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Relations between the Conative and *Out-at* Constructions: An Extended Semantic Map Approach¹

YONG-TAEK KIM
University of Oregon

0. Introduction

This paper presents a theory of syntax-semantic mapping—an extended semantic map model (Kim 2008). It incorporates Talmy's (2000) model of the attentional system as universal criteria of the semantic map model (Croft 2001, Haspelmath 2003). It addresses two unsolved problems regarding the English conative construction (verb-*at* construction, e.g. *hit at the fierce dog*): 1) which verb types can and cannot occur in the conative construction; and 2) why verb-*out* constructions (e.g. *hit out blindly*) cannot occur with transitive constructions (e.g. **hit out the dog*²) but can with the conative construction (e.g. *hit out at the dog*). The new semantic map model explains them by mapping the three constructions (conative, *out* and *out-at* constructions) onto a conceptual space, with the analysis of BNC³ data.

My argument will take the following form. Section 1 poses research questions by pointing out the problems of previous studies. Section 2 introduces data and methodology. Section 3 outlines the semantic map approach (Croft 2001, Haspelmath 2003), and explores an extended semantic map model by integrating the attentional system. Section 4 discusses the results of the corpus analysis, and section 5 provides the semantic map of the verb-*at*, verb-*out* and verb-*out-at* constructions, and its theoretical implications.

1. Previous Studies

A large number of theoretical frameworks have been applied to the problem of the conative construction. Pinker (1989) and Levin (1993) address the conative construction in terms of lexical semantics; van der Leek (1996) and Dixon (2005),

¹ I would like to thank the members of cognitive linguistics workshop at the University of Oregon, particularly Professor Eric Pederson for their valuable and insightful comments during the preliminary presentation of this work.

² It can be interpreted as a resultative construction (=hit the dog out).

³ British National Corpus

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in terms of a compositional approach; Goldberg (1995), in terms of Construction Grammar; Broccias (2003), in terms of Cognitive Grammar. This section briefly outlines them.

1.1. Lexical Semantic Approach

1.1.1. Pinker (1989)

Pinker (1989:105) argues that the verbs participating in the conative construction must signify a type of motion resulting in a type of contact.⁴ The argument is based on the assumption that verbs of hitting (*hit, beat, elbow, kick, punch, poke, rap, slap, strike*, etc.) and verbs of cutting (*cut, slash, chop, hack, chip*, etc.), both of which signify motion and contact, enter into the conative alternation; whereas verbs of touching (*touch, kiss, hug, stroke, contact*, etc.), signifying contact alone, and verbs of breaking (*break, shatter, crack, split, crumble*, etc.), signifying neither motion nor contact, fail to enter into it.

There are two main problems with Pinker's argument. First, *touch* can have a stative, hence non-motion meaning as in (1a); but it can also signify both motion and contact, as shown by (1b). The verb *touch* in Pinker's (1989) example (1c) presumably would denote both motion and contact as shown in (1c).

- (1) a. John touched the wall (for two days, since his murderer had propped his lifeless body against it). (Pinker 1989:51)
- b. *Nancy_i touched the wall, but she_i did not move at all.
- c. *Nancy touched **at** the cat. (Pinker 1989:104)

In other words, there are many verbs which do signify motion and contact cannot participate in the conative construction, for example *spank, carve, sculpt*, etc. as shown below.

- (2) *She spanked **at** his bottom.
- (3) *He carved **at** the roast.
- (4) *He sculpted **at** the statue.

Second, the motion and contact hypothesis gives only a description—and not even a sufficient one—of some semantic properties of the verbs participating in the conative construction. It offers no explanation for why the verbs signifying motion and contact and not others should fit into that slot.

In sum, it is impossible to produce only and all grammatical sentences that include conative constructions, if the account is based only on the verbal semantic constraints of contact and motion.

1.1.2. Levin (1993)

Levin (1993:41-2) lists ten classes of verbs as potential candidates for the con-

⁴ Pinker (1989) does not specify the type of motion.

