THE CONATIVE ALTERNATION:

An exploration of semelfactives

and

the elusive non-Theme Patient

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# Table of Contents

**ABSTRACT** .......................................................................................................................... 1

1 **CHAPTER ONE: BACKGROUND ISSUES AND DISCUSSION** .......... 2

1.1 **WHAT IS THE CONATIVE ALTERNATION?** ......................................................... 2

1.2 **PARTICIPATING VERBS** .................................................................................. 4

1.2.1 General Characteristics: Main Verbs that Participate ................................. 4

1.2.2 Non-Participating Verbs ........................................................................ 8

1.2.3 Different Prepositions ........................................................................ 9

1.2.4 *Away at* Frame ................................................................................... 11

1.2.5 Verbs which only take *at* .................................................................... 13

1.3 **PREVIOUS ANALYSES OF THE CONATIVE ALTERNATION** .................... 13

1.3.1 Attempted Action.................................................................................. 14

1.3.2 Missed Contact................................................................................... 20

1.3.3 Change in Boundedness........................................................................ 22

1.4 **PREVIEW OF THESIS CONTENT** ................................................................. 24

2 **CHAPTER TWO: FURTHER PRELIMINARIES** ........................................ 26

2.1 **VERBAL ALTERNATIONS** .......................................................................... 26

2.2 **DATA EXAMINATION** .................................................................................. 27

2.2.1 Contact frame...................................................................................... 28

2.2.2 Exerted-force frame .......................................................................... 36

2.2.3 Impact Frame ..................................................................................... 39

2.2.4 Generic *at* frame ............................................................................ 45

2.2.5 *ON* preposition............................................................................... 54

2.2.6 *Away at* frame ............................................................................... 55

2.3 **CONCLUSION: THE CONATIVE FRAME IDENTIFIED** ............................. 64

3 **CHAPTER THREE: NEW ANALYSIS OF CONSTRUCTIONS** .............. 67

3.1 **PRELIMINARY THEMATIC ISSUES** ............................................................... 67

3.2 **CONATIVE FRAME** .................................................................................... 69

3.2.1 Goal and Target PPs............................................................................ 70

3.2.2 Orientational *at* .............................................................................. 71

3.2.3 *[State ORIENT] and the impact frame** ........................................... 75
# Table of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Levin’s participating verb classes</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Data sentence frames</td>
<td>27</td>
</tr>
<tr>
<td>3</td>
<td>Key to data judgements</td>
<td>27</td>
</tr>
<tr>
<td>4</td>
<td>Path + Target/Goal</td>
<td>70</td>
</tr>
<tr>
<td>5</td>
<td>Moens’ event class distinctions</td>
<td>132</td>
</tr>
<tr>
<td>6</td>
<td>Proposed distinction between ‘telic’ and ‘bounded’ events</td>
<td>136</td>
</tr>
<tr>
<td>7</td>
<td>Patient Proto-Role</td>
<td>151</td>
</tr>
<tr>
<td>8</td>
<td>PP Stacking options</td>
<td>162</td>
</tr>
</tbody>
</table>
Abstract

This thesis examines the transitivity alternation known as the conative alternation. The claims previously made about it in the literature are presented and investigated. A thorough review of the data that is claimed to be involved follows. This allows the meaning of the construction to be identified and isolated in four separate forms. Other frames that have been analysed alongside the conative frame are distinguished. The impact frame is identified as the canonical conative frame. Its key participants are transitive semelfactive verbs.

A detailed investigation of the thematic and aspectual characteristics of the semelfactive verb class follows. The thesis presents a sublexical representation of the transitive and conative frames, following the Lexical Argument Structure framework of Hale & Keyser. This has implications for the representation of non-Theme Patients within their framework. The aspectual characteristics of the conative forms and the semelfactive verbs are also explored. A distinction between telic and bounded predicates is proposed that identifies the semelfactive verbs as self-bounded forms that do not implicate a direct object in their bounding.

The behaviour of Path phrases is discussed and a proto-Goal role is proposed that has two distinct realisations. This provides a means to explain the constraints on the coherency of multiple events. The thesis suggests that Path phrases can be combined, subject to certain conditions and restraints.

The observations and conclusions that are drawn throughout the thesis shed light on the aspectual, thematic and sublexical nature of the semelfactive verbs and the non-Theme Patient role.
Chapter One: Background Issues and Discussion

This thesis explores the syntactic construction known as the conative alternation. The claims previously made about it in the literature are investigated with a thorough review of the data that is involved. This allows the meaning of the construction to be identified and isolated in four separate forms. A particular semantic form of the conative alternation is the focus of much of the discussion that follows in the later chapters. This allows an entry point into a detailed investigation of the thematic and aspectual characteristics of the semelfactive verb class. The observations and conclusions that are drawn shed light on the nature of the non-Theme Patient role.

In this chapter, I introduce the conative alternation and the general assumptions surrounding it. I discuss the different semantic content that has been ascribed, the different verbs that have been claimed to participate in it and consider different syntactic frames that have been analysed alongside it. I also briefly present some of the leading discussions and theoretical approaches that have been used with respect to the conative alternation.

1.1 What is the conative alternation?

The conative alternation is neither a new nor a recent observation in the argument structure literature on transitivity alternations. In treating a structure as a transitivity alternation, a semantic relationship or generalisation is assumed between two different syntactic structures. These structures are viewed as distinct yet related by virtue of a single lexical entry that unites the verb that features in both variants. Well-discussed examples of transitive alternations include the locative alternation and the dative alternation.

1. (a) She sprayed water on the wall.
    (b) She sprayed the water on the wall.

2. (a) He gave the book to his sister.
    (b) He gave his sister the book.
In both these alternations, the same arguments of the verb appear in different syntactic positions in the two variants. Each variant of the alternation is analysed as carrying a distinct, coherent semantic interpretation.

The conative alternation, presented within the framework of transitive alternations, has two syntactic variants. The object of a verb in the transitive variant is realised as the object of a prepositional phrase headed by the preposition at in the ‘conative’ variant (Levin 1993, 42).

3. (a) He kicked the ball.
   (b) He kicked at the ball.

4. (a) The mouse nibbled the cheese.
   (b) The mouse nibbled at the cheese.

The semantic characteristics of the conative variant are often presented as an ‘attempted action’ which reflects an aspectual shift between the transitive and conative variants (e.g. Levin 1993, Guersslal et al., 1985, Ghomeshi & Massam 1994 etc).

There are a number of different theoretical approaches as to the best means of analysing and representing transitivity alternations and many of these attempt to accommodate the conative alternation within their scope. Two approaches which focus on the argument selection role of the verb include Construction Grammar (Goldberg 1996) and the Verb Class approach (Levin 1993, Levin & Rappaport Hovav 1991). The VP centred approach of Construction Grammar is essentially a ‘top-down’ approach, which proposes that a syntactic construction provides an integral degree of semantic meaning to a phrase or utterance. A verb can participate in the construction if it is semantically underspecified or semantically compatible. In contrast, the Verb Class model suggests that semantic meaning comes from the ‘bottom-up’ of a structure, with the meaning of the verb determining into which syntactic constructions it can fall.

Lexical theory models also attempt to claim the conative alternation as an example that participates well within their particular theory. Theories that have attempted to address the conative alternation include Lexical Conceptual Structures

1.2 Participating Verbs

Although the conative alternation is discussed within a number of different theoretical frameworks, significant by its absence in much of the literature is any in-depth data analysis to provide the evidence for the claims being presented. Any discussion of the conative alternation is usually limited to a brief paragraph of a text or a page at most, which does not allow examples to be explored in any great detail. This means that earlier claims about the verbs that participate in the alternation are accepted and not thoroughly investigated or further substantiated. This section presents a collection of the examples discussed in the literature but leaves any indepth analysis for later sections. In my discussion I include references to the conative frame, the use of other prepositions in similar constructions, the away at frame and verbs that are found only in the at form. All of these variations have been discussed at some point as the ‘conative alternation’. A more detailed analysis of the verbal data and the different constructions is to be found in Chapter 2.

1.2.1 General Characteristics: Main Verbs that Participate

In the literature a wide range of verbs are identified as participating in the conative alternation. Levin (1993) provides the most comprehensive inventory of participating verbs and is referred to in most subsequent discussions (e.g. van der Leek 1996, Ghomeshi & Massam 1994). Levin explains in the introduction to her work that many of the claims being presented are at a preliminary stage of their investigation and may need to be further investigated to ensure their validity. However, much of the later discussion of the conative draws directly on Levin’s claims without checking the accuracy of her data.

As discussed above, Levin works from the perspective of a Verb Class approach in which verbs group together on the basis of some common key semantic content. Levin identifies the core components of motion and contact as being integral to a verb’s ability to participate in the alternation (Levin 1993, 42; Levin & Rappaport Hovav 1991). She provides a list of verb classes that participate in the conative
alternation and includes among them a list of classes that, on the basis of their semantic content, might be expected to participate, but for some reason fail to do so (Levin 1993, 41).¹

<table>
<thead>
<tr>
<th>Levin’s Participating Verb Classes (from Levin 1993: 41-42)</th>
<th>Verb Class</th>
<th>Class Members</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Verbs of Contact by Impact</strong></td>
<td>HIT verbs</td>
<td>Bang, bash, batter, beat, bump, butt, dash, drum, hammer, hit, kick, knock, lash, pound, rap, slap, smack, smash, strike, tamp, tap, thump, thwack, whack</td>
</tr>
<tr>
<td></td>
<td>SWAT verbs</td>
<td>Bite, claw, peck, punch, scratch, shoot, slug, stab, SWAT</td>
</tr>
<tr>
<td></td>
<td>*SPANK verbs</td>
<td>Belt, birch, bludgeon, bonk, brain, cane, clobber, club, conk, cosh, cudgel, cuff, flog, knife, paddle, paddywack, pummel, sock, spank, strap, thrash, truncheon, wallop, whip, whisk</td>
</tr>
<tr>
<td><strong>Poke verbs</strong></td>
<td>POKE verbs (some)</td>
<td>Dig, jab, poke, stick</td>
</tr>
<tr>
<td><strong>Verbs of Cutting</strong></td>
<td>CUT verbs</td>
<td>Chip, clip, cut, hack, hew, saw, scrape, scratch, slash, snip</td>
</tr>
<tr>
<td></td>
<td>*CARVE verbs</td>
<td>Bore, bruise, carve, chip, chop, crop, crush, cube, dent, dice, drill, file, fillet, gash, gouge, grate, grind, mangle, mash, mince, mow, nick, notch, perforate, pulverise, punch, prune, shred, slice, slit, spear, squash, squish</td>
</tr>
<tr>
<td><strong>Spray/load verbs</strong></td>
<td>SPRAY/LOAD verbs (some)</td>
<td>Dab, rub, splash, spray, squirt, swab</td>
</tr>
<tr>
<td>*<strong>Alternating Verbs of Change of State</strong></td>
<td>*BREAK verbs</td>
<td>Break, chip, crack, crash, fracture, rip, shatter, smash, snap, splinter, split, tear</td>
</tr>
<tr>
<td></td>
<td>*BEND verbs</td>
<td>Bend, crease, crinkle,</td>
</tr>
</tbody>
</table>

¹ The non-participating classes are marked * in Figure 1.
Levin also identifies that WIPE verbs participate in the alternation.

Although Levin notes about 80 separate verbs as participating in the alternation, only about 20% of these are ever discussed in the literature. Those that are discussed include *cut* (Pinker 1988; van der Leek 1996, Guerssal et al., 1985), *chip* (Pinker, van der Leek), *hit* (Pinker, van der Leek, Dixon 1991), *kick* (Pinker, van der Leek, Dixon), *spray* (van der Leek), *dab* (van der Leek), *eat* (van der Leek, Ghomeshi & Massam 1994), *pull* (van der Leek, Dixon), *nibble* (van der Leek), *rub* (Levin & Rappaport Hovav 1991), *scrape* (Levin & Rappaport Hovav), *bite* (Dixon), *hold* (Dixon), *win* (Dixon), *shoot* (Ghomeshi & Massam), and *hammer* (Ghomeshi &

<table>
<thead>
<tr>
<th>Touch Verbs</th>
<th>TOUCH verbs</th>
<th>Caress, graze, kiss, lick, nudge, pat, peck, pinch, prod, sting, stroke, tickle, touch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Push/Pull verbs</td>
<td>PUSH/PULL verbs</td>
<td>?draw, heave, jerk, press, pull, push, shove, ?thrust, tug, yank</td>
</tr>
<tr>
<td>Destroy verbs</td>
<td>DESTROY verbs</td>
<td>Annihilate, blitz, decimate, demolish, destroy, devastate, exterminate, extirpate, obliterate, ravage, raze, ruin, waste, wreck</td>
</tr>
<tr>
<td>Verbs of Ingesting</td>
<td>EAT verbs</td>
<td>Drink, eat</td>
</tr>
<tr>
<td>CHEW verbs</td>
<td>Chew, chomp, crunch, gnaw, lick, munch, nibble, pick, peck, sip, slurp, suck</td>
<td></td>
</tr>
<tr>
<td>*GOBBLE verbs</td>
<td>Bolt, gobble, gulp, guzzle, quaff, swallow, swig, wolf</td>
<td></td>
</tr>
<tr>
<td>*DEVOUR verbs</td>
<td>Consume, devour, imbibe, ingest, swill</td>
<td></td>
</tr>
<tr>
<td>*Verbs of Sending and Carrying</td>
<td>SEND verbs</td>
<td>Airmail, convey, deliver, dispatch, express, FedEx, forward, hand, mail, pass, port, post, return, send, shift, ship, shunt, slip, smuggle, sneak, transfer, transport, UPS</td>
</tr>
<tr>
<td>*SLIDE verbs</td>
<td>Bounce, float, move, roll, slide</td>
<td></td>
</tr>
</tbody>
</table>

*Figure 1: Levin’s participating verb classes*
From these limited examples, broader generalisations are extrapolated. As discussed above, Levin (1993) and Levin & Rappaport Hovav (1991) suggest that motion and contact are core meaning elements of verbs that participate in the conative alternation. Verbs of contact through motion can therefore be found in the conative alternation.

5. Shelley dabbed at her face.

(Levin & Rappaport Hovav: p.136)

Guerssal et al. (1985) suggest something similar. Working within a theory of Lexical Conceptual Structures (LCS), their underlying premise is that differences in the syntactic behaviour of verbs within a language can be attributed to an appropriately specified lexical representation and the manner in which elements of this representation may be realised in an underlying syntactic representation (48).

Where Levin (1993) and Levin & Rappaport Hovav (1991) posit core semantic elements to explain a verb’s behaviour, the LCS framework represents these semantic elements as part of the LCS of each individual verb. Guerssel el al. (1985, 59) suggest that a verb that participates in the conative alternation has an LCS that necessarily includes both an EFFECT clause and a CONTACT clause to give a basic underlying transitive entry of:

6. \( x \) produce effect on \( y \) by ENTITY coming into contact with \( y \).

(Guerssal et al.: p.59)

Under Guerssal et al.’s proposal, an LCS that does not have both the EFFECT clause and the CONTACT clause cannot interact with the rule that forms the conative structure. Their analysis of how the conative is formed is discussed below in section 1.3.2.
1.2.2 Non-Participating Verbs

In her collection of verbs that participate in the conative alternation, Levin (1993) identifies particular groups that are not compatible with the conative variant, even though they may include the appropriate semantic features of contact and motion. Key among these are change-of-state verbs, such as *split* and *tear*, and resultant state verbs such as *destroy* and *annihilate*.

