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## Hans C. Boas (Austin) Frames and constructions for the study of oral poetics

**Abstract:** The seminal studies by Milman Parry and Albert Lord in the 20<sup>th</sup> century demonstrated that oral epic singers compose lengthy and intricate poems in remembering a fixed text, but by improvising their songs as they perform. Performances rely heavily on mastering a set of interconnected concepts, such as (1) formulae, (2) themes, and (3) story-patterns, all of which need to be accessed throughout a performance. In communicating with their audience, oral poets on features of everyday language use, which is often dependent on pairings of form with meaning and encyclopedic knowledge. The formulas used by oral poets constitute a very high degree of idiomatization, which is often difficult to access systematically with the concepts of more traditional grammatical theories.

In this paper, I show how two related linguistic theories, Construction Grammar and Frame Semantics, can be applied to the study of oral poetics in order to systematically describe and analyze the forms and meanings communicated by oral poets during their performances. The paper is structured as follows. Section 1 discusses the principles of Frame Semantics, a theory of word meanings. It shows how FrameNet, a lexicographic database of English, is structured to represent different types of lexical knowledge important for the interpretation of words. Section 2 presents Construction Grammar, a framework for systematically analyzing syntactic structures together with their meanings. Section 3 shows the principles of Frame Semantics and Construction Grammar are applied to the analysis of a concrete text. Section 4 summarizes the main points of this paper.

### 1 Frame Semantics and FrameNet

One central problem with analyzing language is figuring out the meanings of words. Traditional print dictionaries often offer good first characterizations of word meanings, but they suffer from a number of drawbacks, such as circular mode of organization, level of detail, and coverage.<sup>1</sup> Over the past five decades

<sup>1</sup> See Beryl T.S. Atkins, "Analyzing the Verbs of Seeing: A Frame Semantic Approach to Lexicography". In: Christopher Johnson et al. (eds.), *Proceedings of the Twentieth Annual of the Berkeley Linguistics Society*, Berkeley 1994, 42-56; Beryl T.S. Atkins, "The Role of Example in a Frame Semantics Dictionary". In: Masayoshi Shibatani and Sandra A. Th

Linguists developed different types of lexical semantic theories to account for word meanings, including structuralist semantics, generativist semantics, neo-structuralist semantics, and cognitive semantics.<sup>2</sup>

One very prominent cognitive semantics approach, developed by Charles Fillmore in the 1970s and 1980s, is Frame Semantics, "a research program in empirical semantics and a descriptive framework for presenting the results of such research."<sup>3</sup> This approach relies on common backgrounds of knowledge (semantic frames) against which the meanings of words are interpreted.<sup>4</sup> A "frame is a cognitive structuring device, parts of which are indexed by words associated with it and used in the service of understanding."<sup>5</sup> The central ideas underlying Frame Semantics can be characterized as follows:

A word's meaning can be understood only with reference to a structured background of experience, beliefs, or practices, constituting a kind of conceptual prerequisite for understanding the meaning. Speakers can be said to know the meaning of the word only by first understanding the background frames that motivate the concept that the word encodes. Within such an approach, words or word senses are not related to each other directly, word to word, but only by way of their links to common background frames and indications of the manner in which their meanings highlight particular elements of such frames.<sup>6</sup>

(eds.), *Essays in Semantics and Pragmatics—In Honor of Charles J. Fillmore*. Amsterdam and Philadelphia 1995, 25–42; Beryl T.S. Atkins and Michael Rundell, *The Oxford Guide to Lexicography*. Oxford 2008; and Clif Goddard, *Semantic Analysis*. Oxford 2011.

2 For an overview, see Vyvyan Evans, *How words mean*. Oxford 2009; and Dirk Geeraerts, *Theories of Lexical Semantics*. Oxford 2010.

3 Charles J. Fillmore, "Frame Semantics". In: Linguistic Society of Korea (ed.), *Linguistics in the Morning Calm*. Seoul 1982, 111–138, 111. This section builds on Hans C. Boas, "Recent trends in multilingual computational lexicography". In: H. C. Boas (ed.), *Multilingual Frameworks in Computational Lexicography*. Berlin and New York 2009, 1–36; Hans C. Boas, "Zum Abstraktionsgrad von Resultativkonstruktionen". In: S. Engelberg, K. Proost, and A. Holler (eds.), *Sprachliches Wissen zwischen Lexikon und Grammatik*. Berlin and New York 2011, 37–69; and Hans C. Boas, "Wie viel Wissen steckt in Wörterbüchern? Eine frame-semantische Perspektive". In: *Zeitschrift für Angewandte Linguistik* 57 (2013): 75–97.

4 Fillmore's use of the concept of "frame" is related to other research in linguistics and artificial intelligences. For details, see Alexander Ziem, *Frames und sprachliches Wissen*. Berlin and New York 2008; and Dietrich Busse, *Frame Semantik*. Berlin and New York 2012.

5 Miriam R.L. Petruck, "Frame Semantics". in: J. Blommaert, C. Bulcaen, J.-O. Östman, and J. Verschueren (eds.), *Handbook of Pragmatics*. Amsterdam 1996, 1–13, 2.

6 Charles J. Fillmore and Beryl T.S. Atkins, "Toward a Frame-based Lexicon: The Semantics of RISK and its Neighbors". In: E. Kitay and A. Lehrer (eds.), *Frames, Fields and Contrasts: New Essays in Semantic and Lexical Organization*. Hillsdale 1992, 75–102, 76–77. For a more detailed review of the main principles of Frame Semantics, see Petruck, "Frame Semantics"; Charles J. Fillmore, Chris R. Johnson, and Miriam R.L. Petruck, "Background to FrameNet", *International Journal of Lexicography* 16 (2003): 235–251; and Charles J. Fillmore and Collin Baker, "A Frames

To illustrate, consider the so-called Revenge frame, which is evoked by a number of semantically related words such as the verbs *revenge*, *avenge*, *get even*, the nouns *revenge*, *sanction*, and *retaliation*, and the adjectives *vengeful*, and *vindictive*.<sup>7</sup> The Revenge frame represents a scenario with different participants, also known as frame elements (FEs) that can be regarded as instances of broader semantic roles such as AGENT, UNDERGOER, INSTRUMENT, etc.<sup>8</sup> FEs are defined specifically with respect to the types of situations covered by frames.<sup>9</sup> In FrameNet (<http://framenet.icsi.berkeley.edu>), an on-line lexicographic database implementing the principle of Frame Semantics, the Revenge frame is defined as follows:

The frame concerns the infliction of punishment in return for a wrong suffered. An AVENGER performs a PUNISHMENT on an OFFENDER as a consequence of an earlier action by the OFFENDER, the INJURY. The AVENGER inflicting the PUNISHMENT need not be the same as the INJURED\_PARTY who suffered the INJURY, but the AVENGER does have to share the judgment that the OFFENDER's action was wrong. The judgment that the OFFENDER had inflicted an INJURY is made without regard to the law.

I first discuss the so-called core FEs of the Revenge frame as defined by FrameNet. The AVENGER is defined as someone who exacts revenge from the OFFENDER for the INJURY. The FE INJURED\_PARTY identifies the constituent that encodes who or what suffered the INJURY at the hands of the OFFENDER. Some times, an abstract concept such as a person's honor or their blood is represented as the element that has suffered the injury. These also constitute instances of INJURED\_PARTY. The FE INJURY is the injurious action committed by the OFFENDER

approach to semantic analysis". in: B. Heine and H. Narrog (eds.), *The Oxford Handbook of Linguistic Analysis*. Oxford 2010, 313–340.