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tive alternation. Her list is summarized as below:⁵

(5) **Classes of Verbs that Participate in the Conative Alternation**

Verbs of Contact by Impact	HIT verbs	<i>bang, bash, hit, kick, lash, strike, etc.</i>
	SWAT verbs	<i>bite, claw, paw, peck, punch, etc.</i>
	*SPANK verbs	<i>belt, brain, clobber, knife, spank, etc.</i>
Poke verbs		<i>dig, jab, poke, stick</i>
Verbs of Cutting	CUT verbs	<i>chip, cut, hack, saw, etc.</i>
	*CARVE verbs	<i>bore, bruise, carve, chip (potatoes), etc.</i>
Spray/load verbs		<i>dab, rub, splash, spray, squirt, swab</i>
*Alternating verbs of Change of State	*BREAK verbs	<i>break, chip, crack, fracture, snap, etc.</i>
	*BEND verbs	<i>bend, crease, crumple, fold, etc.</i>
*Touch verbs		<i>kiss, pat, pinch, stroke, touch, etc.</i>
Push/Pull verbs		<i>heave, jerk, pull, push, yank, etc.</i>
*Destroy verbs		<i>annihilate, destroy, exterminate, etc.</i>
Verbs of Ingesting	EAT verbs	<i>drink, eat</i>
	CHEW verbs	<i>chew, gnaw, lick, nibble, pick, sip, etc.</i>
	*GOBBLE verbs	<i>gobble, gulp, swallow, wolf, etc.</i>
	*DEVOUR verbs	<i>consume, devour, imbibe, ingest, swill</i>
*Verbs of Sending and Carrying	*SEND verbs	<i>airmail, deliver, hand, post, send, etc.</i>
	*SLIDE verbs	<i>bounce, float, move, roll, slide</i>

Levin classifies verbs of Contact by Impact into HIT, SWAT, and SPANK verbs, but does not explain why HIT and SWAT verbs are acceptable in the conative construction whereas SPANK verbs are not.

- (6) He hit **at** the boys.
- (7) He swatted **at** the boys.
- (8) *He spanked **at** the boys.

Similarly, Levin sub-classifies CUT and CARVE verbs under verbs of Cutting without any explanation of why CUT verbs are acceptable in the conative construction whereas CARVE verbs are not.

- (9) *Margaret carved **at** the roast.
- (10) Margaret cut **at** the roast.

In the same way, Levin classifies verbs of Ingesting into EAT, CHEW, GOBBLE, and DEVOUR verbs, but does not explain why EAT and CHEW verbs

⁵ The non-participating verb classes are indicated as “*”, and a partial listing of the verb class as “etc.”

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are acceptable in the conative construction, whereas GOBBLE and DEVOUR verbs are not.

(11) She rolls her fries in ketchup and nibbles **at** them vaguely. (BNC: ACP)

(12) *The mouse devoured **at** a piece of cheese.

After her list of verbs, Levin (1993:42) argues that the conative alternation appears to be found with verbs whose meaning includes both contact and motion. As with Pinker (1989), this is a broad description rather than an explanation.

1.2. Compositional Approach

1.2.1. Dixon (2005)

Dixon (2005:298-9) argues that a preposition can be inserted before the Object NP of a transitive verb to indicate that the emphasis is not on the effect of the activity on some specific Object (the normal situation) but rather on the subject's engaging in the activity. For example, (13) could be used to focus on the fact that he was angry and just kicking out in fury, with what the kicks made contact with being of secondary importance.

(13) He kicked **at** the door.

This compositional approach is very insightful, but it is also limited to a description of the conative construction. It does not offer any explanation of why the inclusion of a preposition leads to the shift of emphasis from the effect on the Object (without *at*) to subject's activity (with *at*).

1.2.2. Van der Leek (1996)

Van der Leek (1996) argues that the meaning of the conative construction is compositional. The skeletal meaning of the verb (i.e. the semantics that a verb brings in, given a minimally necessary context (van der Leek 1996:372), is merged with that of the *at*-phrase, which designates a point of contact without signaling a path. Van der Leek also argues that *at* in the conative construction signals either estimated-point-of-contact with verbs designating forceful motion as in (14), or point-of-contact with verbs implying a bit-by-bit process as in (15).

