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Teaching second year German using frames and constructions

1 Innovating and invigorating the second year German curriculum

This paper describes how to use a free open educational resource for German, the German Frame-Semantic Online Lexicon (G-FOL), to structure the curriculum of a second year German course at the university level. While the practical elements of this paper are most relevant to teachers of foreign languages, specifically German, the application of Frame Semantics and Construction Grammar to the foreign language classroom may also interest linguists and language students who find these theories useful in other kinds of research. The paper first examines strategies for overcoming the challenges faced by second language learners when acquiring vocabulary, then touches briefly on the recent shift toward open educational resources and their benefits for students. Then, I introduce the online resource G-FOL and outline some principles for creating a second year curriculum plan using the G-FOL. Finally, I discuss benefits of this approach, implications for the future, and the significance of this work within the broader field of foreign language pedagogy.

As linguistic research advances our understanding of language and its relation to cognition, so too should foreign language teaching methods and materials advance to reflect this new understanding. Current work in cognitive linguistics has provided two powerful descriptive and analytical tools for linguists that can be adapted for use in the classroom: *frames* and *constructions*.[1] The former is a way to define a generalized scenario that constitutes the real-world background knowledge evoked (or accessed) by a speaker when they use (or interpret) words and expressions whose meanings involve that kind of situation. Each frame can be broken down into the participants or actors in the scenario, known as *frame elements*, whose definitions and interrelations make up the meaning of the frame. For example, the word *schlafen* in German ('to sleep') would evoke the Sleep Frame, which includes only one frame element, the Sleeper, who enters (and will eventually leave) a state of unconsciousness.

1 For a more complete view of how cognitive linguistics contributes to and informs foreign language pedagogy, see Holme (2012).

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In this simple example, the frame is evoked by a verb with a straightforward meaning. Frames can also be evoked, however, by idioms or grammatical constructions. The second linguistic tool that this paper draws on is the *construction*. These are grammatical structures that impart meaning, much in the same way as words and expressions. Traditionally, grammatical structures have been separated from the lexicon (e.g. textbooks do not often include grammatical structures with vocabulary lists). Cognitive linguistics has shown, however, that this separation is superficial and unnecessary; there is no clear boundary between grammar and lexicon (see Langacker 1987, 2013 and Croft 2001, among others). Therefore, frame-based approaches set out that specific pairings of a form and a meaning evoke each frame.

Two kinds of form-meaning pairs can be identified: *lexical unit* refers to words, parts of words or expressions relative to their meaning in a particular frame (e.g. a word in one of its senses), and *construction* refers to a pairing of form with meaning/function (Goldberg 1995). The ditransitive construction in German is one such case: [X] verbs [Y] [Z], as in *Der Mann gibt dem Hund den Ball*. 'The man gives the dog the ball.' This is an arrangement of a verb and three nouns in different cases (nominative, accusative and dative) that evokes the meaning of transfer, where an item (the direct object, realized in accusative case) begins in the possession of one individual (the subject, in nominative case) and moves to another place (the indirect object, in dative case), which is typically the possession of a different individual, as in the example.

For learners, frames can provide a way to contextualize vocabulary and grammar, and to explore the differences and similarities between vocabulary items in and across languages with relation to a consistent frame of reference (pun intended!). Constructions provide a way of linking grammar to the meaning it conveys, so that learners clearly understand the part grammar plays in the language and why it is important for communication. A pedagogical approach based on frames and constructions assumes no strict division between grammar and the lexicon, underscoring the idea that language is made up of form-meaning pairings that can exist at various levels of complexity, far beyond a simple word like *Apfel* ('apple') and its referent – for example, the possessive "s" in English, the ditransitive construction, and so on. This places grammar and vocabulary on equal footing when it comes to communicating in the target language, which is the primary goal of second year language study at the university level. Furthermore, this justifies the inclusion of explicit grammar instruction as a necessary part of the language learner's experience when the learning objective is effective communication (Ellis 2002).

To implement a pedagogical approach to second year German that incorporates frames and constructions, teachers can take advantage of a free online

resource known as the G-FOL (German Frame-Semantic Online Lexicon, coerll.utexas.edu/frames). This site describes a variety of frames well suited to teaching intermediate German, complete with definitions of their frame elements and lists of relevant lexical units that evoke each frame. Connected to every lexical unit, there are notes on usage and any relevant cross-cultural differences, example sentences, templates for how to use the lexical unit in a sentence (relative to frame elements), alternate forms (e.g. noun plurals, past tense verb forms), and grammar notes that explain relevant grammatical structures that are commonly used with that lexical unit.

All of this was designed with the learner in mind (Boas & Dux 2013, Boas et al. 2016). This means that infrequent or impractical vocabulary items are avoided in favor of a more concise list of lexical units for each frame. The frames should therefore not be seen as complete, but rather as sufficient for giving students the means to communicate about the topic described by the frame. Comparisons drawn between German and American culture can be found in the Details of each entry, and foster cross-cultural awareness and intercultural competence by explicitly conveying these differences (e.g. the broad use of English *friend* for close and not-so-close relationships, versus the use of German *Bekannte* 'acquaintance' to distinguish more distant relationships from closer friends designated as *Freunde* 'friends').

2 Challenges and strategies for learning L2 vocabulary and grammar

Before introducing a new approach to teaching and learning vocabulary in a foreign language, there must be room for improvement over existing methods; this paper seeks to improve the ways target language meanings are taught. Communicative, contextualized and proficiency-based instructional models dominate the foreign language teaching landscape in U.S. universities today, and given their popularity and success, this will likely continue. Research has shown that vocabulary is better retained when learning activities are contextualized rather than in list form (Redouane 2011), and the focus on communication and proficiency in communicative settings (e.g. ordering food in a restaurant, interacting with salespeople or the police) has produced speakers who can make their way in the world using the target language. The current approach appreciates these advances in language pedagogy and works within these methodological frameworks, using frames as a means for contextualizing learning, and adding explicit instruction regarding meaning of lexical units to achieve the goal of proficient communication on the topics covered in the frames.

Even in textbooks that make it a point to contextualize their lessons and emphasize the acquisition of communication skills, it has been difficult to transcend the basic "vocabulary list with glosses" format of presenting new vocabulary, and analysis of the vocabulary activities in current textbooks reveals an emphasis on this form-meaning connection (Neary-Sundquist 2015). In fact, Neary-Sundquist's analysis of five beginning-level German textbooks showed that the books provided virtually no way to discover information "concerning the underlying concept and referents that were associated with a word" (Neary-Sundquist 2015: 74–75). Language students and teachers alike easily view vocabulary learning as memorizing a word and matching it to its translation equivalent in the native tongue. This perspective is contrary to what teachers and students know about the difficulties of one-to-one translation, the importance of cultural context to interpreting the language, and the role of grammar as another way to convey meaning (Schmitt 333–334). In my own classes, I have seen students who rely on a simple gloss, and quickly realize this is impractical when they encounter homonyms or homophones. For example, when learning color words, a student objected to German *hell* ('light,' as in *light blue*), claiming that in Duolingo, he had learned the form *Licht* ('light,' as in *turn the light on*).

Ellis (2019: 52) notes that an imbalanced approach (either a broad focus on meaning or a broad focus on grammar) tends to accomplish its main goal, but may do so with reduced competence in the other area (i.e. grammatical competence with low fluency or communicative competence with low accuracy). Because this approach assumes no strict division between grammar and vocabulary, its goal is to strike a balance that fosters both communicative and grammatical competence (especially with regard to grammatical structures with greater expressive power). This means instructors should introduce any and all useful and relevant linguistic forms (whether lexical or grammatical in nature) that will help learners to become effective communicators regarding the topic at hand. This section presents research that highlights the importance of teaching meaning explicitly and providing opportunities for learners to induce meaning from language input, both in relation to vocabulary and to grammar. The focal points of this section are the difficulties encountered by teachers and learners with respect to vocabulary and grammar acquisition, and strategies for overcoming these difficulties.

2.1 Explicit instruction and how to allocate it

Researchers of foreign language pedagogy recognize that there is a need for rich vocabulary instruction, while also acknowledging that the average college level course is limited by time constraints and the level of cognitive demand required

for learning a language (Ellis 1997, 2002, 2007; Nation 2001). Laufer and Nation (2012) characterize priority vocabulary items as those that are frequent (and therefore generally useful), and those that are useful to individual learners based on their own circumstances, regardless of frequency (2012: 164). Of those useful items, some have meanings very close to the translation equivalent in the L1, while others differ significantly in meaning, usage, or both. For practical purposes, a language curriculum should aim to follow the 80/20 rule[2] by focusing explicit instructional efforts on the smaller percentage of useful vocabulary that differ from the L1; this will give learners the broadest ability to communicate effectively.

This means that frequent or useful words that can be straightforwardly translated (such as German *spielen* 'to play' or *Tisch* 'table') should not receive as much attention, while words that have cross-linguistic differences in meaning or use should be explicitly taught and the differences explained (e.g. German *Freund/Freundin* 'male/female friend' or 'boyfriend/girlfriend,' depending on how it is used). Teaching cross-linguistic differences alerts learners to the mismatch between the conceptual structure they use in their L1 and that of the L2, which can be a major source of difficulty in vocabulary acquisition (Jiang 2020). Finally, to most effectively allocate explicit instruction, it should focus on input that provides repeated encounters with the vocabulary (Ellis 2009, Laufer and Nation 2012), encouraging learners to focus on the forms presented and engage with them in some way; not necessarily by producing them; attending to them or understanding them and acting on that knowledge also improves likelihood of acquisition (Kim 2011, Robinson et al. 2012, Shehadeh and Coombe 2012).

Ellis (1997) argues that semantic features of new vocabulary (i.e. word meaning) is learned consciously and explicitly. When learning words in context (e.g. viewing a picture with labels of new vocabulary items or guessing the meaning of a word in a text), the learner is actively engaged in determining what that word's semantic properties are and fitting it into their mental lexicon. Whenever new vocabulary is introduced, a learner must fit it into their version of the target language. This process can be fostered through explicit vocabulary instruction, whereby learners encounter clear explanations of semantic information. Foreign language learners must link their pre-existing conceptualizations of the world to new language forms, and are thus subject to interference from their

2 The 80/20 rule, related to the Pareto distribution, is the principle that in many contexts, 80% of the output is produced by 20% of the effort. This suggests that where you focus your efforts is of great importance; doing a few highly productive activities will make you more efficient at the greater task than overworking yourself or scattering your efforts to accomplish things that barely add to your productivity.

native language with regard to the ways in which the world is partitioned and expressed linguistically (Ellis 1997).