7 Names of semantic frames are in Courier font. Names of Frame Elements (FEs) are in small cap. Frame Elements differ from traditional universal semantic (or thematic) roles such as Agent (Patient) in that they are specific to the frame in which they are used to describe participants in certain types of scenarios. "Tgr" stands for target word, which is the word that evokes the semantic frame.

8 See Robert D. Van Valin, Jr. and D. P. Wilkins, "The Case for 'Effector': Case Roles, Agents, and Agency Revisited". In: M. Shibatani/S. Thompson (eds.), *Grammatical Constructions*, Oxford 1996, 289–322; Fillmore et al., "Background"; Hans C. Boas, "Semantic frames as interlinguistic representations for multilingual lexical databases". *International Journal of Lexicography* 18 (2005): 445–478; Fillmore and Baker, "A frames approach"; and Josef Ruppenhofer, Michal Ellsworth, Miriam R. L. Petruck, Chris Johnson, and Jan Scheffczyk, *FrameNet II: Extended theory and practice*. 2010. Available at <http://framenet.icsi.berkeley.edu/>.

9 See also Thomas Schmidt, "The Kickoff—A multilingual lexical resource of football language". In: H. C. Boas (ed.), *Multilingual Frameworks: Methods and Applications*. Berlin and New York 2009, 101–134, on the difference between frames and scenarios.

against the INJURED\_PARTY. This FE need not always be realized, although it is conceptually necessary. The OFFENDER has committed the earlier INJURY for which the AVENGER seeks revenge. The FE PUNISHMENT is defined as the action taken by the AVENGER, i.e. the AVENGER carries out a PUNISHMENT in order to exact revenge on the OFFENDER.

Besides the core FEs AVENGER, INJURED\_PARTY, INJURY, OFFENDER, and PUNISHMENT, there are also a number of non-core FEs belonging to the Revenge frame. Non-core FEs are more peripheral FEs that are not always conceptually necessary for the scenario described by a frame. They typically include FEs such as DEGREE (which identifies the Degree to which an event occurs), INSTRUMENT (i.e. the Instrument with which the revenge is performed), MANNER (which refers to the Manner in which the Avenger exacts their revenge from the Offender), PLACE (which identifies the Place where the revenge occurs), PURPOSE (this FE identifies the Purpose for which the revenge is performed), and TIME (which identifies the Time when the revenge occurs).

With this background in mind, I now turn to some concrete examples of how the Revenge frame is evoked. Frame Semantics subscribes to a splitting approach (as opposed to a lumping approach) when analyzing the various senses of a word. On this view, the number of a word's senses depends on the number of semantic frames it evokes. Each frame-evoking sense of a word is called a lexical unit (LU), and each lexical unit evokes a separate semantic frame. In the following examples, the frame-evoking LUs are in all caps to indicate their special status.

- (1) [AVENGER Bubba] AVENGED<sup>1st</sup> [INJURED the death of his cat] [PUNISHMENT by killing] [OFFENDER the coyote].
- (2) [AVENGER I] shall take a terrible RETRIBUTION<sup>1st</sup> upon [OFFENDER You] [INJURY for all the pain you have caused me].
- (3) They look upon the security forces as a VENGEFUL<sup>1st</sup> [AVENGER occupying force which must be opposed].

In (1)-(3), the Revenge frame is evoked by three different target LUs (identified the superscript "Tgr"), namely the verbal LU *avenge*, the nominal LU *retribution*, and the adjectival LU *vengeful*. The annotations in the three sentences are the result of applying the description of the Revenge frame to the sentences. For example, in (1) the verbal LU *avenge* evokes the Revenge frame, and the core FEs, which are realized syntactically, include the AVENGER (*Bubba*), the INJURY (*the death of his cat*), the PUNISHMENT (*by killing*), and the OFFENDER (*the coyote*).

The Revenge frame is just one of thousands of frames discovered, documented, and analyzed by frame semanticists over the past four decades. One major advantage of semantic frames is that they allow us to systematically catalogue the types of knowledge evoked by words in specific contexts. There are many differ-

ent types of frames at different levels of abstraction,<sup>10</sup> from many different semantic domains, covering various types of concepts such as Activity\_Stop, Age, Calendric\_Unit, Theft, Operate\_Vehicle, Part\_Whole, Quarreling, Departing, Suspicion, Temperature, and Waiting. Since each frame has its own unique set of FEs it becomes possible to systematically compare and contrast word meanings. It also allows us to arrive at inferences about particular scenarios even in the absence of lexically specific information. Consider, for example, the sentence *We saw the presents under the tree*, which clearly evokes the Christmas frame, together with a particular specification with respect to the Calendric\_Unit frame (though this is heavily culture dependent, Christmas presents in the U.S. are typically opened on the morning of December 25, while in Germany this traditionally happens on December 24), and associated frames such as Religious\_practices and Holidays.

Another advantage is that frames can be systematically related to each other by so-called frame-to-frame relations.<sup>11</sup> This allows us to connect related types of information to each other. For example, the LU *to mug* evokes the Robbery frame, which uses a more abstract frame, the Theft frame, and it inherits from the frame Committing\_crime. Connecting one frame to other frames allows us to systematically understand how concepts are related to each other, and how very often they depend on each other. See, for example, Fillmore and Atkins<sup>12</sup> on the Risk frame, Petruck and Boas<sup>13</sup> on the Calendric\_Unit frame in English, German, and Hebrew, and Schmidt<sup>14</sup> on numerous frames important for the analysis of word meanings in the soccer domain.

One major advantage not addressed so far concerns the relationship of form to meaning. As I show below, Frame Semantics is not only interested in accounting for the meanings of words. It is also concerned with how that meaning is syntactically realized and under what circumstances specific elements of meaning (i.e. FEs) can be left unsaid. I return to this point below.

The examples in (1)-(3) illustrate how some of the basic principles of Frame Semantics are applied to the analysis of word meanings. But how is such knowledge helpful for our understanding of Oral Poetics? Recall that during their performances, oral poets rely heavily on mastering a set of interconnected concepts, such as (1) formulae, (2) themes, and (3) story-patterns. But so far, there

<sup>10</sup> See Fillmore and Baker, "A frames approach".

<sup>11</sup> See Ruppenhofer et al., *FrameNet II*.

<sup>12</sup> Fillmore and Atkins, "Frame-based Lexicon".

<sup>13</sup> Miriam R.L. Petruck and Hans C. Boas, "All in a Day's Week". In: E. Hajicova, A. Kolesovcova, and Jiri Mikovsky (eds.), *Proceedings of CIL 17*. Prague 2003.

<sup>14</sup> Schmidt, "Klicktionary".

does not yet exist a systematic approach for cataloguing and analyzing the types of knowledge accessed by oral poets during their performances. I propose that Frame Semantics offers an important solution that will help us with systematically describing and analyzing the different types of knowledge accessed by oral poets. To this end, I now turn to a more detailed discussion of how the principles of Frame Semantics have been applied to the creation of FrameNet, a database of lexical entries for several thousand English words taken from a variety of semantic domains.

Based on corpus data from the British National Corpus, members of the FrameNet project identify and describe semantic frames and analyze the meanings of words by appealing directly to the frames that underlie their meanings.<sup>15</sup> In addition, the FrameNet project studies the syntactic properties of words by asking how their semantic properties are given syntactic form.<sup>16</sup> Between 1997 and 2015, FrameNet defined close to 13,000 lexical units (LUs) (a word in one of its senses) in more than 1,100 frames.

