Transitivity Alternations in Sorani Kurdish

By

Hiba Gharib

Submitted to the department of Linguistics
and the Graduate faculty of the University of Kansas in partial fulfillment of the
requirement of the degree of
Master of Arts

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Abstract

Guerssel et al. propose Lexical Conceptual Structures to account for the syntactic properties of verbs in four languages. The Lexical Conceptual Structures reference a universal set of semantic components to predict the syntactic features of verbs. The authors neglect the fact that verbs in different languages often lack direct translations in other languages and may have different syntactic properties as well.

This study explores the semantic components and the syntactic alternations of a group of *cut* and *break* verbs in Kurdish. The results indicate that there is no clear semantic line between *cut* and *break* verbs in Kurdish. Guerssel et al. (1985) consider these verbs to represent two distinct semantic classes of verbs. They assume that the syntactic behavior of a verb can be explained in light of its semantic representation. Guerssel et al. did not consider all the semantic and pragmatic contexts that determine verb meaning and use. I investigated the use of Kurdish verbs in different syntactic and semantic contexts. I chose contexts in which the verbs indicate real as well as metaphorical actions.

The semantic components and the syntactic alternations of Kurdish verbs change according to their contexts of used. Although the Kurdish verbs are used in some of the same contexts as the English verbs *cut* and *break,* the Kurdish verbs have uses which are not predicted by the semantic representations of Guerssel et al. These results illustrate the difficulties involved in investigating semantic representations with translational equivalents in different languages.

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List of abbreviations

Adjp: Adjective phrase

AdvP: Adverb phrase

Asp: Aspect marker

Cause: Causative marker

CST: construct state

DAT: dative case

DECL: declarative

DEF: definite

ERG: eragative case

f: feminine

IMP: imperative aspect

Indef: indefinite article

INST: instrument

m: Masculine

Neg: Negative marker

NP: Noun phrase

O: Object agreement

Past: Past tense marker

Pl: Plural marker

Poss: Possessive marker

Prog: progressive aspect marker

Pres: Present tense marker

PP: Prepositional phrase

Prep: Preposition

PURP: purposive

s: singular

S: subject agreement

1: First person singular

2: Second person singular

3: Third person singular

Chapter 1

1.1 Introduction

In chapter 1 I discuss the Guerssel et al. (1985) study which proposes a connection between the lexical representation of verbs and their syntactic behavior. The study analyzes the verbs *cut* and *break* in four languages. I will discuss how Guerssel et al. connect the verbs' syntactic behavior with their semantic representation. In their analysis, Guerssel et al. depend on two levels of representation, the first is the lexical conceptual structure (LCS) representation, which means roughly "the meaning" of the verb, and the second level is the lexical structure (LS) which represents the syntactic behavior of the verb. I provide a detailed discussion of the (LCS) and the (LS) and how they are described in the previous studies. In the last section, I note some short comings in the Guerssel et al. study that need to be modified to fit the Sorani data.

1.2 Guerssel Model

Guerssel et al. (1985) create simple lexical entries that represent the meanings of the verbs *cut* and *break*. The writers assume that the syntactic behavior of verbs can be explained by reference to their meaning based on the way in which the elements of the semantic representation are arranged. Guerssel's study examines those aspects of meaning which contribute to verb participation in several syntactic alternations. Guerssel et al. refer to four lexical alternations in their study. The causative-inchoative alternation is a lexical alternation that characterizes pairs of verbs in which the intransitive member of the pair, the inchoative verb, denotes a change of state, and the transitive member of the pair, a causative, denotes a bringing about of this change of state (Pinon 2001). The conative is an alternation in which the object in the transitive form is demoted to a prepositional phrase headed by *at* in the intransitive form. The conative alternation

converts a change in state action to an attempted action, for example 'Sally swatted the fly' has the conative 'Sally swatted at the fly'. The middle alternation is an alternation in which the verb needs an adverb to convey a generic meaning, e.g., 'Flies swat easily'. The authors contrast the middle alternation with the passive alternation which does not require an adverb.

Guerssel et al. dealt with four languages: Berber, English, Warlpiri, and Winnebago. They claim that differences the syntactic alternations which verbs undergo can be connected to the semantic relation that an "agent" has with the predicate in the lexical representation of verbs. Guerssel et al. examine the behavior of *break* verbs as a representative of change-of-state verbs and *cut* verbs as a representative of motion-contact-effect verbs. They test the verb *break* in the causative/inchoative and middle alternations respectively,[1] as shown in (1). The verb *break* does not undergo the conative alternation as shown in (2). The verb *cut* undergoes the middle and conative alternations, but not the inchoative alternation.

(1)   a. Janet broke the cup
        b. The cup broke.
        c. Fine china breaks all at the slightest touch, but Corelle doesn't even break with a
           hammer

(2)   *Janet broke at the bread

(3)   a. The meat cut easily
        b. Margret cut at the bread
        c. *the bread cut

The middle alternation can be found with both verbs *cut* and *break*. There are some languages that allow these alternations without adding special morphology such as Berber, but other languages add verb affixes to express the different alternations that the verbs undergo such as in Warlpiri and Winnebago.

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[1] All the examples in (1) , (2), and (3) are taken from Guerssel et al. (1985).

Guerssel et al. (1985) propose that the syntactic behavior of verbs, within a language can be explained by reference to their semantic representation. The writers argue that "the distinctive syntactic properties characterizing each class arise from its lexical properties" (Guerssel et al., 1985:49). They claim that differences in transitivity alternations in these languages are attributed to the way the semantic representation of "agent" appears in the lexical representation of the verbs. They state that the agent of 'break' verbs CAUSES the action while the agent of 'cut' verbs PRODUCES the action. Guerssel et al. did not provide a definition for either the predicate CAUSE or PRODUCE.

The writers develop lexical entries for the verbs by providing detailed representations of the semantic and syntactic structures of the verbs. They use the lexical conceptual structure (LCS)[2] to represent the semantic information about the argument roles associated with the meaning of the verbs. They use the lexical structure (LS) to represent the syntactic structure of the verbs. They provide rules for linking the LCS and the LS and refer to the result as the Predicate Argument Structure (PAS).

Guerssel et al. only use the syntactic alternations to argue for differences in the LCS of *cut* and *break* verbs. They do not introduce independent semantic evidence to support their syntactic analysis. They use the predicate CAUSE in the LCS of the verb *break* and the predicate PRODUCE in the LCS of the verb *cut*, but they do not mention any reason for this difference. I discuss the implication of this distinction in chapter 2. Later studies follow the same approach and do not provide independent semantic tests to support claims about LCS. The lack of independent semantic tests is especially important when applying the Guerssel model to verbs in other languages since there is no assurance that a 'break' verb in another language has the same conceptual structure as the 'break' verb of English.

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[2] The LCS and the LS will be fully explained in the next section.

This problem becomes more complex when other languages do not have the same syntactic constructions that Guerssel et al. examine in their article. For example, Guerssel et al. use the conative alternation as a test to distinguish between the *cut* and *break* classes of verbs. Languages such as Berber lack a conative alternation which restricts the evidence available in Berber for the cut/break distinction and could even imply that the English verbs *cut* and *break* lack semantically equivalent predicates in Berber.

Guerssel et al. also fail to test the verbs with a range of objects. They restrict their analysis of each verb to its use with a single, prototypical object. The objects that speakers consider compatible with each verb provide primary semantic evidence about verb meaning. Metaphorical extensions of verbs provide further evidence about verb meaning. In this thesis, I will apply the Guerssel model to verbs in Kurdish and discuss both the syntactic and semantic differences with corresponding verbs in English. The results show that there are many limitations to the LCS proposed by Guerssel et al. and their proposal needs to be modified to account for Kurdish verbs.

1.3 Previous Studies on LCS and LS

The Lexical Conceptual Structure (LCS) is a level of representation that depends on decomposing verbs into smaller semantic elements (Fillmore 1970). The LCS uses a compositional structure to represent the meaning of the verb by showing the relations between the semantic components that form the meaning of the verb. Its components include representations for manner, motion, tool, direction, result, agent and theme.

The LCS always accompanies another level of representation which is the lexical structure (LS). The LS provides a syntactic level of representation, and shows the different

syntactic alternations in which the verb can participate. It provides a syntactic structure for the predicate argument relations of the verb.

The LCS and the LS are mapped together with a set of linking conventions (cf. Carter 1976, Ostler 1979). The linking conventions are set of rules that link the elements of meaning that are represented in semantic representation to verb arguments in the syntactic representation. Guerssel et al. proposed that merging the Lexical Conceptual Structure and the Lexical Structure results in the creation of the Predicate Argument Structure (PAS) which expresses the meaning of the sentence. Therefore, mentioning the LCS and the LS is always accompanied by mentioning the PAS since both of them complete each other.

Fillmore (1970) and Miller and Johnson-Laird (1976) were the first researchers to investigate how to decompose verbs into smaller elements. Those elements represents a set of semantic primitives[3] that cannot be analyzed anymore such as GO, BE, STAY, etc. The LCS requires a set of primitives to represent the meaning of verbs. According to Jackendoff (1983) the primitives represent the conceptual structure of a lexical entry in the brain of the speaker, those elements that combine together to form the meaning of the lexical item. In his work on the LCS, Jackendoff examined relations between the expression in the mind of the speaker and real objects in the world. For example, in the sentence 'Jack made John leave early,' there is an agent who initiates the action who is 'Jack'. The action in the sentence is recognized as Jack "causes" John to "go" away. And 'John' is the patient who has been affected by the action. Jackendoff claimed that the meaning of the verbs participates, to a great extent, in determining the syntactic behavior of the verbs.

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[3] Semantic primitives refer to the smallest basic elements in the components of verb meaning that cannot be analyzed more such as GO and BE.

Some of the current approaches such as Hale & Laughren (1983), Jackendoff (1983, 1990), and Dowty (1979) represent the semantic information in the form of Lexical Conceptual Structures that view verb meanings in the form of structured relations between semantic primitives[4] and syntactic projection, e.g., GO, BE, STAY, etc. For example, the act of drinking is conceptualized in terms of a causal event resulting in the conveyance of a liquid to someone's mouth (Pye, 1998), e.g.,

(4)   LCS drink: CAUSE (ACT (X, Y), BECOME (EMPTY(Y) BY DRINK (X, Z)))

This LCS contains two prominent argument roles:[4] the initiator of the causal event and the stuff being consumed. These arguments are projected into the syntax as the external and internal arguments of the verb respectively. The (X) in above representation represents the agent whose action causes the container (Y) to become empty by the action of (X) drinking the contents (Z). This LCS shows that the agent's action affects both the state of the container as well as its contents. This LCS does not account for the difference in meaning between 'Ann drank a cup of coffee' and 'Ann drank some coffee' because the LCS in (4) assumes that an act of drinking results in an empty container. The LCS predicts that drinking entails that the container will be empty as a result of the drinking event, but this is not true. As the sentence 'Ann drank some coffee' shows, drinking can occur without the result of completely emptying a container. Moreover, Dowty (1979:96) notes that deriving the verb *drink* from an LCS like that

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[4] The arguments are a term that is used in syntax to refer to the number of nouns that the verb selects in a certain context as the subject and the object.

in (4) is somewhat dubious since the action referred to by the primitive DRINK must be compatible with the generic action primitive CAUSE which is not spelled out by the LCS.

Other authors have used other terms to refer to the LCS. These include Lexical Relational Structures (Hale & Keyser, 1992; 1993), event structures (Rappaport & Levin, 1998a; Levin & Rappaport, 2005), semantic structures (Pinker, 1989), L-syntax (Mateu 2001a; Travis 2000), l-structure (Zubizarreta & Oh, 2004), and first phase syntax (Ramchand 2008). Representations called semantic forms (Wunderlich 1997a, 1997b) and semantic representations (Van Valin 1993; Van Valin & LaPolla 1997) are also close in spirit to LCSs.

Current syntactic theory views the verb lexicon as a container that includes a rich set of syntactic and semantic information (Bresnan 1978; Chomsky 1993; Disciullo & Williams 1986; Williams 1994). These studies continue to employ an LCS-like representation of verb meaning. These approaches employ an LCS without providing independent semantic tests for the components used to represent the meaning of verbs. They use syntactic tests as evidence for differences in the LCS and then point to the differences in the LCS to explain the differences in syntactic behavior.

These studies also neglect the fact that using verbs in different contexts can lead to changes in their syntax that implies a difference in the semantic components of the LCS. For example, the verb *break* can be used to break a cup and break a promise, but an English speaker does not accept the sentence 'Her promise broke'. Studies of verb meaning which propose an LCS representation should test the verb in many different contexts with different objects in order to prove whether the LCS captures the full range of the verb's meaning.

The LCS has been used not only in syntactic and semantic theories, but in the field of computational linguistics for data entry. For example, Nirenburg (1992) uses the LCS to create a

lexical entry for translation machines. He states that "our theory of lexical semantics includes a component of lexical knowledge that describes the syntactic encoding of arguments. This lexical knowledge consists of Lexical Conceptual Structures and Linking Rules." Nirenburg (1992) adds that the Lexical Conceptual Structure of words is extracted from the relationship between the predicates and their arguments. For example, to know that the English sentence 'Max interviewed Hester for a job' means that Max was considering hiring Hester, and not that Hester was in the position to hire Max, it is necessary to know that the interviewer role is expressed as the subject of the sentence (Nirenburg 1992, p.10). Nirenburg emphasizes that the LCS components are expressed by different elements in different languages and therefore the 'same' verbs in different languages may lack equivalent LCS representations.

Recently, the LCS model witnessed an expansion by taking into consideration not only the meaning components of a certain lexical item, but also how those components of the lexical items are changed when used in different contexts. For example, Levin & Rappaport (1988, 2005) have proposed rules that link two lexical meanings to create a new lexical meaning. They expanded the LCS of the lexical item to include not only the simple meaning of the lexical item itself, but also the different meanings that the lexical item can express in different contexts. Levin & Rappaport (1988, 2005) showed that a new LCS of a certain verb will be created when the relations among arguments of the verb are structured differently. Such argument-structure-building rules in English include assimilation of manner of motion and directed motion. They propose that a verb meaning may be represented as a predicate decomposition consisting of two components: an event schema and the root. The event schema that stands for the structural component of meaning which represents an event type and the root represents the verb

categorization as a state, result, manner, etc. The root is integrated into the event schema by "canonical realization rules" (Levin& Rappaport 1998:109).

For example, the event schema of a verb like *run* would be:

(5)   Manner [x ACT<MANNER>]

And the event schema of a verb like *result* would look like:

(6)   [[x ACT] CAUSE [y BECOME <RE-STATE>]]

Roots such as 'run' and 'result' are integrated into these schemas as ARGUMENTS in (5) or MODIFIERS (6) by canonical realization rules.

Levin & Rappaport (2005) assumed that two LCSs are combined together by a set of assimilation rules that map the semantic elements to form a new LCS. This new argument structure undergoes assignment of grammatical functions and syntactic encoding of arguments which is called Predicate Argument Structure.

All of the operations of merging two LCSs to get a new LCS that have been mentioned by the above linguists identify syntactic classes of verbs that undergo the same transitivity alternations. The verbs map their arguments onto the same grammatical functions, and convert their arguments syntactically in the same way. The goal is to tie specific semantic features of LCSs to the syntax of these verb classes, e.g., a change-of-state and an effect on a patient. In this respect, the syntactic patterns of verb classes define semantic components of verb meaning. This lexical semantics is language-specific because the syntactic features of verb classes and the

semantic features that are found in the LCS are not the same in different languages. The syntactic structure that a verb appears in is projected from its predicate-argument structure, which indicates the number of syntactic arguments a verb has, and some information about how the arguments are projected onto syntax as internal or external arguments (Marantz 1984, Williams 1981). Projecting the arguments from the semantic representation into syntax provides evidence for the role that semantics plays in determining the syntactic behavior of the verbs.

Many verbs show a range of what have been called argument-alternations, in which the same verb appears with more than one set of morpho-syntactic realizations for its arguments, as in the causative and dative alternations, in (7) and (8), respectively.

(7)   a. Pat dried the clothes
        b. The clothes dried

(8)   a. Pat sold the rare book to Terry
        b. Pat sold Terry the rare book

Some argument alternations seem to imply two alternate realizations of the same set of arguments (e.g., the dative alternation), while others seem to imply real changes in the meaning of the verb (e.g., the causative alternation) (Rappaport & Levin, 1998b). When the agent precedes the object (7a) the sentence is said to be in the causative alternation. When the object moves to the beginning of the sentence (7b), the sentence is said to be in the inchoative alternation. Each sentence expresses a different meaning. In (7a) there is an agent and that agent achieves an action on a theme. The action is drying and the theme is the clothes. The verb takes two arguments an external argument, the agent, and an internal one, the clothes to express the meaning of the whole utterance. While the action is achieved in (7b), the agent can be a natural

force as the sun or the wind. The verb takes only one argument, an internal one, the clothes, and to meet the syntactic requirements of the sentence, this internal argument moves to occupy the position of the syntactic subject. In sentence (8a) the direct object precedes the indirect object, while in sentence (8b) the indirect object precedes the direct one, but still the meaning is the same. Some researchers (Dowty 1979, Pinker 1989) claim the meaning shifts from a focus on the state of the book in (8a) to a focus on Terry in (8b). This difference in focus does not lead to a basic change in the meaning of the two sentences since in both of them denote an action of exchanging a theme achieved by an agent.

Linguists who developed theories of LCS propose that in addition to a verb's argument structure, it is possible to set apart a small set of recurring meaning components which determine the range of argument alternations a particular verb can undergo. These meaning components are inserted in the predicate decompositions such as LCSs. Thus, LCSs are used both to represent systematic alternations in a verb's meaning and to define the set of verbs which undergo alternate mappings to syntax.

Studies such as Patric Saint-Dizier (1997) analyze the LCS of the verbs according to the classes of the verb and the arguments they select. The idea is to divide verbs into different classes, and subdivide those verbs in accordance with the predicates they select. The LCS is a tool that helps to make the meaning of the verbs more explicit by decomposing each class of verbs into small sets of predicates and then subdivide those classes of verbs into smaller units. Patric Saint-Dizier (1997) states that the LCS has three main categories: a. the conceptual categories such as path, purpose, thing; b. the conceptual function such as Go, Cause for states, and Be for location; and finally, c. the semantic fields that express the spatial, temporal or possession features. Patric Saint-Dizier shows that the semantic classes of verbs can be defined

from syntactic behaviors and within each class there is a common form of argument structure. The arguments can be characterized by means of thematic relations. The thematic relation expresses the broad meaning that the verb arguments play with respect to the action described in the sentence. Thematic relations classify the role of each argument and its relation to a syntactic position in the sentence. The examples in (9) and (10) show how Patric Saint-Dizier (1997) exploits the LCS categorization to label verb classes. He stated that verbs which refer to monetary exchanges such as *sell* and *buy* can be characterized in accordance to the way the word *money* shows up in the LCS representation.

(9)   Representation of the verb *sell*
        ([event+CS ([thing I],[event EXC
        [event GO +poss ([thing J],
        [path FROM +poss ([thing K]),
        [To +poss ([thing I])])]],

(10)   Representation of the verb *buy*
        [event GO+poss ([MONEY],
        [path FROM +poss([thing I])
        TO +poss ([thing K])])]]]

The term MONEY is made explicit in (10). The term MONEY may not be mentioned overtly in sentences that include the verbs *buy* or *sell*. The money is usually implicit. It is said to be incorporated into the meaning of these verbs. The term EXCH indicates that there is an object which represents the theme, and this object is exchanged for money (Patric Saint-Dizier 1997: 207). The position and the relation between the word *money* and the term EXCH shown in (9) and (10) decides the difference in meaning between the verbs *buy* and *sell*. In the LCS of the

verb *buy*, the 'thing' follows the 'path' towards 'me' and the 'money' will GO in exchange to another possessor. In the LCS of the verb *sell*, the relation between "money" and "thing" on one hand, and between the possessor on the other hand is exactly the opposite. Patric Saint-Dizier (1997) used different representations to model the different classes of verbs. The Saint-Dizier study explicitly uses some elements in the LCS, which were previously used implicitly as in the case with the term 'money' in the above representation.

