

A Fame-Based Description of the Polysemy of *Dab**

Noriko Nemoto

1. Introduction

The verb *dab* can occur in the conative construction, in which a transitive verb takes an oblique object marked by the preposition *at*, as illustrated below:

- (1) a. Stretched out on a bed was Chuck Riley, with a girl dabbing at a nasty bruise on his forehead. (BNC¹)
- b. She dabbed at a smudge of lipstick with a tissue. (BNC)
- c. When she saw him approaching, she lowered her gaze to the canvas before her and began to dab at it with the brush. (BNC)

The conative construction denotes the subject's attempting to perform an action without specifying whether s/he is succeeding (Levin (1993:42), Pinker (1989:104-105), van der Leek (1996)). The *dab* sentences in (1) share the sense of moving one entity to bring it into contact with another entity without any harmful effect on the second entity. These sentences, however, have different implications with respect to the intended resultant state of the second entity. In (1a), the second entity is not intended to undergo a change of state; but in (1b, c), it is intended to undergo some state change. The dabbing act in (1b) may result in some unwanted substance being removed; that in (1c) may result in applying paint to the second entity. By contrast, with (1a) the act in question is performed without the intention of removing some substance from the second entity or that of putting some substance on it.

How are the uses in (1) related to one another? When the same verb is used to encode different meanings in different constructions, the usage differences may be attributed directly to the constructions that it appears in (Goldberg (1995)). Here the same verb is used to encode different meanings in the same construction and hence the usage differences are to be attributed to verbal polysemy or constructional polysemy or both. What we have in (1) seems to be a case of verbal polysemy. Thus, in describing the uses of conative *dab*, we are necessarily engaged in describing the polysemy structure of the verb *dab*. Section 2 overviews some basic ideas of Construction Grammar and Frame Semantics as background to the analysis that follows. Section 3 introduces three background frames that will prove useful in explaining some basic uses of *dab*. In section 4, we are concerned with extended uses of *dab*, including conative *dab*, illustrated in (1). Section 5 makes concluding remarks.

2. Basic Ideas of Construction Grammar and Frame Semantics

Goldberg (1995) introduces a constructional approach to argument structure and shows that there are certain argument structure constructions, which carry meanings, independently of particular verbs that appear in the constructions. In Goldberg's analysis, a given verb can appear in a given construction when the event type denoted by the verb is related to the one denoted by the construction in certain ways. For example, the verb *kick* can appear in the ditransitive construction because a kicking event can be regarded as a means of a giving event. She proposes to take into consideration rich frame-semantic knowledge associated with verbs, but her actual practice does not devote a good deal of space to a frame-based description of verb meaning. Since her primary concern is to bring forward grammatical evidence for constructionality of some argument structures, she is concerned with the case in which a range of meanings that a verb displays can be associated directly with the particular constructions.

However, when we deal with a case in which the same verb is used to encode different meanings in the same construction and the construction does not contribute to the differences in meaning, as exemplified by (1), we need to characterize verb meaning with reference to rich frame-semantic knowledge. A lot of case studies have shown that speakers can understand a word's meaning only with reference to the conceptual background for the word, demonstrating the significance of a frame-based description of words. Fillmore and Atkins (1992), for example, illustrate that the concept of frame plays an important role in explaining a polysemous word by means of a detailed description of the verb *risk*. They observe that the *risk* sentences in (2) denote different senses, as paraphrased in (3), where the elements realized as the direct object of the verb are put in the parentheses.

- (2) a. He risked death. [Actor, Harm]
- b. He risked a trip into the jungle. [Actor, Deed]
- c. He risked his inheritance. [Actor, Valued Object]
- (3) a. "to act in such a way as to create a situation of (danger for oneself)"
- b. "to perform (an act) which brings with it the possibility of harm to oneself"
- c. "to act in such a way as to expose (something) to danger"

What they call the RISK frame, which is made up of two subframes, includes the following categories: Chance, Harm, Victim, Valued Object, (Risky)

Situation, Deed, Actor, (Intended) Gain, Purpose, Beneficiary, and Motivation. They argue that the usage differences manifested by *risk* result from differences in the way in which the frame elements are syntactically realized, as displayed in the brackets in (2).

Fillmore and Atkins inquire further examples with *risk*. They find out that there are *risk* sentences that cannot be characterized without recourse to more categories than what is involved in the RISK frame, as exemplified in (4).