(14) Sam kicked **at** the glass.

(15) The mouse nibbled **at** a piece of cheese.

This analysis provides more detailed description of the conative construction than Dixon (2005), however, there is no explanation of why *at* signals estimated-point-of-contact in the conative construction containing verbs designating forceful motion whereas *at* signifies point-of-contact in the conative construction containing verbs designating a bit-by-bit process. Furthermore, van der Leek does not offer an explanation of why verbs designating forceful motion or implying a bit-by-bit process, but not others, participate in the conative construction.

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Above all, the compositional account cannot explain where the iterative interpretation of the verbal activity in (16b) and (17b) comes from. Iterative meaning is not derivable from *knock* in (16a) and *pull* in (17a) or *at* in (16b) and (17b).

- (16) a. She knocked the door down.
 b. She knocked **at** the door and waited outside. (BNC: A0R)
- (17) a. You can grab and pull the front guard hand.
 b. If the front guard hand is too far forward, then you can grab and pull **at** it. (BNC: A0M)

1.3. Construction Grammar Approach: Goldberg (1995)

Goldberg (1995) argues that constructions carry meaning, independently of the specific words in the sentence. Goldberg defines the syntactic structure of the conative construction as V <subject, oblique *at*>, and its semantic structure as ‘Agent DIRECTS ACTION AT Theme,’ in which the argument roles of Agent and Theme are represented as subject and oblique *at*-complements syntactically. She further argues that a verb is related to the conative construction by the intended-result relation (i.e. a verb in the conative construction should designate the **intended result** of the activity denoted by the construction).

However, Goldberg also assumes that a verb in the conative construction must be [+motion, +contact]. It indicates that her argument cannot also explain why many verbs (e.g. *spank*, *carve*, *sculpt*, etc.) which do signify motion and contact cannot participate in it, as in (2), (3) and (4) above, and why the verbs signifying motion and contact and not others should occur with it.

Thus, Goldberg’s account does not determine in a principled way which verbs fit in the conative construction and which verbs do not. This suggests that a fine-tuned constructional approach is necessary.

1.4. Cognitive Grammar Approach: Broccias (2003)

Broccias (2003) postulates three schemas: allative schema (translational motion toward a target with possible but not necessary contact, e.g. *kick at*), ablative schema (continuous actions accompanying an ablative movement from a target or a change of state of a target, necessary contact without translational motion, e.g. *pull at*), and allative/ablative schema (translational motion with necessary contact, e.g. *nudge at*).

This classification is also very stimulating. However, the classification into the three schemas is not always clear. For example, Broccias classifies the verb *stroke* into an ablative schema by arguing that it codifies the emission of a perceptual state - sensation. However, sensation is not necessarily entailed in the verb *stroke*.

- (18) his fingers stroking at the base of her neck, sending delightful shivers, signals of desire, up and down her spine. (BNC: HGT 4112) [sensation felt by entity referred to by *her*]

This classification is limited to description of the conative construction rather

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than an explanation of its syntactic and semantic functions.

With the description of the conative construction alone by these previous studies, it would seem that none provide a fully consistent explanation for why (19a), (20a), (21a), (21b) and (21d) are acceptable whereas (19b), (20b), and (21c) are not, which is the research question of this paper:

- (19) a. Fernando **patted at** the beads of vapor at her brow. (BNC: JY4)
 b. *Fernando **touched at** the beads of vapor at her brow.
- (20) a. I told ye to **hit at** it, I didna' tell ye to hit it. (BNC: CBC)
 b. *I told ye to **spank at** it, I didna' tell ye to spank it.
- (21) a. I was hurting, so I **hit you**.
 b. I was hurting, so I **hit out** (blindly).
 c. *I was hurting, so I **hit out** you.
 d. I was hurting, so I **hit out at** you. (BNC: JXV)

Furthermore, they lack an explication of the relationships between the conative (coding a volitional activity without successful affectedness, e.g. *hit at the dog*), *out* (coding uncontrolled activity, e.g. *hit out wildly*), and *out at* (indicating uncontrolled conative activity, e.g. *hit out at the dog*) constructions.