Other writers also consistently identify these particular groups of verbs as being incompatible with the conative alternation. Pinker (1988) gives the specific examples of *touch* and *kiss* in addition to *break* and *split* as verbs that are not found in the conative alternation and thus extends the discussion to include verbs of contact in addition to true change-of-state verbs. Levin & Rappaport Hovav (1991) show that verbs of removal do not work within the conative alternation either.

Levin (1993), Levin & Rappaport Hovav (1991) and Guerssal et al. (1985) all identify contact and motion as the core semantic characteristics of those verbs that participate in the conative alternation. If these semantic characteristics are not present, then the verb should not be able to participate in the alternation. However, if they are present, then the verb should be able to appear in the conative variant. Levin & Rappaport Hovav (1991, 137) suggest that it is the absence of the appropriate semantic features that is responsible for the inability of simple verbs of contact, such as *touch*, and simple verbs of motion, such as *move*, to participate in the conative alternation.

7. *Terry touched at the cat.
8. *Nina moved at the table.

(Levin & Rappaport Hovav: p.135)

They suggest that because *touch* and *move* lack one of the meaning components, they are incompatible with the conative variant.

Similarly, Guerssal et al. (1985, 59) show that verbs of contact alone are incompatible because their LCS contains only a CONTACT clause and lacks an EFFECT clause.
   Japanangka-ERG-1sO-PURP touched me-DAT.
   *‘Japanangka touched at me’.
   (Warlpiri in Guerssal et al.: p59, e.g. (35))

Under this proposal, change-of-state verbs are blocked from participating in the conative alternation because their LCS is of the following form which lacks the requisite CONTACT clause.

10. x cause (y come to be in STATE)
    (Guerssal et al.: p.59)

   The simplicity of these arguments is appealing but probably too generalised. One of the difficulties, if we adopt Levin & Rappaport Hovav’s proposal, is that it provides no means of excluding certain verbs from participating that seem to include the relevant semantic information of a notion of contact and motion in their semantic schema. Levin (1993) identifies this problem with her inclusion of classes such as SPANK, CARVE and SLIDE in her data. One verb within this group is bludgeon.

11. (a) The dairy owner bludgeoned the burglar.
    (b) *The dairy owner bludgeoned at the burglar.

   An example such as bludgeon contains notions both of motion and contact (and Guerssal et al.’s EFFECT), yet does not participate in the conative alternation. Neither Levin & Rappaport Hovav’s nor Geurssal et al.’s proposal can provide a reason as to why this verb should not be able to participate in the conative alternation.

1.2.3 Different Prepositions

   The conative alternation is usually introduced by an at as the head of the prepositional phrase. However, Levin (1993, 42) observes that ‘with certain verbs of ingesting and the PUSH/PULL verbs’ the alternation may also occur with on as the head of the prepositional phrase.

12. (a) The mouse nibbled the cheese.
(b) The mouse nibbled on the cheese.

Despite the different preposition, the *on* construction is usually treated simply as a variation of the conative alternation, which carries the same meaning elements and manifests the same characteristics. One such approach is that of Dixon (1991). He proposes that the presence of a preposition, and seemingly any preposition whether *at*, *on* or even *onto*, has a similar effect on the relationship between the verb and its indirect object argument. He discusses *on* with verbs of ingestion and the *PUSH/PULL* verbs, as observed by Levin.

13. (a) She bit the apple.
    (b) She bit on the leather strap.

    (Dixon: p.279)

14. (a) John pulled the rope.
    (b) John pulled on the rope.

    (Dixon: p.280)

By analysing the role of the preposition in the sentence in this way, Dixon seems to implicitly suggest that *hold* can also be found in the conative alternation but is found with the preposition *onto* (1991, 280).

15. (a) John held the pig.
    (b) John held onto the pole.

    (Dixon: p.279)

He claims that the preposition focuses on the activity described by the verb and minimises the significance of the direct object.

Although Dixon uses different prepositions interchangeably in his analysis of the conative alternation, Ghomeshi & Massam (1994) do contrast the use of *at* and *on*. They suggest that a particular preposition contributes particular semantic information, yet does not destroy the relation between the verb and the internal argument NP (203). However, the contrast they provide is limited and they do not elaborate on what particular semantic information is contributed by each respective preposition. Their
discussion therefore really only illustrates that \textit{at} and \textit{on} can be alternated with particular verbs in constructions that have similar syntactic characteristics.

16. (a) Robin hammered the nail.  
(b) Robin hammered at the nail.  
(c) Robin hammered on the nail.  

\begin{flushright}  
(Ghomeshi & Massam: p.203, e.g.(52))  
\end{flushright}

I investigate the \textit{on} construction further in Chapter 2.

1.2.4 \textit{Away at Frame}

Strictly, the conative alternation is a construction introduced by the preposition \textit{at}. However, discussion of the conative sometimes includes discussion of an \textit{away at} construction, where the direct object of the verb in the transitive variant turns up as the object of the compound preposition \textit{away at} in a prepositional phrase.

17. (a) Sally rubbed the counter.  
(b) Sally rubbed at the counter.  
(c) Sally rubbed away at the counter.  

\begin{flushright}  
Van der Leek (1996, 367) makes a distinction, albeit very limited, between the conative frame and the \textit{away at} frame. She discusses both frames in the same terms and uses the \textit{away at} frame to introduce the concept of non-achievement into her analysis, which is then extended to encompass the conative alternation too.  
\end{flushright}

18. (a) Deep in thought, Sam was aimlessly cutting away at the bread.  
\begin{flushright}  
(van der Leek: p.367, e.g.(10))  
\end{flushright}

She also refers to the \textit{away at} frame as the ‘conative frame’ in discussing the following example from a ‘co-compositional’ perspective (1996, 376).

18. (b) Sam was carving away at the turkey.  
\begin{flushright}  
(van der Leek: p.376, e.g.(32))  
\end{flushright}
Van der Leek’s analysis of the *away at* frame is discussed further in Section 1.3.1.1 below.

Ghomeshi & Massam’s (1994) discussion does not directly equate the *away at* frame with the conative alternation but their treatment of the two frames alongside each other suggests that they are being treated as similar, or related, frames. The *away at* frame is contrasted with the transitive variant with both possible and non-possible events being discussed (1994, 181).

19. (a) John ate the apple.
   (b) John ate away at the apple.

20. (a) John created the picture.
    (b) *John created away at the picture.

    (Ghomeshi & Massam: p.181, e.g.(9) and (10))

Ghomeshi & Massam also discuss the *away at* frame as a three way contrast with the conative alternation (1994, 200).

21. (a) Robin embroidered that shirt (last year).
    (b) *Robin embroidered at that shirt (last year/for years).
    (c) Robin embroidered away at that shirt (for years).

22. (a) Robin created that masterpiece (last year).
    (b) *Robin created at that masterpiece (last year/for years).
    (c) *Robin created away at that masterpiece (last year/for years).

    (Ghomeshi & Massam: p.200, e.g.(43) and (44))

Ghomeshi & Massam do not identify the two frames as the same construction, as Van der Leek does. However they still approach their analysis of the *away at* frame in the same aspectual terms as they do the conative alternation. Their analysis is discussed below in Section 1.3.3.
1.2.5 Verbs which only take at

In their discussion of the conative alternation, Ghomeshi & Massam (1994) and van der Leek (1996) discuss other at frames, which do not strictly fall within the conative alternation definition because they do not have a transitive variant. They explore the characteristics of these at frames to draw parallels with what they claim is the semantic content of the conative alternation itself.

Ghomeshi & Massam (1994, 199) discuss the following example with reference to their proposals for a Flexible Linking Hypothesis and Compatibility Constraint. These proposals are discussed below in more detail in Section 1.3.3.

23. (a) *Robin looked the picture.
(b) Robin looked at the picture.

(Ghomeshi & Massam: p.199, e.g.(41))

Van der Leek (1996, 368) is less clear in the distinction she draws between the conative alternation and other at frames. Taking a Construction Grammar approach, drawing on Goldberg (1996), she suggests that the different at frames are a single construction that can appear both transitively, in the conative, and intransitively. In the latter case, it is simply a ‘mere instantiation’ of the meaning that verbs like look and aim carry of their own accord (van der Leek 1996, 366).

24. He dug up the bones and sat on the ground there looking at them. One after another he would look at them. (from Hillerman 1990: p.302-3)
25. He aimed at the lion, fired and missed.

(van der Leek: p.366, e.g.(8) and (9))

For van der Leek, the relationship between this at construction and the conative alternation is that the two constructions are basically the same, with the conative alternation being a more specific version of the at construction that is illustrated here.

1.3 Previous analyses of the conative alternation

The conative alternation has been discussed and analysed from a number of different perspectives and within different theoretical frameworks. The common
feature of the different analyses is the notion of some kind of incompleteness about the event that is being described. This may be understood as the action not achieving the intended end, contact not being achieved with the internal argument, or a change to the bounding of the event. This section brings together the different analyses and briefly outlines them.

1.3.1 Attempted Action

The etymology of the term ‘conative’ is related to the Latin root conor/conari ‘to try’. In much of the literature which discusses the conative alternation, this is given as the basic meaning of it. ‘The use of the verb in the intransitive variant describes an “attempted” action without specifying whether the action was actually carried out’ (Levin 1993, 42). Dixon (1991) adopts such an approach in his analysis and Van der Leek (1996) proposes a more specific interpretation of the conative frame within this broader context of ‘attempted action’.

Dixon (1991) approaches the conative alternation with an emphasis on the role played by the preposition in a construction. To a certain extent, his approach is syntactic with its focus on the syntactic relation, rather than semantic role, of ‘object’. Dixon’s main hypothesis is that the ‘preposition marks that the object lacks the salient properties associated with the syntactic relation “object”’ (Dixon 1991, 280). He suggests that if an activity referred to by a transitive verb does not achieve a definite result, or does not relate to some specific object, then a preposition may be inserted between the verb and the object NP. This signals a deviation from an ‘ideal’ transitive event (1991, 280). In example 26(b), the ‘aim’ of making contact with the ball is not achieved, as John misses it (279).

26. (a) John kicked the ball.
    (b) John kicked at the ball.

(Dixon: p.279)

Since Dixon is more focused on the information carried by the preposition rather than the conative alternation per se, he extends his analysis to include examples that most other writers would probably not see as being the same construction. Dixon’s proposal that the preposition marks that the object lacks some of the ‘salient properties’ associated with the syntactic relation ‘object’, seems to draw upon the transitivity characteristics identified by Hopper & Thompson (1980), in particular
their analysis of transitivity as ‘an action which is typically EFFECTIVE in some way’ (Hopper & Thompson 1980, 251).

Dixon makes a distinction between contact being made with the direct object and the aim of the event being achieved. For example, he suggests that in example 27(b) contact is still likely to have been made between the foot of the agent and the door. The inclusion of at requires specifically that an aim was not achieved, so Dixon is forced to posit some external aim for the event of kicking. In this case he suggests that the subject might have tried to open the door with a kick or two, but it did not budge (280).

27. (a) He kicked the door.
   (b) He kicked at the door.

   (Dixon: p.279)

In the canonical sense, signalled by the transitive form, the focus is on the effect that the activity has on an object. However, if the actual identity of the object is of peripheral interest and is not affected by the action, a preposition is inserted (Dixon 1991, 180). In example 28(a), the transitive variant emphasises how the direct object is affected. This is contrasted with the conative variant, 28(b), introduced by a preposition other than at, where Dixon suggests that the subject is clutching something so as to affect himself rather than the object.

28. (a) John held the pig (then it couldn’t run away).
   (b) John hold onto the post (so that he wouldn’t be blown off his feet by the gale).

   (Dixon: p.279)

Under Dixon’s analysis, the conative alternation or a similar prepositional structure can also be used in instances where the event does not relate to some specific object. If there is a specific object NP, the plain transitive variant is used but if the object is generic and non-specific, this is signalled by the insertion of a preposition and the appearance of the verb in an at frame (Dixon 1991, 280).

29. (a) Vladimir won that game of chess last night.
Example 29(b) is really quite distinct from the conative alternation since it is not strictly an event. This can be seen when it is compared to my example 29(c) which conveys similar semantic and aspectual information. The *at* of 29(b) is arguably the same as the *at* of 29 (c), yet 29(c) is clearly not an example of the conative construction. The insertion of the preposition does not therefore merely distinguish between different types of object. It also, through introducing a generic situation, shifts the reading from an eventive reading to a stative reading.

Dixon’s analysis does not provide any explanation for why only certain events or actions can have their ‘effectiveness’ changed through the insertion of a preposition into an underlying transitive frame. In his analysis, the preposition provides the indication of a lack of effectiveness, or unachieved aim, and the verb essentially ‘plays along’ with this interpretation. Whether there are, in fact, other constraints on what verbs can ‘play along’ with the effect of the preposition is not elaborated upon by Dixon.

1.3.1.1 Estimated point of contact

Van der Leek (1996) approaches her analysis of the conative alternation from the point of view of compositional semantics. Drawing from Lakoff (1987), she applies an Idealised Cognitive Model to a given situation, which then provides a ‘folk-psychological idealisation of the world’ (van der Leek 1996, 367). In doing so, she attempts to give some formal recognition to the concept of ‘intended result’ of the action. The insertion of the preposition *at* means that the intended result of the action does not occur. The conative alternation is a specific form of a more general *at* construction and

defines the relationship between the meaning of the verb and that of the construction as one of intended result constraining this relation to the class of [+motion, +contact] verbs

(van der Leek 1996, 366).
This gives a more specific reading of ‘estimated point of contact’ for the conative alternation.

Van der Leek bases her proposal on the behaviour of at with non-conative verbs, such as throw. In example 30(a) and (b), the handful of mud or the plate, on being thrown, travels along a path in the direction of Sandy and possibly, but not necessarily, ends up making contact with her (367). An element of motion is therefore involved in the event.

30. (a) Sam threw a handful of mud at Sandy.
    (b) In a blind rage, Sam threw a plate at Sandy.

(van der Leek: p.368, e.g.(17) and (18))

At therefore designates an ‘estimated point of contact’ (van der Leek 1996, 368). Van der Leek describes this estimated point of contact as a ‘sense in context’ that gets created non-lexically through combination with the other participants in the event.

However, difficulties with an analysis of ‘estimated point of contact’ arise with other examples that van der Leek discusses. These difficulties force her to reassess her own claims and provide more specific readings that lose the usefulness that generalisations can potentially bring. With verbs, such as the PUSH/PULL verbs that necessarily involve continued contact throughout the course of the event, an analysis of estimated point of contact is pragmatically unsound.

31. (a) She pulled at the thread until it came out of the piece of cloth.
    (b) She pulled at the thread but it would not come out.

(van der Leek: p.370, e.g.(21))

Van der Leek therefore suggests that pull is ‘force-through-contact’ which combined with an at phrase compositionally yields the interpretation of ‘forceful contact between the instrument and the entity referred to by the at argument’ (1996, 370).

Similar problems of interpretation arise for her analysis of verbs of ingesting, such as sip. As with pull, continued contact is required for an event of sipping to occur.
32. (a) [Sandy was] sipping at her drink just to be polite.