In the foreign language classroom, this means that explicit vocabulary instruction must include references to the native language in a way that distinguishes its conceptual structure from that of the target language (because learners might assume their current perspective constitutes the only way the world perceived). This explicit instruction helps learners identify which parts of their conceptual structure need to be augmented to fit the meanings of the new forms, and allows them to communicate effectively with those forms faster than would have been possible if no explanation had been given.

It is fair to say that all language instructors include explicit vocabulary instruction for some vocabulary that they know to be problematic for the learners they teach, but it is unreasonable and impractical to leave it completely up to instructors to determine which vocabulary items require explanation and which do not. Unfortunately, this is exactly what traditional foreign language textbooks do when they limit the presentation of vocabulary to lists with translations.[3] An ideal vocabulary resource would focus on the most relevant, common and useful vocabulary for a variety of topics, and explicitly state which items are used differently in the target language (and how).

Norris and Ortega (2000) showed that explicit grammar instruction is more effective than implicit grammar instruction, which is in line with its relation to vocabulary acquisition discussed above. Fujii (2005) describes how the increasing importance of communication in language pedagogy led to the realization that grammar should be taught explicitly, as it is an important part of discourse (research in discourse analysis contributed largely to this conclusion). Fujii argues for dealing with grammar beyond the sentence level (2005: 292–293), but that approach was designed for more advanced students who can produce longer discourse than learners in the second year of instruction.

Of course, learners' ability to use grammatical constructions to express themselves must be fostered and developed from the beginning, so simple, sentence level constructions that increase learners' communicative capabilities are a good place to start. As learners become more capable, they take on more difficult constructions. Different structures vary in ease of acquisition; factors such as how common the construction is, how familiar it is to learners from knowledge of their native grammar, and how complex it is (i.e. how many units comprise it), surely

3 It should be noted that modern textbooks use activities to incorporate more than simple glosses; see Neary-Sundquist (2015) for a detailed look at five German textbooks and how they convey information about vocabulary.

influence the degree of difficulty learners experience, just as Willis and Ohashi (2012) found with regard to vocabulary. Given that grammatical structures are form-meaning pairings in the same way as lexical units, we should expect no stark differences in how the two are acquired, challenges learners encounter, or strategies for aiding acquisition.

2.2 Inductive and deductive approaches

Herron and Tomasello (1992) clarify the difference between inductive and deductive approaches to grammar teaching. The former, espoused by contextualized, communicative approaches of the time, exposes learners to a new grammatical structure through authentic texts and encourages them to create and apply grammatical rules in order to use the structure to communicate. The latter approach begins by explicitly presenting the grammatical rules, then asks learners to practice using it by completing exercises designed for that purpose (1992: 708). With their Guided Induction approach, Herron and Tomasello (1992) take the best elements of both; learners are first exposed to language sequences that contain the targeted form, then given the opportunity to complete a model sentence (designed to guide them to discover the rule) based on what they have observed.

In their study, the authors found Guided Induction to be more effective than deduction (1992: 715). More current approaches draw on newly available corpora to magnify the input available to students in an approach known as data driven learning (Hidalgo, Quereda and Santana 2007, Smart 2014, Lin and Lee 2015). Smart's (2014) study compared an inductive, data driven approach to a deductive, corpus-informed approach and a traditional deductive approach (without using corpus data) and found that learners benefitted significantly from the inductive, data-driven method of teaching. Tsai (2019) provides evidence that the deductive approach is better suited to learning word meanings (and thus to earlier levels) while inductive is better suited to learning collocations (and thus more appropriate for more advanced learners).

2.3 Considerations for a curriculum

Research has shown that frequency is an important factor in how useful vocabulary is to a beginning learner (for details see Rankin 2020). Nation (2001) emphasizes the importance of learning high-frequency words (2001: 16), criticizing the lack of distinction between high and low frequency words in second language acquisition studies that suggest knowing a large number of words is key to learn-

ers' success. Nation rightly points out that learning a higher proportion of commonly used terms will allow a learner to use the language more effectively than learning a higher proportion of uncommon terms, and that amassing a large vocabulary is not a necessary goal in the short-term, but is more appropriate as a long-term learning objective (2001: 9). Nation (2013) proposes that learners should study highly frequent words early on, and then continue with less frequent words as they advance (2013: 57).

Crossley et al. (2013) found that the best indicator of whether beginning learners would use a particular word in discourse is word frequency for nouns, and versatility for verbs, i.e. that they can be used in diverse contexts (2013: 727). For example, a word like *gehen* 'to go' in German is learned early on and used frequently, whereas *fahren* 'to drive' and *reisen* 'to travel' are progressively less versatile and learners thus take longer to incorporate them into their discourse. This means that beginning language instruction (i.e. first year university level) is right to focus on frequent nouns and versatile verbs, and that intermediate level instruction (second year university level) should begin to expand students' lexical range by providing ways for them to practice using more specialized (for verbs) and specific (for nouns) vocabulary. This is not to say, however that basic forms should be left out altogether; on the contrary, Nation (2013) emphasizes the utility and effectiveness of fluency development activities, in which learners are encouraged to produce language about basic concepts quickly and in large quantity (54–55).

Based on an analysis of advanced learner discourse, Fujii (2005) recommends that a primary goal for teachers when designing learning tasks should be to "target grammatical items that we know are challenging to learners." (2005: 330). This is the essence of how grammar instruction fits into a communicative or proficiency based approach. Crossley et al. (2013) emphasize that frequency is the best predictor of language acquisition in studies that test constructions, just as with vocabulary acquisition (2013: 728). With grammar too, we encounter the familiar loop of commonality, familiarity, usefulness and versatility all playing into one another. Therefore, common and versatile grammatical constructions are both more important and easier for learners because they are encountered continuously. So again we see that when instructors select content for a language course, they can ensure that it is serving learners well by choosing the most productive, versatile and also commonly used structures possible in novice level classes, and increasing specificity and specialization as learners advance.

A good example of this is the genitive case in German. Of all the German cases, this one may just be the simplest (in its form) because it has fewer variations than the others, and its meaning is straightforward: it conveys possession like English 'of,' which is a commonly used concept. Is this a form that beginning learners should study? Well, no, and that's because there is another form, a single

word, *von* ('of'), that has a straightforward equivalent in English and serves the same function. Because students can use this one word, *von*, to get around using a case that does not exist in their native language, and because this structure is not very versatile, there is no reason for first year (native English speaking) German students to attempt it. The genitive case is much better saved for the second year of instruction, when discourse is developing further and students are actually able to take advantage of some of the more complex concepts that can combine with this structure, such as genitive prepositions like *statt* ('instead of') or *trotz* ('in spite of'), which stretch beyond the basic nature of beginner discourse.

2.4 Achieving deep understanding through input, engagement and repetition

Schmitt (2008) describes different kinds of knowledge necessary for a deep understanding of vocabulary, and claims that different approaches to teaching vocabulary are appropriate at different levels; beginners may need to focus on the form-meaning pairing (explicit instruction), while more advanced learners may begin to associate collocations implicitly through extensive language input (2008: 334–335). Nation (2001) found that learners need to see and interact with vocabulary in a variety of contexts and ways to retain it well, and that a deeper understanding of its meaning is what allows learners to use vocabulary correctly in context. A study by Laufer and Rozovski-Roitblat (2015) showed that the kind of activity used to practice vocabulary is more important for acquisition than frequency. In their study, the best retention results were achieved after a reading task combined with a focused word activity, regardless of number of encounters (other tasks tested were reading only and reading with a dictionary). Input-based instruction need not be paired with language production to achieve these goals; Shintani (2012) showed that negotiation of meaning and a focus on linguistic form are possible with listen-and-do tasks. In fact, research has shown that simple input-based teaching can be more effective in terms of acquisition than poorly designed output-based tasks that nonetheless engage learners (Hamavandy and Golshan 2015).

Teaching grammatical forms in context is very important; it allows learners to engage with and interpret the new forms as they interpret the meaning, and during this process (especially with explicitly directed attention, e.g. focus on form tasks), they become more familiar with how they are applied (Omaggio Hadley 1993). Ellis (1997) argues that the formal elements of language (e.g. phonological structure, part of speech) are learned through analyzing sequences in discourse (consciously or not). In the earliest levels of instruction, students develop a feel for the structures of the target language in an unconscious way

through exposure to the language and by learning chunks first (longer phrases such as *my name is . . .*). Structures that are similar to the native language pass into the student's conceptualization of the target language without much effort (which underscores the importance of language exposure for acquisition, particularly early on), while more complex structures require increasing amounts of attention, engagement, explanation and practice.

Just as noun frequency and verb versatility are good predictors for which vocabulary items are most readily produced by learners (Crossley et al. 2013), frequency of a linguistic item in learner input is a strong predictor of acquisition (Ellis 2002). These frequency effects are two sides of the same coin: production and comprehension. The more common a concept is in everyday life and language, the more likely one is to talk about it; the more often one hears a word, the more likely one is to remember it and start using it. Exposure to target language input is key to vocabulary acquisition, and indeed language acquisition in general (Crossley et al. 2013: 728). Nation (2001) found that learners could be exposed to vocabulary items up to 16 times before learning them, and that without continued exposure over a longer period, new vocabulary was forgotten within 24 hours of instruction. This demonstrates the need for practice and validates teachers' inclinations toward frequent review sessions. Willis and Ohashi (2012) showed that along with frequency, the degree of "cognateness" (i.e. similarity to words in the native language) and word length (in morphemes) were good predictors of how easily a word could be acquired. It's no surprise that foreign words are easier to learn when they're closer to those of your first language, or that longer words are more difficult. Thus while reviewing is necessary and effective, it is best done using activities where learners engage with the vocabulary explicitly and intentionally, rather than in list or overview form. Combining quality input with explicit engagement is a powerful way to help learners retain vocabulary.