- (4) a. We would have to reinforce it before risking it to the waves.
- b. Roosevelt risked more than \$50,000 of his patrimony in ranch lands in Dakota Territory.
- c. He's likely to risk a week's salary on a horse.

They note that in its secondary senses a word can display the syntax and semantics of some other words and claim that the *risk* expressions in (4) inherit some properties from the verbs *expose*, *invest*, and *bet*. In (4a), *risk* is used in a syntactic frame characteristic of *expose*, yielding the sense of exposing something to danger. In (4b), *risk* takes on the syntax associated with *invest* and expresses the sense of investing in something. In (4c), *risk* acquires the syntax of *bet*, with the meaning of betting on something.

Many verbs exhibit a range of meanings and syntactic properties and there seem to be some phenomena that remain to be explained. A frame-based analysis like this is expected to decrease the area of vagueness with its willingness to incorporate categories that go far beyond anything envisioned by other theories of semantic roles. This paper observes that the verb *dab* is also associated with multiple senses and argument structures and the variation is best described in terms of the frame conception.

3. A Frame-Based Description

3.1. Three Basic Uses of Dab

Scenes involving a dabbing act can be regarded as falling into three types, as represented below:

- (5) touching *dab*: "to dab without the intention of removal or that of putting"

touching-for-removal *dab*: "to dab with the intention of removal"

touching-for-putting *dab*: "to dab with the intention of putting"

Firstly, a dabbing act can be done without intending removing some entity from a surface or putting some substance on a surface. We will call the use of *dab* describing this type of scene touching *dab*. Secondly, a dabbing act may be

intended to make a surface clean or dry by removing some unwanted substance from it. Since it is sometimes difficult to remove a spot on a surface, we can refer to a dabbing act without specifying whether the purpose is achieved. The use of *dab* encoding this type of dabbing scene is referred to as touching-for-removal *dab*. Thirdly, a dabbing act can also be done in order to put some substance on a surface. Note that unlike a dabbing act with the intention of removal, this type of dabbing usually results in a substance being put on a surface, accomplishing the purpose. We will name this use touching-for-putting *dab*.

In what follows, we will introduce three background frames which will prove useful in explaining the syntax and semantics of the three basic uses of *dab*. The background frame needed to understand sentences with touching *dab* is called the touching frame. Those needed to interpret sentences with touching-for-removal *dab* and sentences with touching-for-putting *dab* are referred to as the touching-for-removal frame and the touching-for-putting frame, respectively. Note that all the uses of *dab* have in common the sense of touching, i.e., all the events encoded with *dab* involve a dabbing act. The touching frame can be regarded as a subpart of both the touching-for-removal frame and the touching-for-putting frame.

3.2. The Touching Frame

Let us first consider touching *dab*, i.e. the use encoding an event of simply touching a surface. A sentence with touching *dab* is used to describe an event in which one entity is gently brought into contact with another entity several times. This meaning may be clarified by comparison with its neighbors. Other verbs that relate to bringing an entity into contact with another entity include *touch*, *hit*, *beat*, among others. The differences in meaning between these verbs can be captured with the paraphrases in (6).

(6) *touch*: "to bring one entity into contact with another entity"

dab: "to bring one entity into contact with another entity several times"

hit: "to bring one entity into contact with another entity with force"

beat: "to bring one entity into contact with another entity with force several times"

With *touch* and *dab*, there is no necessary implication that the contact comes about with force in contrast to *hit* and *beat*. *Dab* and *beat* have the repetition sense in common, so what *beat* is to *hit*, *dab* is to *touch*. That is, as a beating act involves hitting repeatedly, a dabbing act involves touching repeatedly.

The background frame for a touching event can be defined as follows:

(7) The Touching Frame

Categories:

toucher: the person who brings one entity into contact with another entity

intermediary: the entity that comes into contact with a surface

surface: the entity with which the intermediary comes into contact

Relation: A toucher brings an intermediary into contact with a surface.

The toucher is expressed as the subject. When the surface is represented as the direct object of the verb the intermediary can be marked by the preposition *with*, as represented in (8).

- | | | | | |
|-----|-----------|---|----------|-----------------|
| (8) | NP | V | NP | (with NP) |
| | | | | |
| | [toucher, | | surface, | (intermediary)] |

When the surface is indicated with prepositions like *against*, *on*, or *over*, the intermediary is represented as the object of the verb, as represented in (9).