Lastly, these previous studies except for Broccias (2003) depend on authors' intuition rather than analysis of natural data.

2. Data and Method

This paper analyzes the conative, *out-at*, and *out* constructions from BNC.⁶ The data will be analyzed in terms of 1) verbal aspect (perfective vs. imperfective), 2) tense (past vs. non-past), 3) Object individuation (definite vs. indefinite), and 4) the distribution of manner adverbials.

This method is based on the hypothesis that Object individuation, completeness of an event, and modification of an event by adverbials are crucial factors which reflect speaker's construal of an event.⁷

3. Semantic Map Approach

3.1. Semantic Map Model (Croft 2001, Haspelmath 2003)

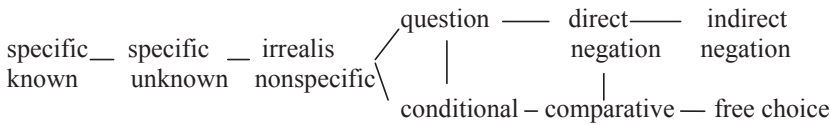
A recent linguistic model that can explain the patterns of multifunctionality of constructions is the semantic map model. According to the semantic map model, distributional patterns of constructions can be mapped onto a conceptual space - a graphical representation of structure of semantic functions, much of whose structure is hypothesized to be universal. For example, Haspelmath (2003) argues that the functions of indefinite pronouns should be arranged on a conceptual space as below:

⁶ All constructions are non-metaphorical clauses. The 79 verbs which undergo the conative alternation and 147 verbs which do not in Levin (1993) are mainly analyzed in BNC.

⁷ Object individuation and completeness of the action are discussed in Lazard (2002).

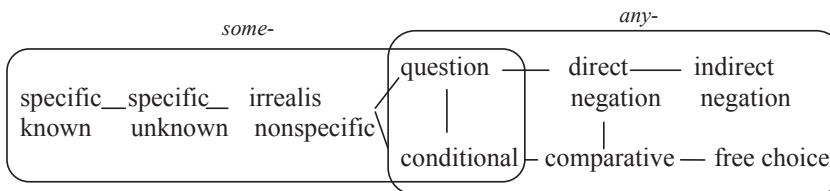
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(22) **A Semantic Map for Indefinite Pronoun Functions** (Haspelmath 2003)



The indefinite pronoun categories of each language can be mapped onto this conceptual space typologically. For example, the English indefinite pronouns, *some* and *any* can be mapped on as follows:

(23) **The Boundaries of English *Some*-Indefinites and *Any*-Indefinites** (Haspelmath 2003)



The semantic map model shows the relationships between the various semantic functions of a multifunctional construction both language-internally as well as cross-linguistically.

However, it has some theoretical limitations. First, it lacks universal criteria with which to specify the arrangement of the geometry of semantic functions and the distance between them. Second, a conceptual space makes little reference to cognitive operations like construal, which indicates that this model leaves out the role of the speaker.

3.2. Conceptual Space with Attentional System

An extended semantic map model integrates Talmy's (2000) model of the attentional system into the traditional semantic map model as its universal criteria. Two main patterns governing the distribution of attention in Talmy's attentional system are **window of attention** on an event and **focus of attention** on participants.

Window of attention is a pattern in which one or more (discontinuous) regions within a referent scene are allocated greater attention, while the remainder of the scene receives less attention. Focus of attention is a center-periphery pattern in which greater attentional strength is placed in a central region and less attentional strength is placed in a surrounding region (Talmy 2000:76). In other words, window of attention takes place with respect to an event along **temporal phases** - time domain, whereas focus of attention is placed on **participants** and **their relationship** in a referent scene - space domain.