The workflow of FrameNet begins by defining frame descriptions (based on corpus evidence) for the words to be analyzed. Then, the following steps are taken:

- (1) characterizing schematically the kind of entity or situation represented by the frame, (2) choosing mnemonics for labeling the entities or components of the frame, and (3) constructing a working list of words that appear to belong to the frame, where membership in the same frame will mean that the phrases that contain the LUs will all permit comparable semantic analyses.<sup>17</sup>

The next step focuses on finding corpus sentences in the British National Corpus that illustrate typical uses of the target words in specific frames. These corpus sentences are then extracted mechanically and annotated manually by tagging the FEs realized in them. Finally, lexical entries are automatically prepared and stored in the database.<sup>18</sup>

15 FrameNet is usage-based, i.e. it deals with naturally occurring (British) English from a more general domain of English (90% written (different genres) and 10% spoken language). There exist specific FrameNet analyses for the medical and judicial domains, where language use is quite different. Taking the usage-based approach to the domain of oral poetics would require linguists to do systematic corpus studies of different texts to see what types of semantic frames are evoked by the words (lexical units) in them. In the case of old texts this might be rather complicated because we usually do not have any native speaker intuitions about all the frame-specific knowledge from the time when the texts were originally written.

16 Fillmore et al., "Background", 235.

17 Charles J. Fillmore, Miriam R.L. Petruck, Josef Ruppenhofer, and Abby Wright, "FrameNet in Action: The Case of Attaching". *International Journal of Lexicography* 16 (2003): 297–333, 297.

18 For more details, see Fillmore and Baker, "A Frames approach".

The result of this workflow is an online dictionary of English that is structured in terms of semantic frames. Going to the FrameNet website, users can search—among other things—for entries of specific LUs, frame descriptions, and combinations thereof. Lexical entries in FrameNet offer a link to the definition of the frame evoked by a LU, including FE definitions, and example sentences exemplifying prototypical instances of FEs. In addition, FrameNet includes a list of all LUs evoking the same frame while also providing frame-specific information about various frame-to-frame relations, like the child-parent relation and sub-frame relation.<sup>19</sup> For example, a search for the *Revenge* frame returns a frame description, together with a list of several semantically related words such as *retaliate*, *avenge*, *avenger*, and *revengeful*, among others, all of which evoke the same frame (for the frame definition (including the FEs), see above).

Consider the LU *retaliate*, whose FrameNet entry consists of three parts. FrameNet uses different colors to highlight each FE, making it easier to identify individual FEs. Due to formatting restrictions, FE names are not color-coded in this paper as they are in the on-line FrameNet entries.

Figure 1 illustrates the first part of a lexical entry in FrameNet, namely the Realization Table of the Lexical Entry Report. Besides providing a dictionary definition of the relevant LU, in this case *retaliate*, it summarizes the different syntactic realizations of the FEs. The left column lists the names of different core FEs (AVENGER, INJURED\_PARTY, INJURY, and INSTRUMENT), the middle column lists the number of annotated example sentences in FrameNet, and the right column lists the different types of syntactic realizations of the respective FEs. Consider the FE INJURY, which appears 38 times, 35 of those times as a definite null instantiation (DNI),<sup>20</sup> twice as a dependent prepositional phrase headed by *against*, and once by a dependent prepositional phrase headed by *for*.

The second part of the Lexical Entry Report summarizes the valence patterns found with a LU, that is, "the various combinations of frame elements and their syntactic realizations which might be present in a given sentence."<sup>21</sup> This list presents an exhaustive summary of all frame element configurations found in the corpus, i.e. combinations of FEs occurring together in the same sentence, together with their various syntactic realizations. While some frame element configurations

19 Fillmore et al., "FrameNet in Action".

20 Following Charles J. Fillmore, "Pragmatically controlled zero anaphora". In: *Proceedings of the Berkeley Linguistics Society*, 95–107. Berkeley 1986, FrameNet records which FEs can be null-instantiated, that is which FEs do not have to be overtly realized syntactically. There are three different types of null instantiation: indefinite null instantiation (INI), definite null instantiation (DNI), and constructional null instantiation (CNI).

21 Fillmore et al., "Background", 330.

Frame Element	Number Annotated	Realization(s)
<b>Avenger</b>	(39)	CNI.-- (2) NP.Ext (37)
<b>Injured party</b>	(1)	PP[on].Dep (1)
<b>Injury</b>	(38)	DNI.-- (35) PP[against].Dep (2) PP[for].Dep (1)
<b>Instrument</b>	(3)	PP[with].Dep (3)
<b>Manner</b>	(1)	AVP.Dep (1)
<b>Offender</b>	(39)	DNI.-- (36) PP[against].Dep (2) PP[on].Dep (1)
<b>Place</b>	(1)	PP[at].Dep (1)
<b>Punishment</b>	(39)	PP[in].Dep (2) PP[with].Dep (3) INI.-- (19) AVP.Dep (2) PPing[by].Dep (12) DNI.-- (1)
<b>Time</b>	(2)	AVP.Dep (2)

Figure 1: First part of FrameNet entry for *retaliate*

display only one specific syntactic realization pattern, such as that in the first line AVENGER, INJURED\_PARTY, OFFENDER, and PUNISHMENT), others exhibit a greater syntactic variability, such as that of AVENGER, INJURY, OFFENDER, and PUNISHMENT, which has a total of twelve different syntactic realizations. The second column from the left in the valence table for *retaliate* in Figure 2 illustrates how the FE AVENGER may be realized either as an external noun phrase (NP.Ext) or not at all, in the case of constructional null instantiation (CNI). Clicking on the link in the column to the left of the valence patterns leads the user to a display of annotated examples sentences illustrating the valence pattern, as exemplified in (1)-(3)

Number Annotated	Patterns					
	Avenger	Injured_party	Offender	Punishment		
1 TOTAL	NP Ext	PP[on].Dep	DNI	INI		
(1)	NP Ext	PP[on].Dep	DNI	INI		
3 TOTAL	Avenger	Injury	Instrument	Offender	Punishment	
(3)	NP Ext	DNI	PP[with].Dep	DNI	INI	
1 TOTAL	Avenger	Injury	Manner	Offender	Punishment	
(1)	NP Ext	DNI	AVP.Dep	DNI	INI	
1 TOTAL	Avenger	Injury	Offender	Place	Punishment	
(1)	NP Ext	DNI	DNI	PP[at].Dep	PP[with].Dep	
31 TOTAL	Avenger	Injury	Offender	Punishment		
(1)	CNI	DNI	DNI	PP[in].Dep		
(1)	NP Ext	DNI	DNI	AVP.Dep		
(2)	NP Ext	DNI	DNI	INI		
(9)	NP Ext	DNI	DNI	PP[in].Dep		
(1)	NP Ext	DNI	DNI	PP[with].Dep		
(1)	NP Ext	DNI	DNI	PP[with].Dep		
(10)	NP Ext	DNI	DNI	PPing[by].Dep		
(2)	NP Ext	DNI	PP[against].Dep	INI		
(1)	NP Ext	DNI	PP[on].Dep	DNI		
(1)	NP Ext	PP[against].Dep	DNI	INI		
(1)	NP Ext	PP[against].Dep	DNI	PPing[by].Dep		
(1)	NP Ext	PP[for].Dep	DNI	INI		
2 TOTAL	Avenger	Injury	Offender	Punishment	Time	
(1)	NP Ext	DNI	DNI	INI	AVP.Dep	
(1)	NP Ext	DNI	DNI	PPing[by].Dep	AVP.Dep	

Figure 2: Second part of FrameNet entry for *retaliate*, Valence Table (partial excerpt)

above. It is important to remember that the list of annotated example sentences is the result of the manual semantic annotation process completed by FrameNet researchers before the actual lexical entry can be compiled. As such, users can always consult the full list of semantically annotated example sentences that form the basis of the Realization Table and the Valence Table in Figures 1 and 2 above.<sup>22</sup>

Having summarized the main principles of Frame Semantics, we are now in a better position to answer the question of how it can help us with understanding the mechanisms and concepts of oral poetry. Recall that all oral poets have more or less the same themes and story-patterns in their minds: the hero that returns home, the hero that dies in the place of another hero, the deity that replaces a hero in disguise, etc. These themes are essentially small scripts or building blocks that help the poet build a part of one of these patterns, e.g. *the messenger, the assembly, the battle, the fight between two warriors, the pursuit*, etc. Themes can be re-used in all or most story-patterns. Looking at themes from a frame-semantic point of view, one could say that themes are organized sets of traditional knowledge shared by the oral poet and the audience. On this view, specific types of scripts (a.k.a. frames) are evoked by specific themes (a.k.a. frame-evoking LUs (which can also be multi-word expressions)).