- | | | | | |
|-----|-----------|---|---------------|--------------------|
| (9) | NP | V | NP | against/on/over NP |
| | | | | |
| | [toucher, | | intermediary, | surface] |

Studies such as Dixon (1991) and Levin (1993) characterize the set of verbs showing this alternation. (8) and (9) are exemplified by (10) and (11), respectively. The *hit* examples are taken from Levin (1993:149) and the *stroke* examples are taken from Dixon (1991:105).²

- (10) a. Paula hit the fence (with the stick).
 b. She stroked the fur (with her left hand).
 (11) a. Paula hit the stick against the fence.
 b. She stroked her left hand on/over the fur.

Touching *dab* does not strike me as very general. (12) is an example of touching *dab* used in the configuration represented in (8).

- (12) He was breathing less heavily now. Perhaps he was asleep. She dabbed his forehead. "Are you asleep?" she whispered. (BNC)

This sentence describes the event of touching a surface gently several times without the intention of removal or that of putting. Since this sentence denotes the sense of simply touching a surface, it is associated with the touching frame. I could find no examples of touching *dab* used in the configuration represented in (9).

3.3. *The Touching-for-Removal Frame*

To understand sentences with touching-for-removal *dab* we need to refer to not only the touching frame but also real-world knowledge about an act intended to make a surface clean. We know from experience that when a surface has unwanted substance on it we can make it clean in various ways: by wiping it, rubbing it, brushing it, and so on. A dabbing act can also be seen as an instance of such an action. Removal through dabbing is necessary when other means might hurt or damage a surface of some entity. The purpose of removal is not always accomplished. Knowledge about touching, represented by the touching frame, and knowledge about a surface contact with the intention of removal combine to make up what we may call the touching-for-removal frame.

(13) The Touching-for-Removal Frame

Categories:

toucher: the person who brings one entity into contact with another entity

intermediary: the entity that comes into contact with a surface

surface-with-substance: the entity that has some unwanted substance on it and with which the intermediary comes into contact

Relation: A toucher brings an intermediary into contact with a surface in order to make it clean or dry.

The toucher is represented as the subject. When the surface-with-substance is expressed as the direct object of the verb the intermediary can be introduced in a prepositional phrase headed by *with*, as represented in (14).

(14)	NP	V	NP	(with NP)
	[toucher,		surface-with-substance,	(intermediary)]

When the surface-with-substance is marked by prepositions like *against*, *on*, or *over*, the intermediary is indicated as the object of the verb, as represented in (15).

(15)	NP	V	NP	against/on/over NP
	[toucher,	intermediary,	surface-with-substance]	

Dixon (1991:106-107) observes that verbs like *brush*, *rub*, *sweep*, and *wipe* can occur in these syntactic configurations, providing the *rub* sentences in (16b) and (17b).

(16) a. His face was beaded with perspiration and as he wiped it with his

handkerchief he dislodged a few locks of his heavily greased hair.
(BNC)

- b. He rubbed the table with that cloth.
- (17) a. When the joint is made, leave it to cool and wipe a damp cloth over the joint to remove any residual flux. (BNC)
- b. He rubbed that cloth over/on the table.

Touching-for-removal *dab* can be found in abundance, in contrast to touching *dab*. Like *rub* and *wipe*, this use of *dab* allows the two argument structures, as shown in (18) and (19).

- (18) a. Karl dabbed his mouth with one of his beautiful handkerchiefs.
(BNC)
- b. It'll soon stop bleeding, just dab it occasionally with the paper, here, don't use your hankie. (BNC)
- (19) a. I often paint an area with retouching varnish mixed with pigment as a glaze, then I absorb much of it with newspaper dabbed onto the canvas. (BNC)
- b. She took a white lace handkerchief out of her bag and dabbed a corner of it carefully at the corner of her eyes before the make-up ran. (BNC)
- c. Soak a piece of bread in water and dab it on both sides of the cloth. The bread absorbs the stain. (BNC)

These *dab* sentences mean more than just the notion of touching. For example, in (18a), the dabbing act seems to be intended to remove some substance from his mouth. Similarly, in (19a), newspaper is brought into contact with the canvas with the intention of removing certain substance from it. Since these *dab* sentences describe dabbing acts aimed at removal, they are associated with the touching-for-removal frame.