Due to the variable nature of many constructions, it is important to afford learners repeated opportunities to engage with the concept and practice producing it in different contexts. After the first round of explicit instruction and practice, applying the construction in new contexts should get much easier. Bogaards (2001) showed that in the realm of vocabulary, multiword expressions made up of familiar words are more easily acquired than novel words (2001: 331–332), and that previous knowledge of a word form is significantly helpful for acquiring new senses of that form while the degree of relatedness to the first learned sense is not very helpful at all (2001: 335–336). If we extend these conclusions to grammatical constructions, it seems that solid knowledge of a construction in one context (e.g. reflexive verbs in the context of grooming in German, e.g. *Sie waschen sich die Hände*, 'They wash their hands') would be key to extending it to new contexts (e.g. reciprocal use of reflexive verbs, e.g. *Sie treffen sich um 10*, 'They meet each other at 10').

2.5 From theory to implementation

There are three main areas in which to implement the strategies discussed above: (1) instructional efforts (explicit instruction and guided induction), (2) course content and sequencing, and (3) strategies for fostering deep understanding of the language. Section 2.1 showed the benefits of explicit instruction for both vocabulary and grammar acquisition (Ellis 1997, Norris and Ortega 2000). Section 2.2 showed that guided induction is an effective way to incorporate authentic data (e.g. from a corpus) in order to let learners construct their own understanding of how the language functions while still receiving guidance from the instructor (Herron and Tomasello 1992, Smart 2014). Curricular considerations were discussed in Section 2.3, namely, how to determine which linguistic units and constructions to include and how to sequence them effectively. It is clear from the discussion that the most common (frequent) and versatile (for verbs, specifically) items should be included at the earliest levels of instruction, with a gradual expansion toward somewhat less frequent items as learners progress (Nation 2001, Laufer and Nation 2012, Crossley et al. 2013, Rankin 2020). To prevent the problem of L1 concepts structuring use of L2 forms, it is also helpful to explicitly teach items with cross-linguistic differences in meaning (Jiang 2020).

Decisions about sequencing course material should weigh the following considerations to maximize acquisition and communicative utility: (1) the closer a L2 form is to an equivalent in the L1, the easier it will be acquired (Willis and Ohashi 2012); (2) the more frequently a concept or linguistic form appears in everyday discourse, the more useful it will be to a learner (this includes topics of conversation, i.e. frames, as well as lexical units and constructions) (Nation 2001, Laufer and Nation 2012, Nation 2013, Crossley et al. 2013, Rankin 2020); (3) the more versatile a linguistic form is (i.e. the more contexts it can appear in and the more other forms it can combine with), the more it contributes to communicative competence, even if these contexts are introduced one at a time, because subsequent new applications will likely be easier to acquire (Crossley et al. 2013). As course material progresses from beginner to intermediate level, inductive grammar teaching becomes more effective as learners are able to acquire more kinds of knowledge about a form (more than what a gloss or definition can convey) (Tsai 2019). At more advanced levels, instruction should be aimed at concepts that instructors believe (or find) is challenging to learners, and corpus data may be used more to move beyond the sentence level toward a more discourse-based approach (Fujii 2005).

Section 2.4 reviewed the value of repetition (both in input and in production) and active engagement for acquisition, which is consistent with Schmitt's (2008) view that a deep understanding of linguistic forms is necessary for their proper

use in communication. The most significant strategies are providing sufficient input (Ellis 2002, 2009, Laufer and Nation 2012), allowing learners to actively incorporate new forms into their previous knowledge using strategies appropriate to their level (Ellis 1997, Schmitt 2008) and perhaps most important of all, fostering genuine engagement and interaction with the material (Laufer and Rozovski-Roitblat 2015)

Building a curriculum for second year language instruction is an enormous task, especially when not relying on a commercially produced textbook. There are, however, ways to find appropriate teaching materials online. Section 3 describes open educational resources and why they are flooding into institutions of higher education.

3 The case for open educational resources (OER)

Open educational resources, those that are freely available online, are accessible to anyone with internet access, and reach a wider range of learners, beyond those who participate in traditional educational institutions. At the university level, open resources alleviate some of the financial burden shouldered by students who are paying ever-increasing tuition costs and seeing less value in paying hundreds of dollars for a language textbook, even if it does last them for a whole year of classes. Of course, there are downsides to open resources; they may be of poor quality, difficult to navigate, out of date or incomplete.

The U.S. Department of Education is encouraging educators to use openly sourced materials with their #GoOpen campaign (https://tech.ed.gov/open/), and modern technology is making it easy. The U.S. Department of Education also funds 16 National Foreign Language Resource Centers (http://nflrc.org/), of which one is completely devoted to OER for language teaching and learning: COERLL, the Center for Open Educational Resources & Language Learning, at The University of Texas at Austin (http://coerll.utexas.edu). The free availability of language materials has allowed universities across the nation to drop their textbooks – which can cost upwards of $300 for one year of study – in favor of using a laptop in class or getting a printed version of the free materials (well under $50). This paper is an effort to bring similar benefits to teachers and students of second year German, using one of the online resources hosted at COERLL.[4]

4 The G-FOL project was developed in collaboration with the Center for Open Educational Resources and Language Learning (COERLL) at the University of Texas at Austin and supported by funds from Title VI grants P229A140005 and P229A180003 from the U.S. Department of Education.

4 Frames, constructions and related linguistic resources

The open educational resource G-FOL (German Frame-semantic Online Lexicon) aims to provide richer vocabulary resources for teaching and learning German and to align learning materials with current linguistic theory. It bridges the gap between frames and constructions as descriptive tools for linguists and as a tool for helping language learners grasp new linguistic forms and their functions. This section gives background information on the G-FOL.

Section 4.1 provides a brief overview of the theory of Frame Semantics (Fillmore 1982, 1985; Fillmore & Atkins 1992). Section 4.2 describes the corpus-driven online database known as FrameNet (Baker et al. 1998, Fillmore et al. 2003 Background, Fillmore & Baker 2010), which is based on Frame Semantics. Section 4.3 gives an overview of the G-FOL, together with contrastive examples from the Grooming frame in both G-FOL and FrameNet.

4.1 Frame Semantics

In Frame Semantics *frames* can be seen as "specific unified frameworks of knowledge, or coherent schematizations of experience" (Fillmore 1985: 223). The basic unit of linguistic meaning in Frame Semantics, paired with a form (such as a word or idiomatic expression), is called a *lexical unit* (LU). A word in one of its senses is the prototypical example of a lexical unit (see Petruck 1996 and Fillmore & Atkins 1992 for more details). Even grammatical structures are viewed as form-meaning pairs; these are typically referred to as *constructions*, following the complementary theory of Construction Grammar (Goldberg 1995, Boas & Sag 2012). Lexical units and constructions are studied with reference to frames, which allows syntactic realizations of semantic properties to be analyzed.

Frame elements, specific to each frame, represent the participants in the frame, so in (1) below,[5] they are defined with respect to the Motion frame (other frames would have different frame elements; even if two frames have a frame element with the same name, they are distinct). The Motion frame involves these participants (frame elements): something that is moving (Theme), the area in which it moves (Area), the direction it moves (Direction), the distance it moves (Distance), where it started (Source), the path it moves along (Path), and the location it moves to (Goal). In (1), for example, the Theme is encoded as the subject

5 This and all other examples are taken from the annotations in FrameNet II, available online.

of the target verb *roll* (which evokes the Motion frame), and the frame elements Path and Goal are also realized:

(1) Suddenly [$_{\text{Theme}}$it] slipped from his hand and *ROLLED*$^{\text{Target}}$ [$_{\text{Path}}$down the bank] [$_{\text{Goal}}$into the water].[6]

4.2 FrameNet

Berkeley's FrameNet Project (http://framenet.icsi.berkeley.edu; Baker et al. 1998, Fillmore et al. 2003 Background, Fillmore & Baker 2010)[7] is an online repository of lexical information that – thanks to Frame Semantics – structures the lexicon in a way that better reflects what we know about how humans organize information than traditional dictionaries. Lexical units are grouped according to the semantic frame that they evoke, and lexical entries appear alongside annotations of the corpus data that were used to create the frames.

Each frame in FrameNet is meant to denote a configuration of concepts that are related in such a way that to grasp one of them, a person must also understand the structure of which it is a part, i.e. the frame, its other components, and how they interrelate (1982: 111). For example, to fully understand the word *Tuesday*, one must have some notion of how weeks are divided into seven days, each of which have a different name, and so on. Words that denote any of the related concepts of a frame are said to evoke or belong to that frame; polysemous words evoke multiple frames (and thus represent multiple lexical units).

Organizing semantic information by frames allows linguists to analyze the English lexicon in a new way, and the sentence annotations allow patterns of realization to be studied more systematically. This reorganization of the lexicon has applications in many fields other than linguistics, including psychology and computer science. For these reasons, FrameNet has served as a blueprint for similar lexical resources in a variety of other languages (see Boas 2009b), which has created the opportunity for cross-linguistic semantic comparisons (see Lönneker-Rodman and Baker 2009).[8]

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6 Example taken from FrameNet's data for *roll.v* the Motion frame, accessible online.

7 FrameNet is the product of Fillmore's early work and many years of collaboration with other researchers. In the interest of space, I cannot give them all their due credit here; please visit FrameNet's publications page for details about who has contributed to the project.

8 This discussion of FrameNet's structure is fairly superficial, in that it does not go into the technical details of the database, its interface, or the xml format of the data files. For more information regarding such matters, see Baker et al. (2003).

As we explore the structure of data in FrameNet, let us use the Grooming frame as an example; the meaning it represents is already familiar. This frame represents speakers' background knowledge about the prototypical situations that involve grooming of the body, what kinds of participants are involved in such situations (e.g. someone who grooms, the body part being groomed, perhaps an instrument like a brush, etc.), and the real world relationships between these kinds of participants (i.e. the person grooming is using the brush to improve the state of the body part).

For example, English speakers, upon hearing the verb *shampoo*, use their knowledge of the prototypical grooming scenario to interpret what the word means in context; without this prior knowledge, the word would not be interpretable. Grooming is not particularly complex, and relates to two other frames in the database: the very general Intentionally_affect (with lexical units like *to do something with/to*), which it inherits some meaning from, and Desirability, which it uses. These are the only frame-to-frame relations identified in FrameNet for this particular example, but other frames may have different relations (e.g. "is causative of" or "perspective on"). Frame relations provide the lexicon with structure that is semantically motivated and allow FrameNet users easy access to related frames through the online interface. For detailed descriptions and motivation for each relation, see Baker et al. (2003: 286–287).