For example, if a particular story pattern involves a script for a battle, then the text needs to include a particular frame-evoking LU such as *altercation, battle, clash, combat, or fight*, which evokes the `Hostile_encounter` frame. Once this frame is evoked, the oral poet (and the audience) know that there have to be a number of specific FEs involved, such as an `ISSUE` (an unresolved question over which the two sides of a hostile encounter are in disagreement), a `PURPOSE` (the desired result of the outcome of the hostile encounter for the `SIDE_1` or for all the `SIDES`), a `SIDE_1` (one of two participants in a hostile encounter), a `SIDE_2` (one of two participants in a hostile encounter), and various other non-core FEs such as `DEGREE`, `DURATION`, `MANNER`, `MEANS`, `PLACE`, `TIME`, etc. Whether or not all FEs are indeed realized syntactically in sentences describing a battle is of course lexically determined by the properties of individual LUs. But whether they are realized syntactically or not in a given context does not matter, since both the oral poet and its audience presumably share the same frame-semantic knowledge about what is involved in battles. In other words, modeling themes with semantic frames also allows us to account for variation in a poet's performance.

<sup>22</sup> For more information, see Hans C. Boas, "From theory to practice: Frame Semantics and the design of FrameNet". In: S. Langer and D. Schnorbusch (eds.), *Semantik im Lexikon*. Tübingen 2005, 129–160; and Boas, "Recent trends".

On some occasion the poet might chose to evoke the battle theme (a.k.a. the `Hostile_encounter` frame) with the noun *battle*. On other occasions, the poet might instead choose *clash, combat, confrontation, or fight*. Even though these are different words with slightly different meanings, they all evoke the same semantic frame, and using different paraphrases may allow the poet to achieve different stylistic effects depending on the occasion. This strategy also cuts across different parts of speech. Instead of using the nouns *battle* and *fight*, the poet might choose the verbal counterparts *to battle* and *to fight*, or support verb constructions such as *to pick a fight* or *to enter battle*.

As explained above, the frame-semantic approach can also capture much more complex relationships in texts. Consider, e.g., the various frames connected to `Hostile_Encounter` that are also at least indirectly evoked when a LU evokes the `Hostile_Encounter` frame. These include frames such as `Fighting_activity` (*affray, fray, melee*), `Attack` (*assault, ambush, charge, fire, onslaught, etc.*), `Taking_sides` (*against, endorse, oppose, opposition, etc.*), `Friendly_or_hostile` (*enemy, friendly, hostile*), and `Member_of_military` (*soldier, troop, general*). This means that once the poet evokes the `Hostile_encounter` frame by using a particular LU such as *fight* or *battle*, this not only triggers all the relevant knowledge associated with such events, but it may also lead to evoking related frames which can serve to elaborate on the theme or the overall script.<sup>23</sup> Using the frame-based approach to investigate oral poetry thus allows us to systematically catalogue the types of traditional knowledge shared by the performer and the audience.

## 2 Construction Grammar

So far, I have mainly addressed how meaning is relevant for the study of oral poetry. I now turn to the question of how the various meanings are expressed syntactically. This involves several factors. The first factor, which I already discussed in the context of valence patterns above, is determined by a word's lexical properties, which are catalogued in its lexical entry. The second factor, however, goes beyond detailed lexical properties and involves a more abstract repertoire of form-meaning-metrics units, which form the larger patterns that organize the oral poetic performance. In the general language domain, these

<sup>23</sup> The complex relationship between different frames is accounted for by an elaborate hierarchy of frames that stand in different relations to each other, such as inheritance, using, subframe, and perspective on. The FrameNet frame grapher (<https://framenet.icsi.berkeley.edu/frndrupal/FraMeGrapher>) is a visual representation tool that shows the various relationships between frames.

more general properties are captured by grammatical descriptions and analyses. Poetry, however, has a much more restrictive set of “patterns”, which are often very formulaic and idiomatic. In the following paragraphs, I first present a particular linguistic theory, namely Construction Grammar (CxG), which, in my view, is well suited for the analysis of oral poetry, in particular formulas. After reviewing some of its basic concepts and ideas, I will show how CxG can be applied to the study of idiomatic and formulaic language found in oral poetry.

The main idea behind CxG is that a linguistic model should be able to account for all facets of a speaker’s knowledge about language. Unlike many other theories of grammar, CxG does not make any theoretical distinctions between different areas of grammar such as core and periphery<sup>24</sup> and therefore aims to achieve full coverage of the relevant facts of a language.<sup>25</sup> CxG does not limit itself to analyzing a slice of interesting data representing regular processes in the grammar of a language (e.g., subject-predicate constructions, relative clause constructions, wh-question constructions). Rather, CxG is also concerned with accounting for semi-productive processes (e.g., *way-constructions*,<sup>26</sup> *What’s X doing Y?*,<sup>27</sup> *Ditransitive*,<sup>28</sup> *let alone*,<sup>29</sup> and idiomatic constructions<sup>30</sup> (e.g., *kick the bucket*; *the Xer, the Yer*)) by using the same kinds of principles used to account for more regular processes.

Rather than positing distinct modules of grammar that interact with each other, CxG takes the notion of the linguistic sign<sup>31</sup> as central and posits that each particular form is associated with a specific meaning that licenses as well as constrains it.<sup>32</sup> Goldberg gives the following definition of a construction.

24 cf. Noam Chomsky, *Lectures in Government and Binding*. Dordrecht 1981.

25 This section is based on Hans C. Boas, *A constructional approach to resultatives*. Stanford: 2003.

26 Adele Goldberg, *Constructions*. Chicago 1995.

27 Paul Kay/Charles Fillmore, “Grammatical constructions and linguistic generalizations: The ‘What’s X doing Y?’ Construction”, *Language* 75 (1999):1–33.

28 Goldberg, *Constructions*; Hans C. Boas, “Comparing constructions across languages”. In: H. C. Boas (ed.), *Contrastive Studies in Construction Grammar*. Amsterdam and Philadelphia 2010, 1–20.

29 Charles J. Fillmore, Paul Kay, and Mary O’Connor, “Regularity and idiomatity in grammatical constructions: The case of ‘let alone’”, *Language*, 64 (1988):501–538.

30 Stefanie Wulff, “Words and idioms”. In: T. Hoffmann and G. Trousdale (eds.), *The Oxford Handbook of Construction Grammar*, 274–289. Oxford 2013.