3.4. The Touching-for-Putting Frame

As with the case of removal, we can put some substance on a surface in many ways: by rubbing, brushing, or spraying. A dabbing act can also bring about a putting event. It should be noted that unlike a dabbing act intended for removal, this type of dabbing act usually results in putting a substance on a surface. The integration of knowledge about touching and that about a surface contact with the intention of putting yields what we might call the touching-for-putting frame.

(20) The Touching-for-Putting Frame

Categories:

toucher: the person who brings one entity into contact with another
entity

intermediary-with-substance: the entity that has some substance on
it and that comes into contact with a
surface

surface: the entity with which the intermediary comes into contact

Relation: A toucher brings an intermediary into contact with a
surface with the intention of putting.

The toucher is expressed as the subject. When the surface is indicated as the direct object of the verb the intermediary-with-substance can be marked by the preposition *with*, as represented in (21).

- (21) NP V NP (with NP)
| | |
[toucher, surface, (intermediary-with-substance)]

When the surface is indicated by prepositions like *on*, *onto*, or *over*, the intermediary-with-substance is realized as the object of the verb, as represented in (22).

- (22) NP V NP on/onto/over NP
| | |
[toucher, intermediary-with-substance, surface]

This is the much-discussed locative alternation.³ The set of verbs that display this alternation is characterized in Levin (1993). The verbs *brush* and *rub* are included in the list of verbs showing this alternation. (21) and (22) are illustrated with these verbs in (23) and (24), respectively.

- (23) a. Brush all four cakes with the remaining apricot glaze. (BNC).
b. Make small slits all over the lamb and insert the garlic, then rub the lamb with the butter. (BNC)
- (24) a. Brush the remaining glaze over the rest of the cake and place on the cake drum. (BNC)
b. Another curious attribute of the powder is that when cooked out it helps to extract other flavours while losing its own. Old fashioned cooks used to rub it over beef before roasting. (BNC)

Dab is rightly included in the list of verbs participating in this alternation in Levin's (1993) study and we can find a number of examples with this use of *dab* in the BNC. The *dab* sentences in (25) and (26) exemplify (21) and (22), respectively.

- (25) a. She allowed Rachaela to dab her with antiseptic and to apply the

- plaster. (BNC)
- b. Holding infested fish in a damp cloth and dabbing the parasites with paraffin administered with a child's paint brush dislodge the pests. (BNC)
 - c. Despite these precautions, I quite often came home with a flea and my mother would take out the streaked bottle of calamine lotion and dab the itchy lumps. (BNC)
- (26) a. He winced as she dabbed disinfectant on the cut and covered it up for him. (BNC)
- b. Dab royal icing onto the base of each petal and stick together.
 - c. She had dabbed powder over her lipstick to rob it of its bright crimson lustre, [...] (BNC)
 - d. She wore a dark make-up base and [...] dabbed an oil-based perfume called Roma behind her ears. (BNC)

These *dab* sentences also mean more than just the sense of simply touching a surface. In (25a), for instance, Rachaela is expected to dab her in order to put antiseptic on her body. In (25c), the intermediary-with-substance role is omitted but this sentence can still convey a dabbing act intended to apply calamine lotion to the lumps. Similarly, in (26a), the dabbing act involved has the intention of putting disinfectant on the cut. These *dab* sentences describe dabbing acts with the purpose of putting some substance on a surface, and thus they are understood against the touching-for-putting frame.

4. Extended Uses

4.1. The Removal Frame

As we have noted above, an act of dabbing intended for removal may or may not be succeeding. The sentences with touching-for-removal *dab* in (18) and (19) do not specify whether the attempts succeed. Take (18a) and (19b), for example.

- (18a) Karl dabbed his mouth with one of his beautiful handkerchiefs.
- (19b) She took a white lace handkerchief out of her bag and dabbed a corner of it carefully at the corner of her eyes before the make-up ran.

In (18a), Karl seems to dab his mouth in order to make it clean but his mouth might still have some foreign substance on it. In (19b), she brings her handkerchief into contact with her face in order to remove the make-up that will soon run but she may fail to prevent it from running.

However, the success of such an attempt can be encoded with *dab*. As mentioned in the overview of Fillmore and Atkins (1992) in section 2, a word can inherit the meaning and syntactic behavior of some other words. In the case of touching-for-removal *dab*, it can acquire the sense of removal when it is used in certain syntactic configurations. The *dab* sentences in (27) manifest the sense of removal.