There are some studies such as Fillmore (1970) that do not mention the term LCS, but classify verbs according to the components of their meaning, which is exactly what the LCS does in later studies. For example, Fillmore (1970) states that the semantic behavior of *break* and *hit* verbs provides a key to the syntactic behavior of these verbs, the number of arguments they select, and the alternations they participate in. He shows the difference in the behavior of the verbs *break* and *hit* with their direct object and the prepositional objects in the following examples:

(11)   a. John hit the fence with the stick
        b. John hit the stick against the fence

(12)   a. John broke the fence with the stick
        b. John broke the stick against the fence

He observed that *break* entails a permanent change of state in its direct object argument, but this change does not apply to a *hit* verb. The difference in the behavior of those verbs is that the direct object of the verb *break* is the theme that undergoes a change of state, while the direct object of the verb *hit* does not undergo a change of state. The object of the verb *hit* can alternate with the indirect object as in (11) since neither the direct or indirect objects undergo a change of state. This explains why the verb *break* can undergo the inchoative alternation in English, while

the verb *hit* cannot. The verb *hit* needs both of its argument to express the meaning of the sentence. The action expressed by the verb *hit* needs an agent that achieves an action on the theme, the agent should be mentioned in the structure of the sentence. But in the case of the inchoative alternation, the verb *hit* should only appear with a theme that has undergone a change of state. This requirement prevents the verb *hit* from undergoing the inchoative alternation. This observation raises the question of whether the behavior of the verbs *break* and *hit* is syntactically and semantically the same in all languages. Guerssel et al. is one of the few studies to compare verb behavior in different languages.

All the studies that dealt with the LCS and the LS use the syntactic behavior of the verbs as evidence for the semantic components of the LCS. These studies do not provide independent semantic tests to establish the components of the LCS. It is especially important to test verbs in different contexts since many verbs have both concrete and metaphorical uses. Even though linguistic studies agree that the semantics of verbs is what decides their syntactic behavior; these studies do not establish methods and ways that help to show the different meanings that the verb may have in different contexts and in different languages. These studies typically refer to verbs from a single language used in one or two contexts.

1.4 LCS and LS Roles in Representation of the English Verb *cut*

In this section, I will present the LCS and LS representations for the verb *cut* that Guerssel et al. developed in their study. I will also show how Guerssel et al. apply the evidence from the causative, inchoative, middle and passive alternations to support their LCS and LS representations.

1.4.1 The Causative Alternation of the Verb *cut*

Guerssel et al. (1985) provide the following LCS of the verb *cut*:

(13)   Cut LCS: x produce CUT on y, by sharp edge coming into contact with y

The LCS in (13) specifies that the active participant carried out the act of cutting with a

tool that has an edge that is brought into contact with the passive participant (the thing). The

syntactic form in which the verb *cut* appears reflects its LS because the verb *cut* in the syntax

governs an NP that will be the V'-internal argument at the LS (Guerssel et al., 1985).

Syntactically speaking, any English sentence should contain an obligatory subject because of the

syntactical predication requirement. As the verb with its internal arguments constitute a

predicate, expressed as a VP in syntax (cf. Marantz 1984), the VP will require a subject (cf. the

Extended Projection Principle of Chomsky 1981). For example, the verb *cut* governs an NP (the

object) and both the cut verb and the NP it governs form a predicate which requires a subject.

The LCS of the verb *cut* shows that this verb denotes a process which requires more than one

participant to be achieved. The participants are represented by (x: the agent) and (y: the theme).

Since the agent (the active participant) is not linked to a position in the LS of the verb itself

(Guerssel et al., 1985), the agent can play the role of the subject for the verb *cut*. The NP that

occupies the subject position is assigned a nominative case and the NP that is governed by the

verb *cut* (the object) is assigned an accusative case. It is clear that all the Predication

requirements are met in the LCS and the LS of the verb *cut* in English.

Guerssel et al. (1985:51) cleverly use the predicate PRODUCE in the LCS of the verb *cut*

to show that the action is achieved through the use of a tool used by the agent because the agent

cannot directly achieve the act of cutting without a tool. In contrast, the predicate CAUSE that Guerssel et al. used in the LCS of the verb *break* gives the sense that the action is achieved directly by the agent. The following example provides a semantic test that shows the difference between using the predicates PRODUCE and CAUSE:

(14)   The company produces gum. (The company produces the gum by means of a manufacturing process that involves several steps)

(15)   ??The company causes gum to exist. (The company cannot directly, without any other factor, be the cause of the existence of that gum. This gives the sense that the company paid some farmers to plant some trees that have a juice, and this juice is used by the company to produce the gum).

Regarding Berber, Guerssel et al. state that the verb *cut* does not undergo the inchoative alternation which means it resembles English in this respect. They provide the following example:

(16)   lla   y-ttby   wryaz   ifilan
        IMP   3msS-cut   man-CST   strings
        "The man cuts strings"

Guerssel et al. state that the verb *cut* in Berber resembles the verb *cut* in English as Berber does not employ any specific morphology in its alternations. They do not provide an LCS for the verb *y-ttby* 'cut' in Berber, and therefore imply that the Berber verb has the same LCS as the English verb.

1.4.2 The Middle Alternation of the Verb *cut*

The middle alternation or the middle voice is found with verbs whose LCS denotes "an action involving an agent, but in the middle alternation this participant does not receive a

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syntactic realization" (Guerssel et al., 1985). The existence of an agent in the LCS is understood as an "implicit agent" (Keyser and Roeper, 1984).

(17)   a. The man cut the string
        b. The strings cut *easily*

There is some controversy about the analysis of adverbs in the middle voice, as in (17b). Tsimpli (1989) argued that the adverb in the middle voice is syntactically licensed. Tsimpli (1989:248) claims that 'imperfective passive affix selects a manner adverbial whose presence then becomes obligatory by some version of the Projection Principle'. Ackema & Schoorlemmer (1994) and Kakouriotis (1994), argue that the requirement for an adverb is pragmatic in nature. They highlight the role that context plays in the acceptability of middles. Condoravdi (1989) claims that the adverb is required on semantic grounds. Middle predicates refer to generic actions which Condoravdi claims require the use of a generic operator. The adverb in the middle alternation restricts the scope of the generic operator to generic actions that can be achieved in the manner specified by the adverb. Guerssel et al. do not provide an explanation for the use of adverbs in the middle construction.

The example in (17b) supports Guerssel et al'.s proposal that the middle alternation is found with verbs whose LCS denotes an action involving an agent. Since the middle construction focuses on the action rather than its result, the difference between the theme of a break verb which undergoes a change of state and the theme of a cut verb which undergoes an action by means of contact is not relevant. The focus on the action allows both break and cut verbs to undergo the middle alternation (Guerssel et al., 1985)

The verb *ttbbi* 'cut' in Berber also undergoes the middle alternation as in:

(18)   lla   ttbbi- n   ifilan
        IMP   cut- 3mpS   strings-CST
        "The strings cut." (Middle only)

The sentence in the middle alternation in Berber, even without an adverb being used in sentence,

is still grammatical. Guerssel et al. do not provide an LCS for the verb *cut* in the middle

alternation, but they provide the explanation mentioned above and they state that English and

Berber have the same LCSs for the *cut* verbs in both languages. Guerssel et al. do not discuss the

morphology of the Berber middle nor do they account for the obligatory adverb in the English

construction. Their LCS for *cut* does not account for these differences.

1.4.3 The Conative Alternation of the Verb *cut*

The conative alternation is the third alternation which the verb *cut* undergoes (19).

(19)   Margret cut at the meat.

The LCS of the verb *cut* needs to be modified a bit in order to be able to express the

intended meaning in the conative alternation. Sentence (19) shows that the "tool" does not

succeed in cutting the object, but rather it moves along the object without having an effect on it.

Guerssel proposed the LCS for the verb *cut* in the conative alternation shown in (20).

(20)   Cut Conative LCS: x causes sharp edge to move a long path toward y, in order to produce
        Cut on y, by a sharp edge coming into contact with y (Guerssel et al., 1985).

The LCS in the conative alternation includes the clause 'in order to produce Cut on y' which describes an intention to produce the result and does not entail that the desired result is actually achieved. In the causative alternation the LCS includes the effect clause that entails that the intended result is achieved. This is considered a change in the LCS of the verb *cut*, but this change in the LCS of the verb *cut* changes the syntactic realization of the direct object to an oblique phrase in English. Guerssel et al. assume that the LCS of the verb *cut* includes two clauses, one of them denotes the action of contact between the active participant and the passive participant, and the other clause denotes the effect of the action. In the conative alternation, the intention is highlighted and the desired effect clause is demoted to a subordinate clause to describe the content of the intention.

The conative alternation[5] does not exist in many languages, including Winnebago and Berber, because in the conative alternation the tool does not affect the object. The meaning of verb *cut* in Berber and Winnebago entails that the object be affected. Since there is no effect of the tool on the object, another verb is used in Berber and Winnebago to express the conative alternation as Guerssel et al. state:

(21)   *Ut* (Berber) *guch* (Winnebago) LCS: x cause ENTITY to move along path towards y, in order to produce EFFECT on y, by coming into contact with y (Guerssel et al., 1985).

The Guerssel et al. LCS of the conative alternation in Winnebago and Berber cannot be considered the same as LCS in English since Winnebago and Berber lack the conative construction. Instead, these languages use different verbs in similar semantic contexts. Guerssel

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[5] Kurdish does not have conative alternation; more details about Kurdish will be stated in the next chapter.

et al. state that the verb that is used in the equivalent contexts in Berber does not imply that there is a 'contact' between the "ENTITY" [The LCS for *ut* contains a contact clause] and the passive participant. This means that the CONTACT element is missing in the LCS of the verb *cut*[6] in Winnebago and Berber which is one of the elements in the LCS that differentiates the verb *cut* from the verb *break* in English. This example illustrates the difficulty of using syntactic constructions as evidence for semantic equivalence. The absence of syntactic constructions in another language can be the result of either a syntactic or semantic difference across the languages. Guerssel et al. do not explore the implications of this difficulty.

1.5 LCS and LS Roles in Representation of the English Verb *break*

In this section, I will provide a detail discussion of the roles of LCS and LS in the representation of the verb *break* as Guerssel et al. (1985) discuss them in their study.

1.5.1 Causative/Inchoative Alternations in *break*

The verb *break* undergoes the causative/inchoative alternations as in the following:

(22)　　a. Janet broke the cup
　　　　b. The cup broke

Guerssel et al. (1985) proposed that the verb *break* has a monadic LCS unlike the verb *cut*, which has a dyadic one. The inchoative alternation in sentence (22b) results from a monadic LCS that has the form of:

(23)　　Break LCS: y come to be BROKEN

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[6] Guerssel at el (1985) study does not provide the verb that is used in Berber in the conative alternation.

What could be understood from the above LCS is that the passive participant "the cup" is in the state that is produced by the verb. There is only one argument "the cup" in the LCS, and when it is extended into the syntax, the argument in the LS represents the object that is affected by the action encoded by the verb. The verb *break* in the sentence (The cup broke) is considered an unaccusative verb, which is an intransitive verb whose syntactic subject is not a semantic agent but rather a semantic object. Therefore, the sentence (22b) is acceptable, while the sentence (*the meat cut) is not acceptable because the verb *cut* is a dyadic verb and it needs both of its arguments in the sentence. Guerssel et al. claimed this would be good evidence that the LCS of the verb *break* is monadic and has a single passive argument that explains why the verb undergoes the inchoative alternation. An internal factor or an external one could play the role of the agent in the inchoative alternation. For example, if a cup broke or crack suddenly appeared without any reason it might be an internal issue in the structure of the cup that lead to this state, or it might be because the cup was badly made. The agent in the inchoative alternation is not overtly expressed nor is one implied. Guerssel et al. claim that this test shows that the LCS of the verb *break* is different from the LCS of the verb *cut*.

Guerssel et al. propose that the LCS of the causative alternation of the verb *break* is derived by a productive rule in which the basic LCS of the verb *break* is embedded as a complement of the dyadic causative predicator CAUSE. This form derives a dyadic LCS that has the form shown in (24).

(24)   X cause (y come to be BROKEN)

According to the new derived LCS, the verb *break* has an LCS that includes an active participant that acts on a passive participant and resembles the LCS of the verb *cut*.

Guerssel et al. study did not provide an example of the Berber verb *break* in the causative/inchoative alternations. Instead, they provide sentences with the Berber verb *open* (25), and claim that this verb has the same LCS form as the English verb *break*.

(25)   lla   y-rzzem   wryaz   tawwurt
           IMP   3msS-open man-CST   door
           "The man opens the door"

Guerssel et al. also provide the inchoative form of the verb *open* in Berber (26).

(26)   lla   t-   rzzem tewwurt
           IMP   3msS-open   door-CST
           "The door is opening" (Inchoative/the door opens/middle)

Guerssel et al. neglect the fact that there is a difference in the elements of meaning between the verb *break* and *open*. They assume that since the verbs *break* and *open* behave the same syntactically in Berber they should have the same LCS. This point remains unproven without an equivalent example for the Berber verb *break*.

1.5.2 The middle alternation of the verb *break*

As I noted above, the middle construction focuses on the result of the generic action so the difference between the agent of a *break* verb which CAUSES the action and the agent of a *cut* verb which PRODUCES the action is not relevant. The generic interpretation allows both

break and *cut* verbs to undergo the middle alternation (Guerssel et al., 1985). The example in

(27) shows that the verb *break* undergoes the middle alternation.

(27)   Fine china breaks at the slightest touch, but Corelle does not even break with a hammer

        (Guerssel et al., 1985).

        Guerssel et al. did not provide an example of the middle alternation in Berber, but they

state that "the construction in Berber with similar properties provides evidence that the PAS of

Berber is the same as that of English" (Guerssel et al.1985:53). This issue is not as easy as it

looks, therefore I will explore it further with data from Kurdish.

1.5.3 The conative alternation of the verb *break*

        Guerssel et al. note that the verb *break* does not undergo the conative alternation (28).

(28)   *Janet broke at the bread

As discussed above for the verb *cut*, The LCS for the conative alternation includes a clause

which describes an intention to produce a result and does not entail that the desired result is

actually achieved. Break verbs have a semantic representation with a change of state complement

that is not compatible with the intentional structure of the conative semantic representation and

therefore do not undergo the conative alternation.

1.6 Shortcomings of the Guerssel et al. Study

Guerssel et al. (and other linguists) propose that verbs of separation are divided cross-linguistically into 'cut' and 'break' verbs according to the meaning they express. They assume that these meanings can be captured by an LCS and LS that employ universal principles of syntax and semantics. They assume that the syntactic behavior of a certain verb within a language can be explained in light of its lexical representation and the way in which the elements of the representation are arranged. The following points summarize Guerssel et al'.s study:

1. The verbs *cut* and *break* are belong to two classes of verbs which have different semantic representations.

2. The LCS for *break* contains a CAUSE predicate with a change of state complement while the LCS for *cut* contains a PRODUCE predicate which has a motion-contact complement.

3. The semantic differences represented in the LCS of verbs account for their syntactic behavior. Only verbs with an LCS that refer to a change of state like that of *break* undergo the inchoative alternation. Only verbs with an LCS that do not refer to a change of state like that of *cut* undergo the conative alternation. Both classes of verbs undergo the middle and passive alternations.

I have noted several shortcomings in the Guerssel study. Guerssel et al. propose a difference in the LCS representations for *cut* and *break* to account for the syntactic behavior of these verbs. They did not discuss the semantic content of the predicates CAUSE and PRODUCE that they use in the LCS representations, nor do they suggest independent semantic evidence to motivate the CAUSE and PRODUCE distinction in predicates.

The absence of a semantic analysis for the LCS representations undercuts Guerssel et al'.s proposed changes to the LCS representations in the inchoative and conative alternations.

Their proposed changes are unmotivated semantically and only provide an *ad hoc* argument for each alternation. Guerssel et al. do not provide an LCS representation for the middle alternation or motivate the obligatory use of an adverb in the English middle alternation.

These shortcomings become more serious when Guerssel et al. analyze *cut* and *break* verbs in Berber, Warlpiri and Winnebago. Guerssel et al. do not provide any semantic evidence beyond broad translation to support their assumption that the 'same' verbs can be identified in different languages. Some type of independent semantic test is needed to evaluate the similarities of verbs in different languages.

Guerssel et al. do make clear that some languages lack a conative alternation comparable to the alternation in English. The syntactic differences raise a further concern in evaluating Guerssel et al'.s hypothesis in different languages. Is the middle alternation in Berber, which lacks an adverb, really equivalent to the middle alternation in English? On what basis? Guerssel et al. are reduced to using different syntactic constructions in different languages to argue for universal semantic components. This is not an acceptable linguistic practice.

1.7 Kurdish 'cut' and 'break' Verbs

My project explores the causative, inchoative, middle and passive alternations in Kurdish. I deal mainly with the contact-effect verbs and the change-of-state verbs, more specifically with *bre* 'cut' and *shka* 'break' verbs, showing that there is no clear semantic and syntactic line between them. The verb *shka* 'break' in Kurdish does not refer only to physical breaking,[7] e.g. the 'breaking' of a glass or door, but also to a metaphorical[8] action of 'breaking'. The same is

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[7] What is meant by "physical" is that the change caused by the action is seen. There is visible effect on the object that is the result of achieving the action.
[8] The application of the verb that is used to describe the action on abstract objects.

true regarding the verb *bre* 'cut' because one might 'cut' a piece of meat or 'cut' a conversation in Kurdish. Metaphorical extensions create the problem of accounting for how the determinants of a physical action extend to metaphorical actions. There must be some semantic components that are shared by physical and metaphorical uses of verbs since speakers use the same verb for both actions.

Speakers of different languages use different verbs in similar contexts. For example, an English speaker would use the verb *break* to state that some burglars broke into a house and robbed it. The verb *break* can express either a physical 'breaking' when the burglars 'break' a door or a window to enter the house, or it can refer to a metaphorical 'breaking' if the burglars enter the house without actually 'breaking' anything. In the case of metaphorical breaking, the burglars 'break' the rules that prevent them from entering another's property. A Kurdish speaker would use the verb *bre* 'cut' to express the same event. A Kurdish speaker would say that the burglars 'cut' the house by either physically 'cutting' the chain that locks the door or metaphorically cutting the edge that separates the public property from the personal property.

One cannot draw a sharp line to separate the verbs *bre* and *shka* in Kurdish because there are many objects that undergo the action of both verbs such as 'a branch of tree' that can be *bre* 'cut,' *shka* 'break' and also *bchre* 'cut by force'.[9]

There cannot be one fixed LCS of a verb as Guerssel et al. propose because the verb may have different meanings in different contexts, for example the verb *shka* 'break' in Kurdish does not have one fixed meaning. It does not necessarily refer to a change of state in the object, but it might mean just 'stop working'. For example in Kurdish one can say:

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[9] The verb *bchre* 'cut by force' will be discussed in more detail in chapter 3.

(29)   Otomobel-aka- m   shk-a
         car   the 1   break-past (stop working)
         "My car stopped working"

This example will cause a problem to the LCS of the verb *break* proposed by Guerssel et al. (1985), and the LCS should be extended to include the new meaning referred by the verb *shka* 'break' in Kurdish. The other issue is related to the nature of the objects that undergo the action of *shkandin* 'breaking' in Kurdish. For example, if a child throws a stone towards another child and the stone hits the head's child, the action in Kurdish is described as *shkandin* 'breaking' while in English it is said that the child's head is injured. This means that there is a total shift in the speaker's understanding of the verb *break* in English and *shka* 'break' in Kurdish as in the example in (30).

(30)   Azad bardek- e   halda sar-   i Rawazi shk- a-   nd
         Azad stone indef   threw head- of Rawaz break-pas cause
         "Azad threw a stone that injured Rawaz's head."

The verb *bre* 'cut' in Kurdish has another story because in Kurdish there are two different verbs that are used to refer to the action of cutting. They have the same form *bre*, but they differ in their use and their alternations. The first verb is used to refer to the action of physical cutting such as cutting a cloth, a tree, or a piece of paper. The other verb is used to refer to the action of metaphorical cutting such as cutting electricity or water. These two verbs also differ in undergoing different alternations. The verb *bre*, which is used to refer to the action of physical cutting, cannot be used in the inchoative alternation because an agent is always needed to

achieve the action, while the verb *bre* that is used to refer to the action of metaphorical cutting

can easily participate in the inchoative alternation.

In my project I will first test the verbs *shka* 'break' and *bre* 'cut' in Kurdish by applying

the Guerssel et al. model to each of them to see whether they have the same behavior

semantically and syntactically. Second, I will apply Fillmore's (1970) test to examine whether

the verb *shka* 'break' has the same components of meaning as the English verb *break*. Finally, I

will use the verbs *shka* 'break' and *bre* 'cut' in different contexts with different objects to test if

they maintain the same components of meaning. If there is a change in the semantic components,

there would be a change in their LCS.