31 Ferdinand de Saussure, *Cours de linguistique générale*. Lausanne 1916.

32 There exist various versions of CxG, but all constructionists subscribe to the basic idea that language consists of a structured inventory of constructions. While some constructionists are interested in typological insights, others focus on the psychological motivation behind language, while others are interested in developing more formalized versions of constructional analyses that

C is a CONSTRUCTION iff<sub>def</sub> C is a form-meaning pair <F<sub>n</sub>, S<sub>n</sub>> such that some aspect of F<sub>n</sub> or some aspect of S<sub>n</sub> is not strictly predictable from C’s component parts or from other previously established constructions.<sup>33</sup>

The relationship between form and meaning/function is illustrated in Figure 3, in which the entire box represents the concept of a construction, in which the form (the box on the top) is linked to the meaning (the box on the bottom) via a symbolic correspondence link.

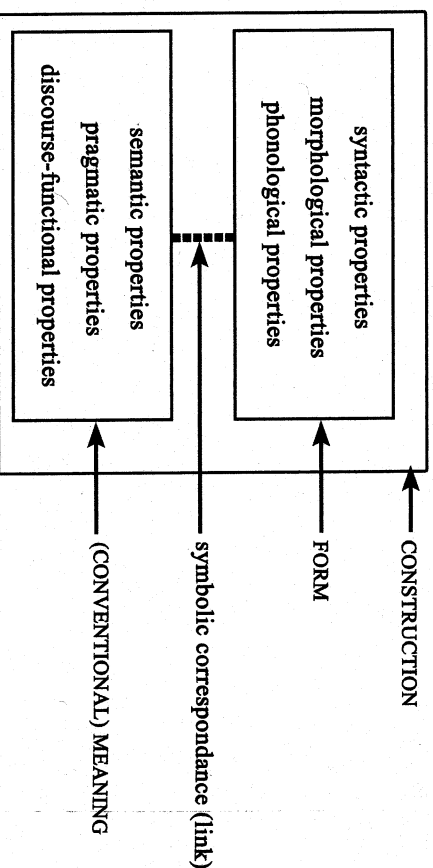


Figure 3: Relation between form and meaning in a construction.<sup>34</sup>

The form of a construction can be associated with different kinds of grammatically relevant information that can be semantic, pragmatic, syntactic, morphological, phonological, or lexical in nature. Taken together, language is regarded as a structured inventory of constructions of various degrees of schematity, ranging from specific morphemes and words to idioms and more schematic constructions such as the ditransitive and the passive, as the following table illustrates.<sup>35</sup>

can be used for computational applications. For more details, see the various contributions in Thomas Hoffmann and Graeme Trousdale (eds.), *The Oxford Handbook of Construction Grammar*, Oxford 2013.

33 Goldberg, *Constructions*, 4.

34 William Croft, *Radical Construction Grammar*. Oxford 2001, 18.

35 Unlike many other theories, CxG claims that each language consists of its own inventory of constructions, and that there are many language-specific constructions (as opposed to “univer-

Table 1: Examples of constructions with different degrees of complexity/schematicity<sup>36</sup>

Morpheme	e.g. <i>pre-</i> , <i>-ing</i>
Word	e.g. <i>avocado</i> , <i>anaconda</i> , <i>and</i>
Complex word	e.g. <i>daredevil</i> , <i>shoo-in</i>
Complex word (partially filled)	e.g. [N-s] (for regular plurals)
Idiom (filled)	e.g. <i>going great guns</i> , <i>give the Devil his due</i>
Idiom (partially filled)	e.g. <i>Jog &lt;someone's&gt; memory</i> , <i>send &lt;someone&gt; to the cleaners</i>
Covariational Conditional	The Xer the Yer (e.g. <i>the more you think about it, the less you understand</i> )
Ditransitive (double object)	Subj V Obj <sub>1</sub> Obj <sub>2</sub> (e.g. <i>he gave her a fish taco; he baked her a muffin</i> )
Passive	Subj aux VP <sub>pp</sub> (PP <sub>pp</sub> ) (e.g. <i>the armadillo was hit by a car</i> )

The representations of the constructions in Table 1 are not complete as they only represent the most important aspects of the form of the respective constructions, but not the meaning side, or other constructional properties, such as specifications regarding which other constructions they can combine with and the types of restrictions that constrain such combinations. For example, a complete constructional representation of the morpheme *pre-* in Table 1 would consist not only of the form side (in this case three English sounds ordered in a specific order), but it would also come with a description of the meaning side about what *pre-* actually means (represented in terms of a semantic frame specific to time and ordering of events), together with specifications about what other types of constructions it can combine with (in this case specific words such as particular nouns, this is the open slot to the right of *pre-*), and a set of constraints that restrict such combinations so that the inventory of constructions does not license any unattested forms. Kay and Fillmore put it as follows: “[T]he construction grammarian is required to develop an explicit system of representation, capable of encoding economically and without loss of generalization all the constructions (or patterns) of the language, from the most idiomatic to the most general.”<sup>37</sup>

sal” constructions). See Croft, *Radical Construction Grammar*, and Boas, “Comparing constructions”.

36 Adele Goldberg, *Constructions at Work*. Oxford 2006, 5.

37 Kay and Fillmore, “Grammatical constructions”, 2. For a formal implementation of constructional representation, see Charles J. Fillmore, Russell Lee-Goldman, and Russell Rhonioux, “The FrameNet-Construction”. In: Hans C. Boas and Ivan Sag (eds.), *Sign-Based Construction Gram-*

Other constructions such as partially filled idioms (*send someone to the cleaners*) or covariational conditionals (*the Xer the Yer*) are more abstract, because their open slots (*someone*, *Xer – Yer*) exhibit fewer restrictions about what types of elements can fill these slots. While the ditransitive and the passive are even more abstract/schematic than the other constructions in Table 1 (the constraints on the elements filling their slots are even broader), there are even more abstract constructions such as relative clauses and subject-predicate agreement constructions.

The idea that language consists of a structured inventory of constructions means that for an utterance to be acceptable in a language, it needs to be licensed by one or more constructions. Consider, for example, a sentence like *A dozen roses, Nina sent her mother!*, which, according to Goldberg<sup>38</sup> is licensed by the following constructions: the ditransitive construction, the topicalization construction, the verb phrase construction, the noun phrase construction, the indefinite determiner construction, the plural construction, and the various constructions representing the individual words (*dozen*, *rose*, *Nina*, *send*, *mother*). Each of these constructions belong to our inventory of constructions.

One advantage of this approach is that it also allows us to systematically deal with idiomatic and non-idiomatic language use alike, as well as different interpretations of the same utterance caused by two competing sets of constructions. Consider a sentence such as *What is that fly doing in my soup?*, which can have two interpretations, according to Kay and Fillmore.<sup>39</sup> The first one is the literal interpretation, which is licensed by a general *wh*-construction, the noun phrase construction, the prepositional phrase construction, the progressive aspect construction, and the constructions representing the individual words. A compositional interpretation of the meanings of all the individual constructions involved in licensing such a question could result in the waiter answering *I believe that's the backstroke*. The second, and perhaps more likely interpretation, according to Kay and Fillmore,<sup>40</sup> is licensed by a particular sentence level construction with a “specific semantic interpretation associated by convention with just such sentences, interpretations that are neither given by ordinary compositional processes nor derived from a literal meaning by processes of conventional reasoning.” This specific incongruous interpretation of the question is thus associated with a particular sentence-level idiomatic construction that is conventionally associated

mar. Stanford 2012, 283–299; and Ivan Sag, “Sign-based Construction Grammar: An informal synopsis”. In: H. C. Boas and I. Sag (eds.), *Sign-based Construction Grammar*. Stanford 2012, 69–202.

