goldberg & Jackendoff 2004).

While most constructional analyses focus on morpho-syntactic, pragmatic, and discourse-functional properties of more schematic grammatical constructions, very few account for semantic differences of word-level constructions, or, more specifically, particles.⁸ We see the relative neglect of the influence of lexical semantic information within CxG as one of the possible reasons for this lack of research, and therefore we propose to pay more attention to Frame Semantics (Fillmore 1982), a theory that complements CxG by providing systematic means of describing and analyzing the meanings of words and constructions.

The basic idea behind Frame Semantics is that “a word's meaning can be understood only with reference to a structured background of experience, beliefs, or practices” (Fillmore & Atkins 1992). In other words, in order to understand the

8. Fried & Östman (2005) and Östman (2006) are notable exceptions to this generalization.

meanings of words in a language we must have first knowledge about the conceptual structures, or semantic frames, which are evoked by words (see Petruck 1996). In practice, the principles of Frame Semantics have been applied to the creation of FrameNet (<http://framenet.icsi.berkeley.edu>), a lexical database that aims to provide, for a significant portion of the vocabulary of contemporary English, a body of semantically and syntactically annotated sentences from which reliable information can be reported on the valences or combinatorial possibilities of each item targeted for analysis (Fillmore & Baker 2010). The method of inquiry is to find groups of words whose frame structures can be described together, by virtue of their sharing common schematic backgrounds and patterns of expressions that can combine with them to form larger phrases or sentences. In the typical case, words that share a frame can be used in paraphrases of each other. The general purposes of the project are both to provide reliable descriptions of the syntactic and semantic combinatorial properties of each word in the lexicon, and to assemble information about alternative ways of expressing concepts in the same conceptual domain (Fillmore & Baker 2010, Boas 2017).

Based on the frame concept, FrameNet researchers follow a lexical analysis process that typically consists of the following steps, according to Fillmore & Baker (2010: 321–322): (1) Characterizing the frames, i.e. the situation types for which the language has provided special expressive means; (2) Describing and naming the Frame Elements (FEs), i.e. the aspects and components of individual frames that are likely to be mentioned in the phrases and sentences that are instances of those frames; (3) Selecting lexical units (LUs) that belong to the frame, i.e. words from all parts of speech that evoke and depend on the conceptual background associated with the individual frames; (4) Creating annotations of sentences sampled from a very large corpus showing the ways in which individual LUs in the frame allow frame-relevant information to be linguistically presented; (5) Automatically generating lexical entries, and the valence descriptions contained in them, that summarize observations derivable from them (see also Fillmore et al. 2003, Ruppenhofer et al. 2010).

To illustrate, consider the sentence *Joe stole the watch from Michael*. The verb *steal* is said to evoke the Theft frame (it is the target (<tgt>) lexical unit, see [4]), which is also evoked by a number of semantically related verbs such as *snatch*, *shoplift*, *pinch*, *filch*, and *thieve*, among others, as well as nouns such as *thief*.⁹ The Theft frame represents a scenario with different Frame Elements (FEs) that can be regarded as instances of more general semantic roles such as AGENT, PATIENT, INSTRUMENT, etc. More precisely, the Theft frame describes situations in which a PERPETRATOR (the person or other agent that takes the GOODS away) takes GOODS

9. Names of Frame Elements (FEs) are in small caps.

(anything that can be taken away) that belong to a VICTIM (the person (or other sentient being or group)) that owns the GOODS before they are taken away by the PERPETRATOR). Sometimes more specific information is given about the SOURCE (the initial location of the GOODS before they change location).¹⁰ The necessary background information to interpret *steal* and other semantically related verbs as evoking the Theft frame also requires an understanding of illegal activities, property ownership, taking things, and a great deal more (see Boas 2005, Bertoldi et al. 2010, or Dux 2011 for additional relevant discussion). Employing the FE names from the frame descriptions for annotating sentences, we see how they are distributed in our example from above.

(4) [_{<PERP>}Joe] *stole*^{<tg>} [_{<GOODS>}the watch] [_{<VICTIM>}from Michael].

In the following section I show how frame-semantic principles can be applied to the description and analysis of the MP *ja* in TxG.

5. Formalizing the distribution of *ja* in TxG

The first step in applying the principles of Frame Semantics to our analysis of MPs in TxG concerns the identification of the frame-evoking lexical unit(s). Then, based on corpus evidence, we arrive at a frame-semantic description of the semantic frame evoked by the target LU and determine the presence of relevant FEs. After identifying the four different frames evoked by *ja*, I discuss their pragmatics of implicit anchoring and formalize our insights in terms of a discourse-level construction.