(van der Leek: p.367, e.g.(13))

In these circumstances, where estimated point of contact is not an appropriate analysis, van der Leek suggests that the appropriate interpretation sees the entity referred to by the at preposition as being ingested partially and in a ‘bit-by-bit’ fashion (1996, 371). However, as she notes, sipping inherently means ingesting in a ‘bit-by-bit’ fashion, since otherwise it bears no clear distinction from some other manner-content verb of ingestion such as guzzle. Significantly, guzzle does not participate in the conative alternation because of the very fact that it involves total consumption of the direct object in its transitive variant.

33. (a) She guzzled her drink.
(b) *She guzzled at her drink.

Problems also arise with van der Leek’s proposed analysis of nibble. First, she suggests that nibble does not involve motion (1996, 374). For this claim to be correct, she can only mean significant motion towards the object in question, since nibble is necessarily iterative and involves continued motion of the jaw and teeth and movement towards and on the object being nibbled. What is perhaps more significant for the consistency of her argument, however, is her second claim that the contrast between the transitive and conative frames is that of complete versus partial ingestion (374). In this instance, she proposes that the at signals ‘point-of-contact’ rather than ‘estimated point of contact’.

34. (a) The mouse nibbled a piece of cheese.
(b) The mouse nibbled at a piece of cheese.

(van der Leek: p.374, e.g.(31))

Again, as with the example of sip discussed above, nibble inherently means partial ingestion of something and it is therefore difficult to see how the contrast between the two variations can be proposed to be one of complete versus partial ingestion. What is more interesting is the second issue of van der Leek’s analysis of what at is
signalling in this construction. If we accept that the use of *at* in the conative frame of verbs of ingesting means ‘point-of-contact’, as opposed to ‘estimated-point-of-contact’, then her proposal means that the same construction or alternation is being analysed from differing perspectives. Although it may be feasible for the same construction to carry slightly different meanings, it seems unlikely from the perspective of language acquisition that that same construction could carry two distinctly opposite meanings.

Van der Leek’s proposals therefore seem to be internally inconsistent. In her approach of examining other structures which use the preposition *at* to introduce the indirect object, she strays into constructions which are not the conative proper and fails to distinguish them clearly. One example of this is her discussion of the *away at* construction, introduced briefly in Section 1.2.4 above, as if it is the same construction as the conative alternation. Her explanation for identifying this as the conative frame is that one role of the conative frame is to ‘co–compositionally identify the (partial) result’ (1996, 376).

35. Sam was carving away at the turkey.

(van der Leek: p.376, e.g.(32))

The reading she gives for the example (35) is that Sam is cutting some of the turkey into slices or pieces.

The *away at* construction is discussed in more detail in Chapter 2 of this thesis, including the reading that seems to come most naturally with it, which is not the same as van der Leek’s proposal. One basic difficulty for her common analysis of the *away at* frame and the conative frame is that the data shows that not all verbs that participate in the conative alternation participate in the *away at* frame and vice versa. This seems to suggest that they are two distinct frames.

In calling upon a ‘folk-psychological’ interpretation of the conative alternation, van der Leek does not really propose any underlying reason why verbs can or cannot participate in the conative frame. An explanation that ‘they can if it is interpretable’ does not answer the prior question of what the language user is referring to in their cognitive model to make any such interpretability judgement. Nor does it
explain why language users have, by and large, the same judgements as to the 'interpretability' of a verb’s participation in a frame.

1.3.2 Missed Contact

Another meaning element ascribed to the conative alternation is that of 'missed contact’. The main advocate of this approach is Guerssal et al. (1985). As discussed above, they explain the occurrence of the conative alternation in a Lexical Conceptual Semantics framework. In their framework, for an individual verb to participate in the conative alternation, they propose that its Lexical Conceptual Structure (LCS) must contain a CONTACT and an EFFECT clause. The basic form of such a clause is reproduced here:

36. x produce effect on y by ENTITY coming into contact with y

(Guerssal et al.: p.59)

Cut has the following Phrasal Argument Structure (PAS) and LCS which indicates that it should participate in the conative frame.

37. 

x produce CUT in y, by sharp edge coming into contact with y

(Guerssal et al.: p.58)

To produce the conative variant a productive rule applies to the Phrasal Argument Structure (PAS) of a verb and, in doing so, modifies the LCS to form a purposive clause consisting of:

38. x causes ENTITY to move along path toward y

(Guerssal et al.: p.58)

This gives a combined conative LCS for cut (59) of:
39. x causes sharp edge to move along path toward y, in order to produce CUT in y, by sharp edge coming into contact with y

(Guerssal et al.: p.59, e.g.(34))

The combined elements of the verb’s LCS and the productive conative rule result in an interpretation of missed contact. The ‘entity’ mentioned moves along a path and does not necessarily make contact with y, even though this may be the intended outcome or purpose behind the event. As with Levin’s (1993) analysis of the centrality of motion and contact, discussed above in Section 1.2.1, the significance of motion to the conative frame is also emphasised in the LCS model. However, rather than being located in the verbal lexical entry itself, it is represented in the conative rule by ‘to move along path toward y’.

One of the problems with analysing the conative as a purposive clause is that this seems to imply a volitional action on the part of the subject. However, an iterative at frame which is often identified as the conative frame, can occur with inanimate subjects, which are by definition incapable of acting with volition.

40. (a) The branch tapped the window.
(b) The branch tapped at the window.

Guerssal et al. assess the difference between the transitive variant and the conative variant as effecting ‘a change in the thematic role of the non-agent argument’ (1985, 59). It is unclear exactly what this change actually is, as it is not expanded upon. Their only suggestion is that ‘in the non-conative the entity denoted by this argument (i.e. the non-agent argument) is affected by the action, but in the conative this is not necessarily so’ (59). Without a clear definition of ‘affected’ it is difficult to discern exactly what Guerssal et al. are intending to encompass. If this is simply a more formalised attempt to restate Levin’s (1993) analysis of ‘attempted action’ as one of ‘missed contact’, then the same difficulties arise. Namely, it does not encompass those verbs that are found with an at frame, described as the ‘conative’, that by definition require continued contact throughout the course of the event.

One of the more pressing concerns about the Guerssal et al. analysis is that they discuss only one verb that participates in the alternation, cut, and it is unclear if
the analysis would extend to other verbs quite as easily. Furthermore, there is no indication as to which verbs are intended to fall within their analysis.

Goldberg (1996) assigns the conative construction the meaning of ‘direct-action-at’ which implies a lack of contact being made with the internal argument. She gives the Construction Grammar frame for the conative as:

```
41. Sem  DIRECT-ACTION-AT < agt theme >
    |      |
R: intended  PRED < >
Result +motion | |
+contact | |
↓         ↓   ↓
Syn V SUBJ OBL “at”
```

Under the broader claims of Construction Grammar, a verb cannot participate in a construction unless its semantic information is either underspecified, in which case any gaps are supplemented by the details provided by the construction, or it is semantically compatible with the meaning of the construction. Goldberg’s approach does not solve the problem of preventing the participation of ostensibly appropriate verbs that have the semantic characteristics to fit within her frame but are not found within it.

Goldberg’s approach suggests that a verb which is underspecified to the extent that it still includes elements of motion and contact satisfies the requirements of Goldberg’s analysis. However, a number of verbs appear to satisfy this requirement, yet are not found to participate in the conative alternation.

1.3.3 Change in Boundedness

The third most significant effect associated with the conative alternation is that a bounding or telicity distinction is achieved through the alternation of arguments between the transitive and conative frames. I discuss the bounding characteristics of the conative frame in more detail in Chapter 4. This section introduces the claims of Ghomeshi & Massam (1994).

Ghomeshi & Massam (1994) propose an analysis of the conative alternation based upon notions of boundedness and telicity. They suggest that the syntactic
realisation of the conative alternation, with the object of the verb moving from a canonical direct object position to an indirect object position, brings about a change in aspectual interpretation (181). Under their approach, the ‘meaning’ contributed by the conative alternation is predominantly a shift in bounding classification.

Under a compositional semantic approach, Ghomeshi & Massam posit a Flexible Linking Hypothesis that holds that ‘any syntactic position can contain any semantic participant, subject to interpretability’ (1994, 178). The consequences of this is the broad prediction that any verb with an internal argument can appear in a syntactic frame with either the argument expressed as a direct or an indirect object (1994, 198). Checks on such occurrences are provided by a Compatibility Constraint which states that ‘Meaning contributed from a given source must be compatible with meaning contributed from all other sources’ (1994, 178).

Verbs can be divided into three classes under Ghomeshi & Massam’s proposal. These are [+bounded], [-bounded] and ‘lexically unspecified’ (1994, 200). Only lexically unspecified verbs are able to participate in the conative alternation because of the contrast in lexical aspect that is claimed to occur between the transitive variant and the conative variant. They use the verb shoot to illustrate their claims. When the argument is in the direct object position, it delimits the event and the event is result-oriented and bounded. In contrast, when in the conative frame, the event is no longer result-oriented nor bounded.

42. (a) Pat shot the duck.
   (b) Pat shot at the duck.

   (Ghomeshi & Massam: p.193, e.g.(30))

Their analysis holds that a durative reading is not possible with the transitive frame but that this is the natural reading for the conative frame. They give the following semantic judgements to support this (1994, 194):

43. (a) Pat shot at the duck for an hour.
   (b) ?Pat shot the duck for five minutes.
   (c) ??Pat shot the duck for an hour.
(d) *Pat shot the duck for half a day.

(Ghomeshi & Massam: p.194, e.g.(32))

The durative adverb *for forces an iterative reading on the event and suggests that the ‘normal assumption that death or serious injury results [from shooting] makes iterativity unlikely, especially when the length of time specified is long’ (Ghomeshi & Massam 1994, 194).

Under this approach, the conative frame is an indicator of aspectual difference. The different syntactic projections of the internal argument provide different aspectual schema to the event. The conative frame indicates unboundedness. I discuss Ghomeshi & Massam’s claims in more depth in Chapter 4.

1.4 Preview of Thesis Content

The following chapters of this thesis take up a number of the issues introduced in this chapter. Through exploring specific issues in greater detail, I attempt to draw together a coherent picture of the conative alternation and fit it within established argument structure and semantic theory.

Chapter 2 explores preliminary issues further, by examining the transitive and conative variants of the alternation as separate constructions. It revisits the proposed verbal candidates for the conative alternation and reclassifies them, by examining the verbs that are claimed to participate, the use and effect of different prepositions and an exploration of the *away at* frame. I identify four distinct forms that have previously been subsumed under the generic heading of ‘conative alternation’. The chapter concludes by identifying the specific conative form that will be the main focus for the remainder of the thesis.

In Chapter 3 a new analysis of the transitive and conative frames is presented. This draws upon the observations and classifications made in the thematic roles literature (Gruber 1965 and Jackendoff 1972). Focus is given to the impact conative frame and its transitive form and an analysis is suggested that sees the impact conative frame as expressing an orientational AT that indicates a path and carries a meaning of ‘missed contact’. I then use the model of argument structure proposed by Hale & Keyser (1992, 1998) to represent the thematic roles and relationships that the arguments of the conative frame hold. The notions of incorporated and displaced
themes is explored within this model and the discussion also has implications for the
general treatment of Patient verbs within the theory of Lexical Structures.

Chapter 4 focuses on the bounding and telicity issues that arise from the
analysis presented in Chapter 3. The impact conative frame is analysed within the
framework of event classes (Vendler 1957) and the significance of the semelfactive
class to the conative frame is identified. The aspectual nature of the semelfactive
class as a whole, and the impact conative frame specifically, is then explored and
Ghomeshi & Massam’s claims investigated. I propose a contrast between the
classifications of telicity and bounding, that draws on the work of Depraetere (1995)
but suggests a different distinction. I show that the semelfactive class is characterised
by its self-bounding form, which is related to the issue of Theme incorporation
discussed in Chapter 3 and that this influences the aspectual characteristics of the
impact conative frame.

In Chapter 5, broader thematic issues are discussed, including the relationship
between the syntactical direct object and aspect (e.g. Tenny 1992 and Dowty 1991). The challenges that the impact conative frame poses to Tenny’s Aspectual Interface
Hypothesis are presented and assessed. The relationship between Path phrases and
multiple events is discussed and an analysis of the behaviour of different Path phrases
is proposed.

Chapter 6 provides a conclusion to the proposals and discussion presented in
the course of the thesis. I revisit the issues backgrounded in this introductory chapter
and summarise my own position with respect to them.
2 Chapter Two: Further Preliminaries

In this chapter I investigate the claims made about the verbs that participate in the conative alternation in more depth than was possible in the previous chapter. This investigation includes a reassessment of the value of approaching the construction from the perspective of a transitivity alternation and suggests that it is more useful to explore the conative construction as two separate frames, one transitive and one involving a prepositional phrase. I will refer to the prepositional structure as the at frame, until the characteristics of the conative frame(s) are clearly identified.

I then re-examine the verbal candidates that have been proposed for the conative alternation, look at the different types of verbs that are found in an at frame and identify and examine the meaning of four distinct forms. Attention is also given to the away at frame since this is often treated as the same as the conative frame in the literature. The chapter concludes by isolating the specific frame which will be the focus of the following chapters.

2.1 Verbal Alternations

The conative alternation is usually discussed within the context of transitivity alternations. A verbal or transitivity alternation is the transposition of up to two arguments of a verb which brings about both a change in semantic content and an associated change in argument structure. The alternation is not limited to a single verbal entry but is understood to work across a set of semantically related verbs. The different syntactic frames that the verb appears in retain a shared meaning. This leads to an assumption that the two constructions are related to each other, usually by derivation.

The conative alternation is presented as being underlyingly a transitive construction from which the conative at form is derived as a syntactic form by shifting the direct object of the verb into a position as the object of the preposition at.

1. (a) Sally wiped the table.
   (b) Sally wiped at the table.
2. (a) John kicked the ball.
   (b) John kicked at the ball.
In the verbal alternation approach, the transitive frame (a) is seen as primary and somehow more basic than its counterpart (b), the conative frame. In order to ensure that the correct conclusions and analysis are going to be reached in this thesis, without getting caught up in the assumptions associated with derivation, I analyse the conative alternation as two separate constructions. One of these is the transitive frame, example (a) above, and the other will be referred to as an at frame, example (b) above, until further investigation can confirm the characteristics of the frame(s) and therefore confirm which particular frame(s) should be named the conative.

2.2 Data examination

In the early part of my analysis, I took the verbs identified by Levin (1993) and other semantically related verbs and examined them by testing them in four different frames. These frames were:

<table>
<thead>
<tr>
<th>Frame</th>
<th>Structure</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitive</td>
<td>X V-ed Y</td>
<td>John kicked the ball</td>
</tr>
<tr>
<td>At frame</td>
<td>X V-ed at Y</td>
<td>John kicked at the ball</td>
</tr>
<tr>
<td>Away at frame</td>
<td>X V-ed away at Y</td>
<td>John kicked away at the ball</td>
</tr>
<tr>
<td>Light verb frame</td>
<td>X gave Y a V/N</td>
<td>John gave the ball a kick</td>
</tr>
</tbody>
</table>

Figure 2: Data sentence frames

Each verb was inserted into the frames in its most basic sense and then in other peripheral senses. These sense distinctions were drawn from the WordNet™ database and are indicated by the number following the verb entry. Judgements were then made on the basis of a three way distinction.²

<table>
<thead>
<tr>
<th>Judgement</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Acceptable</td>
</tr>
<tr>
<td>2</td>
<td>Possible, but odd</td>
</tr>
<tr>
<td>3</td>
<td>Impossible</td>
</tr>
</tbody>
</table>

Figure 3: Key to data judgements

² The full judgements for the verbs discussed in this chapter can be found in the Appendix.
The data that I examine in this chapter rates 1 for both the transitive frame and the *at* frame. The ratings for the *away at* frame are also significant and are discussed further in Section 2.2.6. The final frame is of interest to the present discussion only to the extent that it is a form that is found in frameworks that do not otherwise deal with the verbs in question in this investigation (e.g., see Hale & Keyser 1999).