In the frame report for Grooming, as in any frame, there is first a general frame description in prose that gives an outline of the frame and what part each of the frame elements plays in it:

> In this frame, an Agent engages in personal body care by grooming either a Patient or a Body_part. An Instrument can be used in this process as well as a Medium.
>
> [$_{\text{Agent}}$She] WASHED$^{\textit{Target}}$ [$_{\text{Patient}}$the baby].

FrameNet also provides short definitions for all frame elements typically together with annotated example sentences as well as a list of lexical units that evoke the frame. For Grooming, these are: *ablution.n, bathe.v, brush [hair].v, brush [teeth].v, cleanse.v, comb.v, facial.n, file.v, floss.v, groom.v, lave.v, manicure.n, manicure.v, moisturize.v, pedicure.n, plait.v, pluck.v, shampoo.v, shave.v, shower.v, soap.v, wash.v,* and *wax.v*.[9]

FrameNet provides for each LU a lexical entry reports, which is structured as follows: First, the frame of the LU is identified at the top, and then a brief definition is given, followed by a table that lists frame elements that appear with

9 The letter appended at the end of the lexical unit indicates the part of speech (all nouns and verbs in this case, but the database does contain other parts of speech as well).

that lexical unit and how they are realized in annotated corpus sentences. There is also a table showing the valence patterns of annotated sentences, i.e. which frame elements are realized together and their grammatical roles in the sentences when they co-occur (for details, see Boas 2017 and Ruppenhofer et al. 2017).[10]

4.3 Enter the G-FOL (German Frame-Semantic Online Lexicon)

While FrameNet is a resource for professional linguists and software developers, the German Frame-Semantic Online Lexicon (G-FOL; Boas and Dux 2013, Boas et al. 2016; coerll.utexas.edu/frames) was developed specifically for learners of German who speak American English. This resource began with the data from FrameNet and adapted it to the German language and to the intended audience. Considerations such as those discussed in Section 2 above guided decisions about which LUs are included, and while annotated sentences are still featured prominently, other features are also included, all aimed at helping learners acquire the content more easily (see Lorenz et al. 2020). In short, the resource provides a kind of explicit instruction that learners can access outside the classroom, saving precious instructional time for interaction and language use.[11] Figure 1 shows the interface of the G-FOL website, which aims to presents information in a way that is not too crowded; users click to reveal details about particular LUs.

In G-FOL, frames are chosen because they contain a number of LUs that typically appear in first or second year textbooks. G-FOL is not aimed at complete beginners, partly because it assumes some knowledge of basic grammar and vocabulary (e.g. pronouns, articles, parts of speech).[12] G-FOL researchers typically base the G-FOL frames on FrameNet frames, and, if necessary, rewrite parts

10 FrameNet has been used as the basis for several similar resources in other languages, including Spanish (Subirats 2009), Japanese (Ohara 2009), German (Boas 2001, 2005b, 2013; Burchardt et al. 2009, Schmidt 2009), Portuguese (Salomão 2009), French (Pitel 2009; Schmidt 2009), and Swedish (Borin et al. 2009). For these resources, the frames from English FrameNet were re-used, and new frames were added where necessary (for methodology, see Boas 2002, 2009).

11 The G-FOL project was developed in collaboration with the Center for Open Educational Resources and Language Learning (COERLL) at the University of Texas at Austin and supported by funds from Title VI grants P229A140005 and P229A180003 from the U.S. Department of Education.

12 Infrequently, multiple FrameNet frames may be combined when realized in the G-FOL. This is because FrameNet prefers to split senses as much as possible, whereas the G-FOL wants to provide students with a cohesive semantic field. This is done with extreme caution and only when the sets of frame elements are compatible and the frame meanings fit together well enough to maintain a clear frame definition.

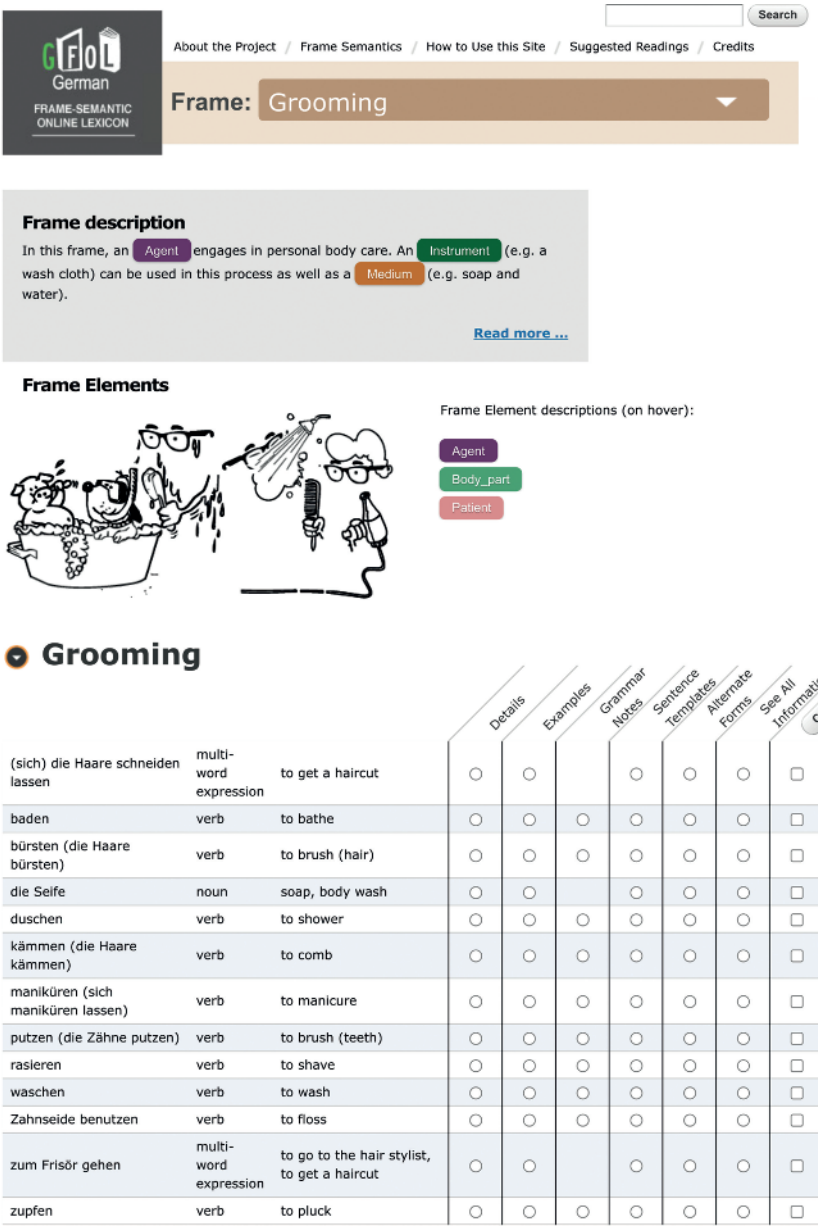


Figure 1: G-FOL webpage for the Grooming frame, retrievable at http://coerll.utexas.edu/frames/frames/grooming.

of them to make them more learner friendly (i.e. clear, concise and simple) and relevant to German (if there are any cross-linguistic differences that warrant mentioning at the frame level). For more details on the workflow underlying G-FOL, see Boas et al. (2016), Lorenz et al. (2020), and Boas (this volume).

Figure 2 shows the frame description for the Grooming frame and Figure 3 shows annotated example sentences in G-FOL for *die Zähne putzen*, 'to brush teeth.' The identified frame element combinations are encoded as sentence templates that show learners how the lexical unit can be used in the context of the frame. Figure 4 shows sentence templates for *waschen*, 'to wash.'

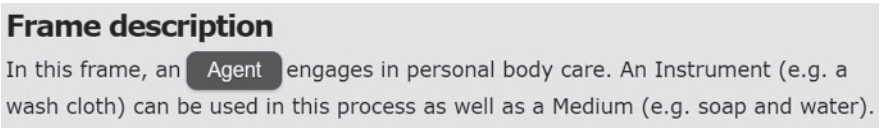


Figure 2: Frame definition for the G-FOL Grooming frame.

Figure 3: Annotated example sentences for *die Zähne putzen*, 'to brush teeth,' in the Grooming frame.

While compiling examples and templates, G-FOL researchers make note of alternate forms (e.g. plurals for nouns, irregular forms for verbs, comparative and superlative forms for adjectives) and write concise prose descriptions of the meanings and usage for each LU. In the simplest of cases it will read "Used like its English equivalent," but whenever the German LU does not precisely match,

Figure 4: Sentence templates for *waschen* in the G-FOL Grooming frame.

learners can read the details section to learn all they need to know in order to properly use it in discourse.

This is where cross-linguistic differences, culture-specific information, collocations, etc. are presented and explained in prose with reference to examples and comparisons to English. Sometimes researchers find that particular grammatical structures appear frequently across a frame (e.g. German reflexive verbs for the Grooming frame), and will add a grammar note for that topic that will be linked in the database to each lexical unit for which it is relevant. Grammar topics that are relevant to individual lexical units are mentioned in the details section along with a link to that topic in a corresponding open grammar resource (Grimm Grammar; http://coerll.utexas.edu/gg/gr/index.html).

After other team members reviewed and edited the frame content, everything is published on the website and users can freely access it. The G-FOL currently covers over 350 LUs in 20 frames, and is continuously expanding. Eventually, coverage will extend to more complex frames and linguistic concepts beyond first and second year German instruction.

5 How to build a curriculum around the G-FOL

Textbooks typically combine vocabulary content, grammar content, activities, readings, etc. into themed chapters. The decision of when to incorporate grammatical structures is sometimes arbitrary (e.g. past tense – it goes with just about any topic), and chapter length varies significantly between textbooks. When using the G-FOL as the basis for a second year German curriculum, it is up to the instructor to sequence frames in a way that makes sense and pair them with authentic language materials to engage students and help them navigate communicative situations in the target language.

This section describes how second year German was taught with the G-FOL as primary course material (a grammar book was used periodically to supple-

ment instruction) at Southern Oregon University in the 2017–2018 and 2018–2019 school years. Due to the quarter system, the year is split into three classes (one per term), each of which are 10 weeks long (not including finals). Each term consisted of three content units, after which students were assessed with a written test of tasks in multiple modalities and formats (listening, reading, writing, fill-in-the-blank, matching, multiple choice, etc.). Students created their own vocabulary lists for weekly quizzes (20 linguistic forms per quiz), and completed various activities in and outside of class to develop their communication skills and practice the new forms.