In my work I analyze the points mentioned in the Guerssel et al. (1985) study that need to

be modified for Kurdish. The Guerssel study assumed that the verb *cut* in English and its

counterpart in the languages that have been tested in the study is always a transitive verb that

needs an agent and a theme. Kurdish has two verbs that mean *cut* and one of them can be used

intransitively. Therefore, Guerssel et al'.s study should be modified to be able to include the

behavior of the *cut* verbs in Kurdish. First I will apply Guerssel et al. (1985) to the verbs *shka*

'break' and *bre* 'cut' to demonstrate the similarities and differences between those verbs in

English and in Kurdish.

In the next chapter I will provide an introduction to Kurdish grammar and the syntax and

semantics of the Kurdish verbs *cut* and *break*.

Chapter 2

2.1 Introduction

       The second chapter of my thesis has two main sections. The first section presents the basic syntax and morphology of the Kurdish language, more specifically the Sorani dialect. The second section provides a detailed syntactic and semantic description of the verbs *shka* 'break' and *bre* 'cut' in Sorani. My goal is to compare the verbs *break* and *cut* in English and Kurdish to determine the similarities and differences in the uses and characteristics of these verbs in both languages. I then use the Kurdish data to test the claims made by Guerssel et al.

2.2 The Kurdish Language and Sorani Dialect

       Kurdish belongs to the Iranian languages, which make up the Indo-Iranian branch of the Indo-European languages family (Abdullah, 1967; McCarus, 1959; Fattah, 1997). Kurdish is spoken in western Asia. The languages most closely related to Kurdish are Balochi, Gileki, and Talysh. Those languages belong to the northwestern branch of the Iranian languages. Kurdish is spoken in Iran, Iraq, Turkey, Syria, Lebanon, Armenia, and Azerbaijan. Kurdish has many different dialects and sub-dialects. Two general divisions are Sorani, which is called central Kurdish, and Badinani, which is called northern Kurdish.

       The most important difference between Sorani and Badinan resides in the fact that Sorani is an accusative language while Badinani is ergative. Thus, in Sorani the verb invariably agrees with the subject, while in Badinani dialect, the syntactic pattern of transitive sentences in the past tenses is a typically ergative one in that the NP with which the verb agrees is not the agent but the goal (Bynon 1979:16). My research was done on Sorani, which is spoken in Sulaimnyha in the north of Iraq, and Sinnha in the western part of Iran.

2.2.1 The Verb System in Kurdish

      This section explains the factors that make the verb system in Sorani a complex system. I will state the different kinds of verbs, how they are formed, and the characteristics of each of them. I will support my explanation with data and sentences from Sorani. I will explain how negation and interrogatives are expressed in Sorani. The overall goal of this section is to provide a descriptive background about the verb system in Sorani.

      The verb system in Sorani is a highly complex system, not only because the verb incorporates, among other things, tense, mood, aspect, number, causative, person, passive, and other markers, but also because verbs in Sorani can be used within a sentence, or they can constitute an entire utterance since Kurdish is a pro-drop language as in (31).

(31)   da- shk- e   -n   -im
          prog-break-pres-cause-1
          "I am breaking it"

      In Sorani, the subject agrees with the verb in subject and number. This agreement is realized as an agreement marker, or a clitic that shows up at the beginning or end of the verb as in (Table 1).

Number	Person	Pronoun	Example
singular	I	-m	**mi**n dar - aka **m-**shk- a- n I - tree- the 1- break- past- cause 'I broke the tree'
	you	-t	**to** dar- aka- **t-**shk- a- n you tree- the- 2-break-past-cause 'You broke the tree'
	he/she/it	-i	**aw** dar- aka- **I** shk- a- n s/he tree- the- 3 break-past-cause 'S/he broke the tree'
plural	we	-m-an	**ema** dar- aka- **m-an** shk- a- n we tree- the- 1- pl break-past-cause 'We broke the tree'
	you (pl)	-t-an	**ewa** dar- aka- **t-an** shk- a- n you tree- the- 2-pl break-past-cause 'You (pl) broke the tree'
	they	-y-an	**aw-an** dar- ak- **y-an-** shk- a- n 3-pl tree- the- 3-pl- break-past-cause 'They broke the tree'

Table 1. Perfective agreement marking in Kurdish

Negation and interrogation are marked on the main verb in Sorani. Unlike English, Sorani has no auxiliary verbs, negation is expressed by the morpheme *na,* which precedes the main verb such as:

(32)   mn- esh   aka- m-   kird
        1   work   the 1-   do_past
        "I did the work"

(33)   mn   esh-   aka-   m   na-   kird.
        Is   work   the   1-   neg-   do_past
        "I did not do the work"

Kurdish is a final verb language, the word order is: SOV. Interrogative and imperative cases are expressed either by using the main verb with a rising-falling intonation, or by using a

separate pronoun with the main verb for emphasis. For example, the pronoun *to* 'you' is added

for emphasis in (34).

(34) To panjar aka- t- shk- a-   n-(d)?
      you window the- 2- break-past- cause?
      "Did you break the window?"

Verbs in Sorani are divided into simple, compound and complex verb classes.[10] The

simple verbs contain a single morpheme such as *buu* 'became,' *chuu* 'went,' *shkan* 'break,' and

bran 'cut'. The examples in (35) and (36) illustrate two simple verbs.

(35) Buu (become)
      Kur- aka gawra   buu
      boy- the older   become_past
      "The boy became older"

(36) Krd (do)
      nan-   aka- m   kird.
      bread- the- 1   do_past
      "I baked the bread"

The simple verb *buu* 'become' in (35) is preceded by the adjective *gawra* 'older' to

express the intended meaning, while in (36) the verb *kird* 'do' is preceded by a noun *nan* 'bread'

to express the intended meaning.

Compound verbs in Kurdish consist of a non-verbal-element, which can be a noun,

adjective, adverb, or preposition, and a verbal element that can be simple or complex. The

meaning of the whole verbal construction is expressed by the combination of both verbal and

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[10] In my division of the Kurdish verbs, I mainly depended on Fathullah (2004).

non-verbal element. Sometimes the meaning of the verb compound can not be predicted from the

meanings of the original constituents as in (37).

(37)   Compound verb in Kurdish
        Dast+breen
        hand+cut
        "To trick somebody"

Complex verbs in Kurdish contain a bound morpheme in the form of a prefix or suffix in

combination with a verbal element as shown in (38).

(38)   Complex verb in Kurdish
        Kurse ka-   m   hal-bre
        chair- the- 1   up-cut_ past
        "I lift up the chair"

In (38) the verb *bre* 'cut' is used and it is preceded by an suffix that has a directional meaning.

When *hal-* is added to verbs it indicates that the action is achieved from bottom to top. It adds a

new meaning component to the meaning of the verb *bre* 'cut' which is directionality. The

sentence can be translated literarily as 'I cut the relation between the chair and the ground by

lifting up the chair from bottom to top'. The most widely used affixes are *hal-* 'up' and *da-*

'down'.

2.2.2 The Prefixes *ha-l* and *da-* in Kurdish:

In some cases the prefixes *hal-* and *da-* completely change the meaning of the original

verb. The following examples illustrate some of these changes.

(39) a. kur-   aka   gosht- aka-   i   br-   e
        boy-   the   meat- the-   3   cut-past
        "The boy cut the meat"

b. Kur- aka xoi la diak- i da- bre-i
   boy- the himself prep mother- 3 off- cut-past
   "The boy cut himself off from his mother"

c. Kur- aka kurse- ka- i- hal-br- e
   boy- the chair- the- 3 up-cut-past
   "The boy lifts the chair"

(40) a. Azad wir- aka- i bchr- e
     Azad wire- the- 3 cut-past (by force-without a tool)
     "Azad cut the wire by force."

b. Azad qumash- aka- i da- bchr-e
   Azad cloth- the- 3 down-cut-past (by force from top to bottom)
   "Azad cut the cloth by force from top to bottom"

c. Azad quto- ka- I hal- bchr- e
   Azad can- the- 3 down-cut- past (by force from top to bottom)
   "Azad opened the can by force from top to bottom"

(41) a. Dana dar- aka- i shk- a- n
     Dana branch- the- 3 break-past-cause
    "Dana broke the branch"

b. Dana dar- aka- i da- shk- a- n
   Dana branch- the- 3 down-break-past-cause (by pulling it down-top to bottom)
   "Dana broke the branch from top to bottom"

c.*Dana dar- aka- i hal-shk- a- n
   Dana branch- the- 3 up-break-past-cause (from bottom to top)
   "Dana broke the branch from bottom to top"

In sentence (39a) the verb *bre* 'cut' expresses an action of cutting by an agent on a theme. The verb *bre* 'cut' indicates that the action is achieved by a sharp-edged tool, and there must be contact between the theme and the tool. There is no difference between Kurdish and English in this context. In sentence (39b) the prefix *da-* is attached to the verb *bre* 'cut' and adds a new meaning component. The English equivalent of the verb *dabre* is cut off, and in most of the cases it expresses a psychological and spatial cut rather than a concrete cut performed with a tool on a thing. The prefix *da-* adds a psychological dimension to the meaning of the verb. The prefix *da-*

usually gives the nuance that a small amount is being cut from a larger amount, or there is a part that is taken from the whole. Sentence (39c) includes the verb *bre* 'cut,' but this time with *hal-* added to it. The prefix *hal-* indicates that the action is done from bottom to top. In sentence (39) the prefix *hal-* is added to the verb *bre* 'cut' and this prefix specifies the direction of the action to be done from bottom to top. Sentence (39c) means literally that the "boy cuts the relation between the chair and the floor" by lifting the chair.

The verb *bchre,* which means literary 'cut by force' is used in (40a). There is no exact English equivalent for this verb. English utilizes the verb *cut* accompanied by other verbs to express a similar meaning. In (40a) the verb *bchre* is translated into the verb 'cut' plus the adverb by force, but (40b) needs some explanation because the prefix *da-* is added to the verb. The context expresses an action of cutting that is achieved by force without a tool, and the action is done from top to bottom. Sentence (40c) expresses a new meaning because the prefix *hal-* is added to the verb *bchre*. When anyone opens a can, he lifts the lid up to achieve the action. For example, the verb *halbchre* 'open' means that someone removed the lid from a can or jar, and this could be done by using a tool or with bare hands. At the same time the direction of the action is from bottom to top.

Sentence (41) includes the verb *shka* 'break,' and it denotes an action done by an agent on a theme. The action changes the state of the theme from one piece into two or more pieces. The verb *break* does not show whether the action is achieved by a tool, hands, or even by some internal factors. Adding the prefix *da-* to the verb *shka* 'break' gives it more specification and limits its meaning. The verb *dashka* in (41b) denotes that the action of breaking is done with bare hands and it is done from top to bottom.

The prefix *hal-* cannot be added to the verb *shka* 'break' for semantic reasons. The prefix *hal-* means that the direction of the action is done from the bottom to top. Since the action of breaking in the case of the prefix *hal-* is done with bare hands and needs control over the theme (which means to achieve it from top to bottom) the context contradicts the meaning expressed by the prefix *hal-*. Thus *hal-* cannot be used with the verb *shka* 'break' in Kurdish.

2.2.3 Sorani verb alternations

Verbs in Sorani undergo the causative/inchoative alternation. The inchoative form for the verb *dra* 'tear' is shown in (42) while the causative form of the same verb is shown in (43).

(42)   Kagaz- aka dra
        Paper-   the tear_past
        "The paper tore"

(43)   Kur- aka kaghaz- aka- i dra- n
        boy- the paper-   the- 3- tear_past-cause
        "The boy tore the paper"

Verbs in Sorani can be divided into three classes according to the causative marker attached to them. The first class needs the causative marker -n. (e.g., the verb *dra* 'tear'), the second class does not have a causative marker in the causative alternation (e.g., the verb *bre* 'cut'), and the causative marker is optional in the third class, in that it can be added or not without changing the meaning of the verb (e.g., the verb *bchre* 'cut by force').

Verbs in Sorani do not undergo the conative alternation because Sorani does not have this alternation. If the native speaker of Sorani wants to express a conative meaning s/he resorts either to the use of the negative form of the verb to refer to the fact that the action has not been

achieved as in (44), or s/he adds the word *hawlida* 'try to' to the verb to indicate that the action is

not achieved as in (45).

(44)   Kur- aka gosht- aka- i   na- br-   e
        boy- the meat- the- 3   not cut-past
        "The boy did not cut the meat."

(45)   Kur- aka hawlida gosht- aka   b- br-   e
        boy- the try   meat- the   to cut-past
        "The boy tried to cut the meat"

Sorani has a middle alternation that verbs undergo. The verb in the middle alternation is always

accompanied by an adverb that describes the way the action is achieved (46).

(46)   Kagaz ba   asani da-dr-e
        paper prep easily asp-tear-pres
        "Paper tears easily"

Sorani has a passive form that is distinct from the middle. In the structure of passive

sentences, the passive morpheme -*ra* is attached to the end of the verb (47).

(47)   Panjar-   aka shke-   n-   ra
        Window-   the break_past-cause-passive
        "The window was broken"

The distinct passive morphology provides a further test for the hypothesis of Guerssel et

al. since the passive and middle constructions in Sorani have distinct morphological and lexical

realizations. The middle construction requires an adverb in addition to its derivational

morphology.

2.3 The Verb *shka* 'break' in Sorani

The verb *shka* 'break' can be translated into English as 'destroy', and it expresses some form of fracture and separation into pieces (Abdullah, et al. 2004). The verb *shka* does not specify the kind or the means of the 'breaking' action. It is not easy to define the nature of the object that undergoes the action of 'breaking'.

2.3.1 The syntax of the verb *shka* 'break'

The verb *shka* 'break' in Kurdish can undergo the causative alternation, and the verb expresses an action that is achieved by an agent (48).

(48) Kur- aka dar- aka- i shk- a- n(d)
      boy- the tree the- 3 break-past-cause
      "The boy broke the tree"

In (48) the verb *shka* takes a subject and an object. The verb *shka* belongs to the set of verbs that attach causative suffix *-n* to indicate the causative derivation. Since Kurdish is an SOV language, the object follows the subject and with the verb in final position. The action expressed by the causative form of verb *shka* 'break' can be achieved by a body part (49) or by using a tool such as a hammer, or a stone (50). The tool that is used should be heavy.

(49) gwez- aka- m shk- a-   n(d) ba   dan.
      nut- the- 1 break-past- cause prep teeth
      "I broke the nut with my teeth"

(50) Mnal- aka pardakh- aka- i shk-   a- n(d)   ba   chacosh
      child- the glass-   the- 3 break-past-cause   prep hammer
      "The child broke the glass with a hammer"

The verb *shka* undergoes the inchoative alternation (51). The verb in the inchoative

alternation is used intransitively. In the inchoative alternation the object plays the subject role, as

seen in (51).

(51)　　Dar- aka　　shk-a
　　　　tree- the　　break-past
　　　　"The tree broke"

The verb *shka* 'broke' ends with the morpheme *a*, which, according to Kurdish linguists, is the

tense marker. Sentence in (51) shows that the inchoative form of the verb *shka* 'break' in

Kurdish gives the sense that 'the tree broke', but the cause of its "being broken" is either an

internal factor or an external one[11].

　　　　The verb *shka* 'break' is used in the middle alternation in Kurdish to refer to a generic

action without an explicit agent. The verb *shka* is changed from *shka* to *shke* (52). The vowel *a* is

changed to *e* in the middle voice form. This means that the morphological form of the verb *shka*

in the middle alternation has a different form from its morphological form in the inchoative

alternate ons. An adverb is obligatory in the middle voice form in Kurdish.

(52)　　Shusha- ee Rumadi　　ba　　asani da- shk-　　　e
　　　　glasses- of Rumadi　　prep　easy asp- break-pres
　　　　"Rumadi's glasses break easily"

---

[11] The external factor is any outside factor that surrounds the object and causes its 'breaking such as an agent or a
natural force, the wind for example. The internal factor is any factor that resides inside the object and causes its
'breaking such as the kind of material the thing is made of.

Kurdish also has a passive form of the verb *shka*. The passive adds the passive

morphology *–ra* to the causative form of the verb. The verb in the passive form indicates an

action by an unknown agent.

(53)   Shusha- ee Rumadi shk-   e-   n-   ra
          glasses of Rumadi   break-past-cause-passive
          "Rumadi's glasses were broken"

Table 2 shows the causative, inchoative, passive, middle and infinitive forms of the verb *shka*

'break'.

causative	shk- a- n(d)-i break-past-cause- i
inchoative	shk- a break-past
passive	shke- n- ra broke-cause-passive
middle	da- shk- e- n- re asp-break-pres-cause-middle
infinitive	da-shk- e- t asp-break-pres- 2

Table 2. Causative, inchoative, passive, middle and infinitive forms of the verb *shka* 'break'

2.3.2 The Semantics of the Verb *shka* 'break' in Sorani

Guerssel et al. (1985) claim that verbs that have the same meaning components can be

used in the same semantic and syntactic contexts. In what follows I will show that even though

the verbs *break* and *shka* are considered translational equivalents, they have different semantic

components and this results in their use in different syntactic alternations in English and Kurdish.

To explore the semantic similarity and differences between the Kurdish verb *shka* and the English verb *break* I applied the causative form of the verb to a number of different objects in the two languages, e.g. 'He broke my heart'. Tables 3 and 4 show the result of this test.

	Kurdish	**English**
Physical 'breaking'	glass, window, stone, wood, nuts, branch of tree, chair, wall, plates, boxes, doors, bread, cars, watches, eggs body parts (finger, leg, hand, head, back, nose, eye)	glass, window, stone, branch of tree, chair, plates, boxes, doors, bread, ground, cars, watches, eggs, egg yolk, water of a pregnant woman body parts (finger, leg, hand, skull, back, nose, hair)
Metaphorical 'breaking'	record, rules, trust, promise, fasting, ablution, desire, market, price, fear, loneliness body parts[12](heart, tongue, arm, back, nose)	record, rules, trust, promise, fasting, cold, warm, fever body parts[13](heart)

Table 3. Things that 'break'

Objects	**Kurdish**	**English**
Things that do not physically 'break'	Paper, liquids, gases, cloth, weeds, hair, ground, egg yolk	Paper, liquids, gases, cloth, body parts (eye, head)
Things that do not metaphorically 'break'	Love, relationship, cold, warm, fever, memories, beauty, breath	Love, relationship, memories, beauty, breath

Table 4. Things that do not 'break'

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[12] The act of breaking here is not physical , for example if you 'break' someone's nose this means you made him loose her/his dignity.

[13] The act of breaking here is not physical , for example if you 'break' someone's nose this means you made him loose her/his dignity.

Tables 3 and 4 show the Kurdish verb *shka* and the English verb *break* apply to a similar set of physical objects. There are more differences in the semantic extensions of the verbs for metaphorical objects. This evidence shows that the semantic extension of the verb *shka* in Kurdish is slightly different from the verb *break* in English. The example in (53) illustrates one of these differences.

(54)   otomobel- aka- m-   shk-   a
        car-   the 1   break-past
        "My car broke"

The expression in (54) is used when someone's car has stopped working. This means that the verb can be applied to mechanical defects. The verb *shka* does not give any information regarding the nature of the fracture whether it is a total fracture or partial one. Most of the objects that undergo the physical action of breaking in English and the action of *shka* in Kurdish are hard. Some soft objects undergo the physical action of breaking in English such as the yolk of the egg and a mother's water before delivery. One soft object that undergoes the act of *shka* in Kurdish is the egg. Even though Kurdish and English have soft objects that undergo the action of *shkandin* and *breaking*, the nature of the object is different. It is the egg in Kurdish and both the egg and the egg yolk in English.

Semantically the transitive form of the verb *shka* 'break' selects two arguments, an external one that is the agent who carries the action and is considered to be the direct cause of the action and the theme, which is affected by the action. The verb *break* can also select an instrument argument as in (55). The instrument is considered to be an indirect cause of the action. The agent of the sentence can be animate (55) or inanimate (56).

42

(55)   Kur- aka panjar- aka- i shk- a- n(d) ba bard
        boy- the window- the- 3 break-past-cause prep stone
        "The boy broke the window with a stone"

(56)   bard- aka panjar- aka- i shk- a- n(d)
        Stone- the window- the- 3 break-past-cause
        "The stone broke the window"

In (56) the instrument stone plays the role of the cause even though the stone does not

have the will to break the window. Its nature of being a hard object and more specifically being

harder than the glass in the window, give it the ability to achieve the breaking action. The stone

in (55) is considered as an instrument that is used by the agent to achieve the action.