As I discussed in the previous chapter, the basic meaning of the conative frame is given as an ‘attempted’ action (e.g., Levin 1993, van der Leek 1996, and Dixon 1991). However, on closer examination of the data, it can be seen that the *at* frame falls into four distinct groups, which carry different meanings. These groups form the basic divisions of the data discussion that follows. They are the contact frame, the exerted-force frame, the impact frame and a generic *at* frame. Within these groups, further patterns can be seen with respect to the nature of the event that is being described. These patterns include whether the event is iterative and plural in its internal components, whether it is resettable with each individual action identifiable or countable, whether it is homogenous in its structure, what semantic information it lexicalises and whether it can occur with other prepositions, particularly *on*. Each of the *at* frames is discussed below and a conclusion then made as to which particular group(s) should be recognised as the conative.

### 2.2.1 Contact frame

The verbs in this class lexicalise the manner of action described in the event. Their defining characteristic is that the transitive frame implicates a change-of-state reading. This is not lexicalised by the verb itself since the *at* form does not include the same implicature of change-of-state. The endstate depends on the particular collocation of the verb in question.

Within this class fall four subgroups. These are separated according to other semantic information that the verb lexicalises, in addition to the transitive contact reading. I discuss each of these in turn below.

#### 2.2.1.1 Brush/sweep

The *brush/sweep* frame necessarily requires contact between the Theme of the event and the Location. This contact is maintained throughout the course of the event. Since it is maintained, the contact is consistent in its pressure and any impact on the direct object of the transitive frame is minimised. The verbs are therefore
characterised by a manner reading of \([+\text{CONTACT} -\text{IMPACT}]\). The BRUSH/SWEEP verbs emphasise the manner of the motion relationship between the Theme and the Location. In Talmy's (1985) terminology, they are characterised by the continued contact between the Figure and the Ground. One significant feature of this group is their compatibility with the \textit{away at} frame. The \textit{away at} frame is discussed in Section 2.2.6 below.

The BRUSH/SWEEP verbs consist of multiple internal components and are necessarily iterative. Talmy describes these verbs as ‘multiplex’ (1985, 77). For the event to have occurred, the action or gesture described by the verb must have been repeated.

3. (a) Sally brushed her teeth. (brush 1)
    (b) Sally brushed at her teeth. (brush 1)

4. (a) John scoured the pot. (scour 3)
    (b) John scoured at the pot. (scour 3)

If Sally brushes her teeth there is continued contact between the toothbrush and the surface of her teeth. The action of moving the brush back and forth while maintaining contact with the teeth, or 'brushing', is repeated. Significantly, if Sally ‘attempts’ to brush her teeth and does not make any contact with them, it is not true to say that an event of brushing has occurred.

3. (c) *Sally brushed at her teeth but missed.
    (d) *Sally brushed towards her teeth.

An ‘attempted’ brushing of teeth, the usual meaning associated with the conative frame, does not mean that the toothbrush makes no contact with the teeth. Instead it means some kind of half-hearted contact or effort is given to the activity. Crucially, contact has to have occurred if an event of brushing is being described regardless of whether the transitive or the \textit{at} frame is used to express it.

The transitive frame of the BRUSH/SWEEP verbs implicates a change-of-state. This implicature is not carried over to the \textit{at} frame.
5.  (a) Sally brushed her teeth clean.
(b) *Sally brushed at her teeth clean.

6.  (a) John scoured the pot clean.
(b) *John scoured at the pot clean.

The transitive frame with the appropriate collocation can therefore imply an endpoint to its event. The *at frame resists this reading and is incompatible with a form which requires a change-of-state reading.

*Scrub* and *swab* display similar properties.

7.  (a) He scrubbed the floor.     (scrub 1)
(b) He scrubbed at the floor.     (scrub 1)
(c) He scrubbed the floor clean.
(d) *He scrubbed at the floor clean.
(e) He gave the floor a scrub.
(f) ?He gave the floor three scrubs/ scrubbed the floor three times.

8.  (a) The sailor swabbed the deck.    (swab 1)
(b) The sailor swabbed at the deck.    (swab 1)
(c) The sailor swabbed the deck clean.
(d) *The sailor swabbed at the deck clean.
(e) The sailor gave the deck a swab.
(f) ??The sailor gave the deck three swabs/ swabbed the deck three times.

Contact must be maintained between the entity, such as a brush, that is doing the scrubbing and the Ground that is being scrubbed. Our real-world comprehension of a scrubbing or swabbing event is that it is for some external purpose, such as getting something clean. The fact that this reading cannot appear in the *at* frame indicates that it is not lexicalised by the verb itself, but is instead a pragmatic collocation. Without the collocation of an endpoint to the event, the *at* frame requires a durative reading. Due to the nature of the events that fall into the *brush/sweep* class, the
reading of the at frame focuses on the manner of the action lexicalised in the verb, rather than the endpoint of the event.

Repetition of the action is required in both the transitive and at frames. The meaning that the light verb frame carries, example 7(e), is not that one scrubbing movement occurred but that one event of scrubbing occurred and that this event was composed of a number of individual ‘scrubbing’ instances. ‘A scrub’ cannot identify a single countable component, where countability is understood to mean that it is able to be represented by a number. There is no lexeme available, in English, to name an individual scrubbing movement. As with brush, discussed above, there is minimal impact on the Ground that is being scrubbed, since the contact that is made does not involve movement towards the floor. Instead, the contact between the Figure and the Ground is uninterrupted.

The need for contact to be maintained extends to include both the location and locatum of an event, which can both feature in the at frame but sometimes have different acceptability judgements for the other frames. Mop illustrates this point.

9. (a) She mopped the spill. (mop 1- locatum)
(b) She mopped at the spill. (mop 1- locatum)
(c) She mopped the spill up.
(d) *She mopped at the spill up.
(e) *She gave the spill a mop.

10. (a) She mopped the floor. (mop 1- location)
(b) She mopped at the floor. (mop 1- location)
(c) She mopped the floor dry.
(d) *She mopped at the floor dry.
(e) She gave the floor a mop.

The notion of continued contact can also have a metaphorical extension to include other verbs within its at frame.

11. (a) The acid ate the metal. (eat 6)
(b) The acid ate at the metal. (eat 6)
Although the action described by the contact is more difficult to discern in this situation, the same characteristics can be identified. The event, in this case of ‘eating’, is made up of separate components of the acid touching the metal, which must be repeated for the event to have occurred. There is no movement towards the direct object of the transitive frame and therefore no direct impact.

The BRUSH/SWEEP verbs carry an implicature of change-of-state in their transitive frame. The main effect of the at frame is to cancel this implicature. Without an endpoint to the event, the at frame focuses on the manner aspect of the event rather than the end result. ‘Wiping at the table’ therefore seems to be a more repeated but not necessarily a more energetic activity than ‘wiping the table’.

The BRUSH/SWEEP group is characterised by its predominant features of [+CONTACT –IMPACT] and by the plurality or multiplex nature of its event. Each event is made up of individual components that can be conceptualised but not lexically expressed. These components must be repeated for the event described to have occurred. Its at frame emphasises the continued iteration of the activity. The members of the group include: brush 1, brush 3, comb 1, comb 3, dust 1, eat 6, eat 8, file 3, grind 5, mop 1 (locatum), mop 2 (location), saw 1, scour 3, scrape 2, scrape 3, scrub 1, scrub 2, splash 1, swab 1, sweep 3, sweep 6, wear 4, wipe 1 (location), and wipe 1 (locatum).

2.2.1.2 Chop

The CHOP verbs describe a modified impact on the internal argument of the event. Contact occurs but it is not continuous. Instead, there is movement towards the object and the verb lexicalises the manner of impact. The manner of impact is related to the relationship between the agent’s action, with or without a separate instrument, and the direct object. For example, chop, chip, and hack all involve some kind of cutting action with the same kind of physical motion entailed but a different extent of contact or type of impact on the internal argument resulting from it. As with the BRUSH/SWEEP verbs, the transitive frame of the CHOP verbs implicates a success or

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3 The verb lists at the end of each of these sections are not intended to be an definitive list. Some of these verb classes are more productive than others. The verbs that I include are ones that have previously been acknowledged as participating in the conative alternation.
endstate of some description which signals the end of the event. The at frame cancels this implication and, in order to avoid such a reading, requires an iterative interpretation.

The majority of the CHOP verbs are inherently repetitive or multiplex (Talmy 1985, 77). As with the other vague plural verbs discussed in the previous section, the event consists of internal distinguishable components that are necessarily repeated for the event to occur. The verb describes the kind of impact that the contact with the direct object involves.

12. (a) Jack hammered the nail. (hammer 1)
(b) Jack hammered at the nail. (hammer 1)
(c) Jack hammered the nail in.
(d) *Jack hammered at the nail in.
(e) Jack gave the metal a hammer.

13. (a) The chef chopped the vegetables. (chop 1)
(b) *The chef chopped at the vegetables. (chop 1)
(c) The chef chopped the vegetables up.
(d) *The chef chopped at the vegetables up.
(e) ?The chef gave the vegetables a chop.

An event of hammering consists of repeated instances of a hammer, or object being used in a hammer-like way, being brought down upon the direct object. Although each time the hammer is brought down can be individually identified as the event progresses, this observation is not captured by example 12(e). It is not true to say that an event of ‘hammering’ has occurred unless multiple downward movements and repeated contact occurs.

The endstate reading found with the transitive frame is again a collocation which is based on a conventional view of how a particular endstate is achieved. Further evidence for this comes from the appearance of the verb as a participal adjective, lexicalising the associated endstate. The examples in the CHOP and BRUSH/SWEEP classes are consistent with this form.
14. (a) Santa trimmed his beard. (trim 6)
    (b) Santa trimmed at his beard. (trim 6)
    (c) Santa’s trimmed beard was very tidy.

15. (a) The gardener clipped the overhanging shrubs. (clip 4)
    (b) The gardener clipped at the overhanging shrubs. (clip 4)
    (c) The clipped shrubs flourished.

16. (a) Her supervisor hacked the draft. (hack 7)
    (b) Her supervisor hacked at the draft. (hack 7)
    (c) The sight of the hacked draft drove her to despair.

    Unlike the BRUSH/SWEEP verbs, the CHOP verbs do not maintain contact with
    the direct object throughout the course of the event. Contact with the object is made,
    but it is repeated instances of contact as the entity that moves towards it makes contact
    and the action is then repeated. The kind of impact that occurs is significant to an
    understanding of the event and is lexicalised within the verb. Significantly, the entity
    that moves towards the object and makes contact with it is not projected. This entity
    can be projected in a separate with-phrase.

14. (d) Santa trimmed his beard with little silver scissors.
15. (d) The gardener clipped the shrubs with his new secateurs.

    Although most of the CHOP verbs are inherently repetitive, if the implied
    endstate can be achieved with minimal repetition, a single occurrence of the action can
    be understood. This may occur if the direct object is limited in its size.

17. (a) She cut her pony-tail. (cut 33)
    (b) She cut at her pony-tail. (cut 33)
    (c) She cut her pony-tail off with one cut.

    In example 17(c) the individual event is clearly countable and involves one movement
    of the scissors and contact with the hair. Even with a verb that does not require
repetition to achieve the intended result, the *at* frame still does not implicate an endstate or result. Example 17(b) has two possible readings. First, consistent with the other *CHOP* verbs, the action or event is understood to be repeated longer with less effect or secondly, that there is movement of the scissors towards the pony-tail without contact necessarily being entailed. This second reading is more aligned with the *JAB/POKE* verbs that are discussed further below in Section 2.2.3.1.

The *CHOP* verbs lexicalise the manner of impact that the event has on the direct object. Contact is made with the object but, unlike the *BRUSH/SWEEP* verbs, the contact is not continuous and must be reset for the event to continue. The transitive frame of the *CHOP* verbs implicates an endstate, although this is neither lexicalised nor entailed by the verb. The effect of the *at* frame is to cancel any implicature of the event ending and usually involves further repetition of the event to achieve this.

Verbs that are found in the *CHOP* class include: chip 4, chop 1, clip 4, cut 4, cut 33, dig 4 (location), dig 4 (locatum), hack 7, hack 7, hammer 1, punch 3, trim 6.

2.2.1.3 Grip

This group of verbs is quite distinct from the other members of the contact frame. Rather than implying a change-of-state, the *GRIP* verbs have an “inchoative state” reading. This means that the event is made up two internal components. A process event that concludes with a state reading. For example, *grip* involves both the hand moving in a clenching manner and then continued contact and pressure on the object that is being gripped in a statelike manner. Maintained contact between the agent and the object is required, and the only thing that can achieve this is a body part, or a body-like object. The *at* frame reinforces the repetition of the action and its extended duration for the event. This can be seen with the example of *grip*.

18. (a) Thomas gripped the steering wheel. (grip 1)
(b) Thomas gripped at the steering wheel. (grip 1)

Any movement involved is minimal and is initially towards the direct object. Any further movement is almost peripheral to the event itself. If anything, the movement that is involved reinforces the contact that is necessarily there.

In the transitive frame, Thomas’ hands move towards the steering wheel and the endpoint implied by the verb is not strictly a change-of-state. Instead it involves
transition from an eventive reading to a stative reading as the event shifts from one of movement towards an object to a stative image of the ongoing contact between hands and the steering wheel. The \textit{at} frame presents two possible readings. The first reading is an inchoative reading of intensified gripping. In this reading, Thomas grips more tightly to the steering wheel in an image of whitened knuckles. The second is one of attempting to grip, as if the steering wheel were slippery and gripping were difficult to achieve. In either reading, the extent of contact with the steering wheel is broken and then reset as the preposition alters the intensity of the contact by interrupting the physical relationship between the subject and the internal argument.

\textit{Clasp, clutch} and \textit{squeeze} exhibit the same characteristics.

19. (a) Sally clasped her handbag. \hspace{1cm} (clasp 4)
    (b) Sally clasped at her handbag. \hspace{1cm} (clasp 4)

20. (a) Greg clutched the edge of the boat. \hspace{1cm} (clutch 1)
    (b) Greg clutched at the edge of the boat. \hspace{1cm} (clutch 1)

21. (a) She squeezed his hand. \hspace{1cm} (squeeze 2)
    (b) She squeezed at his hand. \hspace{1cm} (squeeze 2)

Verbs that fall into the \textit{Grip} group include clasp 4, clutch 1, grasp 1grip 1, and squeeze 2.

2.2.2 Exerted-force frame

2.2.2.1 Push/pull

The \textit{Push/Pull} verbs, into which all the exerted-force verbs fall, are characterised by the change-of-location that is implicated in the transitive frame. As with the verbs discussed above in Section 2.2.1, the change is not lexicalised or entailed by the verb but is instead a collocation. The \textit{at} frame of the \textit{Push/Pull} verbs entails no motion of the pushee (the entity being pushed). Contact is not necessarily entailed with the pushee but force must be directed towards it. The verb lexicalises the exertion of force. The movement entailed by the verb in the transitive frame does not consist of individual components that are repeated like the \textit{Brush/Sweep} group,
nor is it reset as with the CHOP verbs. Instead, the event is like a mass noun in its homogeneity.