38 Goldberg, *Constructions at Work*, 21.

39 Kay and Fillmore, “Grammatical constructions”.

40 *Ibid.*, 4.



with this meaning, and whose meaning cannot be derived compositionally. This is just one of many cases of conventionalized idiomatic expressions found in everyday language.<sup>41</sup>

Over the past five years, construction grammarians have begun to look into adopting the same methodology underlying the description and analysis of semantic frames for the description and analysis of grammatical constructions. The idea behind this move is that just like individual words (or LUs) are capable of evoking semantic frames (with open slots to be filled by FEs), so, too, can particular combinations of words evoke specific grammatical constructions (some of which carry specific meanings which in turn can be represented by semantic frames) with open slots to be filled by Construction Elements. This observation has led to a number of case studies applying the frame-semantic methodology underlying the creation of FrameNet to the creation of a so-called Constructicon, an electronic database with a structured inventory of constructions. Similar to the work-flow in FrameNet, electronic corpora are used to discover sentences illustrating particular constructions. These are then annotated with the relevant constructional information, resulting in an inventory of constructions, in which each construction entry consists of a description of its form side, including specifications of the individual parts of the construction (including information such as phrase type, grammatical function, etc.), together with a prose description of its meaning side (i.e. its interpretation) and a set of annotated sentences exemplifying the construction in context. The creation of construction entries follows one of the basic tenets of CxG (see Goldberg's definition of construction above): every time when a particular pattern cannot be accounted for based on combinations of constructions already recognized, then a new construction entry must be posited.<sup>42</sup>

How are insights from CxG useful for studying oral poetry? Just like frame-evoking LUs have FE slots depending on the semantic frame, constructions also have slots and often associated with meaning. When studying oral poetry, researchers are working with texts composed almost completely of idiomatic expres-

<sup>41</sup> See Hans C. Boas, "Cognitive Construction Grammar". In: T. Hoffmann and G. Trousdale (eds.), *The Oxford Handbook of Construction Grammar*. Oxford 2013, 233–254.

<sup>42</sup> For details on the Constructicon, see Charles J. Fillmore, "Border conflicts: FrameNet meets Construction Grammar". *EURALEX XIII Conference*. Barcelona 2008; Fillmore et al., "FrameNet-Constructicon"; Hans C. Boas, "Zur Architektur einer konstruktionsbasierten Grammatik des Deutschen". In: A. Lasch and A. Ziem (eds.), *Grammatik als Inwenter von Konstruktionen: Sprachliches Wissen im Fokus der Konstruktionsgrammatik*, Berlin and Boston 2014, 37–63; and Alexander Ziem, Hans C. Boas, and Josef Ruppenhofer, "Grammatische Konstruktionen und semantische Frames für die Textanalyse". In: J. Hagemann and S. Staffelt (eds.), *Syntaxtheorien. Analysen im Vergleich*. Tübingen 2014, 297–333.

sions, or of partially idiomatic expressions that follow very specific schematic patterns. For example, certain types of speeches are always introduced by a fixed set of arranged elements, such as *optional particle + optional qualification phrase* (e.g. "looking at him/her darkly") + *subject + language verb* ("said/replied/answered"). Such semi-idiomatic expressions are nothing else but a type of semi-idiomatic construction that pairs a specific form with a specific meaning, thereby constituting a form-meaning, a construction. Such constructions are re-occurring entities in oral poetry; they are conventionalized, and stored as patterns in memory. Thus, whenever such an array of words occurs together in a text as a formula, the audience will immediately know what it means, the same way it associates specific knowledge with themes when semantic frames are evoked by specific LUs.

### 3 Application of Frame Semantics and Construction Grammar to oral poetry

Applying the principles of Frame Semantics and CxG to the study of oral poetry means to first assemble an (electronic) corpus of texts. The analysis of the text should first focus on identifying the relevant frame-evoking LUs and then annotating the text according to the relevant frames and their FEs. If the text is in English, the Berkeley FrameNet database can be used as a reference for finding the relevant frames. Note that FrameNet has not yet covered all of the core vocabulary of English, which means that in cases where there are no existing frames in FrameNet, one would have to make up such frames on the fly.<sup>43</sup> There currently exist FrameNets for other languages, too, such as Japanese, Swedish, German, and Spanish. These lexical databases are built on almost the same set of frames as those of the Berkeley FrameNet for English.<sup>44</sup> For the multitude of languages for which there is currently no FrameNet available, researchers could consult the English FrameNet database in Berkeley to start building an ad-hoc inventory for their own language.<sup>45</sup>

<sup>43</sup> See Aljoscha Burchardt, Katrin Erk, Anette Frank, Andrea Kowalski, Sebastian Padó, and Manfred Pinkal, "Using FrameNet for the semantic analysis of German: annotation, representation, and automation". In: H. C. Boas (ed.), *Multilingual FrameNets: Methods and Applications*. Berlin and New York 2009, 209–244.

<sup>44</sup> See Hans C. Boas (ed.), *Multilingual FrameNets in Computational Lexicography*. Berlin and New York 2009.

<sup>45</sup> For various methods, see Miriam R.L. Petruck, "Typological considerations in constructing a Hebrew FrameNet". In: H. C. Boas (ed.), *Multilingual FrameNets: Methods and Applications*. Berlin

To see what an annotation of a text might look like, consider the beginning of the story "The Tiger of San Pedro" by Sir Arthur Conan Doyle.<sup>46</sup> The first sentence reads as follows:

- (1) A COLD<sub>Ambient\_temperature</sub> and melancholy WALK<sub>Self\_motion</sub> of a COUPLE<sub>Cardinal\_numbers</sub> of MILES<sub>Measure\_linear\_extent</sub> BROUGHT<sub>Bringing us to a HIGH<sub>Dimension</sub></sub> wooden gate, which opened into a gloomy AVENUE<sub>Roadways</sub> of chestnuts.

The annotation in sentence (1) shows the frame-evoking LUs in capital letters, followed by the names of the evoked frames in subscript. For example, *cold* evokes the Ambient<sub>temperature</sub> frame and *walk* evokes the Self<sub>motion</sub> frame. This first sentence illustrates that there are at least seven frames evoked by seven different LUs, but there are other LUs, which have not been annotated, such as *melancholy*, *wooden gate*, *to open*, *gloomy*, and *chestnuts*, which all evoke other frames. Focusing on the seven LUs evoking the seven different frames in (1), we can see how interconnected the different LUs are in this first sentence, i.e. many frame-evoking LUs are themselves FEs of other frames. In other words, there are multiple layers of frames whose meanings are interconnected with each other. Consider the first frame-evoking target LU, which evokes the Ambient<sub>temperature</sub> frame in (2).

- (2) A COLD<sub>tr</sub> and melancholy [CIRCUMSTANCES<sub>walk of a couple of miles</sub>] brought us to a high wooden gate, which opened into a gloomy avenue of chestnuts. [PLACE<sub>DNI</sub>] [FRAME<sub>DNI</sub>]

The Ambient<sub>temperature</sub> frame is defined in FrameNet as the specification of a TEMPERATURE in a certain environment, determined by TIME and PLACE. In (2), *cold* evokes the Ambient<sub>temperature</sub> frame, and the PLACE and TIME FEs are not overtly mentioned (they are definite null instantiations, as can be seen at the end of the sentence). The only overtly realized FE is CIRCUMSTANCES<sub>walk of a couple of miles</sub>, which serves as some specification of the circumstance under which the ambient temperature is as specified. Note that one LU of the FE CIRCUMSTANCES<sub>walk of a couple of miles</sub> frame, namely *walk*, is itself a frame-evoking LU, as is shown in the following annotation.