Fillmore (1970) observed that the English verb *break* allows a theme argument to

alternate with a location (57).

(57)   a. John broke the fence with the stick.
        b. John broke the stick against the fence.

This alternation is not possible in Kurdish. In (57a) the breaking affects the direct object and this

is exactly how the verb *shka* 'break' in Kurdish behaves as in (58).

(58)   Kur- aka dewar- aka- i shk- a- n(d) ba dar- aka
        boy the fence- the- 3 break-past- cause prep stick- the
        "The boy broke the fence with the stick"

Kurdish does not have an alternation between the direct object and the prepositional

object as English. To express the meaning of the verb *break* in (57b) the verb *shka* 'break' in

Kurdish needs another verb which is the verb *kesha* 'hit' (59).

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(59) Kur- aka dar- aka- i ba dewar- aka kesh-a w shk- a- n- i
boy- the stick- the- 3 prep fence- the hit_pas and break-past-cause- 3
"The boy broke the stick against the fence"

When the verb *shka* 'break' is used to mean a metaphorical breaking, the theme that is

affected by the action is considered to be an experiencer that undergoes a certain psychological

and emotional condition as in (60) and (61).

(60) kch- aka dl- i kur- aka- i shk- a- n(d)
girl- the heart- of boy- the- 3 break-past-cause
"The girl broke the boy's heart"

(61) mrdn- i bawk- i psht- i shk- a- n(d)
death of father- of back- 3 break-past-cause
"His father's death broke his heart"

In (60) the girl causes the theme, the experience, to undergo a bad psychological condition. The

change in the state of the theme in (60) is not a physical change but it causes the experiencer to

be sad. In (61) the agent is not a real agent, but it is a cause that enables the action of the verb

break to come into effect and affect the theme.

I assume that the LCS of the causative form of the verb *shka* 'break' in Kurdish has the

same LCS as the causative form of the verb *break* in English. The cause is marked overtly in

Kurdish by the addition of the causative marker attached to the verb while the cause is not

overtly marked in English. When the causative marker is used in Kurdish this means that there is

an external agent, or a doer that achieved the act.

(62) *Shkan* LCS: (x) cause-n (y come to be *SHKA*)

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The things that undergo *shkandin* shown in Table 3 can appear with both the causative and inchoative forms of the verb. For this reason I assume that the LCS of the inchoative form of the verb *shka 'br*eak' in Kurdish is similar to the inchoative form in English:

(63)   *Shka* LCS: y come to be *SHKA*

2.4 The verb *bre* 'cut' in Sorani

The verb *bre* 'cut' in Kurdish refers to an action that causes something to be divided into parts. The verb is also used to mean 'to injure' when it is used to refer to body parts. Kurdish native speakers use the verb *le bowa* to refer to the action of cutting any parts of the body such as a finger or a hand. This verb means literarily 'to separate'. The verb *bre* 'cut' is different from the verb *bashkirdin* 'divide' because *bashkirdin* refers to an action that is usually achieved after the action expressed by the verb *bre* 'cut' on objects that can be cut and divided like cakes or sweets. In other words the object undergoes the action of *breen* 'cutting', and then it is divided among the participants. The verb *bashkirdin* 'divide' includes a "sense of sharing" after cutting the object. The verb *bashkirdin* also applies to the division of multiple objects that cannot be cut such as coins or candies.

2.4.1 The Syntax of the Verb *bre* 'cut' in Sorani

In Kurdish, The verb *bre* 'cut' can be used transitively and intransitively. Morphologically, the verb *bre* 'cut' has the transitive infinitive form *bree* and the intransitive form *bra*. In the causative alternation both of them have the transitive form *bre* and the

intransitive form *bra*. Unlike the verb *shka* 'break', *bre* has no causative marker attached to it. The passive form of the verb is *br-ra*, which has the passive morpheme *-ra* attached to it. The middle form of the verb is *dabaret*. Table 9 shows all the forms of the verb *bre*.

Causative	bre-e cut_past-1 'cut'
inchoative (real action)	Not used
inchoative (metaphorical action)	bra cut_past 'cut'
Passive	br-ra cut-passive 'was cut'
Middle	da-bre modal-cut_pres 'cut'
Infinitive	da- bre- t asp- cut_pres-2 'you cut'

Table 5. Syntactic forms of the verb *bre* 'cut' in different alternations

2.4.1.1 The transitive verb *bre* 'cut'

The verb *bre* 'cut' can be used transitively and intransitively. When the verb is used to refer to the cutting of services such as electricity, water, or internet it can be used transitively or intransitively, but when the verb is used to refer to an action of cutting concrete objects, it is only used transitively. There is a morphological difference between the intransitive and the transitive use of the verb.[14]

The verb *bre* 'cut' takes a subject and an object as its arguments (64).

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[14] The verb *bre* in the causative alternation has no causative marker because the causative marker is usually attached to verbs in which the action is achieved by the subject mentioned in the structure of the sentence or it is used with the verbs that can alternate. The verb *bre* in when it is used in contexts where there is definite subject achieved action especially when a tool is needed and the tool should be carried by an agent. Kurdish does not attach the causative marker to it. Tests in the next section will clarify this point.

(64)　　Kur- aka dar- aka- i　　br- e　　ba　minshar
　　　　　boy- the tree- the- 3　cut_past　prep　saw
　　　　　"The boy cut the tree with a saw"

2.4.1.2 The Intransitive Verb *bre* 'cut', the Inchoative Alternation

The verb *bre* 'cut' is used transitively and intransitively when it is used to refer to the

physical or metaphorical cutting of services such as electricity or water (65).

(65)　　karaba　　　br- a
　　　　　electricity　cut_past
　　　　　"The electricity cut"

This sentence applies to situations where there is no electricity because it stopped running

from the source to the location. In this case the verb does not refer to a physical event of cutting

which is a process that needs an agent. In (65) the verb refers to stopping a utility from entering a

location. The verb in this case can undergo the inchoative alternation. The verb is also can be

used transitively (66).

(66)　　Kur- aka karaba-　　　aka- i br- e
　　　　　boy- the electricity-　the- 3 cut_past
　　　　　"The boy cut the electricity"

Sentence (66) means that the boy used a tool to cut the wire that transfers the electricity from the

source to the house. The verb here is used to refer to a physical cutting event; therefore an agent

is needed here, and the verb cannot undergo the inchoative alternation.

The verb *bre* 'cut' also undergoes the middle alternation. Although the action is achieved

by a generic agent the agent is not mentioned explicitly in the sentence. The verb in the middle

alternation is always accompanied by an adverb that describes the way the action of the verb is achieved (67).

(67)   Gosht-i   mar   ba   asan-i   br-   e
       meat- of lamb prep ease-ly – cut_pres
       "Lamb's meat cuts easily"

2.4.2 The semantics of the verb *bre 'cut'* in Kurdish

The action expressed by the verb *bre* 'cut' is usually achieved by a tool. The tool can be a pair of scissors, a knife or clippers. The tool that is used to achieve the action of the verb *bre* 'cut' is usually, but not always a sharp-edged tool. Table (6) shows that the action is achieved on some objects with a tool as meat, hair, and other objects mentioned in the table can be cut without a tool such as paper and bread.

The objects	Kurdish *bre*	English *cut*
physical 'cutting' With a tool	meat, wood, hair for women finger, hand, leg, face, water, phone, internet, rope, road	bread, meat, wood, paper, cloth, hair for men and women finger, hand, leg, face, rope, road
by hand (no tool)	paper, cloth, bread	
metaphorical 'cutting'	electricity, water, phone, internet, liver, arm, nose, tongue, sound, back, road, salary, houses, relationship, conversation, ability, borders	seconds, The service of electricity, water, phone, internet, tooth

Table 6. Things that undergo the action of *breen* and *cutting*

The use of the verb to refer to a physical instance of cutting indicates a controlled clean process of cutting by a sharp-edged tool that contacts the object. Guerssel et al. (1985) state that the tool goes along a path. For me the action expressed by the verb *bre* 'cut' can be called a

"process" since the action takes time to be completed. The action can be stopped at a certain point without being completed (68).

(68) newa-y dar- aka- m br- e
half-of tree- the- 1 cut_past
"I cut half of the tree"

The sentence in (69) is impossible to say since breaking is not a process that can be controlled over an interval of time.

(69) *newa-y pardakh- aka- m shk- a- n-(d)
half- of glass- the- 1 break-past-cause
"I broke half of the glass"

Since the physical act of *bre* 'cut' is a process that can be achieved with or without a tool, the result of the action which is the clean separation is much more important in the process of cutting than the than the tool.

The verb *bre* can also be used to refer to actions that are achieved without a tool although an agent is still needed to achieve the act of cutting. For example, if someone folds a sheet of paper and s/he tears the paper following the straight line that results from folding the paper, Kurdish would express the action by the verb *bre* 'cut'. Figure 1 illustrates this action with the verb *bre*. This use suggests that the verb *bre* 'cut' is sensitive to a clean separation rather than simply the use of a tool. The verb *dri* 'tear' is used when someone separates a piece of paper by hand without folding it resulting in a rough separation.
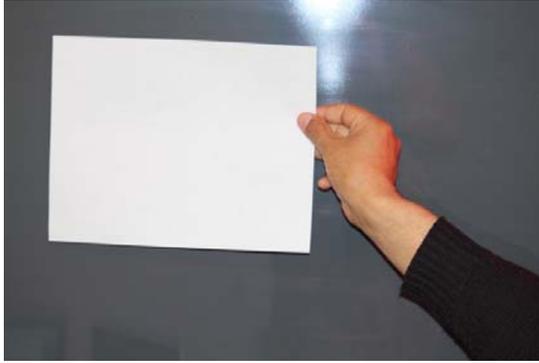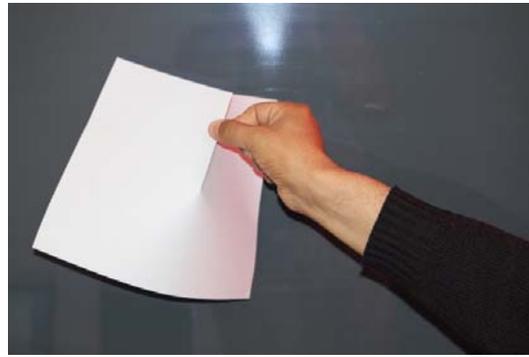
A   B
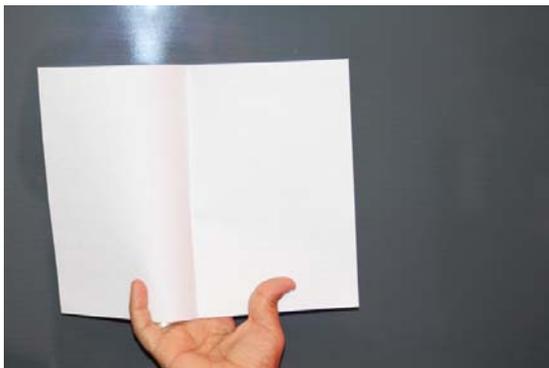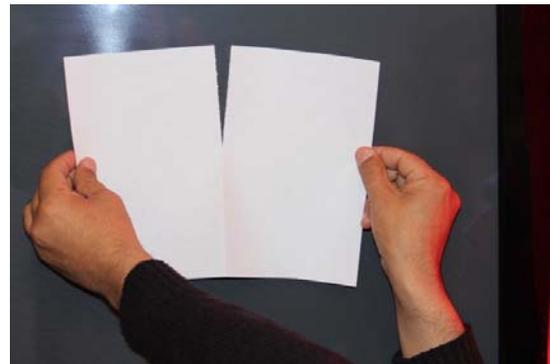
C   D

Figure 1.

The verb *bre* 'cut' can be used as an intransitive verb to refer to the cutting of some

public services and a metaphorical action of cutting such as electricity, water, or salaries (63).

(70)   Karaba   br-   a
         electricity cut_past
         "The electricity cut"

When the verb *bre* 'cut' is used to refer to the action of cutting services, the agent could

be implicit, or explicit. Sentence (70) means that there is no electricity and the reason, which

leads it to be *bra* 'cut' is not known. The act of cutting could be caused by an agent or by natural

forces such as the wind.

The verb *bre* 'cut' in Kurdish is used to express an act done by an active participant on a passive participant with the use of a sharp-edged tool that goes along a path on the passive participant (Guerssel et al., 1985).[15] It seems that the meaning of the verb *bre* in Kurdish differs from the meaning of verb *cut* in English because unlike the English verb, the action expressed by the verb *bre* can be achieved by bare hands, which are not a sharp edged tool. For this reason I assign the LCS shown in (71) to represent the meaning of the Kurdish verb *bre*.

(71)   *Bre* LCS: x PRODUCE a clean separation on y

The Kurdish LCS for *bre* does not contain the phrase 'sharp edge instrument coming into contact with y' since an instrument is not obligatory in Kurdish when a clean straight separation can be produced on the object by hand.

I use PRODUCE in the LCS for *bre* since the action requires a clean separation. The use of the word PRODUCE in the LCS of the verb *bre* emphasizes that the action expressed by the verb cannot be done accidently, which also explains why most of the actions expressed by *bre* require an instrument and a clean separation is usually achieved by the use of an instrument. There is not a CONTACT component in the LCS of the Kurdish verb unlike the LCS for the English verb *cut* since the verb *bre* does not require the use of an instrument.

As the lexical representation in (71) shows, the verb *bre* 'cut' can undergo the causative alternation because there is an active participant, the agent that produces the action of cutting on the passive participant. Kurdish resembles English and Berber in this respect. There is no

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[15] Even the word "path" has not been defined by Guerssel, but it is clear that the path is considered as part of the whole process of 'cutting' since the agent has the ability to choose the place from which s/he wants to achieve to cut on the object, and the agent can stop in the middle of the action without completing it. This is not possible with the verb *break* since the whole action is not a process but one uncontrolled action.

causative marker attached to the verb *bre* 'cut' when used transitively because the agent produces the action by following an extended process and there is no possibility that the action is done by accident. Meat or the wood cannot be cut by accident without having an intention.

This analysis leads to a semantic test for the semantic components PRODUCE and CAUSE that accounts for the difference between the meanings of 'cut' and 'break'. The semantic component PRODUCE applies to processes that extend over a period of time. The semantic component CAUSE applies to punctual events that do not extend over a period of time. It is possible to cut a paper for a minute but not to break a glass for a minute. The process represented by the component PRODUCE accounts for the difference between 'cut' and 'break' rather than the CONTACT component.

The verb *bre* 'cut' undergoes the inchoative alternation when the action expresses a metaphorical *bre* 'cut'. Table 7 shows the objects that can undergo the metaphorical act of cutting.

Context	Kurdish sentence	Meaning
electricity cut	*Karaba bra*	There is no electricity
water cut	*Aw bra*	There is no water
phone cut	*Talaphone bra*	There is no phone service
his hand cut	*Dasti bra*	Somebody tricked him
salary cut	*Maash bra*	There is no salary
the sound cut	*Dangi bra*	To silence or shut up a person or a TV

Table 7. Contexts of use for the intransitive verb *bra*

I will propose the LCS in (72) for the verb *bre* 'cut' when it is used intransitively, usually with metaphorical actions.

(72)   *Bre* LCS: x become to be *BRA*

Kurdish resorts to using this construction when the agent is not known, but when the result is intentional, or when it is achieved by natural forces.

To test what I propose about the absence of the agent in the inchoative construction, I added a purpose clause to the original sentence. A purpose clause can only be used in contexts where there is an agent and that agent performs the action to achieve a purpose. The inchoative forms of the Kurdish sentence become ungrammatical with a purpose clause. In sentence (73) an adverb is added to the original sentence (74) and that adverb is also used in contexts where there is an agent that achieves the action. The Kurdish sentence became ungrammatical again. This shows that the agent is not present in the above construction.

(73)   *Karaba   br- a   bo-pashakawt kirdni wwza
          Electricity cut_past to- save   do   power
        "The electricity cut to save power"

(74)   *Karaba   br- a   ba   palla
          electricity cut_past prep quickly
          "The electricity cut quickly"

The verb *bre* 'cut' cannot undergo the conative alternation in either its physical or metaphorical sense since Kurdish does not have a conative construction. Kurdish uses another verb to express the incomplete nature of the English conative alternation. For example, if someone tries to cut a piece of cloth with scissors, and he moves the scissors on the cloth, but the scissors fail to divide the cloth into two pieces, the piece of cloth will be ruined because of the effect of the scissors but it will not be cut.

(75) kch- aka   hawleda qumash- aka b- br-   e
      girl- the try   cloth-   the   to-cut_past
      "The girl tried to cut the cloth"

As shown in the above sections, the verbs *shka* 'break' and *bre* 'cut' in Sorani are similar to the

verbs *break* and *cut* in English. However, there are many different contexts and alternations that

the verbs undergo in Sorani but not in English. I propose that *shka*, but not *bre*, has the same

LCS as the English equivalent. The Sorani verb *bre* focuses on a clean separation rather than the

use of a tool that Guerssel et al. identified for the English verb *cut*.

Chapter 3

3.1 Introduction

In this chapter, I will analyze the semantic and syntactic characteristics of a number of cutting and breaking verbs in Sorani. I started with the verbs *bre* and *shka* in Chapter 2, which translate loosely into English as *cut* and *break* respectively. In this chapter, I analyze other verbs that refer to separation changes on similar types of objects. For example, both *bre* and *shka* apply to separations of rope and bread. Other Sorani verbs that describe similar operations on rope and bread are *bchre* 'cut by force', *wirdkirdin* 'dice' and *hareen* 'grind'. In addition, I examine the verbs derived from this basic set of verbs by the addition of directional prefixes, e.g., *hallbchre* 'cut from bottom to top by force' and *dabchre* 'cut from top to bottom by force'. I will explore the syntactic features of these verbs by documenting the range of syntactic contexts for each verb. I examine how each verb undergoes the inchoative, causative, middle, and passive alternations. I will explore the semantic features of the verbs by denoting the physical and metaphorical objects that undergo the action of these verbs. Their common syntactic and semantic features make it difficult to draw a syntactic and semantic line between the classes of cut and break verbs in Sorani. Such evidence suggests that cut and break verbs in Sorani do not share the same semantic and syntactic features with their translations in English.

3.2 The Verb *bchre* 'cut/break' in Kurdish

The verb *bchre* in Sorani indicates an action of cutting, but the action is always achieved by using force. The action is achieved without a tool. I could not find an exact equivalent for the verb in English, as it is used in many contexts to mean cut and in other it means break. What follow is a detailed explanation of its syntactic alternations and semantic contexts.

3.2.1 The syntax of the verb *bchre*

3.2.1.1 The causative alternation

The verb *bchre* undergoes the causative alternation. The verb denotes an action that is

achieved by a doer and the effect of the action is reflected on an object (76).

(76)   Causative form of *bchre*
         Kur- aka pat- aka- i   bchree
         boy- the rope- the- 3   force_cut_past
         "The boy cut the rope (by force)"

The verb *bchre* is one of the verbs in which the causative marker is optional; it can be used

with or without the causative suffix without any change in the meaning of the verb (77).

(77)   Kur- aka pat-   aka- i   bchra-n(d).
         boy- the rope- the- 3   force_cut_past-cause
         "The boy cut (by force) the rope"

When the verb *bchre* is used without the causative marker it behaves like the verb *bre* 'cut,'

while it resembles the verb *shka* 'break' when the causative marker is attached to it. The verb in

the causative alternation takes two arguments, a subject and an object. The agent is represented

syntactically by the subject and is the doer of the action. The object is the theme that undergoes

the effect of the action.

3.2.1.2 The inchoative alternation

The verb *bchre* in Kurdish undergoes the inchoative alternation and it denotes an action that

is achieved by either some natural forces such as the sun, the wind, or gravity, or by a person

involved in the action. The verb *bchre* in the inchoative alternation is mostly used to express the

former because Kurdish uses the passive alternation to denote that there is a person involved in the action.

(78)   Pat- aka bchr-   a
       rope- the force_cut_ past
       "The rope cut (by force)"

Syntactically the verb *bchre* behaves like the verb *break* in respect to its arguments which can be defined as the noun phrases that express the major argument roles. The single argument of the verb *bchre* is the passive participant in the action denoted by the verb. The verb is considered in this context to be an unaccusative verb. The argument is realized as a noun phrase (NP) behaving as a semantic object to the verb.