22. (a) She pulled the rope. (pull 4)
(b) She pulled at the rope. (pull 4)
(c) She pulled the rope three times.

23. (a) He hauled the net. (haul 1)
(b) He hauled at the net. (haul 1)
(c) He hauled at the net three times.

The event of *pulling* entails exerted force between the agent and the thing that is being pulled. It is continued exertion on the part of the puller, rather than repeated internal motions. The contact or force directed towards the internal argument is not reset in these situations but is one continuous exertion through the course of the event. The (c) examples show a repeat of the exertion as a whole, rather than a repeat of part of the event.

24. (a) The goat tugged the chain. (tug 1)
(b) The goat tugged at the chain. (tug 1)
(c) The goat tugged at the chain three times. (tug 1)
(d) The goat gave the chain three tugs. (tug 1)

In the transitive frame, when the goat tugs the chain the movement involved is in a direction away from wherever the chain is tethered. The chain and the goat maintain contact with each other throughout the ‘tug’ and the end of the *tugging* event is when the goat reaches the end of its ‘away’ movement. The event is resettable, as the goat can release the tension created by the taut chain after the initial tug and can then repeat the same ‘away’ movement. This repeated motion is countable.

Within the PUSH/PULL group are a group of verbs where the motion is characterised as a quick, single movement that can be reset if the event, as a whole, is repeated. The impact on the direct object is still that of movement away from its original position. With *pluck*, the ‘away’ movement is evident in the transitive frame.
The end of the event is defined by the endpoint of the path of movement, which implicates removal in 25(a). The event can be reset and repeated by a return of Sally’s hand to the beginning point of the motion path. Exerted force between the internal argument and the actor continues throughout the path of movement.

25. (a) Sally plucked the ingrown hair. (pluck 1)
     (b) Sally plucked at the ingrown hair. (pluck 1)

The at frame emphasises the ‘locativeness’ of the relationship and de-emphasises the possible change-of-location reading. Example 25(b) therefore implicates non-removal of the ingrown hair. A repetition reading results from this, since the emphasised locative reading entails less chance at success in achieving the original intention of the action.

The role of Path phrases is significant with the push/pull verbs. Many of the verbs have a more satisfactory reading in the transitive frame if a Path phrase is projected. The presence of a Path phrase entails movement of the pushee. Since movement is necessarily entailed, the Path phrase is incompatible with the at frame.

26. (a) He pushed the cart. (push 1)
     (b) He pushed the cart to New York.
     (c) He pushed at the cart. (push 1)
     (d) *He pushed at the cart to New York.

27. (a) She shoved the trolley. (shove 2)
     (b) She shoved the trolley into the river.
     (c) She shoved at the trolley. (shove 2)
     (d) *She shoved at the trolley into the river.

Another distinguishing feature of the push/pull verbs is that the entity that moves in the event is projected into the surface syntax. This is not the case with either the verbs discussed in the previous section brush/sweep, grip, or chop or the verbs discussed below in Sections 2.2.3 or 2.2.4. The entity that moves in the transitive
frame, or pushee, is found in the direct object position. Its movement provides a progressive measure to the event.

28. (a) Bridget yanked the door (yank 1)  
   (b) Bridget yanked at the door. (yank 1)  

29. (a) He tugged the suitcase (to the car) (tug 4)  
   (b) He tugged at the suitcase (tug 4)  

In example 28(a), it is the movement of the door which provides a measure to the progress of the event. Similarly, in example 29(a), the movement of the direct object, the suitcase, determines whether or not the Path, to the car, had been completed and the event understood as ended.

The PUSH/PULL verbs entail movement of the direct object argument in their transitive frame. The effect of the at frame is to remove this entailment. The verb lexicalises the exerted force that is present in either frame. The presence of a Path phrase entails movement of the pushee and is therefore incompatible with the at form. The members of the PUSH/PULL class include: haul 1, jerk 1, pluck 1, pull 1, pull 4, push 1, push 5, shove 2, spray 1, tug 1, tug 4, yank 1.

2.2.3 Impact Frame

The central feature of the impact group is the countability of the action that makes up the event. Also significant is that the entity that moves in the event is not projected into the surface syntax. The transitive frame entails contact with the direct object. In the at frame this entailment is removed and the reading is one of missed contact.

2.2.3.1 Jab/poke

Each action of the JAB/POKE verbs is self-contained and only a single instance of it is required to constitute an event. Each event is resettable, in that it can happen more than once but is not inherently or internally iterative. This resettable feature gives the event its countability. Contact is not entailed by the verb itself, although it is an entailment of the transitive frame, as a whole. If contact does occur, the verb modifies the kind of impact that takes place. A central characteristic of the gestures
or actions that fall within this group is that they involve movement towards the direct object.

30. (a) Bill jabbed her stomach. (jab 1)  
    (b) Bill jabbed at her stomach. (jab 1)

31. (a) Bill prodded her arm. (prod 1)  
    (b) Bill prodded at her arm. (prod 1)

32. (a) Anna flicked his ear. (flick 8)  
    (b) Anna flicked at his ear. (flick 8)

Bill’s *jabbing* action involves a sharp movement in the direction of *her stomach*. Contact is made in the transitive frame but this entailment is absent in the *at* frame.

30. (c) Bill jabbed at her stomach but missed.  
31. (c) Bill prodded at her arm but missed.  
32. (c) Anna flicked at his ear but missed.

If Bill repeats the motion, he has jabbed her two times, rather than a single event of jabbing being interpreted as twice as long in duration. The whole movement of the unprojected entity in the direction of her stomach is reset and then repeated. It is easily countable.

30. (d) Bill jabbed at her stomach two times/again.  
      (e) Bill gave her stomach two jabs.

31. (d) Bill prodded at her arm two times/again.  
      (e) Bill gave her arm two prods.

32. (d) Anna flicked at his ear two times/again.  
      (e) Anna gave his ear two flicks.
The idea of movement towards the internal argument can be shown more clearly with an example that involves movement of something that can be easily conceptually isolated from the actor.

33. (a) Sally splashed her mum. (splash 1)
(b) Sally splashed at her mum. (splash 1)

In example 33(a), Sally directs water at her mother and it makes contact with her. In contrast, in example 33(b) Sally causes water to move in the general direction of her mother and whether or not it actually makes contact is irrelevant to the event of splashing.

Verbs which are often viewed as involving contact when in the transitive frame also fall into the JAB/POKE group. Again, the at frame forces a missed contact reading.

34. (a) She hit the ball. (hit 1)
(b) *She hit the ball and missed. (hit 1)
(c) She hit at the ball. (hit 1)
(d) She hit at the ball and missed. (hit 1)

Since the at frame is understood as missed contact, a reading which requires contact, as in example 34(f) is incompatible with it.

34. (e) She hit the ball to the boundary. (hit 1)
(f) *She hit at the ball to the boundary. (hit 1)

Significantly, the direct object argument in the transitive frame is not the entity that moves during the event. The argument that moves is not separately projected but can be realised in a separate with-phrase, as in examples 34(g) and (h).

34. (g) She hit the ball with her lucky bat.
(h) She hit at the ball with her lucky bat.
The meaning of the *at* frame for JAB/POKE verbs emphasises the movement towards a target, which results in incomplete or missed contact. A repetitive reading is possible with some of the JAB/POKE verbs in the *at* frame but this is secondary to the ‘missed contact’ reading.

35. (a) The fighter hit at his opponent and missed.  
(b) The fighter hit at his opponent over and over again.

This shows that the iterative *at* frame is not inconsistent for all JAB/POKE verbs even though the primary reading is ‘missed contact’. It is the resettable characteristic of the JAB/POKE verbs that permits a reading of repeated missed contact.

36. (a) She stabbed him three times.  
(b) She stabbed at him three times.  
(c) She stabbed at him three times and missed each time.

37. (a) The goat butted her four times.  
(b) The goat butted at her four times.  
(c) The goat butted at her four times but each time she jumped out of the way.

Each individual movement that makes up JAB/POKE verbs is countable. The shape of the action lexicalised by the verb provides the shape to the event and this clearly defined shape is what gives the verbs their countability. The transitive frame entails contact and the *at* frame removes this entailment. Verbs that are found in the JAB/POKE group include: bat 1, butt 1, flick 8, hack 3, hack 8, hit 1, hit 4, jab 1, peck 1, peck 2, peck 3, poke 1, poke 3, poke 5, prick 1, prod 1, shoot 1, smack 1, slap 1, slash 1, splash 1, squirt 2, stab 2, stab 3, strike 2, swat 1.

### 2.2.3.2 Kick/punch

The KICK/PUNCH verbs resemble the JAB/POKE verbs in all their main characteristics. The events are resettable but not inherently or internally repeated. Each action is self-contained and only a single instance of it is required to constitute the event. This is not to say the action cannot be repeated, which is indeed possible,
but the crucial point is that it does not need to be repeated for the event to have occurred. Contact with the direct object is entailed in the transitive frame and the verb modifies the kind of impact that takes place. The most distinguishing feature of the KICK/PUNCH verbs is that the verb, in addition to lexicalising the type of impact that occurs with the direct object, also lexicalises the entity that moves during the event. This entity is a body part.

38. (a) The boy kicked the dog. (kick 1)
(b) The boy kicked at the dog. (kick 1)

The event of kicking necessarily involves the foot and this information is encoded in the verb *kick*. If any *with*-phrase is projected it can only contain this part of the body. A *with*-phrase may seem redundant because of this restriction, but if extra detail of the entity is given, the reading is more satisfactory.

38. (c) ?The boy kicked at the dog with his foot.
(d) The boy kicked at the dog with his left foot.

The self-contained nature of the *kick* that is being given to the dog means that it has a beginning and an end that defines the course of its action. The course of its action is separable from any possible contact made with the internal argument, since contact does not define the end of the event, especially in the *at* frame.

38. (e) The boy kicked at the dog and missed.

Even without contact occurring, the path that the *kick* follows is still travelled. The foot follows through the same arc of motion whether or not contact occurs with some other object at the end of the arc.

The intransitive variant of *kick* clearly illustrates the self-bounded nature of the verb. Intransitive *kick* does not select a direct object, yet the shape of the action is clearly defined.
The action that the KICK/PUNCH verbs describes is able to be mimed or gestured, which provides a conceptual idea of how the event is conceived independently of any contact relationship with the internal argument. A punch or a poke, in the sense of a particular kind of tactical punch, involves a closed fist travelling from close up next to the body of the agent along a trajectory path towards the opponent. It does not need to make contact with the opponent for a punch to have been thrown. Indeed the very expression of example 39(a) suggests an action that exists independently of contact with another entity.

39. (a) The fighter threw a punch.
   (b) The fighter punched his opponent. (punch 1)
   (c) The fighter punched at his opponent. (punch 1)
   (d) The fighter poked his opponent. (poke 4)
   (e) The fighter poked at his opponent. (poke 4)

This can be shown more clearly by the event occurring even in the absence of contact.

39. (f) The fighter threw a punch but missed his opponent.
   (g) The fighter punched at his opponent but missed.
   (h) The fighter poked at his opponent, who ducked and avoided it.

The action of punching is resettable in that the fighter can retract his arm and fist, ‘reset’ the event and repeat the action. However, this constitutes a separate event of punching. Each separate repeat of the action is countable.

39. (i) The fighter punched at his opponent four times.

The reading for this example that requires repetition is that the fighter drew his fist back and punched out at his opponent four separate times. The resettable characteristic of these verbs is discussed further in Chapter 3. Example (40) illustrates the same points.
40. (a) The cat jabbed the mouse.     (jab 2)
   (b) The cat jabbed at the mouse.     (jab 2)
   (c) The cat jabbed at the mouse twice.

Since contact is only entailed by the transitive frame and not strictly
lexicalised by the verb, the at frame of the KICK/PUNCH verbs can give the reading of
‘missed contact’ or incomplete action, most commonly associated with the conative
alternation in the literature. Rather than contact occurring, the reading suggests
motion towards the internal argument. A secondary reading of repetition is possible,
but as identified above, this is not an inherent repetition that builds up to the same
event, but is instead understood as a number of separate events.

Verbs that fall into the KICK/PUNCH class include: jab 2, kick 1, kick 2, kick 3,
poke 4, and punch 1.

2.2.4 Generic at frame

The exact nature of the fourth at form is difficult to describe. Any semantic
distinction between the transitive frame and the at frame is minimal. It may be that
this frame is simply a locative use of at which reinforces the relationship between the
unprojected entity that moves and the object of the prepositional phrase. In the
transitive frame, this object is in the direct object position.

2.2.4.1 Rub/scratch

The RUB/SCRATCH verbs are similar to the BRUSH/SWEEP verbs discussed in
Section 2.2.1.2 except the transitive frame does not have the implicature of a change-
of-state reading. The verbs involve continued contact with the internal argument and
have minimal effect or impact on it. They can therefore be classified as [+CONTACT –
IMPACT].

Some of the RUB/SCRATCH verbs consist of multiple internal components and
are necessarily iterative. They therefore fall into Talmy’s grouping of multiplex verbs
(1985, 77). For the event to have occurred, the action or movement described by the
verb must have been repeated.

41. (a) Bridget scratched the itchy bite.     (scratch 3)
If Bridget scratches an itchy bite there is continued contact between whatever she is scratching it with and the bite itself. The friction which is caused through the movement of the entity in contact with the bite is repeated to constitute an event of scratching. Significantly, if Bridget attempts to scratch the itchy bite and does not make any contact with it, it is not true to say that an event of scratching has occurred.

Examples 42(c) and (d) and 43(c) and (d) are not interchangeable. The lexeme *rub* does not equate with one movement of John’s hand across his knee. However, there are some verbs within this group that are countable. Unlike the *jab/poke* and *kick/punch* verbs this is not related to movement towards the object because contact is required for the *rub/scratch* verbs in both the transitive and *at* frames. Instead it is because the resetting of the action gives a gestural shape to the event. This can be seen with *stroke*.
(b) John stroked at the cat.
(c) John stroked the cat three times.
(d) John gave the cat three strokes.

Stroking does not have internal complexity to it. The nature of stroking a cat means that the actor’s hand moves down the cat’s back with continued contact. Since the cat’s back is finite in length, contact between the stroker’s hand and the strokee must be reset and the movement repeated. The countability of the event is related to this resetting of the contact as contact must be maintained between the Figure or entity that is doing the stroking and the Ground that is being stroked. If contact is not reset, the event is no longer a ‘stroking’ event but is instead a ‘rubbing’ event and is no longer countable.

One benefit of using clearly defined senses in the verb entries when examining the data is that subtleties in the behaviour of the verbs can be more easily explored. Different senses of the same verb can fit into different groups. For example, brush 1, with its implicature of change-of-state was discussed above as an example of the BRUSH/SWEEP group but brush 3 falls within the RUB/SCRATCH group.

45. (a) Jo’s skirt brushed the edge of the step. (brush 3)
(b) Jo’s skirt brushed at the edge of the step. (brush 3)
(c) Jo's skirt brushed at the edge of three of the steps.

Contact between Jo’s skirt and the edge of the step is maintained throughout the course of the event of brushing but, like stroke, it is a single instance of contact. There are no internal components of repeated movements to the event. This means that if the event is repeated, as in example 45(c), the 'brushing' is reset and each 'brushing' is able to be individually identified and counted.