5.1 Principles of the teaching approach

Every unit in the curriculum revolves around a set of frames and topics that combine in a way that makes sense conceptually. Grammar and vocabulary are presented as tools for expressing meaning, without separating them explicitly. Sometimes texts or films are used to build cohesion between frames that may otherwise seem disconnected (e.g. a film was used to incorporate the frames Desire, Arguing and Fighting). Within each unit, the frame under consideration provides students with a context to rely on when they are practicing new forms. This way, new forms (grammatical structures in particular) are practiced within a confined conceptual space, which allows students to focus their attention rather than trying to apply the structure to a variety of disparate contexts.

In addition to the context of the frame, authentic texts and videos that instantiate the frame are used in activities so that learners can apply their knowledge to real-world situations while practicing comprehension. Cross-linguistic differences in meaning and use are taught explicitly within each frame, and relevant cultural variations are also explicitly conveyed to students. This gives them a head start on the acquisition process by helping them understand the pattern of difference between English and German so that they can identify it when they encounter it.

Throughout the year, high frequency frames, lexical units and constructions are reinforced through review and practice in a variety of contexts. For example, the first term begins with the familiar frames Sleep, Eating & Drinking, and Exercise, which affords students the opportunity to review content from the first year (after a summer typically devoid of the German language) while adjusting to the structure and philosophy of the G-FOL. In that first unit, the basic tenses, cases and word order are reviewed as well. This entrenches those forms and builds a strong foundation for learners as they build on their German knowledge throughout the year, and as new concepts are introduced, they are linked to those

with which students are already familiar. The content decisions made by G-FOL creators ensure that vocabulary included in the frames is not uncommon or esoteric, and because learners direct their own learning by deciding what items to include on their weekly quizzes, the task of content selection for vocabulary is already taken care of for the instructor. Only frames and grammatical constructions require attention in this manner.

5.2 Sample G-FOL curriculum

Tables 1–3 show a breakdown of the curriculum by term, each of which are divided into three units. Each unit contains themes (often frames; shown without bullet points) that provide context for lessons and learning activities. Grammar, vocabulary and culture topics that pair with the theme are listed beneath it. All frame names are capitalized and in bold. Topics with new content are marked with an asterisk (some may have already been introduced briefly or partially, but the asterisk indicates that the current unit introduces new information on the topic). This curriculum plan has been revised based on two years of implementation.

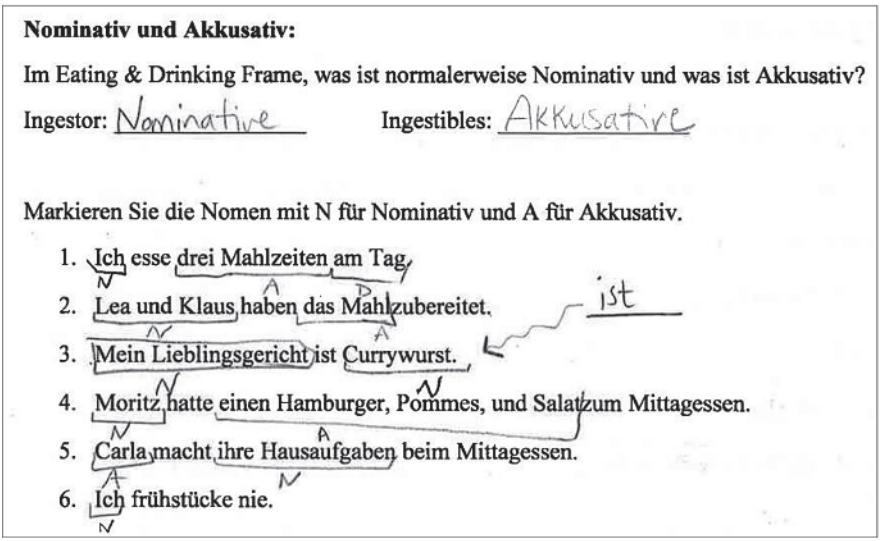
Table 1: Curriculum overview for fall quarter (German 201). This is the first class of three in the second year German sequence.

	Unit 1	Unit 2	Unit 3
German 201	**Sleep*** – personal pronouns – nominative case – present tense – irregular verbs – separable prefix verbs – conversational past tense **Eating & Drinking*** – noun genders – articles – *der-*/*ein-* words* – accusative case – word order – coordinating conjunctions **Exercise*** – days and times – adverbs of frequency – free time activities, sports – infinitive clauses	**Personal Relationship*** – family – possessive pronouns – dative case – genitive case* – *etwas machen lassen* construction ('to have something done [by another person]') **Grooming*** – daily activities – times and days – reflexive verbs (dative and accusative reflexives) **Cleaning*** – separable prefix verbs (present and past) – accusative case – simple past tense* – house/rooms/furniture	**Causation*** – accusative case – imperative – coordinating and subordinating conjunctions – modal verbs (present) *Text: short story** – reading strategies* – simple past tense* – word order – basic summarization – simple reactions

The first unit in German 201 is a review and expansion of content learned in the first year. The Sleep frame serves as a simple introduction to the G-FOL; all students can communicate about sleeping already (although most benefit from a reminder of the irregular conjugations of *schlafen*, 'to sleep'), and generally find the frame easy to grasp and its vocabulary interesting because it expands their conceptualization of a sleep scenario in unexpected ways (e.g. *in Ohnmacht fallen*, 'to lose consciousness;' *etwas ausschlafen*, 'to sleep something off;' *sich ausschlafen*, 'to sleep in'). The Eating & Drinking frame is also known to students, and affords them the opportunity to review food vocabulary while also engaging in conversations where they can competently communicate. The Exercise frame gives them similar opportunities to review and regain their confidence in the language after a summer off.

In terms of grammar, this unit guides students through a review of the basics. With verbs, for example, the Sleep frame contains mostly intransitive verbs, so students focus on the nominative case (for grammatical subjects), previously learned irregular forms (e.g. *er schläft*, 'he sleeps'), and word order (conjugated verb second, separable prefix at the end of the clause if applicable). Eating & Drinking is full of transitive verbs, so accusative case becomes a focus of instruction and practice while continuing to practice proper sentence structure, expanding the focus on word order to sentence structure with coordinating conjunctions. In the activity shown in Figure 5, students link the frame elements of Eating & Drinking to their typical grammatical roles in the sentence, then practice identifying the cases in sentences that evoke the frame. For this activity, students focus on the grammatical cases within the unified context of the frame. Building the activity on frame elements contextualizes the sentences within the frame even though they describe differing situations.

At the end of the unit, Exercise is characterized by a mixture of lexical units with similarities to English and some with strong cross-linguistic differences. While *spielen* ('to play') is used with organized sport games as in English, and *machen* ('to do') is used with non-game sports activities such as Yoga (also like English), the translation equivalent of *to play sports* is *Sport machen* (lit. 'to make sports'). Students struggle to implement this lexical unit in their discourse, despite having learned it in the previous year. To complicate matters, this German expression can also be translated as *to exercise* (*Sport*, 'exercise;' *Sport machen*, 'to exercise;' *eine Sportart [z.B. Basketball]*, 'a sport, a kind of exercise [e.g. basketball]'). By progressing through these frames in the first unit, students familiarize themselves with the G-FOL and learn to rely on it for explicit information regarding how to use each lexical unit. They can begin by reviewing and working at their level, then they transition to expanding their knowledge of the topics covered and improving their grammatical and discourse skills.



Nominativ und Akkusativ:

Im Eating & Drinking Frame, was ist normalerweise Nominativ und was ist Akkusativ?

Ingestor: Nominative Ingestibles: Akkusative

Markieren Sie die Nomen mit N für Nominativ und A für Akkusativ.

1. Ich esse drei Mahlzeiten am Tag.
2. Lea und Klaus haben das Mahl zubereitet.
3. Mein Lieblingsgericht ist Currywurst.
4. Moritz hatte einen Hamburger, Pommes, und Salat zum Mittagessen.
5. Carla macht ihre Hausaufgaben beim Mittagessen.
6. Ich frühstücke nie.

Figure 5: Student-completed activity from the Eating & Drinking frame. The first question asks which grammatical cases (nominative for subjects, accusative for direct objects) are typically associated with the two frame elements of this frame. Then students identify those cases in each sentence (all evoke the Eating & Drinking frame in different ways).

The themes in Unit 2 also expand topics covered in the first year, but they incorporate more completely new forms, such as the construction *etwas machen lassen* ('to have/get something done'), which is used to indicate that someone else is doing the activity for you, rather than you doing it yourself. This construction first appears in the Personal Relationship frame with *sich scheiden lassen* ('to have oneself divorced') and is strengthened in the Grooming frame with *sich die Haare schneiden lassen* ('to have one's hair cut').

The Personal Relationship frame reminds students of cross-linguistic and cultural differences of *Freund* ('friend'), such as its double meaning of 'male friend' and 'boyfriend,' or that it is reserved for one's close friends, and is not applied to just anyone in one's social circle (in contrast to English where acquaintances or coworkers can be referred to as friends). It also expands the notion of personal relationships from a focus on family and friends to a broader range of interpersonal experiences. Some of these are well suited to telling stories about the different stages a relationship can go through, for example: *sich befreunden* ('to befriend'), *anmachen* ('to hit on'), *Fernbeziehung* ('long-distance relationship'), *mit jemandem zusammen sein* ('to date,' literally 'to be together with someone'), *sich verlieben* ('to fall in love'), *sich verloben* ('to get engaged'), *heiraten* ('to marry'), and *sich scheiden lassen* ('to get divorced').

For the activity in Figure 6, students are tasked with narrating a brief story that describes the development of a relationship as shown in the pictures. By providing milepost events in the relationship, students are free to be creative, inserting details where they see fit. This student, for example, did not want to end the story with heartbreak, and so added that the man died after the couple was divorced, and the woman remarried. Despite errors in grammatical accuracy, the student found ways to incorporate much of the desired vocabulary, integrate it with known concepts (e.g. having *zwei Kinder*, 'two children'), and creatively fill in the gaps between events from the pictures to make a fuller narrative.