3.2.1.3 The middle alternation

The verb *bchre* undergoes the middle alternation and it shares the same morphological form with the inchoative alternation. The verb *bchre* in the middle alternation denotes an action that is done by someone to something. The doer of the action is not clear, but the existence of the adverb makes it impossible for the action to be done without an active participant. As mentioned in Chapter Two the adverb is obligatory in the middle alternation. The middle alternation is expressed in Kurdish in the present tense.

(79)   Pat- i   bareek   ba   asanee   da- bchre
       rope of thin   prep easily   asp-force_cut_pres
       "The rope cuts (by force) easily"

3.2.1.4 The Passive

The verb *bchre* is used in the passive to express an action that is achieved by an active participant that is not mentioned explicitly. The passive adds the suffix *–nra* to the verb. When the verb *bchre* is used in the passive, it indicates that the action was done on purpose.

(80) Pat- aka bchre-   n-   ra
        rope- the force cut_past-cause-passive
        "The rope was cut"

I summarize the syntactic forms of *bchre* in Table 8.

Causative	Bchree	Bchrandi
Inchoative	Bchra	X
Middle	da-bchre	da-bchre-ndre(t)
Passive	bchre-n-ra	Bchre-nra

Table 8. Syntactic alternations of the verb *bchre*

3.2.2 The Semantics of the Verb *bchre*

To explore the semantic extension of the verb *bchre*, I examined the objects used with the verb in different contexts. In the following examples, the verb *bchre* is translated into English by the verbs 'break', 'snap', 'cut', 'hit-cut', break up', 'crack' and 'force-cut'. The examples include concrete (81) and metaphorical (82) actions.

(81) Concrete events

a.   Pat- i baeni   duu sayar- aka bchr-a
        rope of between two cars-   the break-past
         "The rope between the two cars broke"

b.   Pat- aka- i dast- me bchre   (ba   dast)
        rope- the- 3 hands my force_cut_past prep hands
        "He snapped the rope around my wrists"
        "He broke the rope around my wrists"

c.   Laħeem- aka bchr-a
       weld-   the force_break-past
       "The weld broke"

d.   Dewar –aka baxrapee bchre   wa ba   asanii chak na- betawa
       wall-   the   badly   force_break_past and prep easily repair no again
       "The wall cracked so badly that it cannot be repaired easy"

e.   Shovel- aka wier- i carab-   aka- i bchra-   n(d)
       shovel- the wire of electricity-   the- 3   force_cut_past-cause (by hitting them)
       "The shovel hit the electricity wires and cut them"

(82) Metaphorical Events

a.   Dle- m- bchr-a   ka   mrdn- i- m   bist
       Heat 1- break-past   when death- his- 1   heard
       "My heart broke when I heard about his death"

b.   Ski-   ii bchre- i-   m   la   pekanen
       Abdomen my break_pres- 1   prep laugh
       "He makes me break up with laughter"
       "My sides are splitting with laughter"
       "He cracked me up"

c.   Qsa-   aka- y- an   pe   bchre-   m
       speech- the- 3- pl   prep   force_cut_past-1
       "They forced me to cut my speech short"

Sentence (81a) shows that the verb *break* is used in English to describe the rope when its state changed from one piece into two pieces. The context of the sentence suggests that the action of breaking is achieved without using a tool, but what led to the change of state of the rope is the force created by the action when the first car pulled the second one. In the sentence (81b), the same element is mentioned, which is the rope, but the context is different. I consulted English native speakers and they did not agree upon one verb. Some of them used *snap*, others prefer

broke. In the second context, the rope became two pieces as a result of using force, but not with the use of a tool.[16]

The verb *bchre* is used in sentence (82a) to express a psychological change of state that happened to the heart. Sentence (82c) shows a real change of state in the weld. The difference between the actions achieved in the two sentences is that the heart underwent a psychological change that cannot be realized with eyes, while the change in the state of the weld is clear.

Sentence (82b) was a controversial sentence because when I asked English native speakers to translate the Kurdish sentence after I explained the meaning to them, I got different translations. The first group prefers to use the verb *break* to express the meaning, and the other group chose *split*. I consulted the Oxford English dictionary to check the verb used in the dictionary. I found out that the dictionary includes a sentence that has the same meaning, and the verb which was used was *break*, so I chose *break* to translate *bchre* in the above context.

In sentence (81d), the verb *crack* used in English and it is considered equivalent to the verb *bchre*. The last two English sentences resort to two verbs to express the meaning of the verb *bchre*. Sentence (81e) used the verb *hit* plus the verb *cut* and sentence (81e) used the verb *force* plus the verb *cut*. Table 9 presents the objects that undergo the action *bchre* while Table 10 presents objects that do not undergo the action *bchre*.

Physical *bchreen*	Metaphorical *bchreen*
Strand, rope, wires, weld, meat	Heart, abdomen, speech, breath

Table 9. Things that undergo *bchreen* 'cut by force'

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[16] This issue is controversial because some linguists argue that bare hands or teeth could be considered as tools, but others disagree by saying that they are parts of human body.

Physical *bchreen*	Metaphorical *bchreen*
Paper, liquids, gases, cloth, weeds, hair, ground	Love, cold, warmth, fever, memories, beauty

Table 10. Things that do not undergo *bchreen* 'cut by force'

Most of the sentences in English used the verb *break* to translate the verb *bchre* in Kurdish. Interestingly, the verb *bchre* is derived from the verb *bre* 'cut' in Kurdish. Morphologically the verb *bchre* is formed by adding the ch [tʃ] sound after the [b] sound which causes its semantic difference.

Bre (in Kurdish) = *cut* (in English)

B-ch-re (in Kurdish) = *cut/break/split/crack* (in English)

The verb *bchre* in Kurdish means to cut something with or without using a tool, but the change of state occurs by using force. When a speaker specifies the context, the listener easily knows which means is used to achieve the action. If the speaker says that he/she cuts the meat (by force), the listener knows that the agent uses his/her teeth, but not a knife or cleaver. In all cases there is a force or pressure that helps to achieve the action. The other difference between the verb *bre* 'cut' and *bchre* 'cut by force' is that the action, which is expressed by the verb *bchre,* includes intentionality, while the action that is expressed by the verb *bre* can be done intentionally or unintentionally. For example, one might *bre* 'cut' his/her finger unintentionally while making salad, but cannot *bchre* 'cut' a rope with bare hands unintentionally. Unlike *bre,* a *bchre* action does not require a tool. The thing that undergoes the action of the verb *bchre* is usually divided into two unequal parts.

Therefore, the verb is not a *divide* verb, but resembles a *cut* verb in having a result that consists of two parts. The division is not necessarily clean; the parts can have a ragged edge which makes the result resemble the result of the verb *break* in English. The semantics of *bchre* seems to be part way between *bre* and *shka.* The result of a *bchre* action is like the break of *shka*, but the intentional nature of a *bchre* action and the use of a tool resemble the features of a *bre* action.

The difference between the verb *shka* 'break' and *bchre* 'cut by force' is very clear especially in the metaphorical uses of the verbs. In (83) the verb *shka* 'break' expresses a psychological state in which the theme undergoes a metaphorical division. The action expressed by the verb *shka* can take place over an extended period of time.

(83)   kch- aka dl-   e kur- aka- i   shk-a-   n(d)
          girl- the   heart of boy- the- 3   break-past-cause
          "The girl broke the boy's heart"

In (84) the verb *bchre* refers to a sudden action and it may cause death if the sound is very high or occurs suddenly. That means that the clause 'by force' in the LCS of the verb *bchre* makes the verb more punctual and complete.

(84)   Dang- i hawratreshq- aka dl -   e bchra-   n-d- im
          sound of   thunder-   the   heart of cut_by_force-cause-1
          "The sound of the thunder makes my heart jump out of my chest"
          "The sound of the thunder almost gave me a heart attack"

I propose the Lexical Conceptual Structure in (85) for the monadic verb *bchre*. It is monadic since the verb can be used in intransitive sentences without an overt agent. The force

clause has to be in the monadic LCS of the verb *bchre*, since it marks the difference between the LCS of the verb *shka* 'break' and *bchre* 'cut by force'.

(85)   Monadic *bchre* LCS: y becomes BCHRA (by force)

The dyadic LCS for *bchre* (86) has a cause predicate since the verb can alternate between transitive and intransitive forms. Since the use of a tool is optional for *bchre*, a PRODUCE clause is not a part of its LCS. The dyadic LCS is also compatible with a punctual event. The result is encoded by the state of *bchra*. Intentionality is an important element in the LCS of the verb when it is used transitively since the agent cannot achieve the action without having an intention to achieve the action.

(86)   Dyadic *bchre* LCS: x cause y to become BCHRA, by force intentionally.

3.3 The verb *wurdkirdin* 'dice'

The verb *wurdkirdin* 'dice' is a compound verb. It consists of the adjective *wurd* which means small and the root *kird* which means 'do'. I did not translate the verb *wurdkirdin* into 'mince' because *jneen* has that meaning in Kurdish.[17] The verb *wurdkirdin* indicates an action that is achieved by an agent on a theme. The action indicated by the verb *wurdkirdin* is somewhere between the actions indicated by the verb *bre* 'cut' and *jneen* 'mince'. The verb *bre* refers to actions that result in relatively large slices. The verb *wurdkirdin* 'dice' refers to actions that result in relatively moderate slices while the verb *jneen* 'mince' refers to actions that result

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[17] The verb *jneen* will be discussed in the next section.

in relatively tiny pieces. The object first undergoes *breen* 'cutting' then *wurdkirdin* 'dicing', and lastly *jneen* 'mincing'.

In (87) the agent cut the meat into small pieces with a tool. The tool is not mentioned in the sentence, but it is understood to be involved in the action since the action cannot be achieved without a tool. In (87) the tool is a knife because the theme is meat. In (88) the tool must be an axe or a saw since the theme is wood. In (89) the tool is again a knife, but in (90) there is a shift in the verb that is used in the sentence. In Kurdish the verb *wurdkirdin* is used, while in English the verb 'break' is used but it is accompanied by the phrase 'into pieces' to be equivalent to the Kurdish sentence.

(87) Min gosht- aka- m   wurd- kird
      I   meat- the- 1   small-do_past
      "I diced the meat into small pieces"

(88) Ali dar-   aka- i wurd-kird   bo   sutand-in
      Ali wood-   the- 3 small-do_past prep burn-ing
      "Ali cut the wood into small pieces to burn"

(89) Khayar-   aka- m   wurd-kird
      cucumber the- 1   small-do_past
      "I diced the cucumber"

(90) Kur- aka bard- aka- i wurd-kird
      boy- the stone- the- 3 small-do_past
      "The boy broke the stone into pieces"

The verb *wurdkirdin* has no metaphorical uses; all of the things that undergo the action of the verb are real objects. Most of the objects are hard except for meat which is, to some extent, softer that the other objects that undergo the action. The verb does not extend to cases where a person falls to pieces. The English verb *dice* as in (87), (88), and (89) is the translational

equivalent of the verb *wurdkirdin,* while in (90) the verb *break into pieces* is considered its English equivalent.

3.3.1 The syntax of the verb *wurdkirdin*

3.3.1.1 The causative alternation

(91)   Ali dar-   aka - i wurd- kird   bo   sutand-in
        Ali wood   the- 3   small-do_past prep   burn-ing
        "Ali cut the wood into small pieces to burn"

The verb *wurdkirdin* undergoes the causative alternation. The verb denotes an action that is achieved by an agent. The verb is a transitive verb that needs both of its argument, the subject and the object. There is no causative marker attached on the verb. Since the action of the verb is achieved by a direct cause, mostly an animate agent, the causative marker will not be needed.

3.3.1.2 The inchoative alternation

The verb *wurdkirdin* undergoes the inchoative alternation by suppletion. The verb *kird* changes to *buun* (92). Without mentioning the agent, the sentence with the verb *wurdkirdin* would be ungrammatical (93).

(92)   Gosht - aka wurd-buu
        meat- the small-become_past
        "The meat diced"

(93)   *Dar- aka wurd-kird
        wood- the small-do_past
        "Cut into small pieces"

3.3.1.3 The middle alternation

The verb can undergo the middle alternation in the forms *wuurdbuu as in* (94) and in the

form *wuurdkird* as in (95). This case is not discussed in Guerssel since all of the verbs they

analyzed have one middle form. Kurdish shows that only the intransitive form and the transitive

form can appear in the middle voice.

(94)   Gosht-i   mar ba   asani wurd- da-be (t)
           meat- of lamb prep easily small-become_pres
           "Lamb meat dices easily"

(95)   Gosht- i   mar ba   asani wurd- da-   kret
           meat- of lamb prep easily small- asp- do_pres
           "The meat dices easily"

The verb *kird* by itself has a middle form (96):

(96)   Nan   ba   asani da-kre-t
           bread prep easily asp-do-3
           "The bread makes easily"

3.3.1.4 The Passive

The verb *wurdkirdin* 'dicing' is used in the passive to express an action that is achieved

by an active participant that is not mentioned explicitly, but there is a morphological reference

attached to the verb that indicates its existence.

(97)   Tamata - aka wurd- k-ra
           Tomato- the small   do-passive-past
           "The tomato was diced"

When the verb *wurdkirdin* is used in the passive, it bears the sense of intentionality. The doer of the action did the action on purpose, but it does not show up for a reason or another in the structure of the sentence.

I summarize the syntactic forms of *wurdkirdin* in the following table:

causative	*wurd-kird*	X
inchoative	*wurd-buu*	X
middle	*wurd- da-be/wurd da-kre*	*wurd-da-kret*
passive	*wurd-k-ra*	X

Table 11. The syntactic alternation of the verb *wurdkirdin*

3.3.2 The Semantics of the Verb *wurdkirdin*

The verb *wurdkirdin* refers to changing the state of an object from one piece to many small pieces. The action is achieved with or without a tool. The tool can mentioned in the sentence or not, and there are many tools that can be used to achieve the action such as knives, axes, hammers, etc. The tool does not necessarily need to be a sharp tool, but it should be heavier than the object that undergoes the action. The state of the object that undergoes the action of *wurdkirdin* depends on the tool used in the action. If the tool is a sharp edge tool, the pieces of object that undergoes the action will have, roughly, equal shapes which is the same result when the verb *bre* 'cut' is applied. This is not the case of the pieces that undergo the action by a tool like a hammer that has no sharp edge. The result is similar to what one gets when grinding an object. An agent is always needed to achieve the action of the verb *wurdkirdin*.

Table 12 presents the objects that undergo the action *wurdkirdin* while Table 13 presents the objects that do not undergo the action *wurdkirdin*.

physical *wurdkirdin* 'dicing'	metaphorical *wurdkirdin* 'dicing'
glass, window, stone, wood, branch of tree, chair, wall, plates, bread, tomato	X

Table 12. Things that undergo *wurdkirdin* 'dicing'

physical *wurdkirdin* 'dicing'	metaphorical *wurdkirdin* 'dicing'
Hair, ground	Love, cold, warm, fever, memories, beauty

Table 13. Things that do not undergo *wurdkirdin* 'dicing'

The verb *wurdkirdin* needs both monadic and dyadic LCSs to account for its use in intransitive and transitive contexts. The monadic LCS is shown in (98) while the dyadic LCS is shown in (99).

(98)   *Wurdbun LCS:* x become *WURD*

Intentionality is an important element in the LCS of the verb *wurdkirdin* in its transitive use (99).

(99)   *Wurdkirdin LCS:* x cause y become *WURD*

The verb *wurdkirdin* '*dicing'* can be considered a verb that shares some semantic features with the verb *shka* 'break'. The result of the action can result in ragged, unequal pieces. The verb *wurdkirdin* also shares some semantic features with *bre* 'cut'. The verb refers to actions that involve tools to achieve the result. This LCS does not explain why the verb *wurdkirdin* does not have a middle form.

3.4 The verb *jneen* 'mincing'

The verb *jneen* 'mincing' is verb that is used mostly with foodstuff that is to be prepared for cooking such as meat and vegetables. The verb indicates an action done by an agent on a theme. The action is achieved by a sharp-edged tool that gets into contact with the theme. The verb has a new usage that comes into the Kurdish discourse after inventing some machines that can cut old clothes into very small pieces for different purposes. I have asked some native speakers about the equivalent for this use, and they said that the best equivalent for it would be the verb 'shred' and the machine is called "textile shredder machine." But in both uses of the verb, with food or with clothes, a tool is used to do the action.

(100)   Min Gosht- aka - m   jnee
        I   meat- the- 1   mince_past
        "I minced the meat"

(101)   Khayar   aka- m   jnee
        Cucumber   the- 1   mince_past
        "I minced the cucumber"

The verb has no metaphorical uses in Kurdish. In (100) and in (102) the agent achieves an action of *jneen* 'mincing' on the theme by a sharp-edged tool that contacted it. The agent controls the number and the shape of the pieces resulted from achieving the action on the object.

3.4.1   The syntax of the verb *jneen* 'mincing'

3.4.1.1 The causative alternation

The verb *jneen* undergoes the causative alternation. The verb denotes an action that is achieved by a doer and the effect of the action is reflected on an object. The verb is a transitive

verb that needs both of its argument, the subject and the object. There is no causative marker attached on the verb.

(103) Min Gosht- aka - m jnee
      I   meat- the- 1 mince_past
      "I minced the meat"

The action of the verb is achieved by a sharp-edge tool that comes into contact with the object. Since the action of the verb achieved by a direct cause, mostly an animate agent, the causative marker is not needed.

3.4.1.2 The inchoative alternation

The verb *jneen* cannot undergo the inchoative alternation because the action is achieved by a direct causation and the agent should be there in the structure of the sentence to achieve the action. Without mentioning the agent, the sentence would be ungrammatical (104).

(104) *Gosht-aka   jna
      meat   the   mince_past
      "The meat minced"

3.4.1.3 The Middle Alternation

The verb undergoes the middle alternation by adding an adverb that generalizes the action (105).

(105) Gosht-i mar   ba   asani da- genre-   t
      meat- of lamb   prep   easily asp- mince_pres-1
      "Meat cuts easily"

3.4.1.4 The Passive

The verb *jneen* is used in the passive to express an action that is achieved by an active participant that is not mentioned explicitly, but there is a morphological reference attached to the verb that indicates its existence. When the verb *jneen* is used in the passive, it bears the sense of intentionality.

(106) Gosht- aka   jn-   ra
       meat- the   mince_past-passive
       "The meat was minced"

I summarize the syntactic forms of *jneen* in Table 14.

The verb	Causative	Inchoative	Middle	Passive
Jneen	*Jnee*	*X*	*dajnree*	*jnra*

Table 14. The syntactic alternations of the verb *jneen*.

3.4.2 The semantics of the verb *Jneen* 'mincing'

Semantically, the verb *jneen* 'mincing' indicates an action that needs an agent involved in the achieving it. The agent affects the theme by a sharp-edged tool, and produces a change in the state of the object. The action mostly achieved on food stuff, specifically on meat and vegetables to prepare them for cooking. When the object undergoes the action, it cannot be changed into smaller pieces, but if one wants to continue mincing it more, the object will undergo another state, it will be a "paste." Table 15 lists the objects that undergo the action of *jneen* while Table 16 lists the objects that do not undergo the action of *jneen*.

Physical *jneen* 'mincing'	Metaphorical *jneen* 'mincing'
tomato, potato, meat, vegetables	X

Table 15. Things that undergo *jneen* 'mincing'

Things that do not undergo physical	Things that do not undergo

jneen 'mincing'	metaphorical jneen 'mincing'
Paper-liquids-gases-weeds-hair-ground.	Love-cold-warm-fever-memories-beauty

Table 16. Things that do not undergo wurdkirdin 'dicing'

According to the semantic features and the syntactic alternations I will propose the following

LCS for the verb *jneen* 'mincing' in Kurdish:

(107)   *Jneen* LCS: x produce *jneen* on y by a sharp-edge tool that comes into contact with y

intentionally.

The LCS of the verb *jneen* 'mincing' is more look like the LCS of the verb *bre* 'cut' in Kurdish,

but the objects that undergo the action of *jneen* are not the same as the objects that undergo the

action of *bre* 'cut'. The action of *jneen* is more restricted than the action of *bre*.

3.5 The verb *hareen* 'grinding'

The verb *hareen* 'grinding' is a verb that indicates an action achieved on hard objects.