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The window of attention is the X-axis and the focus of attention is the Y-axis of the extended semantic map, presented in Kim (2008) (cf. (28) in section 5). Any constructions can be mapped onto this two-dimensional conceptual space. However, this study mainly concerns verb-*out*, verb-*out-at*, verb-*at* constructions.

The X-axis consists of sub-events: Volition, Activity, Causation⁸ and Change. Continuous or discontinuous subsets of them can be windowed. For example, an English example like *He touched the window on purpose* refers to the initiatory agent, “He,” and to Activity, “He moved his hand forward,” and indicates that the agent had Volition to move his hand and made a contact with the window by doing so. The agent’s scope of intention embraces Volition and Activity rather than Causation and Change. This type of construction will be categorized as an [Activity]-windowing construction.⁹

On the other hand, an example like *He broke the window on purpose* refers to the agent’s Volition to do some Activity, Causation, “energy was transmitted from *He* to *the window*,” and Change, “the window broke,” but the agent’s real Activity (= his bodily motion to break the window) is not windowed. The agent’s scope of intention embraces Volition, Causation and Change rather than Activity. This type of construction will be categorized as a [Change]-windowing construction.¹⁰

The Y-axis indicates a speaker’s focus of attention on the participants and construal of the relationship between them; whether their participant roles are construed as Agent-Location (LOC), as in *He shouted at the lighthouse* or Agent-Theme, as in *He broke the window*. It is based on the Case theory that the major, typologically well-attested patterns of case marking of core arguments can be explained in terms of a simple set of the three case roles, Agent, Theme and LOC (DeLancey 2000). However, the differential configuration of Agent-LOC and Agent-Theme results from a speaker’s construal of the secondary participant as LOC in [Activity]-windowing events, or Theme in an [Change]-windowing events.¹¹

Since the X-axis indicates windowing of attention on an event, it correlates with verbal aspect (e.g. perfective vs. imperfective) and tense (e.g. past vs. non-past), whereas Y-axis correlates with agentivity and Object individuation, such as referentiality (e.g. definite vs. indefinite) since the Y-axis indicates focus of attention on participants.

I argue that there is a statistical relation between the windowing of attention on an event (X-axis) and the focus of attention on participants (Y-axis). Participants who control an event are more likely to have the speaker’s focus of attention in [Activity]-windowing events, so that these controllers are prototypically construed as Agents in Agent-LOC and Agent-Theme configuration, and repre-

⁸ Causation is defined as transmission of energy.

⁹ [Volition-Activity] is not used because Volition is typically included in this type of event.

¹⁰ [Causation-Change] is not used because Change presupposes Causation.

¹¹ Please refer to Fillmore (1970) for the difference between LOC and Theme in English.

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sented as S (Subject of intransitive verb) or A (Subject of transitive verb). On the other hand, participants who undergo change are more likely to have the focus of attention in [Change]-windowing events, so that these undergoers are prototypically construed as Themes in Agent-Theme configuration, and represented as O (Object of transitive verb).

I also argue that [Activity]-windowing constructions do not entail the Change of a Theme, and are more likely to occur with imperfective aspect, non-past tense, indefinite Object, or manner adverbials. On the other hand, [Change]-windowing constructions entail the Change of a Theme, and are more likely to occur with perfective aspect, past tense, definite Object.¹²

The *out* construction is an [Activity]-windowing construction; 1) Volition and Activity are windowed, and furthermore it can encode one-participant (=Agent) event as in *He hit out wildly*, 2) it is likely to occur with imperfective aspect, non-past tense, indefinite Objects, or manner adverbials.

The *out-at* and conative construction are also [Activity (-Causation)]¹³-windowing constructions; 1) it does not entail the Change of a Theme, in other words, it windows Volition, Activity (and Causation), but not Change; 2) it is likely to occur with imperfective aspect, non-past tense, or indefinite Objects.

The *out*, *out-at* and conative constructions are [Activity]-windowing constructions in that the Change of a Theme is not entailed. However, I hypothesize that the *out* construction is most [Activity]-windowing and the conative construction is least [Activity]-windowing construction because the *out* construction encodes one-participant event, involving no Theme, and the Change of a Theme is more likely in the conative construction than the *out-at* construction because the latter encodes uncontrolled activity.