- (27) a. He put a hand to his cheek and dabbed off a tear. (BNC)
 b. Gently dab excess sauce from lips and chin. (BNC)
 c. There she stopped in a car park to dry her eyes and dab the blood from the tear at the corner of her mouth. (BNC)
 d. With her own handkerchief Louisa dabbed the tears from Emilia's cheek. (BNC)

For instance, in (27a), a tear is removed from his cheek. In (27c), the blood is removed from the split. Understanding these *dab* expressions requires a background frame concerning removal scenes. We will refer to such a background frame as the removal frame.

(28) The Removal Frame

Categories:

remover: the person who takes some unwanted substance away from a place

unwanted-substance: the substance on a location which is to be taken off

location: the place from which the unwanted substance is taken off.

Relation: A remover takes an unwanted substance away from a location.

The remover role is represented as the subject of the verb. The unwanted-substance role is realized as the object of the verb. The surface can be introduced in a prepositional phrase headed by *from* or *off* when it is expressed, as represented in (29).

- (29) NP V NP from/off NP
 | | |

[remover, unwanted-substance, location]

The surface role can be omitted when a particle like *off* is retained, as represented in (30).

- (30) NP V NP off
 | |

[remover, unwanted-substance]

(29) and (30) are exemplified by the expressions with the phrasal verb *take off*, a representative example associated with this frame, in (31) and (32), respectively.

- (31) George strips the wallpaper, takes the covers off books and spreads his hay all over the floor in one of our rooms. (BNC)
 (32) He opened the door, took off his cap and threw it into the stall. (BNC)

Since the touching-for-removal frame fits well into the removal frame, touching-for-removal *dab* can inherit the syntax and semantics of *take off*, yielding the examples cited in (27). (27a) is an instance of (30) and (27b-d) are instances of (29). Levin and Rappaport Hovav (1991) observe that verbs denoting surface contact through motion can be used to encode removal, as in (33).

- (33) a. Kay wiped the fingerprints from the counter.
 b. Sylvia mopped the spots from the floor.

However, the fact that *dab* can be used to encode the removal sense is not recorded in their study. In fact, they characterize *dab* as an instance of verbs of contact through motion that are not used as verbs of removal (p. 135-136).

The distributional property of *take off* represented by (29) and (30), which is inherited by touching-for-removal *dab*, does not overlap that of *remove*, another common word for this sense. *Remove* can occur either in the "NP V NP from NP" syntactic frame, (34), or in the simple transitive construction, (35), as illustrated by (36) and (37), respectively.

- (34) NP V NP from NP
 | | |
 [remover, unwanted-substance, location]

- (35) NP V NP
 | |
 [remover, unwanted-substance]

- (36) I thought you were going to remove that spot from my shirt. (BNC)

- (37) I remove the making fluid simply by rubbing it with my fingers — it peels off quite easily. (BNC)

In (37), *remove* denotes the removal sense in a simple transitive sentence, showing that the removal sense of a *remove* sentence need not be inherited from

some other words; rather it is inherent in the meaning of *remove*. Both (36) and (37) evoke the removal frame. They differ in that the location role is stated in (36) but not in (37).

Unlike the case of *remove*, touching-for-removal *dab* can denote the sense of removal in the "NP V NP from NP" configuration, (38), but not in the transitive configuration, (39).

(38)	NP	V		NP		from NP
	[remover,			unwanted-substance,		location]
						(the removal frame)

(39)	NP	V		NP
	[toucher,			surface-with-substance]
				(the touching-for-removal frame)

Compare (27b-d), instances of (38), and (40), instances of (39). ((18a, b) are repeated here as (40a, b))

- (27) b. Gently dab excess sauce from lips and chin. (BNC)
- c. There she stopped in a car park to dry her eyes and dab the blood from the tear at the corner of her mouth. (BNC)
- d. With her own handkerchief Louisa dabbed the tears from Emilia's cheek. (BNC)
- (40) a. Karl dabbed his mouth with one of his beautiful handkerchiefs.
- b. It'll soon stop bleeding, just dab it occasionally with the paper, here, don't use your hankie.
- c. Then came Brian, who had cut himself shaving, and was dabbing the blood on his chin. (BNC)
- d. William spilled a drop of wine. [...]; He licked his finger and dabbed the mark on his trousers. (BNC)

The sentences in (40) are understood against the touching-for-removal frame. The subject expresses the toucher and the object the surface-with-substance. In this frame, as the name "surface-with-substance" suggests, a substance and a surface need not be construed as two separate entities. In (40a), the role refers to a place where some substance is located. In (40b), the role seems to refer to a substance that flows from a place. In (40c, d), the role refers to both a substance and a place. All these sentences denote dabbing acts intended to remove a substance from a surface.