The at frame does not carry any significant semantic difference to the transitive frame. With some verbs in this group, it may indicate increased repetition but there is no strong distinction.

46. (a) The ostrich scratched the dirt. (scratch 2)
(b) The ostrich scratched at the dirt. (scratch 2)
The absence of any definitive semantic difference between the two frames suggests that the *at* may simply be a locative preposition which emphasises the relationship between the Figure and the Ground of the event. This means that the *at* focuses on the relative physical positions of the Figure and the Ground and can be paraphrased as “continues to be located at”. It does not signal any incompleteness to the event.

The RUB/STROKE verbs require contact to be maintained throughout the course of the event. If there is no internal complexity to the event, a countable reading may be possible. This reading relates to the resetting of the contact with the internal argument. It does not indicate movement towards the object since contact is a requisite feature of the event. If the event does have internal complexity, it is not countable and necessarily involves repetition of movement. RUB/STROKE verbs include: brush 2, brush 4, draw 12, draw 15, itch 1, mop 3, nudge 1, pluck 4, rake 1, rob 0 (locatum), rub 0 (location), rub 1, rub 3, scratch 2, scratch 3, stroke 1, suck 2, suck 3, sweep 1, sweep 1.

2.2.4.2 Chew

This subgroup of the generic *at* frame is grouped together because the entity that moves during the course of the event is a body part. This body part is lexicalised within the verb and is not projected at surface level. The CHEW group consists mainly of verbs that lexicalise the mouth or mouthparts. The verbs are inherently repetitive or following Talmy are multiplex (1985, 77). As with the multiplex verbs discussed above, such as BRUSH/SWEEP, CHOP and RUB/SCRATCH, the event is made up of individually identifiable components, the repetition of which is required for the event to occur. There is no significant semantic distinction between the transitive frame and the *at* frame. The CHEW group appears alongside the *away at* frame, discussed below in section 2.2.6.

47. (a) Sally chewed the sandwich. (chew 1)
(b) Sally chewed at the sandwich. (chew 1)
(c) Sally chewed away at the sandwich.

Although an individual chew may be identifiable as a single movement up and down of Sally’s jaw and teeth, an event of chewing does not occur unless these movements
are repeated. The nature of chewing means that contact with the object, in this case *the sandwich*, is intermittent. The verb therefore describes a manner of impact. Chewing can only be done in the mouth and since this information is lexicalised within the verb itself, it is not syntactically projected.

Similar lexicalisation of mouth parts and movement can be seen with *gnaw*. Again, the verb describes the type of impact that the mouth has upon the object and therefore contains a significant manner component. Contact with the object is intermittent but necessary for the process of *gnawing* to occur.

48. (a) The dog gnawed the bone. (gnaw 1)  
(b) The dog gnawed at the bone. (gnaw 1)  
(c) *The dog gnawed at the bone but did not have it in its mouth.

49. (a) Anna munched the celery. (munch 2)  
(b) Anna munched at the celery. (munch 2)

50. (a) The mouse nibbled the cheese. (nibble 1)  
(b) The mouse nibbled at the cheese. (nibble 1)

51. (a) The horse chomped the bit. (chomp 1)  
(b) The horse chomped at the bit. (chomp 1)

The *at* frame of the *chew* verbs seems to reinforce the repetition of the event by lessening the relationship between the internal argument and the verb to a limited extent. In the (a) examples, the direct object is materially affected by the action of the event. In contrast, in the (b) examples, the event is more focused on the action of the Agent rather than the effect on the direct object. It is as if repetition is required to compensate for the minimised impact on the object. This is not a definitive distinction however, since repetition is equally possible with the transitive frame.

49. (c) Anna munched the celery for ages.  
(d) Anna munched at the celery for ages.
51.  (c) The horse chomped the bit for an hour while waiting for its rider.
     (d) The horse chomped at the bit for an hour while waiting for its rider.

     Significantly, if an instrument phrase is to be projected, it must be the same
     body part that is lexicalised within the verb. Indeed, as with the KICK/PUNCH verbs,
even if this is projected in a *with*-phrase, the resulting sentence is pragmatically odd
since the separate projection seems to be redundant. However, the reading is still
acceptable.

48.  (d) The dog gnawed at the bone with its teeth.
     (e) *The dog gnawed at the bone with its claws.

     Body parts other than the mouth can also be lexicalised within the verb stem
and fall within the CHEW group if they involve repetition. The lexicalised body part
may be quite specific in its nature and closely related to the nominal form. The exact
relationship between the nominal form and the verbal form is beyond the scope of this
thesis.

52.  (a) The lion clawed its prey.       (claw 3)
     (b) The lion clawed at its prey.    (claw 3)

     The lion cannot physically claw with anything but its claws. If its claws are retracted
and all that is left are paws, the sentence is pragmatically anomalous.

52.  (c)  *The lion clawed at its prey with its paws.

     A similar relationship between the body part that has been lexicalised and the
verb itself can be seen with *paw*. When used with reference to an animal, the
animal’s paws are implicated in the action.

53.  (a) The bear pawed the door.       (paw 1)
     (b) The bear pawed at the door.      (paw 1)
However, the metaphorical extension of paw-like actions can extend this same verb to non-bear animals to encompass and describe the same clumsy action. Greater emphasis is placed upon the manner of impact in such an extension.

54. (a) The drunken man pawed the young woman. (paw 0)
    (b) The drunken man pawed at the young woman. (paw 0)

In this example, the lexicalised body parts are the hands of the drunken man, but the manner component that is also contained within the meaning of the verb lexicalises the type of behaviour associated with animals that have paws instead of hands. Again, although an individual ‘paw’ might be isolatable, in the movement and contact of the man’s hand with the young woman, unless these are repeated, ‘pawing’ has not occurred.

The CHEW verbs are inherently repetitive with individual components combining to make up the event. The at frame weakly indicates repetition but an iterative reading is also possible with the transitive frame. The verbs lexicalise a body part which is the entity that moves and impacts upon the internal argument. The CHEW verbs include chew 1, chomp 1, claw 3, crunch 4, gnaw 1, lick 2, munch 2, nibble 1, paw 1, paw 1, peck 1, pinch 2, rake 1, scratch 3, suck 1.

2.2.4.3 Sponge

This final group of verbs lexicalises the type of impact that the action has on the direct object. However, unlike the CHOP verbs, the transitive frame does not implicate a change-of-state. There is no significant semantic distinction between the transitive and at frames. Like the CHEW verbs of the previous section, they are inherently repetitive or multiplex (Talmy 1985, 77). The event consists of internal distinguishable components that are necessarily repeated for the event to occur.

55. (a) Jack pounded the metal. (pound 2)
    (b) Jack pounded at the metal. (pound 2)
    (c) *Jack gave the metal three pounds.

56. (a) He hacked the shrub. (hack 7)
    (b) He hacked at the shrub. (hack 7)
(c)  *He gave the shrub three hacks.

An event of ‘pounding’ consists of repeated instances of an external object being brought down upon the direct object in a forceful way. Although each time the object is brought down can be individually isolated as an independent cycle, this cycle does not equate with the lexeme pound. It is not true to say that an event of ‘pounding’ has occurred unless multiple downward movements and contact occurs.

Beat exhibits similar characteristics. Contact with the direct object, the drum, signals the end of the individual cycle of downward movement and necessarily brings about the retraction of the arm. This cycle must be repeated for the event of ‘beating’ to have taken place.

57.  (a) Jill beat the drum.  (beat 18)
(b) Jill beat at the drum.  (beat 18)

58.  (a) Sally sponged the stain.  (sponge 1)
(b) Sally sponged at the stain.  (sponge 1)

As with the CHEW group discussed in Section 2.2.4.2, the entity that moves towards and makes contact with the direct object, in this case the drum-sticks, does not have to be syntactically projected. If it is, it is found in an optional with-phrase.

57.  (c) Jill beat the drum with the drumsticks.  (beat 18)
(d) Jill beat at the drum with the drumsticks.  (beat 18)

58.  (c) Sally sponged the stain with a cloth.  (sponge 1)
(d) Sally sponged at the stain with a cloth.  (sponge 1)

59.  (a) Jill beat the table.  (beat 3)
(b) Jill beat at the table.  (beat 3)
(c) Jill beat the table with her shoe.  (beat 3)
(d) Jill beat at the table with her shoe.  (beat 3)
A slightly different situation can be found with the same structure but with an inanimate subject. In this case, the entity creating the impact by its movement towards the direct object is projected into the subject position.

60. (a) The wind battered the tent. (batter 1)  
(b) The wind battered at the tent. (batter 1)

61. (a) The rain beat the window all night. (beat 6)  
(b) The rain beat at the window all night. (beat 6)

Since the argument is already projected, a *with*-phrase is not possible.

61. (c) *The rain beat at the window all night with raindrops.

The transitive frame of this structure is not as satisfactory as the *at* form, which may indicate that the metaphorical extension of *beat* is idiomatic.

A similar defective metaphorical extension can also be seen with *peck*. Example 62 shows a use of *peck* as a semelfactive verb, which is not inherently repetitive, and therefore does not come within the SPONGE verbs. In comparison, example 63 shows an idiomatic form of *peck* that only occurs in the *at* frame. In this situation 63(b) seems to be a semi-idiomatic complex predicate.

62. (a) The kea pecked the tyre. (peck 1)  
(b) The kea pecked at the tyre. (peck 1)

63. (a) *She pecked the cake. (peck 4)  
(b) She pecked at the cake. (peck 4)

The metaphorical example of ‘pecking at the cake’ extends the manner component of the type of impact that is lexicalised within the verb. To ‘peck at a cake’ involves eating it in a nibbling, bit-by-bit manner similar to the collocation associated with the manner in which birds must necessarily eat because of their physical limitations. Example 62(c) clarifies how *peck* falls into the JAB/POKE class of Section 2.2.3.1.
62. (c) The kea pecked at the tyre but missed.

Other examples of the SPONGE group:

64. (a) She powdered her nose. (powder 2)
(b) She powdered at her nose. (powder 2)

The *at* frame of the SPONGE verbs emphasises and reinforces the repetition of the task. The verb lexicalises the nature of the impact made with the direct object and does not necessarily project the entity that moves towards it. Contact with the direct object is made, but it is repeated instances of contact. This means that impact is also significant to an understanding of the event. This is what distinguishes the SPONGE verbs from the continued contact nature of the RUB/SCRATCH group. The verbs that fit into the SPONGE group include: batter 1, beat 18, beat 3, beat 6, bite 2, daub 2, drum 1, hack 1, hew 1, kiss 2, knock 2, lash 1, pat 1, peck 4, peck 5, pound 2, pound 2, powder 2, prick 2, prick 6, pump 1, rap 1, rap 2, sponge 1 (location), sponge 1 (locatum), sponge 2 (location), tap 6, and whip 4.

2.2.5 **ON** preposition

In the published literature, which I introduced and discussed in Chapter 1, *on* is presented as being interchangeable with *at* when forming the conative alternation. Levin (1993) identifies it as an alternative realisation of the conative alternation that occurs with certain verbs of ingesting and the PUSH/PULL verbs of her classes. On closer examination, the use of *on* seems to be more prevalent than appearing only with the verbs of ingesting and PUSH/PULL verbs identified by Levin. Such pervasiveness provides a strong basis for distinguishing the *on* construction as a construction quite separate from the conative alternation.

*On* can be found with CHEW verbs, PUSH/PULL verbs, as well as certain members of the SPONGE group.

65. (a) The mouse nibbled the cheese. (nibble 1)
(b) The mouse nibbled on the cheese. (nibble 1)
66. (a) She yanked the door
    (b) She yanked on the door.

67. (a) She pounded the metal.
    (b) She pounded on the metal.

Other verbs that can be found in a prepositional phrase headed by *on* in this way include: beat 3, beat 6, beat 18, chew 1, chomp 1, crunch 4, drum 1, gnaw 1, haul 1, knock 2, munch 2, nibble 1, pluck 1, pound 2, pull 1, pull 4, push 1, push 5, rap 1, rap 2, shove 2, spray 1, suck 1, tap 6, tug 1, tug 4, yank 1. This list is not intended to be exhaustive.

68. (a) She knocked the door.
    (b) She knocked on the door.

69. (a) She rapped the table.
    (b) She rapped on the table.

70. (a) She crunched the carrot.
    (b) She crunched on the carrot.

Significantly, since the above verbs can also appear in a prepositional phrase headed by *at*, *on* does not appear to be functioning as an alternative form of *at* which performs exactly the same task. Instead *on* seems to be performing a locative role that emphasises the location of the contact that occurs during the course of the event. As discussed above, *at* appears to have a number of distinct roles, depending on the verb group that it is appearing with. These include the “missed contact” reading of the impact conative, which is not available with *on* as the preposition. The *on* construction is therefore not strictly part of the conative frame and does not form any further part of my discussion.

2.2.6 *Away at* frame

As identified in Chapter 1, the *away at* frame is treated by some writers as being the same as the conative frame (e.g. van der Leek 1996). However, a focused
examination shows that, although it may be related to the conative frame, it is actually a separate construction. Different data is found within it and it carries a meaning that is distinct from that of the at frames identified in the previous sections of this chapter.

The core participants of the away at frame are the multiplex verbs identified in the BRUSH/SWEEP, CHOP, CHEW, and SCRATCH/RUB groups. Other groups do participate in the frame as well but with a more varied degree of success.

71. (a) Sally munched away at the celery.
    (b) The mouse nibbled away at the cheese.
    (c) John scrubbed away at the benchtop.
    (d) Mary hammered away at the metal.

In the basic at frame, these verbs had their inherent internal iteration emphasised. In the following sections, I distinguish the meaning contributed by the at frame and that contributed by the away at frame.

2.2.6.1 Non-simple transitive variant

An examination of a group of verbs that do not have a simple transitive variant but can participate in both the at frame and the away at frame provides interesting observations about the nature of the latter frame particularly. Many of these examples are idiomatic in nature but this does not detract from the common characteristics that they still exhibit. Significantly, their non-participation in certain frames suggests that the at and away at frames are indeed distinct constructions.

72. (a) *Kate worked her tree diagrams.
    (b) Kate worked at her tree diagrams.
    (c) Kate worked away at her tree diagrams.

Example 72(b) shows a concentrated application by Kate to the task at hand. The away at frame, example 72(c), lexicalises an increased diligence or persistence being applied to the task. Its extended duration is also emphasised.

There is also a group of verbs that falls midway between the conative group and the ‘work at’ group of verbs. With this group, the simple transitive variant is impossible but the at and away at frames are less clear in their semantic acceptability.
73.  (a) *Kate slaved her tree diagrams.
    (b) ?Kate slaved at her tree diagrams.
    (c) Kate slaved away at her tree diagrams.

74.  (a) *Jill stuck her job.
    (b) Jill stuck at her job.
    (c) ?*Jill stuck away at her job.

There are also examples that fit comfortably only within the away at frame.

75.  (a) *Jack beavered his work.
    (b) *Jack beavered at his work.
    (c) Jack beavered away at his work.

In all of the above examples, the away at frame indicates a perseverance or persistence being given to the task at hand, independently of whether the verb can appear in a conative or at frame. Increased perseverance results in a strong durative aspect to the event as a whole. Since the verbs themselves are quite vague as to the specific activity that is being undertaken, there is no lexicalised individual component to iterate. Instead, duration is achieved through maintaining and lengthening a process without any specific iteration.