The action of the verb *hareen* 'grinding' is achieved by the use of a tool. The tool usually is a

heavy tool that creates pressure, and the pressure causes the change of the state in the object that

undergoes the action. The state of the object is changed from one piece into crust. The action of

the verb *hareen* 'grinding' is, in some respect, similar to the action of the verb *shkandin* 'break'

since the objects that undergo them are mostly hard objects and the result is uncontrolled.[18]

(108)   Azad   ganm- aka - i   har-   i
        Azad   wheat- the - 3   grind_ past- 3
        "Azad ground the wheat"

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[18] This means that the agent cannot control the number of the pieces that are resulted from the action.

(109) Azad   barda- aka - i   har-   i
       Azad   stone- the- 3   grind_ past-3
       "Azad ground the stone"

In (108) and (109) the agent changes the state of the object from one piece into a crust by using a

tool. The agent has no ability to determine the number of the pieces resulted from applying the

action on the object.

3.5.1 The syntax of the verb *hareen* 'grinding'

3.5.1.1 The causative alternation

(110) Azad ganm-   aka - i   har-   i
       Azad wheat- the- 3   grind_past- 3
       "Azad ground the wheat"

The verb *hareen* undergoes the causative alternation. The verb denotes an action that is

achieved by a doer and the effect of the action is reflected on an object. The verb is a transitive

verb that needs both of its argument, the subject and the object. There is no causative marker

attached on the verb. Since the action of the verb achieved by a direct cause, mostly an animate

agent, the causative marker will not be needed. The subject is assigned a nominative case, and

the object is assigned an accusative case. All the predication requirements are met. The sentence

syntactically is correct.

3.5.1.2 The inchoative alternation

The verb *hareen* does not undergo the inchoative alternation because the action is achieved by a direct causation and the agent should be there in the structure of the sentence to achieve the action. Without mentioning the agent, the sentence would be ungrammatical as in:

(111)   *ganm- aka   haree
        wheat-   the   grind_ pres
        "The wheat grinds"

3.5.1.3 The middle alternation

The verb undergoes the middle alternation because the agent of the sentence exists there in the structure of the sentence. The adverb is a prerequisite element in the structure of the sentence:

(112)   Ganm- aka   ba   asani   da-   haret
        wheat-   the   prep   easily   asp-   grind_ pres
        "The wheat grinds easily"

3.5.1.4 The passive

The verb *hareen* is used in the passive to express an action that is achieved by an active participant that is not mentioned explicitly, but there is a morphological reference attached to the verb that indicates its existence. When the verb *hareen* is used in the passive, it bears the sense of intentionality.

(113)   Ganm -aka   har-   ra
        wheat-   the   grind_past   passive
        "The wheat was ground"

In the above sentence the object *ganm aka* undergoes the action of *hareen* 'grinding' by a passive agent that is not mentioned explicitly in the sentence. I summarize the syntactic forms of *hareen* in Table 17.

The verb	Causative	Inchoative	Middle	Passive
Hareen	*Haree*	X	*Da- i-haree*	*har-ra*

Table 17. The syntactic alternation of the verb *hareen*.

3.5.2 The semantics of the verb *hareen* 'grinding'

The action of the verb *hareen* 'grinding' is achieved by an agent who is considered the main cause of the action. The action is achieved by a heavy tool that comes into contact with object. The objects are usually hard. The change of state in the object from one pieces into crust is not reached by a single movement of the too, but it needs a couple of movements to affects the object. Table 18 presents the objects that undergo the action of *haeen* and Table 19 presents the objects that do not undergo the action of *haeen*.

Physical *hareen* 'grind'	Metaphorical *hareen* 'grind'
tomato, potato, meat,	X

Table 18. Things that undergo *hareen* 'grind'

Things that do not undergo physical *hareen* 'grind'	Things that do not undergo metaphorical *hareen* 'grind'
Paper-liquids-gases-cloth-weeds-hair-ground.	Love-cold-warm-fever-memories-beauty

Table 19. Things that do not undergo *hareen* 'grind'

An LCS for the verb *hareen* 'grinding' is shown in (114).

(114)   LCS *Hareen* : x produce hareen in y by a heavy tool that has pressure on the theme

The verb *hareen* 'grinding' is similar to the verb *shkand* 'break' regarding the tool that should heavy and the result being uncontrolled, and also similar to *bre* 'cut' in the respect that the action needs a tool to be achieved. The tool should be present in the LCS because the action cannot be archived without it.

3.6 The verb *dabchre* 'cut down' (by force)

The verb *dabchre* denotes an action that includes force. The action is achieved by an agent on a theme. The prefix *da-* that precedes the verb *bchre* 'cut,' denotes that the theme is usually represents a small part of a larger part. In order to achieve the action, the agent should use some kind of physical force or authority.

Sentence (115) shows that the agent seized a piece of land, by using a kind of authority. The agent "cuts" the piece of land from a large land, and it is now under his own control. Sentence (116) expresses the same meaning, but the theme is different, and the means by which the action achieved is different too. The theme is a piece of cloth and the agent uses his force to cut and took part of the cloth from a whole piece of cloth.

(115) Zaw- e-   aka- i   bo   xoi   da- bchre
       piece of land the- 3   prep himself   down- take (by force)_past
       "He took (a piece of land) for himself"

(116) Parcha- qumqsh- aka-   m   da-   bchre
       Piece   cloth-   the-   1   down- cut and take_past (by force)
       "I cut and took the piece of cloth"

3.6.1 The syntax of the verb *dabchre*

3.6.1.1 The causative alternation

The verb *dabchre* undergoes the causative alternation. The verb denotes an action that is

achieved by an agent and the effect of the action is reflected on a theme.

(117) Parcha-   qumqsh-   aka-   m   da-   bchre
       Piece-   cloth-   the-   1   down-cut and take_past (by force)
       "I cut and took the piece of cloth"

The verb *dabchre* in the causative alternation takes two arguments, a subject and an object. Both

of the arguments appear in the structure of the sentence. All the predication requirements are

met.

3.6.1.2 The inchoative alternation

The verb *dabchre* does not undergo the inchoative alternation because the action

expressed by the verb needs an agent, to achieve the action:

(118) *Parcha-   qumqsh-   aka-   da-   bchra
        Piece   cloth-   the   down-cut and take_past (by force)
        *"The piece of cloth cut and took"

3.6.1.3 The middle alternation

The verb *dabchre* undergoes the middle alternation, but semantically the adjective that is

used to describe the theme should match the adverb that is used to describe the action. For

example:

(119) Parcha- qumqsh- i tanik da- da- bchren-   re(t) ba assani
      Piece   cloth-   3   thin   asp-down- cut_cause(by force)-pres prep easily
      "The delicate piece of cloth cuts downwardly easily"

The theme which is a piece of cloth in the above sentence is described as delicate, therefore; the action must be done easily, but if the piece of cloth is described as thick, the action needs more effort and achieving the action would be difficult.

3.6.1.4 The passive

The verb *dabchre* undergoes the passive alternation and it denotes an action achieved by an agent on a theme. The agent uses force to achieve the action, the force can be a physical strength or an authority.

(120) Parcha- qumqsh- aka   da-   bchre-   n-   ra
      Piece   cloth-   the   down- cut and take_past (by force)-cause-passive
      "The piece of cloth was cut and taken"

Syntactically a passive morpheme -*ra* is attached to the verb, and the passive morphology absorbs the verb's ability to assign a case to the noun phrase that follows it. The theme moves to get case, and since there is no explicit subject, the theme moves to occupy its position and is assigned a nominative case. All the requirements are met in the syntax. In daily use, Kurdish speakers do not prefer to use the sentence in the passive voice, but they use the causative alternation. The verb *dabchre* originally includes the sense of using force to achieve the action. This force is used to obtain things legally or sometimes illegally. A Kurdish speaker prefers to mention the agent because the force used decides if the action done legally or illegally. Therefore; the passive alternation is not common in daily Kurdish.

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I summarize the syntactic forms of *dabchre* in Table 20.

The verb	causative	inchoative	middle	passive
dachre	*daebchree*	X	*da-i-dacbhre*	*dabchrenra*

Table 20. The syntactic alternation of the verb *dabchreen*.

3.6.2 The semantics of the verb *dabchre*

The verb *dabchre* is formed by adding the suffix *da-* to the verb *bchre*. The suffix *da-* (as mentioned earlier) adds the sense that the action is achieved from top to bottom. The verb *bchre* denotes an action of cutting that is achieved by force. Therefore, the verb *dabchre* includes in its components meaning directionality and force. The verb denotes an action that is achieved by an agent, who has some kind of authority or power on an inanimate object. The action is achieved intentionally because the agent must use force or power to achieve the action (121).

(121)   Parcha- qumqsh-   aka- m   da-   bchre
        piece   cloth-   the- 1   down- cut and take_pas (by force)
        "I cut and took the piece of cloth"

The above sentence shows that the agent uses force to achieve the action on a piece of cloth. The agent cuts the piece of cloth into two pieces, but without using a tool. The agent uses her/his hands to achieve the action from top to bottom. Since the division is done by hands, the division is not clean.

Table 21 lists objects that undergo the action of *dabchre* and Table 22 lists objects that do not undergo the action of *dabchre*.

Physical *dabchre* 'cut by force from top to bottom'	Metaphorical *dabchre* 'cut by force from top to bottom'
Cloth	Piece of land

Table 21. Things that undergo *dabchre* 'cut by force from top to bottom'

Physical *dabchre* 'cut by force from top to bottom''mincing'	Metaphorical *dabchre* 'cut by force from top to bottom'
Paper-liquids-gases-weeds-hair-ground.	Love-cold-warm-fever-memories-beauty

Table 22. Things that do not undergo *dabchre* 'cut by force from top to bottom'

I propose the following LCS for the verb *dabchre* which has a monadic LCS since the verb needs both of its arguments.

(122)   *Dabchre* LCS: x produce Cut on y (intentionally), by using force (the action is directed downwards).

3.7 The verb *halbchre* 'open with force'

The verb *halbchre* is formed by adding the prefix *hal* to the verb *bchre* 'cut by force'. The prefix *hal-* adds the sense that the action of the verb is achieved from bottom to top. The verb denotes an action done by an agent on a theme. The agent achieves the action either with bare hands or with a tool. The action cannot be achieved without using force.Achieving the action needs exerting great force, which is why the action is always intentionally achieved. The action is usually achieved from bottom to top.

(123)   Roza   quto-aka-   i   hal-bchre
        Roza   can- the-   3   up- force open_past
        ''Roza opened the can''

(124)   Nama- aka hal-bchr-a
        Letter- the up- force open_past
        ''The letter opened''

Sentence (123) denotes the action of opening a can, but the action is achieved by force and with a tool. A Kurdish speaker knows that the action in (123) is done from bottom to top. Sentence (124) has nearly the same meaning and denotation. Opening a letter in its usual sense does not imply exerting any kind of force, but if the person who receives the letter expects important news that might be happy or sad, s/he would be eager to open it quickly. S/he will utilize some kind of force to speed up the action of opening. Directionality is an obvious component in the meaning of the verb in sentence (124).

3.7.1 The syntax of the verb *halbchre*

3.7.1.1 The causative alternation

The verb *halbchre* undergoes the causative alternation. The verb denotes an action that is achieved by an agent on a theme (125).

```
(125)  Roza  quto-   aka-  i   hal-bchre
       Roza  can-    the-  3   up force open_past   .
       "Roza opened the can"
```

The verb has two arguments in the structure of the sentence. The agent, who occupies the subject position, is assigned a nominative case, and the theme, which occupies the object position, is assigned an accusative case.

3.7.1.2 The Inchoative Alternation

The verb does not undergo the inchoative alternation, since the action implies directionality, an agent has to achieve the action (126).

(126) *Quto-aka   hal-bchra
         can- the up- force open_past
         "The can opened (by force)"

         The action expressed by this verb needs an agent and also intentionality because the force

used requires the intentionality to achieve the action; therefore agentivity and intentionality are

there in the structure of the sentence, To test this I will use the adverb *la xoyawa* which means

'by itself' to show that the action cannot be achieved without intentionality and agentivity:

(127) *Quto-i sarde- aka   hal- bchra   la xoyawa.
         can- of soda- the up- open_past by itself
         "The soda can opens by itself"

(128) *Quto- ka   hal-bchr-   a   la xoyawa
         can-   the   up- force open_past by   itself
         "The can opened (by force)"

Sentences (127) and (128) are not acceptable in Kurdish as the action cannot be achieved without

an agent.

3.7.1.3 The middle alternation

         The verb *dabchre* undergoes the middle alternation, but semantically the adjective that is

used to describe the theme should match the adverb that is used to describe the action (129).

(129) Quto- i sardi bchuuk ba asani hal- da-bchre-n-re(t)
         can- of soda small   prep easily up asp-open-cause-pres
         "A small can of soda opens easily"

3.7.1.4 The passive

The verb undergoes the middle alternation, but semantically the thing that undergoes the action determines the force that is needed to achieve the action (130). If the action is achieved without exerting much effort, it is described as "easily" done. On the contrary, if the action needs great effort; it is described as done "with difficulty".

(130) Quto-   i doshaw tamata- aka ba   asani   hal-da-   bchra
       can   of paste tomato- the prep easily   up- asp-   open_past
       "The can of tomato paste opens easily."

The verb *halbchre* undergoes the passive alternation and it denotes an action that is achieved by a passive agent (131).

(131) Quto- aka hal-bchre   n-   ra.
       can- the up-force_open_past cause-passive
       "The can was opened (by force)"

Syntactically a passive morpheme -*ra* is attached to the verb, and the theme moves to the subject position to get nominative case. Semantically the sentence in the passive alternation is not usually used, but rather the causative alternation is used. Kurdish speakers prefer mentioning the agent due to the force used to achieve the action. The passive alternation of the verbs *bchre, dabchre,* and *halbchre* is not common in daily use in Kurdish. I summarize the syntactic forms of *dabchre* in Table 23.

The verb	causative	inchoative	middle	passive
halebchre	*Halebchree*	*X*	*hal-dacbhre*	*hal-bchren-ra*

Table 23. The syntactic alternations of the verb *halbchreen*.

3.7.2 The semantics of the verb *halbchre* 'open by force'

The verb *halbchre* expresses an action achieved by an agent on an inanimate object. The verb is always used in expressing a real action, not a metaphorical one. Usually the action of the verb is used to refer to open the lids of cans or soda bottles. There are many components of meaning that participate in composing the overall meaning of the verb *halbchre*. The first component is directionality since the verb contains the prefix *hal* which indicates that the action is achieved from bottom to top. The second component is force because the verb *bchre* carries this sense in its meaning. The third component is intentionality as the action cannot be achieved without exerting some effort; it cannot be done without intention. A tool can be used to achieve the action or it can be achieved using bare hands. For example, some jars can be opened without a tool as in (132). If the object is a can that needs a can-opener, then the action must be achieved by a tool (133).

(132) Shushae-i   mrba- aka- m   hal-bchre
      Jar   of jam- the- 1   up-open_past_by_force
      "I opened the jar of the jam"

(133) Quto-i   doshw- aka- m   hal-bchre   ba   qto-halbchr- aka
      can of paste- the- 1 up-open_past_by_force prep can-opener- the
      "I opened the can of paste with the can opener"

When the action is achieved by hand, the hand is not necessarily mentioned in the sentence as in (132). Table 24 lists objects that undergo the action of *habchre* and Table 25 lists objects do not undergo the action of *habchre*.

Physical *halbchre* 'cut by force from bottom to top'	Metaphorical *halbchre* 'cut by force from bottom to top'

Can, letters, boxes	X

Table 24. Things that undergo *halbchre* 'cut by force from bottom to top'

Things that do not undergo physical *halbchre* 'cut by force from bottom to top'	Things that do not undergo metaphorical *halbchre* 'cut by force from bottom to top'
Paper, liquids, gases, weeds, hair, ground	Love, cold, warm, fever, memories, beauty

Table 25. Things that do not undergo *halbchre* 'cut by force from bottom to top'

According to the semantics of the verb, I propose the LCS in (134) for the dyadic verb *halbchre* and the LCS in (135) for the monadic verb *halbchre*.

(134)   LCS Dyadic *halbchre*: x causes y to open upwards by force

(135)   LCS Monadic *halbchre*: y opens upwards by force

3.8 The verb *dabra* 'cut off'

Languages differ in their means of modifying the original meaning of verbs. English uses verb particles to modify verb meaning, while Kurdish utilizes prefixes to modify the meaning of verbs. One of the Kurdish prefixes is *da*. When this prefix is added to a change of state verb, it adds two new components to the verb meaning. First, it gives the sense of separating a part from a whole entity or a small quantity from a larger one, especially when the verb refers to a psychological or spatial cut, not a concrete one. It also adds a directional component, especially when it is used with verbs that express a concrete change. The action is achieved from top to bottom.

In English, the verb *cut* can be accompanied by the verb particle *off*. In Kurdish, the verb *bre* is preceded by the prefix *da-*. The verb *dabra* 'cut off' in sentence (136) expresses a psychological state that describes the experiencer condition. The agent, who is the experiencer in this case, goes through a kind of a psychological cut from life around himself. The prefix *da-* bears the sense that the singular individual feels cut off from living in that the country. The agent in the sentence represents only a small part of life, so he (the small part) is cut off from the larger community. In sentence (137) the agent is cutting himself spatially from human contact. There is no tool or a passive participant on which the action is achieved. Rather, the action is achieved by the agent reflexively, and this is very clear in the context because of the use of the reflexive pronoun *xoi*.

(136) Hast-   aka- t da- bra   la   ʒyanda la-   m shara
      feel_do- the- 3 off- cut_past prep living prep- this-country
      "She feels very cut off living in this country"

(137) Xoi   da- bre-   e la   xalik la   malawa
      himself off-cut_past-3   prep people prep home
      "He cut himself off from people at home"

Sentence (138) also expresses a psychological and spatial cut off. The agent, who is supposed to be part of the process of learning, cuts himself off from studying. It is impossible to say that the study cut him off because it is the whole not the part. Sentence (139) expresses the spatial and the psychological 'cut off' and bears the same meaning as in sentences (136), (137), and (138).

(138) Da- br- a   la   xwendin
      off- cut_past prep study
      "He dropped his study"
      "He cuts off his study"

(139) Barx- aka da- bra   la   mar-aka
      lamb- the off-cut_past prep ewe the
      "The lamb cut off the ewe"

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3.8.1   The syntax of the verb of *dabre*

3.8.1.1 The causative alternation

The verb *dabra* in the causative alternation refers to an action done by the agent, and the effect of the action affects the agent itself. There are two arguments in the structure of the sentence, which are the agent and a theme. The agent separates himself/herself from the community and the effect is psychological rather than concrete. The agent is the doer of the action and the theme, which is affected by the action at the same time. The reflexive theme is not mentioned explicitly, but is understood from the context.

(140)   Hast-   aka- t da-bra   la   ʒyanda la-   m shara
        feel_do the- 3 off-cut_past prep life   prep- this country
        "She feels cut off from life in this country"

3.8.1.2 The Inchoative Alternation

The verb *dabra* undergoes the inchoative alternation (141).

(141)   Azad da- bra   la   ʒyan
        Azad off-cut_past prep living
        *"Azad cut off living"

The verb *dabra* in Kurdish behaves differently from the verb cut off in English in this context even though they are considered translational equivalents of one another. The action expressed in (141) by the verb *dabra,* can imply that some external factor such as a lack of money cut off the subject from society. The verb cut off in English behaves like the verb cut,

because it requires the existence of both the agent and the theme in the structure of the sentence. If the agent and the theme refer to the same entity in any English sentence, a reflexive pronoun is needed. Knowing this clarifies why sentence (141) is acceptable in Kurdish, but not in English.

3.8.1.3 The middle alternation

The verb *dabra* undergoes the middle alternation. The middle alternation usually needs an adverb that expresses the manner in which the action is achieved. Since the verb *dabra* bears the nuance of being cut off psychologically from something or someone, the adverb that is used to express the manner of the action must refer to this psychological state.

(142)   mnal   ba   qursee   la   sheer da- da-bre(t)
        children prep difficulty from milk asp-off-cut_pres
        "Children stop breast feeding with difficulty"

3.8.1.4 The passive

The verb *dabrra* 'cut off' undergoes the passive alternation in Kurdish. It denotes an action achieved on a theme by an implicit agent.

(143)   Azad da-br- ra   la ʒyanda la- m   shara
        Azad off-cut-passive prep living prep this country
        "He was cut off from living in this country"

The passive morpheme *-ra* is added to the verb to refer to the implicit agent, which is not in the structure of the sentence. I summarize the syntactic forms of *dabra* in the following Table 26.