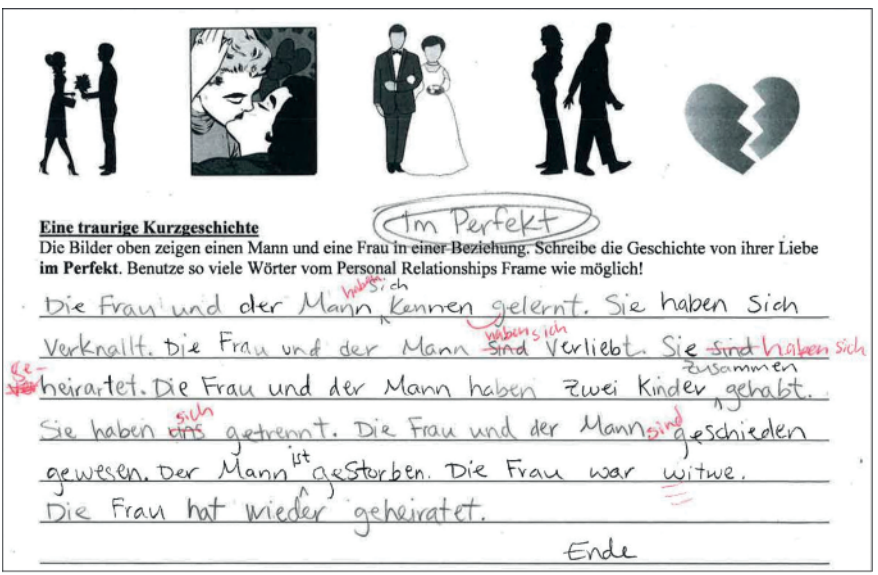


Figure 6: Sample activity for the Personal Relationship frame, completed by a student (includes corrections). The title and instructions read: "A Sad Story – The pictures above show a man and a woman in a relationship. Write the story of their love in present perfect tense (conversational past tense). Use as many words from the Personal Relationship frame as possible!".

The second frame in Unit 2, Grooming, is largely a review, and thus does not take up as much class time as other frames. At this point, however, students have likely not yet mastered the difference between accusative and dative reflexives in German, so the opportunity to practice is valuable. The real benefit in placing the Grooming frame here is to use it as a springboard to the Cleaning frame, which involves some of the same vocabulary and concepts (e.g. *waschen* 'to wash;' using an instrument such as a brush to help clean something) in a fundamentally different kind of situation. Classroom conversations can include concepts from the

Personal Relationship frame (e.g. sharing housework with a *Mitbewohner*, 'roommate,' or family members) and provide a context for reviewing vocabulary about the home, furniture or rooms covered in the first year of instruction.

Finally, Unit 3 introduces the Causation frame, whose lexical units are almost all new to students. After introducing the frame, students briefly practice new forms before reading a short story (the longest text they have encountered thus far) about a private detective investigating a case. While working with the text, students use vocabulary from Causation and eventually use the written past tense (simple past, imperfect) to describe events from the story. This unit may seem sparse compared to the others, but this is not the case. Much effort and class time is required for learning to read in the L2, practicing writing in the proper form of past tense and developing their summarizing skills.

Over the course of the term, students review and reinforce a great deal of familiar content and use it as a basis for adding new skills and topics to their repertoire. New concepts appear repeatedly, in a variety of contexts (frames), to aid acquisition and afford practice opportunities.

The fall quarter ends just before winter break, so when students return in German 202 (see curriculum overview in Table 2), they begin with discussing and writing about their experiences away from the university. This is a good opportunity to reinforce learned vocabulary and personalize their discourse while also allowing students to build relationships and rapport (making the classroom atmosphere more comfortable and encouraging speaking). The curriculum for German 202 builds in complexity much like in 201; the first frame, Buying & Selling, is filled with familiar concepts, and students have a wide knowledge of goods that could be bought or sold, so it is a great context for studying a more difficult grammar topic: dative. The dative articles are reviewed and used in the ditransitive construction, mentioned in Section 1. This construction's meaning involves transfer, and is used to convey a recipient in Buying & Selling, for example with *kaufen* ('to buy'), as in *ich kaufe meiner Mutter ein Geschenk* ('I'm buying my mother a present'). The familiarity of the other lexical items makes it easy to focus on grammatical forms/accuracy, and shopping makes for a good cultural topic so that authentic texts and videos can be used in learning activities.

The second unit is cohesive (Education, followed by Work) and particularly relevant to students. Mock job interviews are an entertaining way to try out new lexical units in discourse. Passive voice fits well with these frames (courses are taught, employees are hired and fired, etc.), as does subjunctive II (Konjunktiv II), the mood used for hypotheticals in German (students talk/write about their dream jobs, or what they would do if they didn't have to work to earn money).

Lastly, in Unit 3, the film *Goodbye, Lenin!* provides content to discuss with relation to the frames Deciding and Experiencing Emotion. The main charac-

ter in the film makes several unorthodox decisions and the movie is emotionally charged, so students have plenty to work with. Grammatical concepts involve adjectives because they abound in Experiencing Emotion (e.g. *traurig*, 'sad;' *glücklich*, 'happy;' and *wütend*, 'angry'), while students continue to practice recently learned concepts (e.g. passive voice, Personal Relationship frame) and use the lexical items in the frames in combination with familiar grammatical structures (e.g. inseparable prefixes and infinitive clauses for Deciding vocabulary).

Table 2: Curriculum overview for winter quarter (German 202). This is the second class of three in the second year German sequence.

	Unit 1	Unit 2	Unit 3
German 202	winter vacation – holidays, traditions, gifts – conversational past tense – ditransitive construction* **Buying & Selling*** – noun morphology for grammatical gender* – stores and businesses* – home furnishings, clothing – shopping destinations* – KaDeWe (culture lesson)* – simple past tense – genitive case – dative case – ditransitive construction	**Education*** – passive voice (present)* – school system in Germany* – educational funding, BAföG* – academic subjects – subjunctive II (hypotheticals) – genitive prepositions* **Work*** – professions – job advertisements* – job interviews* – dative prepositions – two-way prepositions (acc./dat.)* – passive voice (past)* – civil service (culture lesson)* – modal verbs (past) *Text: short story** simple past tense **Causation**	**Deciding*** – inseparable prefix verbs – reflexive verbs – subordinating conjunctions – word order – infinitive clauses – passive voice **Experiencing Emotion*** – expressing *to like* in German – comparative/superlative – adjectives (word order) – adjective endings* – adjectives from participles* *Film: Goodbye, Lenin!** – subjunctive II (hypotheticals) – **Personal Relationship**

In order to provide continuity with the previous term, and to make use of the experiences students have over spring break as topics in discourse, the beginning of German 203 in the spring quarter includes activities that recall the frames Expe-

riencing Emotion and Work. The rest of Unit 1 is organized around the theme technology and media, which fits well with the fairly diverse frames explored: Desire, Thinking: Familiarity and Thinking: Opinion. Because students are at their most advanced stage yet, this quarter's curriculum is more advanced and complex. Unit 1 includes new vocabulary about technology and the media (little was covered on this topic in the first year; only a few basic words), some review of previous grammatical structures (e.g. conjunctions) and new grammar (e.g. relative clauses). This seems like a lot, but it is planned strategically. Much of the new technical vocabulary is similar to English (e.g. *bloggen,* 'to blog'), and the new grammar, while difficult, uses the same syntactic structure as the known form that was just reviewed (subordinating conjunctions and relative clauses both have a key word at the beginning of the dependent clause and place the conjugated verb at the end of the clause).

In Unit 2, the complexity remains as content shifts toward culture, retaining the Thinking: Opinion frame and expanding it to other kinds of thinking. Students practice expressing their opinions as they compare and contrast the cultures of German speaking countries with their own. Finally, the content is brought back down to a more personal, relatable level in Unit 3 to leave students in a fun and memorable way at the end of the year. After a brief introduction to the Desire, Arguing and Fighting frames (all of which include a small number of lexical units), students learn vocabulary relevant to the film *der Geilste Tag*, about two men with terminal illnesses who decide to go in search of the perfect day and have all kinds of interesting experiences along the way. Because the main characters are often at odds, and are on a mission to do the things they always wanted to do, these three frames fit very well with film discussions, summaries and critiques.

The curriculum outlined here begins with very basic concepts, to solidify them, and grows in complexity throughout the year. Students are provided with the tools they need to become proficient at speaking, listening, writing and reading about the themes covered in the course, and practice scenarios of real world interactions as well (e.g. a job interview). At each step, repetition and focus on form are built into instruction. New concepts are not taught in isolation, but rather on the foundation laid by related concepts already familiar to students. The next section discusses more specific aspects of teaching frames and constructions using the G-FOL.

Table 3: Curriculum overview for spring quarter (German 203). This is the last class of three in the second year German sequence.

	Unit 1	Unit 2	Unit 3
German 203	spring vacation – simple and conversational past tenses – free time activities, travel – **`Experiencing Emotion`** – **`Work`** technology and media* – **`Desire*`** – modal verbs – subjunctive II of modals – subordinating conjunctions – word order – **`Thinking: Familiarity*`** – *wissen/kennen*, 'to know'* – **`Thinking: Opinion*`** – relative pronouns/clauses* – infinitive clauses	news and media, politics* – **`Thinking: Opinion`** – **`Thinking: Pondering*`** – Der Spiegel (culture lesson)* – German political parties* – relative pronouns/clauses – German, Swiss and Austrian governments* – subjunctive II (hypotheticals) – other subordinating conjunctions (more complex meanings)* – word order (more difficult)* – comparative/superlative – *Text: short story**	**`Desire`** – modal verbs (past) – word order **`Arguing`** – accusative prepositions – da- and wo-compounds* **`Fighting`** – accusative case *Film: der Geilste Tag** – summarizing plot – sentence connecting adverbs (e.g. *danach*, 'after that')

6 Teaching with frames and constructions

At the beginning of the year, it is imperative that students get to know the G-FOL website and what it has to offer. There are resources to assist students on the website itself (see "How to Use this Site" tab), including an overview video that explains the organization and the Frame Semantic approach, and an infographic for quick reference that describes what all the different bubbles next to a lexical unit will reveal when clicked. Students benefit from an in-class demonstration in the beginning, and later reminders of what different types of information the site has to offer (e.g. sentence templates, alternate forms).

When introducing a frame, students should explore the website on their own to familiarize themselves with the LUs and which ones require extra effort to use properly. To accomplish this, students complete an activity like that shown in Figure 7, which takes students from their own mental representation of the scenario described by the frame to their existing knowledge of lexical units that might evoke it, and finally to the G-FOL frame itself so that they can compare their

ideas to those in the G-FOL frame, discover what frame elements are central to its meaning, get an overview of the LUs in the frame, and even begin to use some of them in sentences.