4. Results of the Corpus Analysis

The *out*, *out-at* and conative constructions are analyzed in terms of 1) verbal aspect (imperfective), 2) tense (non-past), 3) Object individuation (indefinite Theme), and 4) manner adverbials.

The result shows that the non-past tense occurs with the *out* construction most frequently and with the conative construction least frequently. The *out-at* construction occurs with indefinite Themes more frequently than the conative construction. In addition, manner adverbials occur with the *out* construction most frequently. This would suggest that the *out* construction is the most [Activity]-windowing construction, and the conative construction is the least [Activity]-windowing construction as shown in (28) in section 5.¹⁴

The result of the corpus analysis is summarized below:¹⁵

¹² The close relation of Subjects of transitive constructions (A) to imperfective aspect and non-past tense are discussed in Song (2001:174).

¹³ The parenthesis indicates that Causation is implied but not entailed.

¹⁴ More data of the *out* and *out-at* constructions will be analyzed in my dissertation to support this argument.

¹⁵ The number of types indicates that the conative construction is the most productive. The *out*

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(24) Results of the Corpus Analysis of Verb-*out*, Verb-*out at*, and Verb-*at*

	verb- <i>out</i> (155 tokens, 7 types)	verb- <i>out at</i> (119 tokens, 10 types)	verb- <i>at</i> (1144 tokens, 55 types)
imperfective aspect	0 (=0%)	1 (=0.65%)	40 (=3.5%)
non-past tense	20 (=17.4%)	18 (=15%)	86 (=7.5%)
indefinite Object	N/A (one-participant event)	25 (=21%)	12 (=10.9%)
manner adverbials	71 (=45.8%)	15 (12.6%)	224 (=19.6%)

5. Semantic Map of the Conative, *Out* and *Out-at* Constructions

The conative construction is less likely to occur with *touch* as in (25b) and *spank* as in (26b) because the *touch* does not imply Causation (energy transmission) let alone a Change of the Theme, and the *spank* is [Change]-windowing since it typically expresses the Change (=affectedness) of a Theme (a sore bottom) as punishment. On the other hand, the conative construction is more likely to occur with *pat* as in (25a) and *hit* as in (26a), both of which are [Activity-Causation]-windowing.

- (25) a. Fernando **patted at** the beads of vapor at her brow. (BNC: JY4)
 b. *Fernando **touched at** the beads of vapor at her brow.
- (26) a. I told ye to **hit at it**, I didna' tell ye to hit it. (BNC: CBC)
 b. *I told ye to **spank at it**, I didna' tell ye to spank it.

The [Activity]-windowing intransitive *out* construction, (27b), is less likely to occur with the [Activity-Causation]-windowing transitive *hit* construction, (27a), as in (27c). However, it is likely to combine with the [Activity (-Causation)]-windowing intransitive conative construction because both of them are [Activity]-windowing intransitive constructions, indicating closeness on a conceptual space.

- (27) a. I was hurting, so I **hit you**.
 b. I was hurting, so I **hit out** (blindly).
 c. *I was hurting, so I **hit out** you.
 d. I was hurting, so I **hit out at** you. (BNC: JXV)

The extended Semantic Map Model shows the closeness between the [Activity]-windowing *out* construction and the [Activity (-Causation)]-windowing *out-at* and conative construction, and the distance between 1) the transitive [Activity-Causation]-windowing *hit* construction and the most [Activity]-windowing *out*