The verb	causative	inchoative	middle	passive
dabre	*daebree*	*dabra*	*da-dabret*	*da- dabrra*

Table 26. The syntactic alternation of the verb *dabraan*.

3.8.2 The semantics of the verb *dabre* 'cut off'

The verb *dabre* 'cut off' denotes a metaphorical action of 'cutting off' somebody from someone or something. The action can be achieved by an agent who has the ability to cut somebody off something or someone, or it can be achieved by the agent reflexively. The agent can cut himself/herself off from something or somebody. The action refers to a psychological state that the agent chooses (or is sometimes obliged) to undergo. Table 27 lists objects that undergo the action of *habchre* while Table 28 lists objects that do not undergo the action of *habchre*.

Physical *dabra* 'cut off'	Metaphorical *dabra* 'cut off'
X	A child from a mother

Table 27. Things that undergo *dabra* 'cut off'

Physical *dabra* 'cut off'	Metaphorical *dabra* 'cut off'
Paper, liquids, gases, weeds, hair, ground	Love, cold, warm, fever, memories, beauty

Table 28. Things that do not undergo *dabra* 'cut off'

The action dabra includes a sense of separation which is why I propose LCSs for the verb that includes the 'sense of separation'. Intentionality is an important element in the LCS of the verb. In (144) the element 'cause' is used in the LCS of the verb as it implies the existence of an agent

achieving an action on a theme or a patient. The agent can 'separate' the patient from something spatially or psychologically. In the monadic LCS (145) the agent 'separates' him/herself from something. The agent plays two roles—the agent and the patient at the same time; therefore the word 'cause' has not been used in (145).

(144) LCS *dabre*: x causes y *gyakrdinwa* to 'separate' from z (if the agent achieved the action on a theme) intentionally

(145) LCS *dabre*: x *gyakrdawa* 'separates' x from z (if the agent separates him/herself)

3.9 The verb *halbra* 'lift-raise'

Adding the prefix *hal-* to the verb *bre* 'cut' adds new components to the original meaning of the verb. The verb *halbre* expresses an action that requires an agent and a theme on which the action is reflected. The action expressed by the verb *halbre* includes intentionality and direction. The action usually is achieved from bottom to top.

Sentence (146) is a clear example that explains the meaning expressed by the verb *halbre*. The agent in sentence (146) exerts s/his efforts to raise a chair, which means literally "to cut the relation between the chair and the floor in an upward direction." The action is achieved by raising the chair from the floor, "the bottom" to somewhere higher "the top." The action includes intentionality because it cannot be done accidently without effort.

(146) Min kurse- aka- m hal-bre
      I   chair- the-   1 up-cut_past   .
      "I lifted the chair up"

Sentence (147) shows another context in which the same verb expresses nearly the same meaning. The agent lifts the wire up "to cut its relation with the earth," and the action is achieved from bottom to top with intentionality. Sentence (148) seems odd to the English speaker, but for the Kurdish speaker it is not different from sentences (146) and (147). It expresses an action done by a person who "cuts the relation between the upper lid and the lower lid" of her/his eyes. The person achieves the action from bottom to top. The person does so intentionally and by exerting some effort. The verb *halbre* 'raise' is different from *bre 'cut'* in the sense that it expresses directionality and showing that there has been effort exerted to achieve the action.

(147) Wiar- aka hal-bra   ba   mndal   dasti na- gati
          wire- the up- cut_past prep children hands not- reach
          "Raise the wire to prevent the children from reaching it"

(148)   Naxosh- aka   chaw- e   hal-bre
          patient-   the eyes- his up-cut_past
          "The patient opened up his eyes"

3.9.1 The syntax of the verb *halbre*

3.9.1.1 The causative alternation

Syntactically the verb *halbre* in the causative alternation requires two arguments, an agent and a theme (149). The agent occupies the subject position and it is assigned a nominative case. The theme would be in the object position and it is assigned a subjunctive case.

(149)   Min kurse-aka- m   hal-bre
          I   chair- the 1 up-cut_pas
          "I lifted the chair up"

3.9.1.2 The inchoative alternation

The verb *halbre* does not undergo the inchoative alternation because the verb needs both

of its arguments to express the intended meaning (150). The verb *halbre* denotes an action that

needs intention and effort to be achieved. Both the intention and effort are done by an agent.

Omitting the agent leads to the unfulfillment of the action.

(150)   *kurse - ka   hal- bra
           chair-   the   up- cut_past
         "The chair lifted"

3.9.1.3 The middle alternation

The verb *halbre* undergoes the middle alternation (151). The middle alternation requires

an adverb that expresses the manner of the action such as easily, clearly or with difficultly and so

on.

(151)   Kurse bchuk   ba   assani da-hal-bre-t
         chair   small   prep easily   asp-up-cut_past   .
         "The small chair lifts up easily"

If the chair is a small one the action would be achieved easily, and if the chair is big, the

action is achieved with difficultly.

3.9.1.4 The passive

The verb *halbre* 'lift up' can be used in the passive alternation (152). The agent is still

present covertly in the structure even if not mentioned explicitly.

(152) Kurse- aka ha-lbr-ra
       chair-   the up-cut_past-passive
       "The chair was lifted up"

The theme moves to occupy the subject position, but it does not play the role of the agent because the subject role has been absorbed by the passive morphology. The verb in this alternation denotes an action done by an implicit agent. One of the restrictions of the passive alternation of the verb *halbra* 'lift up' in Kurdish is the pronunciation restriction. A Kurdish speaker faces difficulty in pronouncing the passive form of the verb and that leads the speaker to use the inchoative form of the verb to express the same meaning. The syntactic forms of *halbre* are listed in Table 29.

The verb	causative	inchoative	middle	passive
Halbre	*Halebree*	X	*Hal-dabret*	*hal- dabrra*

Table 29. The syntactic alternations of the verb *halbreen*.

3.9.2 The Semantics of the Verb *Halbre* 'lift up'

The verb denotes an action that is achieved by an agent on a theme. Table 30 lists objects that undergo the action of *halbra* while Table 31 lists objects that do not.

Physical *halbra* 'lift up'	Metaphorical *halbra* 'lift up'
chair, one's eyes	nose (to show dignity)

Table 30. Things that undergo *halbra* 'lift up'

Physical *halbra* 'lift up'	Metaphorical *halbra* 'lift up'
Anything that can not be lifted.	love, cold, warm, fever, memories, beauty

Table 31. Things that do not undergo *halbra* 'lift'

The verb *halbre* in its meaning components includes directionality, intentionality, and effort. I propose the LCS in (153) for the verb *halbre*. I did not use the 'cause' component because intentionality is a main component of the action. One cannot lift up something unintentionally.

(153) *halbre* LCS: x produce *barzkirdnawa* 'lifting' on y (intentionally).

3.10 The verb *dashka* 'break by force'

The verb *dashka* is composed of the verb *shka* 'break' proceeded by the prefix *da*. The verb *dashka* is similar to the verb *shka* 'break' in its use to refer to physical "breaking" events. The verb refers to an action that is achieved from top to bottom, but the exact meaning of the verb is determined by the arguments of the verb.

The verb in sentence (154) denotes an action that is achieved by an agent on a theme. The agent broke the branch, but the branch is still connected to the tree. When I asked English native speakers how to express this event, I got two different answers. The first group said that they needed two verbs to express the exact meaning of the context. They said that the verb *break* in English refers to a complete action and since the branch is still connected to the tree another verb is needed to express this sense. The second group prefers the verb *split* to express this event. In sentence (155) the verb *dashka* refers to a metaphorical action of breaking. The agent cuts the price under pressure from the buyer in contrast with reducing prices which is done willingly.

(154) Hoger lq-   i dar- aka- i da-shk-a-n
       Hoger branch of tree- the- 3 down-break-past-cause
       "Hoger broke the branch of the tree but did not separate it totally"
       "Hoger split the branch of the tree"

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(155) Xawan- i sayara-aka nrx- aka- i bo   kryar- aka da-shk-a-n
       owner of car-   the price- the- 3 prep buyer the down-break-past-cause
       "The owner of the car cut the price for the buyer"

3.10.1 The syntax of the verb *dashka*

3.10.1.1 The causative alternation

Syntactically the verb *dashka* undergoes the causative alternation (156). The action expressed

by the verb has an agent, who initiates the action and a theme that undergoes the action.

(156) Hoger lq-   i dar- aka- i da- shk-a-   n
       Hoger branch of tree- the 3 down-break-past-cause
       "Hoger broke the branch of the tree but did not completely separate it"
       "Hoger split the branch of the tree"

3.10.1.2 The inchoative alternation

The verb *dashka* undergoes the inchoative alternation (157). The semantic theme is in the

syntactic subject position.

(157) Lq-   i   dar- aka da-   shk-a
       branch of tree- the down-break-past
       "The branch of the tree broke incompletely"

3.10.1.3 The middle alternation

The verb *dashka* undergoes the middle alternation (158). A generic agent is not

mentioned explicitly in the structure, but it is understood.

(158) lq- i bareek ba asani da- shke
     small of branch prep easily down-break_pres
     "A small branch breaks easily"

3.10.1.4 The Passive

The verb *dashka* 'break downward' can be used in the passive alternation (159). The theme

moves to occupy the subject position. The agent role is absorbed by the passive morphology.

(159) lq- i dar ba- asani da- da- shke- n- ra
     branch of tree prep easily asp- down-break_past-cause-passive
     "Tree branch is easily broken"

Table 32 summarizes the syntactic forms of *dashka* 'break downward'.

The verb	causative	inchoative	middle	passive
dashka	*daishkan*	*dashka*	*dashket*	*da-dashkenret*

Table 32. The syntactic alternations of the verb *dashkan*.

3.10.2 The semantics of the verb *dashka* 'break downward'

The verb denotes an action that can be a real or metaphorical action. It is achieved by an

agent acting on a theme. The theme is usually an inanimate object. The meaning of the verb

includes many components as directionality and intentionality. The action when it refers to a real

action is achieved without a tool. Table 33 lists objects that undergo the action of *dashka* while

Table 34 lists objects that do not.

Physical *dashka* 'breaking downward'	Metaphorical *dashka* 'breaking downward'
Branch of tree	X

Table 33. Things that undergo *dashka* 'breaking downward'

Physical *dashka* 'breaking downward'	Metaphorical *dashka* 'breaking downward'
paper, liquids, gases, hair, ground	love, cold, warm, fever, memories, beauty

Table 34. Things that do not undergo *dashka* 'breaking downward'

I propose the LCS in (160) for the dyadic form of the verb *dashka*. I used the 'cause' component in (161) because the action has to be achieved directly by the agent. The monadic version of the LCS is shown in (161). Intentionality and direction are main components of the meaning of the verb.

(160) Dyadic LCS *Dashka*: x cause y to *SHKA* intentionally (downwardly).

(161) Monadic LCS *Dashka*: y become *SHKA* (downwardly).

3.11 The verb **halshkan*

The prefix *hal-* cannot be added to the verb *shka* 'break'. When the prefix *hal-* is added to a verb, it gives the sense that the action is achieved from bottom to top. To achieve the action expressed by the verb *shka* 'break' the agent should have control and power, which contradicts the meaning of the *hal* prefix. This result contrasts with the English verb *break up*.

(162)   *Hoger lq-   i dar- aka- i hal-shk-a-n
        hoger   branch of tree- the- 3 up-break-past-cause
        "Hoger broke the branch of the tree upward"

3.12 The verb *kirdinawa* 'open'

The verb *kirdnawa* 'open' in Kurdish belongs to the class of compound verbs that is formed by combining a simple verb with a suffix. The origin of the verb is *kird,* which literally means do or make, and the suffix *awa* is added to it, which changes the meaning of the complex to open (163, 164, 165).

(163) Ali darg- aka- i   krd-awa
       Ali door the- 3   do-open_past
       "Ali opened the door."

(164) Qopcha- ka-   m krd-awa
       botton   the- 1 do-open_past
       "I opened the button. (Unbutton the shirt)"

(165) Lala nama- ka- i   krd-awa
       Lala letter   the- 3   do-open_past
       "Lala opened the letter"

The adverb *awa* in Kurdish usually means that the action is repeated twice or three times (166, 167).

(166) Xwar- di- m
       Eat-   it- 1
       "I ate it"

(167) Xwar- di- m awa
       eat -   it - 1 again
       "I ate it again"

But the suffix -*awa* behaves differently with the verb *kird* because it changes its meaning to

kirdinawa 'open'.

The verb *kirdinawa* 'open' in sentence (168) denotes an action achieved by an agent on a theme. The meaning of the action does not imply the use of a tool in the action unless it is mentioned explicitly.

(168)   Ali darg- aka- i   krd-awa   ba   chakush
        Ali door the- 3 do-open_past prep hammer
        "Ali opened the door by a hammer"

The action that is expressed by the verb *kirdinawa* 'open' implies a contact between the agent and a theme. Sentence (168) also expresses an action done by an agent on a theme. Sentence (168) denotes an action similar to the previous sentences, but it differs in the sense that the action is done with a tool. If the action is achieved with a tool like a can-opener, however, another verb is used in Kurdish which is the verb *halbchre*.

3.12.1 The syntax of the verb *kirdinawa* 'open'

3.12.1.1 The causative alternation

The verb *kirdinawa* undergoes the causative alternation because the verb has two arguments the agent, which occupies the subject position and a theme, which occupies the object position (169).

(169)   Ali darg- aka-   i   krd-awa.
        Ali door the- 3 do-open_past
        "Ali opened the door"

3.12.1.2 The inchoative alternation

The inchoative form of the verb *kirdinawa* denotes an action that is apparently achieved without an explicit agent (170). The theme, which is the passive participant in the action, plays the role of the subject syntactically but not semantically. In the inchoative alternation the action seems to be achieved not only by an animate factor, but also by an inanimate one such as the wind.

(170)   Darga- ka   kray-awa
        door-   the do-open_past
        "The door opened"

3.12.1.3 The middle alternation

The verb *kirdinawa* 'open' undergoes the middle alternation (171). The arguments of the verb behave in the same way as in the inchoative alternation. The theme, which is the passive participant in the action, plays the role of the subject syntactically but not semantically. The adverb gives a sense of the manner in which the action is achieved.

(171)   Darg- aka ba   asani kray-awa.
        door   the prep easily do-open_past
        "The door opened easily"

3.12.1.4 The passive

Syntactically the verb *kirdinawa* 'open' undergoes the passive alternation (172). The verb indicates an action that is achieved by an unknown agent. The agent is represented in the sentence by a passive morphology.

(172) Darg- aka kr- enra- yawa
door- the do-passive_past
"The door was opened"

One of the restrictions of the passive alternation of the verb *kirdinawa* 'open'in Kurdish

is the pronunciation restriction. The Kurdish speaker faces difficulty in pronouncing the passive

form of the verb and that leads the Kurdish speaker to use the inchoative form of the verb to

express the same meaning. I summarize the syntactic forms of *kirdinawa* in Table 35.

The verb	causative	inchoative	middle	passive
Kird-in-awa	*Kird-ewa*	*kra-i-awa*	*Dark-e-tawa*	*da-kra-yawa*

Table 35. The syntactic alternation of the verb *kirdinawa*.

3.12.2 The semantics of the verb *kirdinawa* 'open'

The verb *kirdinawa* 'open' denotes an action done by an agent on a theme. No tool is

involved in the action unless mentioned overtly. The action is used with objects as doors,

windows, or jars. Table 36 lists objects that undergo the action of *kirdinawa* and Table 37 lists

objects that do not.

physical *kirdinawa* 'open'	metaphorical *kirdinawa* 'open'
door, window, can	heart

Table 36. Things that undergo *kirdinawa* 'open'

Physical *kirdinawa* 'open'	Metaphorical *kirdinawa* 'open'
paper, liquids, gases, weeds, hair, ground	love, cold, warm, fever, memories, beauty

Table 37. Things that do not undergo *kirdinawa* 'open'

I propose a dyadic LCS for the verb *kirdinawa* in (173) and a monadic LCS for the verb in (174). The word 'cause' is used in (173) since it gives the sense that the action of 'opening' can be performed by an animate or inanimate agent such as the wind.

(173)   LCS dyadic *kirdinawa*: x causes y to be *KRAYAWA*.

(174)   LCS monadic *kirdinwa*: x become to be *KRAYAWA*.

3.13 The verb *pe-akesha*n/*led*an 'hit'[19]

The equivalent of the verb 'hit' in Kurdish is either *peyakeshan* or *ledan* because the use of the verb changes depending on the intention and the purpose behind achieving the action. In (175) the verb *ledan* is used because the agent who achieves the action did it on purpose and as a means of punishment. The father can use a tool to punish, or he can use his own hand to hit the child. In (176) the agent hit the gate, but unintentionally, he did not mean to, that is why the verb *pe-akeshan* is used. Sentence (177) is the repetition of sentence (176), but the verb *ledan* is used instead of *peakeshan* because the agent performed the action on purpose. The action of the verb needs an agent explicitly or implicitly represented by the agreement clitic on the verb.

(175)   bawk- m   leeda- m
        father poss   hit_past-1
        "My father hit me"

(176)   otomobil- aka- i   kesh   ba   darg- aka- ya (Unintentionally)
        car-   the- 3   hit_past prep gate the- that
        "He hit the gate with the car"

---

[19] The verb *keshan* is always used with a preposition *pea* 'on'. In the use of the verb as an infinitive, the preposition precedes the verb and is pronounced as *peakeshan*. When the verb is used in other contexts, the preposition follows the verb and the /p/ sound changes into /b/ for ease of articulation, e.g., *keshe ba*.

(177) otomobil- aka- i da   ba   darg- aka ya. (Intentionally)
       car   the- 3 hit_pas prep gate   the that
       "He hit the gate with the car"

The action is achieved by an agent intentionally or unintentionally. The action does not

change the state of the direct object. If the action is achieved on an animate object, the effect on

the object would be the feeling of hurt. If the action is achieved on an inanimate object, the effect

either would be only a little bump.

3.13.1 The syntax of the verbs *peakeshan/ledan* 'hit'

3.13.1.1 The causative alternation

The verbs *peakeshan/ledan* 'hit' undergo the causative alternation (178). The verbs are

transitive in that they require both a subject and object. There is no causative marker attached to

the verbs since the action is achieved by a direct cause.

(178) Adil darek -i   ba   dewar- ak-aya kasha.
       Adil stick 3   prep   wall- the   hit_past
       "Adil hit the stick against the wall."

3.13.1.2 The inchoative alternation

The verbs s*peakeshan/ledan* 'hit' cannot undergo the inchoative alternation because the

action is achieved by a direct causation and the agent is an obligatory argument. Without

mentioning the agent, the sentence would be ungrammatical as in (179).

(179)   *darek ba   dewar- ak- aya kasha.
        *stick prep wall-   the   hit_past
        *"hit the stick against the wall"

3.13.1.3 The middle alternation

The verbs *pakeshan*/*ledan* 'hit' undergo the middle alternation (180). The middle

alternation usually needs an adverb that expresses the manner of the action. The generic agent is

not mentioned explicitly in the structure, but it is understood from the meaning of the sentence.

(180)   loka   ba   asani pya- ya   da-kesh-re
        Cotton prep easily on   that asp-hit_pres
        "Cotton is easily hit on"

3.13.1.4 The Passive

The verbs *pakeshan*/*ledan* 'hit' are used in the passive to express an action that is

achieved by an active participant that is not mentioned explicitly (181). When the verbs

s*peakeshan /ledan* 'hit' are used in the passive, they bear the sense of intentionality. The doer of

the action did the action on purpose, but it does not show up for a reason or another in the

structure of the sentence.

(181)   la   mindal- aka d- ra
        prep child   the hit-passive
        "The child was hit"

Table 38 summarizes the syntactic forms of *peakeshan*.

The verb	causative	inchoative	middle	passive
Peakeshan	*Peayakesha*	X	*Pe-ya-da-kesh-re*	*da-krayawa*

Table 38. The syntactic alternation of the verbs *peakeshan/ledan*

3.13.2 The semantics of the verbs *peakeshan/ledan* 'hit'

The verbs *peakeshan/ledan* denote a contact-effect action. The action is achieved by an

agent with or without a tool. In (182) the agent achieved the action without any tool; the agent

may use his hand or feet to achieve the action of *ledan* 'hitting,' but in (183) the agent used a

tool to achieve the action. The state of the object that undergoes the action does not change, but it

is affected, if it is animate object, psychologically. The contact between the agent and the object

is the main factor in the achievement of the action.