2.2.6.2 Meaning of the away at frame

The examples introduced in Section 2.2.6.1 indicate the persistence that the away at frame is centred around. Since no specific action is lexicalised within the verb, this is related to more than simple repetition of an activity. Instead there also seems to be an increased energy level that is important. For verbs in the BRUSH/SWEEP and RUB/SCRATCH group that lexicalise activities consisting of individual repeated components, energetic repetition is the means to realise maintained energy.

76.  (a) Sally wiped the table.
    (b) Sally wiped at the table.
(c) Sally wiped away at the table.

In the *away at* frame, Sally is more persistent in her action and this is realised as increased activity on her part, which results in increased repetition of the action of wiping. The increased repetition emphasises the extended duration of the event.

However, as the non-simple transitive frames in the previous section suggest, the *away at* frame is about more than simple repetition. This can be seen when the frame is contrasted with the progressive form of the verb. The progressive gives a repetition reading for the KICK/PUNCH verbs and this gives greater duration to the event than the basic transitive frame. However, the *away at* frame also adds increased energy levels which gives a reading of almost excessive iteration.

77. (a) Jack kicked the dog.
    (b) Jack was kicking the dog.
    (c) Jack kept kicking the dog.
    (d) Jack kicked away at the dog.

    The increased energy levels add a degree of brutality to the reading, since the excessive repetition seems somehow carefree or heedless, particularly in certain situations. The *away at* frame is therefore inconsistent with reluctance or limited volition on the part of the agent, although this is possible with the *at* frame, which does not exhibit the same constraint.

77. (e) Jack kicked at the dog reluctantly.
    (f) ?Jack kicked away at the dog reluctantly.
    (g) Jack kicked at the dog half-heartedly.
    (h) ?Jack kicked away at the dog half-heartedly.

    The *away at* frame is also inconsistent with expressions indicating a lack of energy on the part of the agent. The same inconsistency is not present with the *at* frame.

72. (d) Kate worked at her tree diagrams lethargically.
(e) *Kate worked away at her tree diagrams lethargically.

The *away at* frame therefore seems to indicate high degrees of energy and commitment to the task on the part of the agent. With certain verb groups this may lead to excessive repetition. The persistence of the activity creates a strong durative aspect to the reading and may add a degree of brutality or forcefulness to the reading.

2.2.6.3 Effect of the *away at* frame

The significance of duration or continuative aspect to the *away at* frame means that it applies more readily to processes or events that are easily repeated, even though repetition is not the core meaning of the frame. Free repetition is more likely when there is limited resistance to an event. This means that both the choice of NP and the choice of verb is highly significant and suggests that events that are difficult to repeat easily will be more resistant to participating in the *away at* frame. As will be demonstrated, much of this is to do with pragmatic reasons, rather than purely semantic concepts, such as telicity.

Forceful actions, such as *kick, punch* and *thump* are pragmatically ‘uncomfortable’ with a repetitive frame because increased duration of the action will correlate with increased violence.

78. (a) The fighter punched his opponent.
    (b) The fighter punched at his opponent.
    (c) The fighter punched away at his opponent.
    (d) ?The fighter punched away at this opponent but missed.

79. (a) The girl kicked the dog.
    (b) The girl kicked at the dog.
    (c) The girl kicked away at the dog.
    (d) *The girl kicked away at the dog but missed.

The *away at* frame in example 78(c) suggests unheeded battering by the fighter as punches continued to be thrown. The violence level, compared to 78(a) or 78(b) is significantly increased and emphasised. Significantly, even with the *kick/punch* and *jab/poke* verbs where the *at* frame entails missed contact, the *away at* frame must
entail contact, as shown in example 79(d). This supports the claim that the two frames are quite distinct.

Readings within this frame for the impact verbs are possible but pragmatically uncomfortable. This is especially evident when they are contrasted with the BRUSH/SWEEP and the RUB/SCRATCH group which are inherently iterative and therefore more easily extended in duration or continuative aspect.

80. (a) Sally scrubbed the table.
    (b) Sally scrubbed at the table.
    (c) Sally scrubbed away at the table.

81. (a) John scoured the dried weetbix.
    (b) John scoured at the dried weetbix.
    (c) John scoured away at the dried weetbix.

82. (a) Tom rubbed the stain.
    (b) Tom rubbed at the stain.
    (c) Tom rubbed away at the stain.

Increased persistence, or perseveration, is still lexicalised by the away at frame in 81(c) and 82(c) but because impact is insignificant with verbs that maintain contact throughout the event, the extended duration does not entail a more violent action.

Verbs from classes like the KICK/PUNCH or POKE/JAB classes, which are not inherently repetitive, seem strange within the frame because repetition seems pragmatically unlikely. In the away at frame, the repetition entails repeated contact. If contact is made with the ball, unless it is fixed in place like a punching bag, the ball would move away and a repeated kick would be unnecessary.

83. (a) He kicked the ball.
    (b) He kicked at the ball.
    (c) He kicked away at the ball.
The repetition of the activity brought about by the increased duration and persistence of the away at frame is related not only to the action itself, that is the process of moving the leg in a kicking motion, but rather to the contact that is made with the direct object. KICK/PUNCH and POKE/JAB verbs are naturally short in duration and repetition is the only means by which the event can be extended in its duration. For otherwise non-durative verbs, such as these classes, repetition of the activity must be justified in order to fit within the frame.

However, repetition is not the key element to the away at frame. Rather, as suggested above, maintained input of energy or agency is required for perseveration of the activity. Verbs such as push and shove demonstrate this. This type of verb is pragmatically odd with the away at frame because the contact that is characteristic of these verbs already has a strong durative aspect to it. Pushing and shoving involve a single movement towards the point of contact and then continued contact with the object. This is in contrast to the BRUSH/SWEEP and RUB/SCRATCH verbs, identified above as those most compatible with the frame, which have both continued contact with the object and continued motion in relation to it. If the process of pushing is repeated, it emphasises the continued force of the pusher, rather than continued attempts at pushing.

84. (a) Jill pushed the stone.
    (b) Jill pushed at the stone.
    (c) ?Jill pushed away at the stone.

This means that the away at frame would have a reading of ‘Jill continued to push at the stone but couldn’t make it budge’ rather than ‘Jill gave the stone a push, then another little push, then a further little push’. The key semantic element of the frame is therefore persistence, rather than repetition.
2.2.6.4 Significance of direct object choice

The characteristic interpretation of the KICK/PUNCH and POKE/JAB verbs when participating in the away at frame can be countered somewhat through a change of direct object to a choice which more easily permits or encourages repetition. This counters some of the issues of pragmatic collocation.

This can be illustrated with reference to kick with a choice of NPs as arguments of the preposition. The example below seems overly violent and consequently pragmatically unsound. This is because, unless the dog is fixed in place, it would react and move away to prevent continued repetition of the forceful contact.

85. (a) She kicked away at the dog.

However, the insertion of an inanimate NP as the argument of the PP removes the pragmatic barrier of undue force and kick can participate more easily within the away at frame. Free repetition is more possible because of the limited amount of resistance that is provided by the object.

85. (b) She kicked away at the rotten log.

This suggests that if the ‘purpose’ or ‘effect’ of the activity (see Guerssal et al. 1985) is achieved with minimal repetition, it is pragmatically anomalous to persist in such repetition. Gouge provides a useful illustration of this.

86. (a) She gouged his eye.
     (b) She gouged at his eye.
     (c) ??She gouged away at his eye.4

With the direct object of his eye, the effect of gouging would be apparent or achieved with a limited iterative reading of the verb. If a different object is substituted which provides more resistance, the continuative aspect reading of the away at frame is more pragmatically acceptable.

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4 ! indicates that the sentence is pragmatically marked within the meaning of the frame.
87. (a) She gouged the hole (with the end of a stick).
    (b) She gouged at the hole.
    (c) She gouged away at the hole.

The choice of direct object does not change the reading that the *away at* frame is providing. Instead it works within the Construction Grammar proposal (see Goldberg 1996) that only verbs and arguments that are consistent with the meaning of a construction, which in this case is the *away at* frame, can participate in it.

Other verbs that are resistant to the energetic demands of the *away at* frame are verbs like *prick*. These can be distinguished from *kick* and *gouge* because of their nature as one off, isolatable, activities. Again, the pragmatic constraints against participation can be assisted somewhat by a change in the selection of the direct object argument. There seems to be something about the core meaning of *prick* which resists the continued persistence at the activity which is required by the *away at* frame. If the action is persisted with, the nature of the action can no longer be adequately captured by the lexeme *prick*.

88. (a) The nurse pricked my finger (with the needle).
    (b) The nurse pricked at my finger.
    (c) The nurse pricked away at my finger.

89. (a) She pricked the sausages.
    (b) She pricked at the sausages.
    (c) She pricked away at the sausages.

There is also contrast between these examples with respect to subtle degrees of telicity. The intention of the nurse in pricking a finger is to draw blood. However, sausage pricking is more like a change-of-state event in that you prick sausages in order to make the sausages be ‘pricked sausages’. Repetition is more compatible with this second reading because of the greater effect on the direct object that is intended by the action. If the intention is to create something that has been pricked, then the *away at* frame is pragmatically compatible.
90. (a) She pricked away at the lace.

In summary, the *away at* frame expresses an energetic persistence at an activity and, as such, emphasises the duration or continuative aspect of the event. This is often achieved through excessive repetition. Those verb groups that are internally repetitive, such as the BRUSH/SWEEP and RUB/SCRATCH groups, are most consistent with the frame. Verb groups, such as KICK/PUNCH and JAB/POKE are naturally short in their duration and energetic persistence is pragmatically at odds with their aspectual event structures. They do, however, still participate but with a very marked reading which provides a degree of resistance to the action to allow the necessary repetition. The collocation of an animate direct object with an impact verb and the *away at* frame expresses brutal attack. This marked form means that the *away at* frame is a distinct construction from the conative frame.

### 2.3 Conclusion: The conative frame identified

The aim of this chapter was to examine the verbs that were claimed to participate in the construction referred to in the literature as the ‘conative alternation’. A closer analysis of the data suggests that a number of different *at* frames have been grouped together under a single heading in a way that blurs the crucial distinctions between the meanings of the different verb frames and the nature of the verbs that participate in them. I have shown the following things in relation to the data:

Firstly, four main *at* forms have been identified. The first of these involves the verb groups that have an implicature of change-of-state in their transitive frame. These include the BRUSH/SWEEP, CHOP and GRIP verbs. The *at* frame negates the collocation of change-of-state and emphasises the manner of contact lexicalised by the verb. The entity that moves in the event is not projected at the syntactic level.

The second dominant *at* form implicates change-of-location of the direct object argument in the transitive frame. The *at* frame of the PUSH/PULL verbs cancels this implicature and gives a reading of non-movement.

The third form is the impact frame which includes the JAB/POKE and KICK/PUNCH verbs within it. In the impact transitive frame, contact with the direct object is entailed. The impact conative frame gives a reading of movement towards the direct object but removes the entailment of contact. The events described by these
verbs are individually countable and are shaped by the gesture of the action
lexicalised by the verb. Again, the entity that moves in the event is not separately
projected into the syntax.

The fourth form is the generic \textit{at} group. This is perhaps the most productive
class of those discussed. There is no overwhelming semantic difference between the
transitive frame and the \textit{at} frame, although the \textit{at} frame carries a slightly more
repetitive reading with some events.

The term ‘conative’ is derived from the Latin \textit{conor, conari} ‘to try; to
attempt’. The conative frame has traditionally been identified as describing an
‘attempted action’ (e.g. Levin & Rappaport Hovav 1991, Levin 1993). This reading is
compatible with Forms 1, 2, and 3 that I have identified. In each of these forms the \textit{at}
frame negates some entailment or cancels some implicature of the transitive frame
and suggests that ‘what might have happened, did not’. It seems appropriate to
continue to refer to these forms with the conative label for the \textit{at} form, distinguishing
them by the terms ‘contact conative’, ‘exerted-force conative’ and ‘impact conative’
respectively. The fourth form with its minimal semantic distinction between the
transitive and conative frames seems to be a particular locative construction which
does not fit within the conative assessment. It does not display the same qualities of
‘attempted action’ evident in the other forms. I shall refer to this form as the ‘generic
\textit{at} frame’.

Secondly, the \textit{on} frame has been dismissed from further investigation after
concluding that it is a locative frame that is separate from the conative forms and the
generic \textit{at} frame discussed above.

Thirdly, the conative forms and the generic \textit{at} frame, although distinct
constructions, do seem to be related to the \textit{away at} frame. The impact verbs that
appear in the conative frame are at one extreme of a linear relationship with their
transitive frame entailing contact with the object and the verbs that participate within
the class being individually countable. In its conative frame, the event is focused on
the movement towards the object and no contact occurs. At the other extreme, is the
non-simple transitive variant of the \textit{away at} frame, or the ‘work away at’ verbs.
These verbs are non-count and do not need repetition to achieve the maintained
energetic persistence and continuative aspect of the \textit{away at} frame. Slightly less
extreme than this group are the change-of-state verbs and exerted-force verbs that
appear in the conative, the majority of which are non-countable. The internally repeated verb groups, like BRUSH/SWEEP, RUB/SCRUB and CHEW require further repetition in order to achieve the energetic persistence of the away at frame.

Somewhere between the non-countable verbs that appear in the conative and the away at frame lies the generic at frame. In its transitive frame, the basic interpretation of the generic at frame is one of a process made up of internal parts. However, as noted above, some verbs can be interpreted as a characteristic gesture which is individually countable and with a repetitive reading can also fit within the at frame. The pragmatics of the reading are variable by collocation depending on whether contact or gesture is lexicalised by the verb. The first example, 91(a), can be interpreted as a gesture towards the hat, whereas in the second example, 91(b), non-contact is anomalous and a gestural reading is not available.

91. (a) The valet brushed at the hat.
(b) The branch brushed at the window.

The role of the direct object in the contact conative has already been discussed from the perspective of verbs of removal (see Levin & Rappaport Hovav 1991). In Form 2, the contact transitive and contact conative, the direct object is the entity that moves and fulfils the role and characteristics of a traditional Theme argument. The Theme argument has also been explored in the literature (e.g. Dowty 1991, Tenny 1992 etc). I have shown that Form 4, the generic at frame, is a specific locative construction and is unlikely to show any further interesting characteristics.

However, Form 3, the impact frame, does not select a Theme argument as its direct object in the impact transitive. The argument clearly falls into the Proto-Patient role (Dowty 1991) with impact verbs, such as kick and punch, often advanced as canonical Patient-taking verbs. By investigating both the transitive and the conative form of the impact frame in the remainder of this thesis, the features of the non-Theme Patient argument can be identified. The discussion of the impact frame provides an entry point into this discussion. The remainder of this thesis therefore focuses predominantly on this form of the conative alternation and any reference to the conative frame should be understood as referring to this specific conative form.
3 Chapter Three: New analysis of constructions

In this chapter I propose a new approach to the analysis of the conative and transitive frames that were identified in Chapter 2 with a particular focus on the impact frame. This proposal draws upon traditional thematic role classifications and their association with motion events. I suggest that the conative frame consists of an orientational at which introduces an atelic Path argument to the structure of the event and indicates ‘missed contact’. This contrasts with the transitive frame which lexicalises ‘motion towards + contact’ through a compressed expression of the Theme and Goal arguments. I represent and investigate these conclusions further within Hale & Keyser's theory of Lexical Argument Structures.