- (3) A cold and melancholy WALK<sub>tr</sub> [DISTANCE<sub>of a couple of miles</sub>] brought [SELF\_MOVER<sub>us</sub>] to a high wooden gate, which opened into a gloomy avenue of chestnuts.

In (3), the LU *walk* evokes the Self<sub>motion</sub> frame, which is defined as the SELF\_MOVER, a living being, moves under its own direction along a PATH. Core FEs of the Self<sub>motion</sub> frame include AREA, DIRECTION, GOAL, PATH, SOURCE, SELF\_MOVER, and SOURCE. In (3), only two FEs of the Self<sub>motion</sub> frame are realized with *walk*, namely DISTANCE (a couple of miles) and SELF\_MOVER (us). Next, consider the annotation of *a couple of miles* in (4), which serves as a part of the CIRCUMSTANCES<sub>walk of a couple of miles</sub> FE in (2) above. A part of this phrase, *couple*, serves as a frame-evoking target LU evoking the Cardinal<sub>numbers</sub> frame, of which *of miles* serves as the ENTITY FE.

- (4) A cold and melancholy walk of a [NUMBER<sub>COUPLE<sub>tr</sub></sub>] [ENTITY<sub>of miles</sub>] brought us to a high wooden gate, which opened into a gloomy avenue of chestnuts.

The LU *miles*, which is a part of the FE ENTITY in (4), is also a frame-evoking LU, which evokes the Measure<sub>linear\_extent</sub> frame in (5). Here, *miles* itself is also the UNIT FE, while *a couple* and *of* are both part of the COUNT FE of the Measure<sub>linear\_extent</sub> frame.

- (5) A cold and melancholy walk of [COUNT<sub>a couple</sub>] [COUNT<sub>of</sub>] [UNIT<sub>MILES<sub>tr</sub></sub>] brought us to a high wooden gate, which opened into a gloomy avenue of chestnuts.

Next, consider the LU *brought* in (6), which evokes the Bringing frame. In (6), the AGENT FE of the Bringing frame consists of the entire noun phrase *a cold and melancholy walk of a couple of miles*, while *us* is the THEME FE, and *to a high wooden gate, which opened into a gloomy avenue of chestnuts* is the GOAL FE of the Bringing frame.

- (6) [AGENT<sub>A cold and melancholy walk of a couple of miles</sub>] BROUGHT<sub>tr</sub> [THEME<sub>us</sub>] [GOAL<sub>to a high wooden gate, which opened into a gloomy avenue of chestnuts.</sub>]

In (7), *high* evokes the Dimension frame, of which *wooden gate* is the only overtly realized core FE, namely the OBJECT FE. The FE MEASUREMENT is not overtly realized, but is an indefinite null instantiation.

- (7) A cold and melancholy walk of a couple of miles brought us to a HIGH<sub>tr</sub> [OBJECT<sub>wooden</sub>] [OBJECT<sub>gate</sub>], which opened into a gloomy avenue of chestnuts. [MEASUREMENT<sub>NI</sub>]

and New York 2009, 183–208; Guillaume Pitel, "Cross-lingual labeling of semantic predicates and roles: A low-resource method based on bilingual (Latent) Semantic (Analysis)", In: H. C. Boas (ed.), *Multilingual FrameNets: Methods and Applications*, Berlin and New York 2009, 245–286; and Schmidt, "Kicktionary".

46 See <https://framenet.icsi.berkeley.edu/fndrupal/index.php?q=fulltextindex>.

Finally, consider the LU *avenue*, which evokes the *Roadways* frame in (8), of which *avenue* itself is the FE *ROADWAY*, and of *chestnuts* the FE *ABUNDANT\_ENTITIES*.

- (8) A cold and melancholy walk of a couple of miles brought us to a high wooden gate, which opened into a gloomy [ROADWAY AVENUE]<sup>187</sup> [ABUNDANT\_ENTITIES] of chestnuts].

The annotation of the first sentence of "The Tiger of San Pedro" shows a number of important points. First, most words in a text are capable of evoking semantic frames whose meanings are part of a language user's linguistic inventory, together with a great deal of world knowledge. Second, any utterance with multiple frame-evoking LUs consists of multiple layers of meaning. Third, FEs belonging to a specific frame can themselves be frame-evoking target LUs, which means that they can serve multiple functions at the same time. Fourth, not all FEs of a frame need to be overtly realized, because they can be inferred from the context, based on the frame evoked by a target LU. This last point is perhaps one of the most intriguing points of a full-text annotation, because one might begin to wonder whether there is any special motivation leading an author or a poet to leave certain FEs unmentioned.

So far, I have only discussed the different semantic frames evoked in one sentence. In doing so, I have given an example of how researchers of oral poetry can in principle apply the same methods to the oral performance of poems. The variation on the different themes evoked by specific words might in this context be of great interest, because it allows researchers to systematically relate different versions of the same poem to each other by identifying the frame-evoking LUs that serve as paraphrases of each other.

One important aspect that I cannot address in detail here concerns the formulaic aspects of full text analysis. Using the analytical machinery of CxG as outlined in the previous section would require the researcher to identify all relevant constructions in (1) (as well as all other sentences of a text), and to carefully formulate constructional entries specifying the form and meaning of each construction. For example, the sentence in (1) is licensed by a number of different constructions, including at least the coordination construction (*X and Y*), the noun phrase construction, the prepositional phrase construction, the relative clause construction, the subject-predicate agreement construction, and all individual words, which represent constructions themselves. Space constraints do unfortunately not allow me to formulate specific construction entries here.<sup>47</sup>

47 The interested reader should consult Fillmore et al., "FrameNet-Construction"; Boas, "Zur Architekturf"; and Ziem et al., "Grammatische Konstruktionen" for details.

While the discussion in this section has focused primarily on applying Frame Semantics and Construction Grammar to the analysis of written texts, its applicability to practices as formulaic and traditional as oral poetry is obvious. First, oral traditions hold on to the sets of encyclopedic knowledge of a community and pass them on across generations. This encyclopedic knowledge is encapsulated in the semantic frames evoked by the key words expressing the main ideas of a poem. As such, semantic frames can be viewed as structuring devices for oral poetry. Even though the oral poet is constantly involved in constructing conventionalized form-meaning templates under narrative, structural, metrical, melodic, and prosodic conditions, he must still have a mental summary of the narrative, a condensed plot that is chronologically organized, and that systematically relates different parts of a story line to other parts. It is exactly these key words that can be analyzed from the perspective of Frame Semantics. In other words, one might hypothesize that oral poets internalize sequences of frames (not specific words) representing different parts of a story line. On different occasions, an oral poet might then use different words to express the same meaning, because these different words evoke the same semantic frame. This is one way that a certain degree of variability arises while still adhering to the basic story line.

For example, a battle that may form the central part of an oral performance has a very specific order of sub-events, each of which can be characterized in terms of semantic frames. First, there need to be opposing parties. The member(s) of these parties could be referred to as *soldiers*, *fighters*, or *mercenaries*, each evoking the same semantic frame that calls for a Frame Element labeled *Party 1* or *Party 2*. Second, at least one party needs to prepare for battle, a process consisting itself of multiple sub-events, each of which can again be characterized in terms of a series of inter-connected semantic frames and the various words which they evoke. Third, the battle itself can be analyzed as a series of sub-events, each characterized by a series of inter-connected frames that can be evoked by semantically related words. Finally, a battle typically ends in victory for one party and defeat for another party, each of which can again be characterized in terms of a series of inter-connected frames evoked by semantically similar words. This very brief example shows how Frame Semantics can be directly applied to the characterization of story lines, events, and interconnected relations that form the centerpiece of oral traditions.