 (182) mamust- aka la   xuendkar- akay da
         teacher- the prep student-   the hit_past
         "The teacher hit the student"

(183) mamusta- aka ba   rasta la   xuendkar- akay da
         teacher - the prep ruler prep student-   the hit_past
         "The teacher hit the student with a ruler"

Table 39 lists objects that undergo the action of *peakeshan* while Table 40 lists objects

that do not.

Physical *peakeshan* 'hit'	Metaphorical *peakeshan* 'hit'
car, wall, person	X

Table 39. Things that undergo *peakeshan* 'hit'

Physical *peakeshan* 'hit'	Metaphorical *peakeshan* 'hit'
anything that can be not be hit such as air	love, cold, warmth, fever, memories, beauty

Table 40. Things that do not undergo *peakeshan* 'hit'

The LCS of the verb *peakeshan* 'hit' has to include the agent, the contact, the effect, and the object. But the LCS of the verb *ledan* needs another factor, which is the intention of the agent. It is not easy to draw an LCS for the verbs *peakeshan/ledan* 'hit' because the tool used by the agent, the force used by the agent and the kind of object changes the result of the action. For example, if a man hit a small child slightly by hand, the effect would be a psychological effect, but not a clear effect. If a man hits a child, and exerts more effort in his action, or uses a tool in hitting the child on his face, the effect will be either breaking his jaw or breaking his nose. The effect of the contact between the agent and the object varies depending on the factors mentioned above.

Another context that shows the difficulty in drawing an LCS for the verbs *peakeshan/ledan* 'hit' in Kurdish is when an agent hits a car with a flower. There would be no effect on the car at all, but if the agent uses a hammer to hit the car, the effect of the hitting will be clear because the car will be dented. These contexts show the result of the action of hitting varies in accordance to the force exerted by the agent, the kind of tool, and the kind if object which undergoes the action.

I used the verb 'produce' in the LCS in (184) to show that the action has to be achieved by the agent intentionally. In most cases it is achieved by hand unless a tool is explicitly mentioned. In (185) I used the verb 'cause' to show that the verb can be achieved unintentionally by an agent or a causer with hands or with a tool.

(184) *Ledan* LCS: x produces *ledan* on y intentionally for a purpose.

(185) *Peakeshan* LCS: x cause *peakeshan* on y

3.14 Summary

  In this chapter I analyzed the syntactic behavior of nine 'cut' and 'break' verbs in Sorani with a variety of objects and in a variety of different contexts. I found that these verbs cannot be divided into two verb classes based on their use with single objects or in single contexts. I present the syntactic forms of the Sorani verbs in Table (41).

The verbs	**Causative**	**Inchoative**	**Middle**	**Passive**
bre	*bre-e*	*bra*	*da-bre*	*br-ra*
shka	*shka-nd-i*	*shka*	*da-shke*	*sken-ra*
bchre	*bchra-nd-i* *bchre-e*	*bchr-a*	*da-bchre*	*bchren-ra*
wirdkirdin	*wurd-i kird*	*wurd-buu*	*wurd-da-kre/wurd-da-be*	*wurdkra*
jneen	*jne-e*	X	*da-jnre*	*jn-ra*
hareen	*hare-e*	X	*da-hare*	*har-ra*
dabchre	*da-i-bchre*	X	*da-bchre*	*da-bchren-ra*
halbchre	*hal-i-bre*	X	*hal-da-bre*	*hal-da-bre*
dabra	*da-i-bre*	*dabra-*	*da-da-bre*	*da-br-ra*
halbre	*hal-i-bre*	X	X	*hal-br-ra*
dashka	*da-i-shkan*	*da-shka*	*da-da-shke*	*da-shken-ra*
kirdinwa	*kird-ewa*	*krayawa*	*da-kre-tawa*	*kr-rayawa*
peakeshan	*pea-ya-kesh*	X	*pea-ya-da-keshre*	*pea-ya-keshra*

Table 41. The syntactic alternations of the the verbs mentioned in the thesis

  One important finding is that effect of the prefixes *hal-* and *da-* on the contexts of use for the verbs. These prefixes limit the use of some verbs to metaphorical situations which lack a physical separation of an object into pieces shown in Table 42.

The verbs	physical Use	metaphorical
bre	Yes	Yes
shka	Yes	Yes
bchre	Yes	Yes
dabchre	No	Yes
halbchre	Yes	No
dabra	No	Yes
halbre	Yes	No
dashka	Yes	No

Table 42. The use of the Kurdish verbs physically and metaphorically.

Chapter 4

4.1 Introduction

In this chapter I will summarize my study of the Kurdish verbs for cutting and breaking and assess its implications for the Guerssel et al. (1985) study. I found some alternations of the Kurdish verbs such as the suppletive alternation that were not mentioned by Guerssel et al. (1985) study. I explored differences and similarities in the contexts of use for the English and Kurdish verbs 'cut' and 'break'. I did this by exploring the use of the verbs with a variety of objects and contexts, both concrete and metaphorical. I found that the LCS of the verb changes when it is used to refer to a real action or a metaphorical one in accord with its syntactic behavior A good example that explains this point would be the difference in the LCS of the verb *bre* 'cut' in Kurdish when it is used to mean real or metaphorical actions as shown previously.

In the previous chapter I presented thirteen Kurdish verbs for cutting and breaking and described their syntactic and semantic properties. I proposed an LCS for each of these verbs which attempts to account for their syntactic behavior. I provide a list of these LCSs in Table 43.

verbs	monadic LCS	dyadic LCS
bre	*bra: x become to be bra*	*bre*: x produce a 'clean' separation on y (by a tool) (a tool is optional)
shka	*shka*: y come to be *shkandin*	*shkan*: (x) cause-n (y come to be BROKEN)
bchre	*bchre*: y becomes in the state of *bchra* (by an external force)	*bchre*: x cause *bchre* on y, by using force intentionally.
wirdkirdin	*wurdbun*: x becomes *wurd* by an external agent	*wurdkirdin LCS:* x produce *wurdkirdin* on y intentionally
jneen	X	*jneen*: x produce *jneen* on y by a sharp-edge tool that comes into contact with y intentionally.
hareen	X	*hareen*: x produce hareen in y to be *harraw* 'grounded' by a heavy tool that has pressure on the theme.
dabchre	X	*dabchre*: x produces cut on y (intentionally), by using force (the action is directed downwards).
halbchre	*halbchre*: x causes y to open	*halbchre*: x causes y to open upwards by force y

	upwards by force y	intentionally.
dabra	*dabre*: x *gyakrdawa* 'separate' x from z (if the agent separates him/herself)	*dabre*: x causes y *gyakrdinwa* 'separate' from z (if the agent achieved the action on a theme) intentionally
halbre	X	*halbre*: x produce *barzkirdnawa* 'lifting' on y (intentionally).
dashka	*dashka*:y become to be DASHKA (downwardly).	*dashka*: x intentionally causes y to Dashka (downwardly).
kirdinwa	*kirdinwa*: x become to be KRAYAWA.	*kirdinawa*: x causes y to open
ledan	X	*Ledan*: x produces *ledan* on y intentionally
peakeshan	X	*Peakeshan*: x cause *peakeshan* on y

Table 43. The LCSs of the the verbs mentioned in the thesis

4.2 Overlapping Points between the Verbs 'cut' and 'break' in English and Kurdish

The English verb *break* is translated into the Kurdish verb *bre 'cut'* in sentences (185-187). These examples raise the obvious question of the criteria that can be used for translation between languages. A cross-linguistic study of cut and break verbs must establish semantic criteria for verb translation.

(186) Talafun- aka lee da w   berok- aka mi bre
       Phone   the prep hit and thought the- 1   cut_past
       "The phone rang and broke my thought"

(187) Kur- aka hamuu paywandekan- i bre la   galkomonist partia
       He   the all   relations-   3 cut with communist party
       "He broke all the links with the communist party"

(188) Diz-   aka-n mal- aka bre-n lakatekda ema la mal   na buuen
       burglars the pl house the cut-3 while   we in house not been
       "The burglars had broken in while we were away"

There are many explanations for such differences in translation. First, the contexts of use

for the English verb *break* partially overlap with the contexts of use of the Kurdish verb *bre* 'cut'. The English verb *break* and the Kurdish verb *shka* also share many contexts of use, which shows that the Kurdish verb *shka* has many of the same semantic components as the English verb *break*. The second explanation is that the use of the verb is determined, not only by its semantic components, but by the language user's point of view of specific contexts. An English speaker thinks of such objects as thoughts (186), links (187), and houses (188) as entities that can be broken, and use the verb *break* to describe such actions. A Kurdish speaker thinks of objects such as chains or thoughts as a series that can be 'cut' and uses the verbs *bre* or *bchre* to describe the result. English and Kurdish speakers use different verbs to express the same physical situations due to their construction of the event rather than the physical action. Kurdish native speakers think of the lock of the door in (188) as something that can be 'cut' but not 'broken' by burglars.

In sentence (189), the customer does not pay all the money to the buyer, but 'cuts' some part of it after a long debate. Kurdish uses the verb *bre* 'cut' to express the meaning of the sentence. In sentence (190) the same context is expressed, but from the buyer's point of view. The buyer willingly 'breaks' a little sum from the original price for the customer. Kurdish uses the contrast between *bre* 'cut' and *shka* 'break' to express the same context from the perspective of the seller or the buyer.

(189)　par-　　aka- m le　da-bre
　　　　money　the- 1　prep asp-cut
　　　　"I cut the money from him.(said by the buyer)"

(190)　Sear- m bu　da-shk-a-n
　　　　price- 1　prep down-break-past-cause
　　　　"I break the money for them. (said by the seller)"

Kurdish and English agree in using the verb *shka* 'break' in contexts when one break's somebody else's heart, promise, or trust, but they disagree about the context in which a relationship is involved. English speakers usually look at the two persons in a relationship as one entity which can 'break'. Kurdish speakers use the verb *bre* 'cut' to express the same situation. Kurdish speakers look at the relationship not as an object that can be broken, but as link between two persons. Usually the link is 'cut' and this leads to the end of the relationship. This contrast in the use of the English and Kurdish verbs for 'cut' and 'break' led me to propose two different hypotheses. First, I propose that the verbs in Kurdish and English are the same and accordingly they will have the same LCSs, but they are used in different contexts by the language users. Second, I assume that the English and Kurdish verbs are not equivalent, and this explains why the LCS of the verb *bre* 'cut' is different for metaphorical actions. The next section deals with this issue.

4.3 Semantic Components

Semantically, I could not find an exact English counterpart for the verbs that I investigated in Kurdish such as the verb *bchre*. For example, the verb *shka* 'break' can be used to mean a real action such as when cars or watches stop working. Guerssel et al. only considered verbs used in a few concrete contexts in their study; they did not consider metaphorical actions. I will discuss the uses of verbs in physical and the metaphorical contexts separately.

4.3.1 Verbs in Physical Contexts

Guerssel et al. demonstrate the semantic components of the verb 'break' in English by using the verb in one context with one object. In my study I used the verb *shka* in different

contexts with different objects, and I realize that the verb *shka* is used with objects that the English verb *break* is not used with and vice a versa. For example, the verb *shka* is used to refer to the action of breaking nuts, bread and heads, while in English rope, skin and egg yolks undergo the action of breaking. The same is true regarding the verb *bre* 'cut' because in Kurdish a conversation undergoes the action of *breen*, while in English men's hair is cut.

When the verb is used with different objects new semantic components pop up, and some semantic components disappear. For example, when the verb *shka* is used with nuts, the element 'take out' enters its semantic components, while when the hand is used to *bre* 'cut' papers in Kurdish, the element 'with a sharp-edge tool coming into contact' does not exist anymore in the semantic components of the verb.

4.3.2 Metaphorical use of verbs

Verbs are also used to denote metaphorical actions and this means that the verbs are used with different objects and may gain or lose some semantic components. For example, the verb *shka* 'break' is used metaphorically as in (190):

(191) qsa lagal manal- aka bka   ba trs- i   b-shke
       talk prep child- the make to fear- 3   asp-break_pres
       "Talk to the child to be familiar to you"

In (191) a Kurdish native speaker uses the verb *shka* 'break' with 'fear' as s/he views 'fear' as a psychological barrier that needs to be broken to assure a fluent communication between the two parties involved in a conversation.

The verb *bre* 'cut' in Kurdish has its own semantic components that do not exist in the semantic components of its English counterpart when it is used to indicate a metaphorical cutting as the case of cutting a conversation. The other meaning that the verb *bre* 'cut' expresses is 'to stop a service' such as electricity and water. This example suggests that the meaning components of the verb *bre* in Kurdish in the metaphorical use of the verb are different from its components in its use to refer to real actions. What changes in the components of the verb *bre* are two components, the first is related to the doer of the action. In the case of the metaphorical use of the verb, the doer could be a causer or a natural force such as the wind, while in the use of the verb with real objects; the doer should be an agent. The second component that changes is the instrument. In the metaphorical use of the verb, no instrument is specified, while in the use of the verb with real objects the instrument can be a sharp-edge tool or the action can be achieved without an instrument. Accordingly, the involvement of an instrument and the semantic feature of surface contact are less prominent in Kurdish than in English. This difference affects the LCS and explains why the metaphical extension of the verb *bre* can undergo the inchoative alternation in Kurdish.

4.4 Syntactic properties

I investigated the Kurdish change of state verbs: *bre* 'cut', *shkan* 'break', *bchre* 'cut by force', *wurdkirdin* 'dicing', *jneen* 'mincing', *hareen* 'grinding', *dabchre* 'downward cut by force', *halbchre* 'upward open by force', *dabra* 'cut off', *halbre* 'lift', *dashka* 'break down ward', *kirdinwa* 'open', and *peakeshan* 'hit'. I found out that several of these verbs undergo the inchoative alternation even though they belong to the 'cut' class of verbs. For example, the verb

bre 'cut' can undergo the inchoative alternation when it is used to refer to the cutting of services as water or electricity.

The conative alternation does not exist in Kurdish. Instead Kurdish express the meaning of the conative alternation by using two verbs, the first is *hawldan* 'try to' and another verb as 'bre 'cut' or *shkan* 'break'.All Kurdish verbs can be used with *hawldan.*

Other alternations that Kurdish verbs undergo are the middle and passive alternations and in this respect they resemble the English verbs syntactically. However, the compound verbs in Kurdish such as *wurdkirdin* 'dicing' undergoes the suppletive alternation which was not mentioned in the Guerssel et al. (1985) study. In the suppletive alternation, the causative form of the verb (193) is different from the inchoative form in Kurdish (193).

(192)   Gosht- aka- m   wurd-kird
        meat   the- 1   small-make_past
        "I diced the meat"

(193)   Gosht- aka   wurd-buu
        meat-   the   small-become_past
        Intended: "The meat diced"

Considering both the real and the metaphorical uses of verbs in Kurdish, it is hard to separate them completely into distinct 'cut' and 'break' verb classes. Using a verb in a certain context with a certain object makes the verb alternate differently as is the case with the verb *bre* 'cut' when it is used to denote a real act of cutting or a metaphorical act of cutting.

4.5 The LCS of the verbs in English and Kurdish

In this section, I will concentrate on the use of the words 'cause' and 'produce' that have been used in the LCS by Guerssel et al. Guerssel et al. propose LCSs for the verbs 'break' and 'cut' as in (194-196).

(194) Monadic LCS break: y come to be BROKEN
(195) Dyadic LCS break: x cause (y come to be BROKEN)
(196) Dyadic LCS cut: x produce CUT on y, by a sharp edge coming into contact with y.

In the dyadic LCS of the verb *break*, Guerssel et al. use the semantic component 'cause'. They use the semantic element 'produce'for *cut* without explaining the reason behind their choice. I assumed that the difference between the use of 'cause' and 'produce' marks a key semantic feature of these English verbs and accounts for their syntactic behavior. When I apply the LCS analysis of Guerssel et al. (1985) to the Kurdish data, I realize that the semantic component 'cause' should be used for the transitive LCS of both the Kurdish verbs *bre* and *shka* since both of them are used in the inchoative alternation (197-200).

(197) Dyadic LCS *shka*: x cause BREAK on y [20] by a tool

(198) Monadic LCS *shka*: (y come to be BROKEN)

(199) Dyadic LCS *bre*: x cause CUT on y [21] by a sharp-edge tool that come into contact with y

(200) Monadic LCS *bre*: y come to be *BRE*

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[20] I placed the optional elements between parentheses.
[21] In Kurdish the tool is optional in some contexts, but what matters is the result of clean separation.

I suggest that when the action of the verb is achieved by an agent and the action can be

stopped without completing it, the semantic component 'produce' should be used in the LCS. For

example:

(201)   Kur- aka ba   chakush dewar- aka- i da-shka-n(d)
        boy- the prep hammer   wall-   the 3 asp-break-cause
        "The boy was breaking the wall with a hammer"

The semantic component PRODUCE can be used in a context such as when a small boy

gets a hammer, and he is breaking a wall when suddenly his father comes and takes the hammer

from him without letting him complete the action. The semantic component PRODUCE (as I

discussed in the previous chapters) denotes an action that goes through many steps until it is

completed. These steps add a durative aspectual component to the verb's action as well as the

use of a tool to complete the action. In the (201) the agent cannot break a wall with his bare

hands, therefore the agent 'produces' the action of breaking by using a 'tool'. The tool is the

immediate causer of the 'breaking', but since it is an inanimate object that has no will to achieve

actions, the agent uses it to achieve the action.

In the case of the verb *bre* 'cut' the semantic component CAUSE can be used when the

action refers to a metaphorical act of cutting, as is the case when water or electricity services are

cut. The CAUSE component in the LCS of the verb *bre* indicates that action of the verb can be

achieved without a tool. Following Guerssel et al., this LCS predicts that the verb can appear in

the inchoative form (202).

(202)   karaba-   ka bra
      electricity- the cut_past
      "The electricity cut"

The verb *bre* 'cut' in (202) refers to an action that is achieved by itself without an agent or causer. The verb *bre* can also be used in the context of separating a sheet of paper or cloth by hand (203).

(203)   kagaz- aka-   m bre
      paper- the- 1 cut_past
      "I cut the paper"

In (203) the agent achieves the action by hand without the aid of a tool. What is important in the above context is that the action of cutting refers to a clean separation. In this context the verb *bre* can also appear in the inchoative. I assume that the verb *bre* has an LCS with the semantic component 'cause' to account for its use in the inchoative.

     In other contexts the verb *bre* does not have an inchoative use. For example, *bre* cannot be used inchoatively when a sheet of paper is cut with a tool. To account for this behavior, I assume that the LCS of the verb *bre* used with certain objects contains the semantic component 'produce' rather than 'cause' (203).

     The verb *bre* 'cut' in (202) can be used in the inchoative alternation while in (202) it cannot. In other words, the verb *bre* 'cut' when it is used to indicate a metaphorical action of cutting, it can be used intransitively, but when it is used to refer to a real action of cutting it has to be used transitively as an agent is required to achieve the action.

Conclusion

Kurdish verbs demonstrate different semantic components in their meaning as they are used in different contexts with different objects. Verbs may have different semantic components in their meaning when they are used with different objects. Verbs are likely to have different syntactic features in concrete and metaphorical contexts. The Guerssel et al. model must be extended to account for varying syntactic features in different contexts of use.

Verbs in different languages do not have the same syntactic behavior even when they are semantically similar. Semantic equivalents differ in the types of objects that undergo the actions, both concrete and metaphorical. Thus, to extend the Guerssel et al. model to another language the semantic and syntactic properties of the verbs must be tested independently. In this thesis, I used a range of objects to establish the semantic features of the Kurdish verbs and tested their syntactic behavior independently. I found that the verbs' semantic extension does not predict their syntactic behavior. The core use of the verb *bre* 'cut' does not undergo the inchoative alternation, but in its metaphorical use does. I cannot predict how the metaphorical use of *bre* 'cut' relates to its concrete use.

My study has important implications for the Guerssel et al. (1985) model and other research which attempts to link semantic representations with syntactic behavior. The Kurdish break and cut verbs have meanings that broadly resemble their English translations, but have different syntactic uses. In applying the Guerssel et al. model to Kurdish I was forced to use the syntactic evidence for the inchoative use to decide between the LCS components 'cause' and 'produce'. The semantics of the verbs did not predict their syntactic behavior. This result suggests that semantics does not provide a reliable guide to the LCS representation for verbs, and that we lack evidence for the LCS components that is independent of the verbs' syntactic

behavior. Much more research into verb semantics is required before we will be in a position to

establish a connection between syntax and semantics. In particular, verb behavior should be

investigated across a wide domain of objects both concrete and metaphorical.

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