GFOL Activity
Eating & Drinking Frame
coerll.utexas.edu/frames

Exploring the Eating & Drinking Frame
Introductory Activity for the German Frame Semantic Online Lexicon

It is recommended that you watch the Intro to the GFOL video at http://coerll.utexas.edu/frames/how-to-use before completing this activity.

Part I. Brainstorm

1. When you think of the concepts *eating* and *drinking*, what kind of scenario do you imagine? Describe it in your own words.

2. What people or other kinds of participants are involved in a general eating and drinking scenario?

3. Do you think the concepts *eating* and *drinking* would be expressed in roughly the same ways in German as in English? Why or why not?

4. Make a list of any German words or expressions you know whose meaning directly refers to this scenario.

Figure 7a. Introductory activity for the Eating & Drinking frame, page 1. Available in the G-FOL's Google Drive folder for teaching materials (http://goo.gl/XSqiwU), no password required.

GFOL Activity
Eating & Drinking Frame
coerll.utexas.edu/frames

Part II. Exploring the GFOL Site
Open the Eating & Drinking frame on the GFOL website (http://coerll.utexas.edu/frames/frames/eating-and-drinking). Read the frame description and look at the frame elements. Hover over each frame element to read its description.

5. What similarities do you see between the frame description and your description of the scenario from question (1)? What is different?

6. Do your participants from (2) match the frame elements? Do the frame element descriptions match your expectations of the participant's role in the scenario? Note any differences.

7. How many of your words/expressions from (4) appear as LUs in the Sleep frame?*

   _____ out of _____

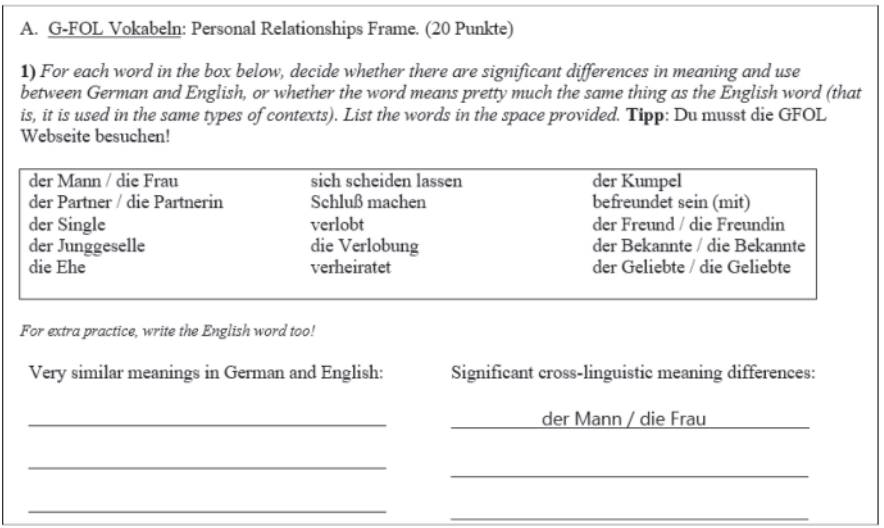
   **Remember, only the most common, practical words and expressions are included on the website, so if your word/expression doesn't appear there, that doesn't necessarily mean it's not part of the frame! Consult your instructor if you would like to know more about a particular word/expression.*

8. Select three LUs from the Eating & Drinking frame that you would like to use in sentences. Write a short narrative using all three LUs (do not write three unrelated sentences).

9. Consider the LUs you chose for (8). Would you say there are significant usage differences between German and English for these LUs? If yes, explain.

Figure 7b. Introductory activity for the Eating & Drinking frame, page 2.

Similar activities can be used as homework to introduce other simple frames, but more focused activities are helpful with complex frames, because they are better suited for explicit instruction during class time. The activity in Figure 8 tasks students with deciding whether each LU listed is very close to English in meaning/use or whether it has significant cross-linguistic differences. To complete the task, students must look at entries for each LU. When they finish the activity, students have a list of words that they should pay special attention to, and a subsequent activity could involve elaborating on the differences students identified. To have students focus on the different forms associated with some of these, they could work in pairs to select the best of multiple translations for a sentence in English, where some of the poorer translations are word-for-word while the best one reflects the nuances of the German meaning and usage patterns.



A. G-FOL Vokabeln: Personal Relationships Frame. (20 Punkte)

1) *For each word in the box below, decide whether there are significant differences in meaning and use between German and English, or whether the word means pretty much the same thing as the English word (that is, it is used in the same types of contexts). List the words in the space provided.* **Tipp**: Du musst die GFOL Webseite besuchen!

der Mann / die Frau	sich scheiden lassen	der Kumpel
der Partner / die Partnerin	Schluß machen	befreundet sein (mit)
der Single	verlobt	der Freund / die Freundin
der Junggeselle	die Verlobung	der Bekannte / die Bekannte
die Ehe	verheiratet	der Geliebte / die Geliebte

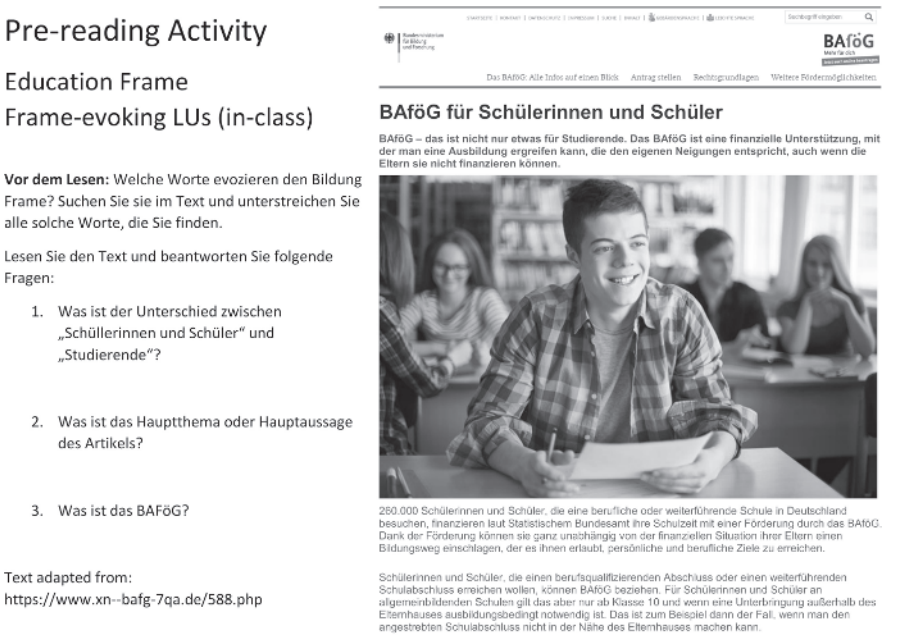
For extra practice, write the English word too!

Very similar meanings in German and English:	Significant cross-linguistic meaning differences:
	der Mann / die Frau

Figure 8: Vocabulary activity for the Personal Relationship frame: sorting lexical units by similarity in meaning and use to English.

For any substantial differences in meaning and use between English and German, it is important that the difference be mentioned explicitly in instruction. Most instructors would likely do so if the difference became apparent during class, no matter their approach, but the G-FOL makes it easier to anticipate where students will have problems and get out ahead of those issues. Instructors can go over more minor differences in meaning and use, or they can simply assign students an activity that requires them to explore particular entries in the G-FOL and analyze some of the examples listed there to draw their own conclusions.

It is important to note that in this approach, vocabulary, grammar, and usage are taught concurrently, and often refer to cultural norms and concepts. This matches the nature of language use in that we are constantly combining our knowledge of all aspects of a language when we communicate. Instructors should provide some authentic cultural materials (videos, songs, texts, etc.) paired with form-focused activities to engage students as they practice their language skills. The pre-reading activity shown in Figure 9 focuses on vocabulary from the Education frame to help students approach an article from the German government concerning how funding for higher education is allocated to students.



Pre-reading Activity

Education Frame
Frame-evoking LUs (in-class)

Vor dem Lesen: Welche Worte evozieren den Bildung Frame? Suchen Sie sie im Text und unterstreichen Sie alle solche Worte, die Sie finden.

Lesen Sie den Text und beantworten Sie folgende Fragen:

1. Was ist der Unterschied zwischen „Schüllerinnen und Schüler" und „Studierende"?
2. Was ist das Hauptthema oder Hauptaussage des Artikels?
3. Was ist das BAFöG?

Text adapted from:
https://www.xn--bafg-7qa.de/588.php

BAföG

Das BAföG: Alle Infos auf einen Blick | Antrag stellen | Rechtsgrundlagen | Weitere Fördermöglichkeiten

BAföG für Schülerinnen und Schüler

BAföG – das ist nicht nur etwas für Studierende. Das BAföG ist eine finanzielle Unterstützung, mit der man eine Ausbildung ergreifen kann, die den eigenen Neigungen entspricht, auch wenn die Eltern sie nicht finanzieren können.

260.000 Schülerinnen und Schüler, die eine berufliche oder weiterführende Schule in Deutschland besuchen, finanzieren laut Statistischem Bundesamt ihre Schulzeit mit einer Förderung durch das BAföG. Dank der Förderung können sie ganz unabhängig von der finanziellen Situation ihrer Eltern einen Bildungsweg einschlagen, der es ihnen erlaubt, persönliche und berufliche Ziele zu erreichen.

Schülerinnen und Schüler, die einen berufsqualifizierenden Abschluss oder einen weiterführenden Schulabschluss erreichen wollen, können BAföG beziehen. Für Schülerinnen und Schüler an allgemeinbildenden Schulen gilt das aber nur ab Klasse 10 und wenn eine Unterbringung außerhalb des Elternhauses ausbildungsbedingt notwendig ist. Das ist zum Beispiel dann der Fall, wenn man den angestrebten Schulabschluss nicht in der Nähe des Elternhauses machen kann.

Figure 9: Pre-reading activity for the Education frame.

Figure 10 shows how a scene from a movie can be examined more closely to facilitate recall of vocabulary in the Experiencing Emotion frame. At designated parts of the conversation (noted by the numbers), students are asked to speculate about how the main character is feeling.