5.1 Frame-evoking senses of *ja*

Consider the first sense of *ja* in TxG as in *Du hast ja eine neue Shotgun!* ('You do have a new shotgun!'). Without using *ja* such statements would be simple descriptions of a particular circumstance. By adding *ja*, the speaker expresses astonishment about what he is expressing, informing the hearer that he perhaps did not expect him to have a new shotgun (as opposed to his old one), or that he did not expect him to have a shotgun at all. In frame-semantic terms, we view *ja* is a target LU that evokes a particular frame, in this case the Emotion_directed frame as in (5).

10. Besides so-called core Frame Elements, there are also peripheral Frame Elements that describe more general aspects of a situation, such as MEANS (e.g. *by trickery*), TIME (e.g. *two days ago*), MANNER (e.g. *quietly*), or PLACE (e.g. *in the city*).

(5) Frame: Emotion_directed

The words in this frame describe an EXPERIENCER who is feeling or experiencing a particular emotional response to a STIMULUS or about a TOPIC. There can also be a CIRCUMSTANCES under which the response occurs or a REASON that the STIMULUS evokes the particular response in the EXPERIENCER. (frame definition adopted from FrameNet [<http://framenet.icsi.berkeley.edu>])

- (6) [_{<Stim>}Du] [<sub><Sup></sub>hast] **ja**^{<target>} [_{<Stim>}eine neue Shotgun]! [_{<Exp>}DNI]
 you have do a new shotgun
 'You do have a new shotgun!'

A frame-semantic analysis of our example in (6) shows how the individual FEs are distributed. Note first that *ja* (in bold) is the frame-evoking target LU with *hast* ('have') acting as a support verb (Sup). The discontinuous FE STIMULUS consists of *Du* ('you') and *eine neue Shotgun* ('a new shotgun'), while the FE EXPERIENCER is null instantiated, i.e., it is not overtly realized, but instead understood within the context of the utterance (see Fillmore 1986, Ruppenhofer & Michaelis 2010).

We now turn to the second sense of the MP *ja* in TxG as in *Mach das ja nicht noch einmal!* ('Don't you dare do that again!'). Without *ja*, this example is interpreted as a regular imperative in which the speaker tells the hearer not to repeat his action(s). By adding *ja*, the speaker signals that not following his instructions could have potentially negative consequences for the hearer. In such contexts, *ja* is typically stressed and occurs with a rising then falling intonation. In a sense, the addition of *ja* underlines the speaker's seriousness regarding his request not to repeat the previous action. As in (5) above, this particular sense of *ja* evokes its own frame, in this case the Commitment_Threatening frame as in (7).

(7) Frame: Commitment_Threatening

A SPEAKER makes a commitment to an ADDRESSEE to carry out some future action. This is an ACTION not desirable (as with *threaten*) to the ADDRESSEE and may also mention the CAUSE. Some of the words in this frame allow an ADDRESSEE to be expressed. (definition adopted from FrameNet [<http://framenet.icsi.berkeley.edu>])

- (8) [_{<Cau>}Mach das] **ja**^{<tgt>} [_{<Cau>}nicht noch einmal]! [_{<Spkr>}DNI] [_{<Add>}DNI]

A frame-semantic analysis shows that *ja* is the target LU; however, in this case it is not evoking the Emotion_directed frame, but rather the Commitment_Threatening frame, as the labeling of the FEs illustrates. Thus, the discontinuous phrase *mach das* ('make that') and *nicht noch einmal* ('not yet again') represents the FE CAUSE. Since neither the SPEAKER nor the ADDRESSEE of the utterance are

overtly mentioned in (8), these FEs are null instantiated, i.e. they are understood based on the context in which the sentence is uttered.

Next, consider the third sense of *ja* as in *Du weißt ja, dass mir morgen jachten gehn* ('You surely know that we're going hunting tomorrow'). Without *ja*, the meaning of the sentence would only indicate that the speaker is telling the hearer a piece of pertinent information. However, *ja* in this context signals that the speaker wants to make certain that the hearer knows about the information so that there is no room for misinterpretation. Thus, *ja* in this context evokes yet another frame, namely the Certainty frame as in (9). As we see in (10), *ja* is the frame-evoking target LU, while *Du* ('you') is the FE COGNIZER, and *weißst* ('know') together with *dass mir morgen jachten gehnt* ('that we'll go hunting tomorrow') constitute the FE CONTENT.