When a dabbing act results in removing a substance from a surface, such an event evokes the removal frame. Since this frame is featured by the separation of a substance from a surface, it takes a substance and a surface to be

two distinct entities, the unwanted-substance and the location. In (27b-d), the object of the verb expresses the unwanted substance and the preposition *from* marks the location.

4.2. The Conative Construction

We now turn to the conative expressions with *dab* presented in (1).

- (1) a. Stretched out on a bed was Chuck Riley, with a girl dabbing at a nasty bruise on his forehead. (BNC)
- b. She dabbed at a smudge of lipstick with a tissue. (BNC)
- c. When she saw him approaching, she lowered her gaze to the canvas before her and began to dab at it with the brush. (BNC)

The frame-based analysis of *dab* sentences so far suggests that (1a) is a conative sentence with touching *dab*, (1b) is a conative sentence with touching-for-removal *dab*, and (1c) is a conative sentence with touching-for-putting *dab*.

This analysis seems to be compatible with observations about the set of verbs occurring in this construction made by some previous studies like Levin (1993), Pinker (1989), and van der Leek (1996). According to them, verbs that exhibit this alternation include verbs of motion toward contact like *cut*, *hit*, and *spray*, verbs of contact toward motion like *pull* and *push*, and verbs of ingesting like *chew*, *eat*, and *nibble*. Verbs that fail to enter into this alternation include simple verbs of contact like *touch*, simple verbs of motion like *move*, and verbs of change of state like *break*. Levin and Rappaport Hovav (1991) note that verbs of surface contact through motion like *rub*, *scrape*, and *wipe* can also appear in the conative construction.

Given these observations, we can capture the uses in (1) as follows: Like *beat* and *hit*, touching *dab* can occur in the conative construction, (1a). Like *rub* and *wipe*, touching-for-removal *dab* can appear in the conative construction, (1b). Like *splash* and *spray*, touching-for-removal *dab* can be found in the conative construction, (1c). The three uses of *dab* share the sense of motion toward contact and thus they can appear in the conative construction. Here a question arises. Why can verbs of motion towards contact occur in the conative construction? An answer seems to lie in Pinker's (1989:109) suggestion that "in motion-contact events such as John hitting Bill, there is a parallel between the physical motion of John's hand, which spatially aimed at Bill, and the temporal unfolding of the act of hitting, which is 'aimed' at the goal of contact." Given that the conative construction encodes "X directs action at Y," as Goldberg (1995) defines, these verbs can appear in this

construction because the semantics of the verb, i.e. the notion of motion toward contact, is compatible with the semantics of the construction, i.e. the notion of directing an action at a target.⁴

Other conative examples with touching *dab*, touching-for-removal *dab*, and touching-for-putting *dab* are given in (41), (42), and (43), respectively.

(41) Jack dabbed at his chin again and went to the window to watch for Charlie. (BNC)

(42) a. She dabbed at the wound, removing bits of grit, revealing a number of oozing scratches. (BNC)

b. She put down her cup and took a tissue out of her trendy cardigan and started dabbing at her skirt. (BNC)

c. Rain dabbed at the blood with a wad of paper handkerchiefs. (BNC)

d. Before John could answer, she sat down at the child's side, took out a lace handkerchief, and, with her free hand, dabbed at the run of the tears. (BNC)

(43) a. With her little finger she flicked melted lipstick from the corners of her mouth, then dabbed at her nose and cheeks with a small powder-puff. (BNC)

b. Wexford watched him feel for the girl's hand, but she was occupied with Mrs Hatton, dabbing at her face and smoothing her hair. (BNC)

As we have seen in section 4.1, the surface-with-substance role from the touching-for-removal frame does not distinguish a substance from a surface. Thus the role can refer to either a place where some substance is located, (42a, b), or a substance that flows from a place, (42c, d).

In this connection, some previous analyses note that the removal sense is incompatible with the conative construction. According to Dixon (1991:107), (44a) differs from (44b) in that *on* specifies where the mark is and *off* specifies where it should go, and in the conative construction *on* must be used, as in (44c).