One of the most useful aspects of teaching with frames is that similar words can be distinguished from one another, and students begin to understand (without simply relying on English glosses) why to choose one word over another

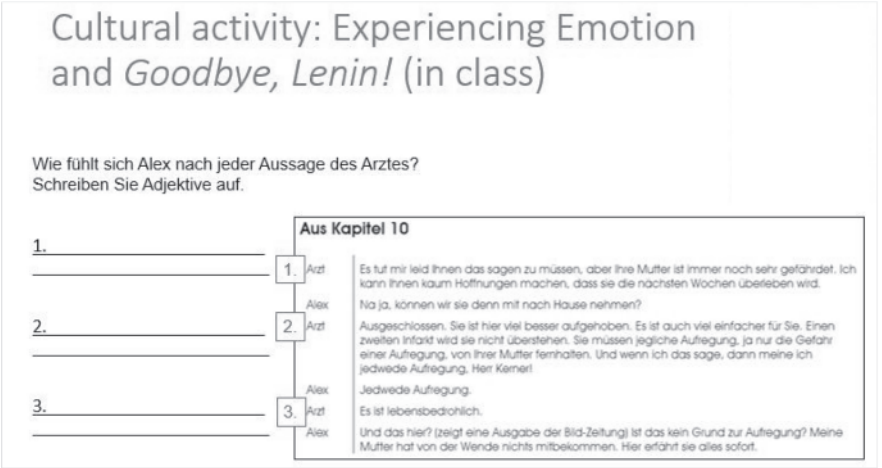
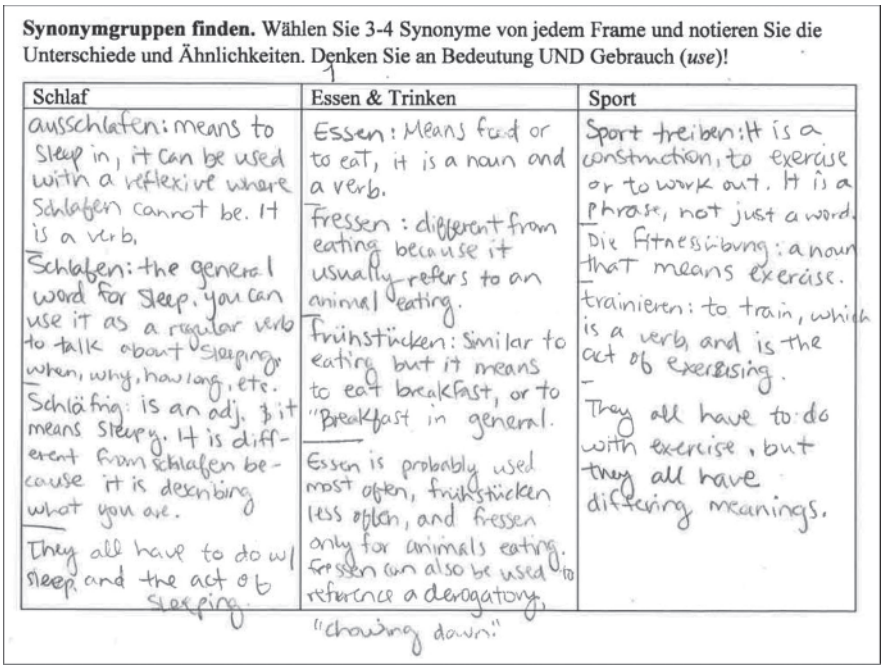


Figure 10: Activity for the Experiencing Emotion frame using the transcript for an important scene in the film.

when they describe similar situations. Activities in which students describe similarities and differences between near synonyms can be a useful way to review the vocabulary in a frame. Because students must explicitly state the differences in their own words, they are more likely to remember them later. In Figure 11, a student selected the synonyms (three to four synonyms from each frame: Sleep, Eating & Drinking and Exercise), then described important similarities and differences.

Another advantage to teaching with frames is that contextualizing students' language use is much simpler. A picture or other visual aid can serve to provide all the context necessary to ground student discourse in a specific set of circumstances, while the frame narrows the focus to a particular aspect of the situation. Figure 12, for example, shows how students can practice using new vocabulary to make statements about a predefined scenario that shows which items/entities fill which roles in the frame. This way, the student must attend to their language closely, as both the instructor and student can see exactly who is doing what. For example, in sentence (2), the student identifies each participant with their frame element role (in German, even though *Käufer* ['buyer'] is not listed in the G-FOL frame; only *Verkäufer* ['seller'] is). This shows that the student was acutely aware of the relationship of each entity to the opposing notions of *kaufen* ('to buy') and *verkaufen* ('to sell').



Synonymgruppen finden. Wählen Sie 3-4 Synonyme von jedem Frame und notieren Sie die Unterschiede und Ähnlichkeiten. Denken Sie an Bedeutung UND Gebrauch (*use*)!

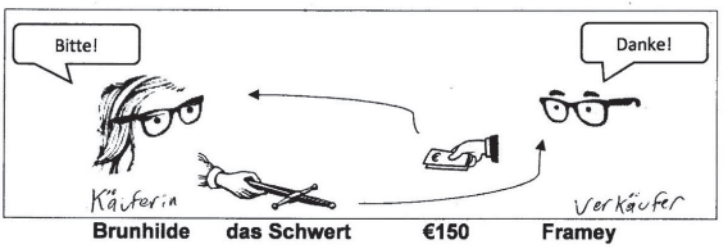
Schlaf	Essen & Trinken	Sport
ausschlafen: means to sleep in, it can be used with a reflexive where Schlafen cannot be. It is a verb. Schlafen: the general word for sleep, you can use it as a regular verb to talk about sleeping when, why, how long, etc. Schläfrig: is an adj. & it means sleepy. It is different from schlafen because it is describing what you are. They all have to do w/ sleep and the act of sleeping.	Essen: Means food or to eat, it is a noun and a verb. fressen: different from eating because it usually refers to an animal eating. frühstücken: Similar to eating but it means to eat breakfast, or to "Breakfast in general. Essen is probably used most often, frühstücken less often, and fressen only for animals eating. fressen can also be used to reference a derogatory "chowing down."	Sport treiben: It is a construction, to exercise or to work out. It is a phrase, not just a word. Die Fitnessübung: a noun that means exercise. trainieren: to train, which is a verb, and is the act of exercising. They all have to do with exercise, but they all have differing meanings.

Figure 11: Sample review activity for Unit 1 of German 201 (fall quarter).

7 Benefits of this approach

Students greatly benefit from using the G-FOL. Not only is the resource freely available online and ever-expanding to new topics, but it also allows them to learn vocabulary, grammar and culture concurrently, just as those concepts intertwine in the real world. The lack of division between grammar and vocabulary makes grammar more relevant because it is seen as necessary for communication, while the frames help students see relationships that influence grammatical patterns. The necessary inclusion of cultural information in lexical unit entries fosters cross-cultural understanding and intercultural competence. Bennett (2009) stresses the importance of intercultural competence today, and claims that engagement with the differences – plentiful in this approach – is key to its development. More recently, Lorenz et al. (2020) investigated beginning and intermediate L2 learners' impressions of working with G-FOL to learn new vocabulary. They show that both beginning and intermediate learners value G-FOL's highly contextualized learning and that both groups of learners feel confident in using the new vocabulary items because of the organization and categorization of the G-FOL site.

Vokabeln: Buying & Selling. Schreibe **logische** Sätze mit Wörtern aus dem Kasten, um das Bild zu beschreiben. (18 Punkte)



kaufen	verkaufen	bezahlen	kosten	mieten	ausgeben	der Preis
	der Kunde / die Kundin			der Verkäufer / die Verkäuferin		

1. Das Schwert kostet €300.
2. Brunhilde ist die ~~Ver~~käuferin und Framey ist der Verkäufer.
3. Brunhilde ist die Kundin von der Laden des Frameys.
4. Framey verkauft altes Schwerten.
5. Das Schwert des Brunhilde ist preiswert.
6. Brunhilde bezahlt mit Geld.

Figure 12: Sentence writing task for the Buying & Selling frame, completed by a student.

By frequently reviewing familiar forms and building on strong foundational knowledge, this approach provides a less effort-intensive way to teach new concepts. Rather than inserting grammar here and there where it seems necessary (as some traditional textbooks seem to do), grammar concepts are taught as they are relevant to the theme at hand, and are always connected to existing knowledge when introduced. This is better because research has shown it is easier to extend known forms to new contexts than to learn completely new forms (Bogaards 2001).

The G-FOL provides explicit instruction and examples for all LUs so that students do not need to rely on instructors to explain every cross-linguistic difference in meaning and use. Rose (2005) found that learners who were explicitly taught about pragmatics outperformed those who were merely exposed to pragmatic features. Detailed information about meaning and use of lexical units is a service to both teachers and learners. While particularly challenging forms will certainly be discussed in class, the lesser differences can be left for students to

discover on their own, saving class time while still providing a path to successful acquisition and use.

The nature of the G-FOL content fosters a balanced approach of inductive and deductive grammar instruction,[13] in which students are exposed to grammatical structures in the many examples contained within the frame, and also receive explicit grammar instruction for the most common structures.

The downside to using the G-FOL in the second year curriculum is the lack of activities to accompany the frames. This is slowly becoming less of a problem as more and more of the activities used at SOU over the past two years are posted online. Finding authentic texts and videos to accompany the resource can also be challenging. Lastly, there are not (yet) enough frames on the website currently to cover all the topics one would typically encounter in the first two years of German instruction.

8 Conclusions and outlook

The German Frame-semantic Online Lexicon (G-FOL) is a useful resource for intermediate German learners. It provides information about linguistic forms that is unavailable in other teaching materials and impractical to present in class. The frames it contains provide a context for any learning activity and thus help to contextualize any grammatical construction. Sections 5 and 6 showed how strategies for overcoming language acquisition challenges discussed in Section 2 can be implemented using a frame-based approach. In addition to promoting proficiency in using vocabulary and grammatical structures, the frame-based approach to teaching language fosters intercultural competence by allowing students to engage with the differences between the L1 and L2 cultures, and the incorporation of authentic texts and videos enriches students' learning experience.

As the G-FOL continues to expand its content, this approach could be extended beyond the second year of instruction. Instructors will have more and more freedom to choose which frames they would like to cover in their courses. This is especially valuable to instructors of German because open resources beyond the first year of instruction are scarce. Eventually, Frame-Semantic Online Lexica may also be created for other languages, allowing this approach to extend beyond the German classroom as well.

13 See Herron & Tomasello (1992) for evidence supporting a balance of inductive and deductive approaches to grammar instruction.

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