(9) Frame: Certainty

This frame concerns a COGNIZER's ability about the correctness of beliefs or expectations. It only includes uses where a COGNIZER is expressed. (definition adopted from FrameNet [<http://framenet.icsi.berkeley.edu>])

- (10) [_{<COGNIZER>}Du] [_{<CONTENT>} weißst] ja^{<tgt>}, [_{<CONTENT>} dass mir morgen jachten gehn].

Finally, consider the fourth meaning of *ja* when used as a MP as in *Soll ich dich mal 'Muss' I denn?' vorsingen? Ja nicht!* ('Should I sing "I'll have to" for you? Surely not!'). The use of *ja* in this context differs from the other uses discussed above in that it is part of a multi-word-expression, together with *nicht* ('not'). In other words, both words together constitute the frame-evoking target LU *ja nicht* ('surely not'), which evokes the Attitude_description frame in (11).¹¹ As we can see in the frame-semantic analysis in (12), the multi-word-expression *ja nicht* is the frame-evoking target LU, and the previous sentence constitutes the FE STATE_OF_AFFAIRS. Both FEs (ATTITUDE and COGNIZER) are null instantiated as they are understood based on the context.

(11) Frame: Attitude_Description

The lexical units in this frame are descriptions of a COGNIZER's ATTITUDE about or outlook on a STATE_OF_AFFAIRS. (definition adopted from FrameNet [<http://framenet.icsi.berkeley.edu>])

- (12) [_{<STATE_OF_AFFAIRS>} Soll ich dich mal "Muss' I denn?" vorsingen?] Ja nicht^{<tgt>}!
[_{<ATTITUDE>}DNI] [_{<Cognizer>}DNI]

11. *Ja* is also part of a similar type of multi-word-expression, namely *ja doch!* ('yes, surely!'), which also evokes the Attitude_description frame.

Thus far we have shown that the MP *ja* in TxG has four different senses, each evoking a separate semantic frame. These frames help us with understanding and analyzing the immediate scenes evoked by the different senses of MPs such as *ja*. However, the frame-semantic analysis by itself does not reveal much more about the broader context in which these MPs are used and what the broader implications are for the discourse. My analysis so far also has relatively little to say about the syntactic distribution of MPs such as *ja*. To address these points, we first review how speakers interpret utterances in discourse, then we propose a unified constructional representation of *ja* that combines aspects of both meaning and form.

5.2 Pragmatics of Implicit Anchoring (PIA)

To facilitate our discussion of the various contexts in which MPs are used in their various senses, I adopt Östman's (2006) principles of the Pragmatics of Implicit Anchoring (PIA). The main idea underlying PIA is that utterances must be interpreted in the context of the larger discourse. Thus, it is necessary "to distinguish between meaning as the explicit in language (what has been codified: the lexical, propositional, semantic, and discourse-level 'meaning') and the function as the implicit in language (what takes place 'between the lines' of what one says: the implicated, and – primarily – aspects that the speaker is not accountable for propositionally)" (Östman 2006: 239).

This view of language leads Östman to propose that speakers make interpretations in relation to (i) their cultural coherence, their tradition and history, the society they live in, and its institutions; (ii) the interactive restraints, the conversations and norms of politeness and tact that they have to take into account when they are in interaction with other speakers; and (iii) the constraints on emotions, feelings and opinions, on the expressions of affect and attitudes, and the prejudices that surround them as interactants and speakers. Östman refers to these three points as "patterns of constraints – parameters" and proposes the following three abbreviations to represent them: C stands for coherence, P for politeness, and I for involvement. In this view, all expressions are "anchored" to C, P, and I in the sense that these three parameters constrain the use of linguistic expression. They are not anchored in a static fashion, but contain dynamic cues that indicate how they are to be interpreted and understood (see also Östman 2004, Fried & Östman 2005).

Applying Östman's proposals to our TxG data, I propose that each sense of *ja* not only evokes its own semantic frame as shown in Section 5.1, but that each sense is also anchored within separate discourse patterns whose Pragmatics of Implicit Anchoring are different from each other (each sense is thus contextually

triggered).¹² Consider the following table, which summarizes the discourse pattern in which the sense of *ja* evoking the *Emotion_directed* frame as in (6) above is anchored.