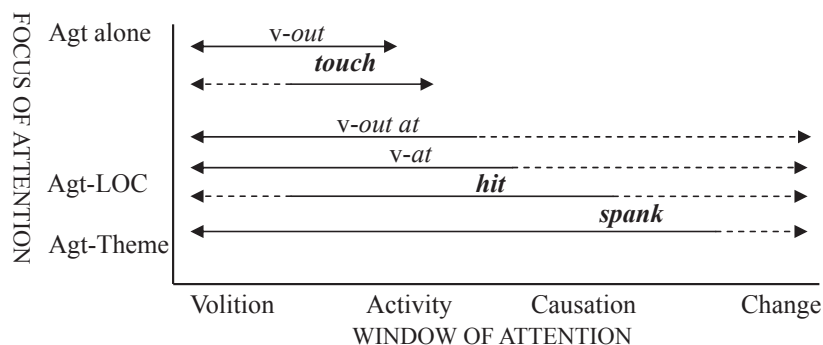
and *out at* constructions are limited mainly to *hit* type verbs, such as *hit*, *lash*, *strike*, *kick*, etc.

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construction and between 2) the [Activity (-Causation)]-windowing conative construction and the [Change]-windowing *spank* construction on a conceptual space. In other words, the closer constructions are on a conceptual space, the more easily they combine. Therefore, the conative construction is more likely to combine with constructions which are located between [Activity] (e.g. *v-out* construction) and [Activity-Causation]-windowing constructions (e.g. transitive *hit* construction) on a conceptual space rather than with [Change]-windowing constructions (e.g. *spank*, *carve*, *devour*; *break*, etc.).

The extended semantic map of these constructions maps onto a conceptual space as follows:¹⁶

(28) **An Extended Semantic Map**



This extended semantic map model sheds light on the syntax-semantics interface of language-internal and cross-linguistic constructions, such as constructional coercion, transitivity, and voice phenomena, etc.

References

- Broccias, Cristiano. 2003. *The English Change Network: Focusing Changes into Schemas*. Berlin: Mouton de Gruyter.
- Croft, William. 2001. *Radical Construction Grammar: Syntactic Theory in Typological Perspective*. Oxford: Oxford University Press.
- DeLancey, Scott. 2000. The Universal Basis of Case. *Logos and Language* 1(2): 1-15.
- Dixon, R.M.W. 2005. *A Semantic Approach to English Grammar*. Oxford: Oxford University Press.
- Fillmore, Charles. 1970. The Grammar of *Hitting* and *Breaking*. In R. Jacobs and

¹⁶ The dotted arrow to the left indicates a typical implication of Volition, and the dotted arrow to the right, implication of the realization of the event schemas (Pederson 2007).

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- P. Rosenbaum, eds., *Readings in English Transformational Grammar*, 120-133. Waltham, MA, and London: Ginn.
- Goldberg, Adele. 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: University of Chicago Press.
- Haspelmath, Martin. 2003. The Geometry of Grammatical Meaning: Semantic Maps and Cross-Linguistic Comparison. In Michael Tomasello, ed., *The new Psychology of Language, Vol. 2*. Mahwah, NJ: Lawrence Erlbaum.
- Lazard, Gilbert. 2002. Transitivity Revisited as an Example of a More Strict Approach in Typological Research. *Folia Linguistica* 30: 141–190.
- Levin, Beth. 1993. *English Verb Classes and Alternations: A Preliminary Investigation*. Chicago: University of Chicago Press.
- Pederson, Eric. 2007. Event Realization in Tamil. In M. Bowerman and P. Brown, eds., *Crosslinguistic Perspectives on Argument Structure: Implications for Learnability*. Mahwah, NJ: Lawrence Erlbaum.
- Pinker, Steven. 1989. *Learnability and Cognition: The Acquisition of Argument Structure*. Cambridge, Massachusetts: MIT Press.
- Song, Jae Jung. 2001. *Linguistic Typology: Morphology and Syntax*. Harlow and London: Pearson Education.
- Talmy, Leonard. 2000. *Toward a Cognitive Semantics, Volume 1: Concept Structuring Systems*. Cambridge, MA: MIT Press.
- Van der Leek, Frederike. 1996. The English Conative Construction: A Compositional Account. *Papers from the Regional Meeting of the Chicago Linguistic Society* 32: 363-378.

Department of Linguistics
1290 University of Oregon
Eugene, OR 97403-1290

muchak@gmail.com