(44) a. John rubbed the mark on the table with that cloth.

b. John rubbed the mark off the table with that cloth.

c. John rubbed at the mark on the table with that cloth.

Levin and Rappaport Hovav (1991:139) illustrate this with the unacceptable conative expression in (45b).

(45) a. John rubbed the fingerprints from the counter.

b. *John rubbed at the fingerprints from the counter.

This fact shows that the touching-for-removal frame, which does not specify whether the removal is actually carried out, fits into the notion of directing an action at a target, but the removal frame does not fit into this notion.

We are now in a position to answer the question raised at the outset: How are the conative sentences with *dab* in (1) related to each other. The consideration so far suggests that the conative expressions in (1) are not linked to each other directly. The three sentences are associated with the three distinct but related background frames proposed in section 3. (1a) evokes the touching frame; (1b) the touching-for-removal frame; and (1c) the touching-for-putting frame. Thus the uses in (1) can be taken to be related to each other by way of their links to the related background frames.

5. Conclusion

Lexical semantic analyses such as Levin (1993) and Levin and Rappaport Hovav (1991), among others, have revealed a number of generalizations about the relation between verb meaning and its syntactic behavior. With the removal and putting verbs, Levin and Rappaport Hovav (1991:139) seem to characterize verbs that can appear in the “NP V NP from NP” as verbs of removal and verbs that can appear in the “NP V NP into/onto NP” frame as verbs of putting. However, as suggested by studies such as Boas (2000:320-325) and Nemoto (2003), we should elaborate on the notions of putting and removal to capture the syntax and semantics of each verb, which is needed to draw a valid generalization. I believe that this case study has elucidated some aspects of verbs that relate to putting and removal. The present study has also shown that a frame-based description of verb meaning plays an important role in explaining the distributional and semantic properties of a verb.

NOTES

* I am indebted to anonymous *TES* reviewers for suggesting stylistic improvements.

¹ The British National Corpus

² See studies like Grunau (1985) and Iwata (1998), for the difference between the two argument structures.

³ The differences between the two argument structures are discussed in Anderson (1971), Iwata (1998), and Pinker (1989), among others.

⁴ See Nakau (2003) for more discussion of semantic properties of the conative

construction.

REFERENCES

- Boas, Hans C. (2000) *Resultative Constructions in English and German*, Doctoral dissertation, University of North Carolina, Chapel Hill.
- Dixon, Robert M. W. (1991) *A New Approach to English Grammar, on Semantic Principles*, Clarendon Press, Oxford.
- Fillmore, Charles, J. and Beryl T. Atkins (1992) "Toward a Frame-Based Lexicon: The Semantics of RISK and its neighbors," *Frame, Fields, and Contrasts: New Essays in Lexical Organization*, ed. by Adrienne Lehrer and Eva. F. Kittay, 75-102, Lawrence Erlbaum Associates, Hillsdale NJ.
- Goldberg, Adele E. (1995) *Constructions: A Construction Grammar Approach to Argument Structure*, University of Chicago Press, Chicago.
- Grunau, Justin J. M. (1985) "Towards a Systematic Theory of the Semantic Role Inventory," *CLS* 21, 144-159.
- Iwata, Seizi (1998) *A Lexical Network Approach to Verbal Semantics*, Kaitakusya, Tokyo.
- Levin, Beth (1993) *English Verb Classes and Alternations: A Preliminary Investigation*, University of Chicago Press, Chicago.
- Levin, Beth and Malka Rappaport Hovav (1991) "Wiping the Slate Clean: A Lexical Semantic Exploration," *Cognition* 41, 123-151.
- Nakau, Minoru (2003) "Eigo no 'Doonoo' Koobun," *Ichikawashoo Sanjuurokunen no Kiseki*, ed. by Gogaku Kyoiku Kenkyujo, 150-158.
- Nemoto, Noriko (2003) "Shokaku Kootai ni Kansuru Koobunrironteki Koosatsu," *Eigo Seinen* 149.3, 182-184.
- Pinker, Steven (1989) *Learnability and Cognition: The Acquisition of Argument Structure*, MIT Press, Cambridge, MA.
- van der Leek, Frederike (1996) "The English Conative Construction: A Compositional Account," *CLS* 32: 363-373.

Faculty of Education
Fukushima University