While semantic frames help with the structuring of oral performances, grammatical constructions help us with understanding some of the key phenomena recurring across oral traditions, such as epic formulaic style and story-patterns. Even though these are natural products of our capacities for meaning construction, they are still limited by the availability of certain types of constructions, spanning the full range from idiomatic to semi-idiomatic to abstract construc-

tions. In other words, oral poets re-construct the details of the story line every time anew, and it is exactly this online, improvisation-based poem-producing techniques that are limited by specific formal requirements of the grammar of a language. By carefully studying the broad variability of epic poems, construction grammarians can investigate and analyze the inventory of grammatical constructions that serve to regulate and produce oral performances. Since grammatical constructions are pairings of meaning with form, they offer a straightforward method for integrating different aspects of form, i.e. not only purely syntactic information, but also information about metrical, melodic, and prosodic conditions in which oral poets are producing their songs.

Frame Semantics and Construction Grammar are not only useful tools for analyzing oral poems, but they can also greatly benefit from the analysis of oral poems to help us understand the nature of spoken language. Since oral poetry is a much more natural form of verbal creativity than written literature, it represents a much more fertile ground of investigation that will help us understand how an elaborate verbal skill is acquired through instance-based generalizations emerging from usage. In other words, a systematic study of large collections of oral poems will surely help cognitive linguists to better understand the many different cognitive processes at work when memorizing, performing, and interpreting oral poetry.

## 4 Conclusions

In this paper I presented the main ideas and principles of Frame Semantics and Construction Grammar, and I argued that they are useful for the study of oral poetics because they allow researchers to systematically analyze oral poems. This approach goes beyond a close reading of respective passages because it utilizes the toolset of a unified cognitive linguistic approach built on empirical data that allows to cross-check insights from the analysis of poems with other linguistic data. In other words, the analytical toolsets of Frame Semantics and Construction Grammar lend themselves very well to formulaic expressions, particularly the enhanced idiomatity of oral poetry, which is much stronger in the epic (lyric is much shorter and one can learn stanzas by heart more easily).

Clearly, this paper is only a first step towards applying Frame Semantics and Construction Grammar to oral poetry. To arrive at a more systematic framework for studying oral poetry, a number of steps must be taken. First, researchers will need to agree on specific corpora to be studied. Should these corpora combine transcripts of performances by different poets? Should these corpora span a poet's entire repertoire or only specific aspects? These are important aspects that need

to be answered before actually analyzing oral performances. Without a suitable corpus, any usage-based analysis will have severe limitations.<sup>48</sup> Second, to what degree is it possible to re-use existing descriptions of semantic frames and constructions for the analysis of oral poetry? Research on spoken language suggests that while there are significant overlaps in form and meaning between written and spoken language, there are also some significant differences.<sup>49</sup> Third, recent psycholinguistic research has focused on how word meanings and constructions are acquired, used, and processed.<sup>50</sup> Before going into the details of analyzing live performances of poems one should have a clearer understanding of the particular cognitive processing factors involved in such performances. A clearer understanding of such factors will also likely help us with teasing out some of the differences between spoken and written language. Fourth, what is the role of language variation in oral poetry? Do all performances of a particular poem rely on the same standard variety of a language? What if there did not yet exist a standard variety of a language, and poems were written in local varieties? What happens when these poems are performed by poets speaking a different variety of the language? How does that influence the performance itself and how it is received by the audience (who might not speak the same variety of the language)? Research on cognitive aspects of language variation suggests that these are also important aspects that need to be considered when analyzing linguistic data.<sup>51</sup>

Obviously, much future research is required to investigate these questions and many more. The goals of this paper have been more modest: to show that oral composition-in-performance is interesting for linguists and cognitive scientists,

<sup>48</sup> See Stefan Gries, "Data in Construction Grammar". In: T. Hoffmann and G. Trousdale (eds.), *The Oxford Handbook of Construction Grammar*. Oxford 2013, 93–110.

<sup>49</sup> See Susanne Günther and Wolfgang Imo (eds.), *Konstruktionen in der Interaktion*. Berlin and New York 2007; Arnulf Deppermann, "Konstruktionsgrammatik und Interaktionale Linguistik: Affinitäten, Komplementaritäten und Diskrepanzen". In: A. Lasch and A. Ziem (eds.), *Konstruktionsgrammatik III. Aktuelle Fragen und Lösungsansätze*. Tübingen 2011, 205–238.

<sup>50</sup> Giulia Benigni, "Psycholinguistics". In: T. Hoffmann and G. Trousdale (eds.), *The Oxford Handbook of Construction Grammar*. Oxford 2013, 379–396; Friedemann Pulvermüller, Bert Cappelle, and Yuri Shtyrov, "Brain basis of meaning, word, constructions, and grammar". In: T. Hoffmann and G. Trousdale (eds.), *The Oxford Handbook of Construction Grammar*. Oxford 2013, 397–418.

<sup>51</sup> See Jan-Ola Östman/Graeme Trousdale, "Dialects, discourse, and Construction Grammar", in: T. Hoffmann/G. Trousdale (eds.), *The Oxford Handbook of Construction Grammar*. Oxford 2013, pp. 476–490; and Willem Hollmann, "Constructions in Cognitive Sociolinguistics", in: Hoffmann/G. Trousdale (eds.), *The Oxford Handbook of Construction Grammar*, Oxford 2013, pp. 491–510.

and to suggest that Frame Semantics and Construction Grammar together offer a unique set of analytical tools for systematically analyzing oral poetry.

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## Anna Bonifazi (Heidelberg) Particles as cues to structuring in Serbo-croatian and early Greek epic<sup>1</sup>

**Abstract:** This work analyzes analogous functions of particles in two oral epic traditions, and it identifies their overall role as cues to structuring. "Structuring" is a concept adopted from the ethnopoetic studies of Sherzer; it regards the reality of oral performances in the making. Singers use particles to mark the articulation of the narration, and to enact metacommunication—telling about the telling; singing about the singing. Structuring describes a piecemeal progress, and indeed singers tend to use particles in connection to individual steps. However, not only particles but also other discourse markers as well as nonlinguistic devices—attested in the guslar tradition, and to be assumed for the Homeric tradition—are cues to structuring. Nonlinguistic as well as linguistic strategies are used to let composers and receivers follow what is going on in the performance. Therefore, structuring is multimodal. A first implication of the latter point is that particles, far from being unimportant, are precious features indexing a semiotically complex event. A second implication is that epic grammar is to be seen as one of the components of multimodal communication, rather than an independent code. This study can be relevant to research in other oral epic traditions, to research in oral genres beyond epic, and to research in everyday multimodal storytelling from a cognitive and pragmatic point of view.

### 1 Introduction

This paper reflects work in progress,<sup>2</sup> and therefore presents results that are partial, at least in terms of comprehensive statistics. Nonetheless, it springs from, and pursues, major methodological and theoretical interests. The general aim is to stimulate more research on how the medium of performance influences and

<sup>1</sup> I wish to thank Cristóbal Pagan Canovás and Mihailo Antović for organizing a very stimulating and groundbreaking conference. Thanks also to David F. Elmer and Mark de Kretj for their comments to earlier versions of this paper, and to the referees, for helpful criticisms.

<sup>2</sup> The analyses and thoughts I am going to offer rest upon two current joint projects, one on the performance of the Serbo-croatian song in question, in collaboration with David F. Elmer, and another one on ancient Greek particles in early epic, lyric, drama, and historiography, in collaboration with Annemieke Drummen and Mark de Kretj.

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