Table 3. Discourse pattern (dp) for anchoring the *Emotion_directed* sense of *ja* together with its form side together with its form constraints

Discourse pattern (dp)	}	Coherence	Introduced topic Expected reaction: No
		Politeness	Camaraderie or Distance
		Involvement	Positively or negatively involved
Form	}	Syntax	"Mittelfeld"
		Phonology	No specification

The first constraint (coherence) on the discourse pattern in which this sense of *ja* is anchored requires that the topic of the conversation is being introduced by the speaker and that the speaker does not require the hearer to react in any specific way. The second constraint (politeness) is not specific with respect to the level of politeness, i.e. the use of *ja* can either be anchored in a context where the speaker and hearer are friends (camaraderie) or where they do not know each other (distance). The last constraint, involvement, does not impose any particular restriction on the use of *ja* in discourse, i.e., the involvement can either be positive or negative. Besides the constraints on the discourse pattern there are also form constraints on this sense of *ja*. The constraint on its syntax requires that it occur somewhere in the so-called *Mittelfeld* ("middle field")¹³ of the sentence, not at the beginning or the end. With respect to its phonology, there are no particular constraints imposed on the discourse pattern to which *ja* is anchored.

Next, consider a different type of discourse pattern, namely that in which *ja* is anchored when it evokes the *Commitment_Threatening* frame. Table 4 shows that in contrast to the *Emotion_directed* sense of *ja* the *Commitment_Threatening* sense of *ja* requires that the topic of the discourse in which the sentence containing *ja* occurs is already known (see (8) above). The discourse pattern is also different from that in Table 3 in that it expects some type of reaction on the side of the hearer, i.e. compliance. The constraint on politeness is also different in that the

12. An anonymous reviewer suggests that there should not be a sharp dividing line between semantics and pragmatics. We share this view completely. The reason why some readers might be led to believe that there is such a difference is because our formalization requires us to make a distinction between discourse patterns and semantic frames. This apparent dividing line can be blurred when our constructional analysis is translated into other constructional frameworks with less formalization (for details see Sag, Boas & Kay 2012).

13. See Zifonun et al. (1997) on the *Mittelfeld*.

Commitment_Threatening sense of *ja* requires there to be two opposing opinions and that the involvement on the part of the speaker is negative. The constraint on the syntax of this sense of *ja* is the same as the one in Table 3 above, namely that it occur in the “Mittelfeld”. One crucial difference, however, is the restriction on the phonology of this sense of *ja*, which is required to follow a rising and falling intonation.

Table 4. Discourse pattern (dp) for anchoring the Commitment_Threatening sense of *ja* together with its form side

Discourse pattern (dp)	}	Coherence	Known topic Expected reaction: Yes
		Politeness	Opposition
		Involvement	Negatively involved
Form	}	Syntax	“Mittelfeld”
		Phonology	Rising and falling intonation

Table 5 summarizes the discourse pattern for the third sense of *ja*, which evokes the Certainty frame. The restrictions on coherence require this sense of *ja* that the topic be known while at the same time no reaction is expected on the part of the hearer. The constraint on politeness states that both speaker and hearer share the same common ground, i.e. that they know the same information. The constraint on the involvement of the speaker specifies positive involvement. Perhaps the biggest difference between this sense of *ja* and its other senses discussed so far lies in its syntactic and phonological specifications. At the syntactic level, the syntactic restrictions require *ja* to be part of the “Mittelfeld”, which precedes the “Nachfeld” containing the subordinate clause.¹⁴ This syntactic restriction is also reflected by a phonological restriction, namely that there be a short intonation break after *ja*, and the beginning of the subordinate clause in the “Nachfeld.”

Table 5. Discourse pattern (dp) for anchoring the Certainty sense of *ja* together with its form side

Discourse pattern (dp)	}	Coherence	Known topic Expected reaction: No
		Politeness	Common ground
		Involvement	Positive involvement
Form	}	Syntax	“Mittelfeld”, requires “Nachfeld”
		Phonology	Short intonation break before subordinate clause in the “Nachfeld”

14. See Zifonun et al. (1997) for additional relevant discussion.

Finally, we turn to the fourth sense of *ja*, which evokes the *Attitude_description* frame. The discourse pattern in which this sense of *ja* (as part of the multi-word-expression *ja nicht* ('surely not')) is embedded in sentences such as (12) above differs significantly from the previous three, as Table 6 illustrates. First, the coherence parameter constrains the topic to be known and also requires an expected reaction. Thus, if the speaker does not expect the hearer to react in some way to his exclamation, then the use of *ja* in this context would be inappropriate. The parameters for politeness require that this use of *ja* expresses non-solidarity, while the one for involvement requires the speaker to be negatively involved. On the form side we see that there is no particular syntactic constraint except that *ja* must precede *nicht*, the second member of the multi-word-expression *ja nicht*. The phonological constraint on this discourse pattern in which *ja* is anchored requires that *ja* receive primary stress and be uttered with a raised pitch.

Table 6. Discourse pattern (dp) for anchoring the *Attitude_description* sense of *ja* together with its form side

Discourse pattern (dp)	}	Coherence	Known topic Expected reaction: Yes
		Politeness	Non-solidarity
		Involvement	Negatively involved
Form	}	Syntax	Precedes <i>nicht</i>
		Phonology	Primary stress and raised pitch on <i>ja</i>

Our discussion of the discourse patterns that *ja* is anchored to has shown that they are quite distinct, in addition to the different semantic frames evoked by the four senses of *ja*. So far, I have said relatively little about the syntactic properties of *ja* except that it occurs in particular syntactic positions. I have also remained relatively quiet on how the semantic-pragmatic properties of the different senses of *ja* are linked to the different form-requirements. In the following section I address these points.

5.3 Formalizing discourse patterns as constructions

Combining our insights from the previous two subsections into a constructional analysis I postulate that each sense of the MP *ja* makes reference to a different semantic frame in combination with a discourse pattern. However, these four separate discourse patterns are not isolated semantic-pragmatic entities, but are instead tied to very specific form-constraints at the syntactic (and the phonological) level, some of which we have already discussed above. Adopting the key principles of CxG as outlined in Section 4, I propose that DPs are constructions, i.e. pairings of form with meaning, with their own specific constraints as outlined above.

I adopt Kay & Fillmore's (1999) box notation for representing constructions. To introduce this notation, I present Kay & Fillmore's example of the verb phrase construction, which consists of two entities, namely a head and a filler as in Figure 2. The VP construction is part of a larger network of constructions each of whose members inherits from a more abstract head plus complements construction. The VP construction specifies that the syntactic category of the head is verbal (*cat v*) and that none of the filler daughters bears the grammatical function (*gf*) subject (*subj*). The two boxes within the larger box (the VP construction) illustrate that the VP construction specifies a phrase consisting of a lexical head daughter (the left box) followed by one or more filler daughter, where filler is a phrasal role played equally by complements which appear as sisters to a lexical head and those that don't (Kay & Fillmore 1999: 7).

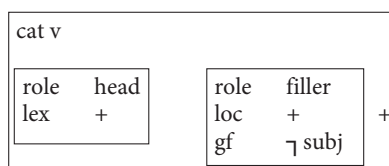


Figure 2. Verb phrase (VP) construction (Kay & Fillmore 1999: 8)

We now turn to the overall constructional representation of discourse patterns. Consider Figure 3, which shows the architecture of the construction entry for the MP *ja*. Together the three boxes make up the MP-*ja*-construction. Note that Figure 3 is rather abstract in that it does not specify which sense of *ja* is captured by the construction entry. In fact, there are a total of four separate construction entries for *ja*, each specifying the four different senses as discussed above.

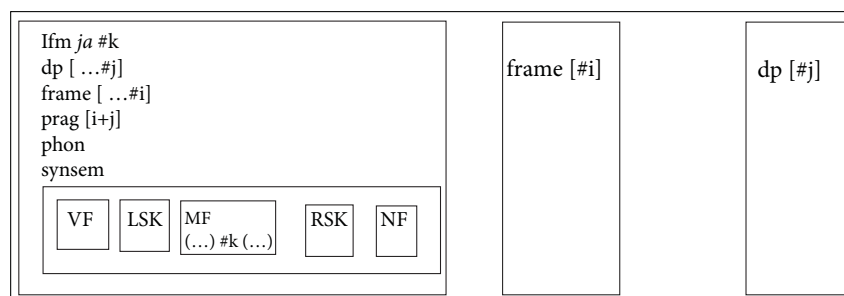


Figure 3. Constructional entry for MP *ja* (underspecified)

The leftmost box contains the relevant information for the head of the MP-*ja*-construction. The lexical form (*lfm*) is specified as *ja* and is followed by the pound sign and a variable *k*. The pound sign indicates that the value shared by the lexical form is co-indexed and is re-occurring at some other place in the