3.1 Preliminary Thematic Issues

The initial discussion in this chapter focuses on the literature on thematic roles. Gruber (1965) is responsible for the original introduction of thematic roles to the semantics literature. His seminal dissertation influenced Fillmore’s Case roles (1968) and Jackendoff’s (1972) further exploration of the roles, which is now the primary reference for any discussion of them. Thematic roles are a system of semantic relations which hold between the arguments of a sentence or VP and the event.

Following Jackendoff (1972), I approach the conative frames in terms of motion events and spatial roles. Motion is seen as a central factor in Gruber’s and Jackendoff’s proposal and the main roles that are identified are Theme, Goal and Source arguments are all defined with reference to it. By analogy, non-concrete types of motion, such as change of possession or abstract position, are also treated as motion events (Jackendoff 1972, 30). Change-of-state events are also treated as metaphorical motion with respective beginning and endpoints of Source and Goal.

The three roles that are most useful for the analysis of the conative frame proposed in this thesis are Patient, Theme and Goal. Their motion relationships are expressed by means of Path arguments.

In Gruber’s analysis, the fundamental semantic notion is the Theme of a sentence. Gruber claims that in every sentence there is an NP that functions as a Theme. This role is defined as the NP that is understood as undergoing motion, whether physical or metaphorical (Jackendoff 1972, 29). With verbs of location, the
Theme is defined as the NP whose location is being asserted (Jackendoff 1972, 30). The Theme is usually found in either the subject or direct object position. With a transitive verb it is usually in the direct object position.

The Goal role is also associated with verbs of motion. It is often expressed with a Path PP but not necessarily so. It is understood as the NP that expresses the location towards which the Theme argument is moving (Jackendoff 1972, 31), or more simply, ‘the object to which motion proceeds’ (Jackendoff 1990, 47). Again, this motion may be concrete or abstract, as with change-of-state verbs.

The Patient role has sometimes been treated as interchangeable with the Theme role in discussions. It is not strictly a role in Gruber’s system but is described by Jackendoff as the ‘affected entity’ (1990, 125). A test for it is the ability of the NP to appear in the frame:

1. (a) What happened to NP was…
   (b) What Y did to NP was…

Jackendoff suggests that ‘their being Patients does not eliminate their other roles’ (1990, 126) and goes on to suggest that an NP can be both a Patient and another role, such as a Goal or a Theme.

The ‘route’ which the Theme takes to get to the Goal is known as the Path. Jackendoff (1990) suggests that there are different sorts of Paths that can be represented with different functions. He identifies the Paths TO, FROM, TOWARD, AWAY-FROM, and VIA (43). In a sentence of motion, the well-formedness conditions on conceptual structure require the Path argument to be present in conceptual structure, even if it is not expressed syntactically (45).

Chomsky (1981) extends the semantic notion of thematic roles to syntax, specifically Government and Binding theory, with his theory of Theta (θ) roles. Under Chomsky’s approach, θ-roles are now associated with the verb’s arguments in a syntactic configuration, rather than simply a conceptual relationship. This system is θ-assignment and is governed by syntactic principles, including the Theta Criterion, which imposes a strict one to one relationship between argument positions and θ roles.
2. **Theta Criterion**- Each Argument bears one and only one θ-role, and each θ-role is assigned to one and only one Argument.

Notwithstanding the continued debate about the usefulness of the Theta Criterion (e.g. Jackendoff 1987, 1990; Dowty 1990), since most of this revolves around the Agent role, it still provides a useful basis for the conclusions drawn in the following sections with respect to other thematic roles and the meaning of the conative frame.

### 3.2 Conative frame

In this section I focus on the meaning and function of *at* in the impact frame. I draw parallels with other *at* frames to suggest that an orientational or directional path interpretation is the most appropriate analysis. This can be contrasted with another conventional analysis of *at* as specifying a location.

In the standard Theme-Goal transitive frame, the Theme travels to the Goal argument and the state of the Theme coming to be at the Goal bounds the event. The bounding characteristics of the conative are discussed in Chapter 4. Briefly, the Goal role is identified as the thematic argument that provides the endpoint to the event. In the case of change-of-state verbs, this is more specifically understood as the endstate that is lexicalised within the verb under a metaphorical interpretation of motion. By examining constructions with clearly identifiable endpoints, the verb’s thematic roles can be identified.

3. (a) Cairns hit the ball to the boundary.

In example 3(a), *the ball* is the entity that moves and therefore, under Gruber’s analysis of thematic roles, is identified as the Theme argument. The event is understood as complete when the ball reaches the boundary. The preposition *to* introduces a Path phrase which selects a Goal argument *the boundary*. Together these provide the endpoint to the event. However, this same *TO + Goal* construction is not possible in the conative frame.

3. (b) Cairns hit at the ball.

(c) *Cairns hit at the ball to the boundary.
In the transitive frame 3(a), the boundary is clearly identified as the Goal argument, since, in combination with its Path phrase, it provides the endpoint to the event. The movement of the Theme to a location at this endpoint, provides the telicity to the event. The Theta Criterion holds that ‘each θ-role is assigned to one and only one Argument’. This suggests that in the conative frame the NP the ball is no longer a Theme but is functioning in a similar way to a Goal argument. The constraints of the Theta Criterion prohibit it from co-existing alongside another Goal-like argument.

In the following sections I explore further the characteristics of this Goal-like argument.

3.2.1 Goal and Target PPs

The data review in Chapter 2 suggested that a significant semantic component of the impact conative at was ‘movement towards’ the object. This means the ball argument in the impact conative does not imply transfer or arrival, as a Goal argument traditionally would. Instead it implies some kind of orientation or pointing towards an entity. It therefore does not seem to be exactly the same as a traditional Goal phrase, where contact is entailed. Instead the at PP, which implies ‘missed contact’, provides a Target for the event. This Target is incompatible with another ‘true’ Goal argument.

Different PPs can be understood as introducing different kinds of Paths.

<table>
<thead>
<tr>
<th>Example</th>
<th>Target/Goal choice</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give it to her</td>
<td>Path + goal</td>
<td>cf. *he gave it to her but she didn’t get it.</td>
</tr>
<tr>
<td>Send it to her</td>
<td>Path + target</td>
<td>cf. he sent it to her but she didn’t get it.</td>
</tr>
<tr>
<td>Smash against the wall</td>
<td>Path + goal</td>
<td>cf. *he smashed against the gate but didn’t get to it.</td>
</tr>
<tr>
<td>Rush towards the gate</td>
<td>Path + target</td>
<td>cf. he rushed towards the gate but didn’t get to it.</td>
</tr>
<tr>
<td>Run to the store</td>
<td>Path + goal</td>
<td>cf. *he ran to the store but didn’t get there</td>
</tr>
<tr>
<td>Run towards the store</td>
<td>Path + target</td>
<td>cf. he ran towards the store but didn’t get there</td>
</tr>
</tbody>
</table>

**Figure 4: Path + Target/Goal**
The distinction between Goal and Target PPs is best understood as two choices in a paradigm. Just as an NP can have either a definite or indefinite article but not both, so the preposition of a PP can be interpreted as either a Goal or a Target PP. The two choices carry different meanings but are part of the same option set. The choice of Goal entails contact. In contrast, the choice of Target does not entail contact and implicates missed contact. Chapter 4 explores the differences between Goal and Target arguments in more depth than is possible here. It examines their bounding characteristics and the implications these have for the impact conative frame and the verbs that are found in it. I discuss the behaviour of different Path phrases in Chapter 5.

3.2.2 Orientational at

In this section I explore the meaning and role of the preposition at that is found in the conative alternation. Through a discussion of other at frames I show that it is distinct from the basic locative at illustrated in the following examples.

4. (a) He met her at school.
    (b) She parked at the edge of the road.
    (c) He was at home on Saturday night.

Rather than specifying location, the at used in the conative frame is ‘orientational’. This analysis is independently motivated by instances of at appearing in non-conative frames where it performs a similar function and contributes similar semantic information to the construction.

The Target-Path construction found with verbs that appear in the conative resembles a particular group of verbs that signal the directional orientation of a Theme but do not involve the transfer or arrival of it. With these verbs, no direct object is projected to function as the Theme role and nothing ‘moves’ in a concrete sense, although by analogy a Path can be discerned. Significantly since nothing moves, no ‘contact’ whether actual or metaphorical occurs with the indirect object argument. It is a Target and not a Goal of the event.

The following examples illustrate two points. First, the at of this construction is different to the at of example 4. It is not locational but instead is orientational in its effect. Second, since the at is not locational (located at) and does not entail
movement of the Theme argument towards it, the argument it projects is a Target argument that implicates non-contact. This analysis is similar to van der Leek’s approach of a compositional sense of ‘estimated point-of-contact’ (see van der Leek 1996). However, I ascribe a different path-selecting role to \textit{at} and \textit{to} than van der Leek does.

5. (a) Tarzan smiled at Jane.
    (b) The hyena laughed at its prey.
    (c) She pointed at the star.

In example 5(a), Jane does not get hit by Tarzan’s smile. Instead, he ‘smiles’ and the smile is directed towards her. Similarly, the hyena’s laugh does not make physical contact with its prey but happens and then is oriented towards the other animal. This kind of metaphorical orientation without transfer or contact occurring is also found with certain transitive verbs.

6. (a) The judge directed her remarks at the accused.
    (b) She shone the light at the possum.

     The same characteristics are displayed by the transitive variants. Some entity is directed towards the argument of the prepositional phrase, yet no contact occurs. It is interesting to observe that 6(a) does not entail that the judge ‘spoke to’ the accused. The reading is more strictly that the judge was speaking to the whole courtroom but the remarks she made were of special significance to the accused.

     A formal means is required of representing the distinction between the orientational \textit{at} and the locative \textit{at}. Jackendoff (1990) discusses stative directional predicates within his theory of Conceptual Semantics. He makes use of the concept of Paths in a quasi-metaphorical sense to denote a position for a stative predicate. He discusses the following example and proposes a function of $[\text{State ORIENT}]$ within which to represent it (1990, 92).
7.  (a) The weathervane pointed north.
(b)  \([\text{State ORIENT} ([\text{WEATHERVANE}], [\text{Path NORTH}])]\)

(Jackendoff: p. 92, e.g.(15))

Jackendoff avoids the issue of what preposition should be introducing the Target path phrase through his choice of argument. *North* is not strictly a Path preposition and should probably be combined with a Path function such as [TOWARDS], which would indicate non-contact with its own internal argument.

The [State ORIENT] representation can be contrasted with a [TOWARDS] Path function combined with a [Event GO] predicate which indicates movement and translocation towards the position stated. This would give the incorrect reading for example 7(a), given in example 8(a), that the weathervane physically moved towards the north, rather than that its arm indicated a northward direction.

8.  (a) The weathervane moved north (carried on the back of a truck that was travelling in that direction).
(b)  \([\text{Event GO} ([\text{WEATHERVANE}], [\text{Path TOWARD} ([\text{NORTH}])])]\)

With the ORIENT function, the subject of the event, in this example the *weathervane*, is understood as the thing that is doing the orienting. It is the weathervane itself that is oriented or pointing in a northward direction. But in a motion event of movement towards an object this is not the case. Consider the following example.

9.  (a) Tom walked towards the park.
(b)  \([\text{Event GO} ([\text{TOM}], [\text{Path TOWARD} ([\text{PARK}])])]\)

In example 9, *Tom* does not necessarily reach the park. The event described is one of movement towards the Target argument of *the park*. Unlike the weathervane example, it is not *Tom* that is oriented towards the Target. If *Tom* stops halfway through his walking event, he is unlikely to be oriented towards the Target. Instead, it is the Path that he travels that provides the orientation for the event. It is the Path that points towards the park and Tom is merely the entity that travels over it. Example 9
therefore involves actual movement of a concrete Theme argument. Examples 5 and 6, introduced above, do not involve translocation of an entity but still project a Path in a similar way to example 9.

In order to be able to represent the examples 5 and 6 introduced above we need to know what entity is oriented along the Path towards the Target argument. This entity would be the Theme argument under a Gruberian analysis. The transitive variants give some suggestion as to what the Theme of an orientational event may be. Under Gruber’s motion analogy, *her remarks* would be analysed as the Theme in example 6(a), whereas the *(torch)light* performs the same function in example 6(b), repeated below as 10(a). These are the entities that ‘move’ towards the Goal or, in this case, the Target, since missed contact is implicated. Although these examples are eventive, in that an action is described, the semantic content of *at* is still ‘statically oriented towards’ rather than ‘moved towards’, since the Theme does not physically move along the Path.

10. (a) She shone her torch at the possum.
(b) \[State ORIENT ([SHE], [TORCHLIGHT ([Path TOWARD [POSSUM]]))]\]

If the same approach is taken to the intransitive variants in example 5, such as *smile at* and *laugh at*, it is immediately obvious that the Theme role is not projected into the final syntactic realisation. But under Gruber’s proposal, there must be a Theme to every sentence. This suggests that it must have been lexicalised into some other aspect of the sentence. To extract the Theme out, we can take example 5(a) and ask ‘what is being ‘oriented’ or ‘targeted’ towards Jane’, and it is identifiable as a *smile*. The Theme is therefore part of the verb meaning and is lexicalised within the verb and not separately projected.

11. (a) Tarzan smiled at Jane.
(b) \[State ORIENT ([TARZAN], [SMILE ([Path TOWARD [JANE]]))]\]

It is not possible to capture the parallelisms between the conative frame and the stative orientational *at* in a simple way. In the following section I outline the
parallelisms and indicate the key characteristics of the impact frame that need to be represented by an adequate analysis of it.

3.2.3 \([\text{State ORIENT}]\) and the impact frame

Jackendoff’s stative application of \text{ORIENT} is really an extended use of a Path phrase which implements the metaphorical motion concept of thematic roles. \text{At} can be understood as the surface preposition expression of \([\text{ORIENT}]\). The preposition selects a Target argument to indicate non-impact.

The central difference with the conative frame and those examples discussed above in Section 3.2.2 is that the conative frame involves a motion verb and ‘movement towards’ the object of the \text{at} preposition. In example 12(a), the \text{at} is the surface realisation of ‘orientation towards’. This time there is physical movement or motion towards the argument of the prepositional phrase, so rather than being stative it should be analysed as an Event.

12. (a) Cairns hit at the ball.

The internal argument, \textit{the ball}, is identified as a Target argument, rather than a Goal, because it does not specify an endstate but merely a position towards which the Path of the Theme is oriented. It is incompatible with any other Goal argument. Furthermore, since the Theta Criterion prevents any Argument from being assigned more than one role, the Theme argument cannot be the object of the preposition as it has already been assigned a role. Instead, as with the intransitive orientational \text{at} verbs of example 11, the Theme is not separately projected as an argument at the level of syntax.

A Path phrase is projected that selects a Target argument to represent the fact that contact is not made with it. In example 12(a) the entity that moves towards the Target and is identifiable as the Theme, cannot be \textit{the ball}, nor can it be Cairns, the Agent of the event. Instead, the Theme is something like Cairns’ bat which is not syntactically projected in the basic conative frame. It is possible, however, for the Theme to be extracted and projected as a separate Instrument, or displaced Theme, phrase. \textit{The ball} remains the Target, since contact is still not entailed.

12. (b) Cairns hit at the ball with his bat.
The impact conative frame means ‘missed contact’. This meaning is brought about by the particular components that combine to make the frame. Its preposition at selects a Target argument which does not entail an endstate to the event, but is the object of a Path structure that is oriented towards it. The entity, or Theme, that moves towards the Target is not projected separately but is incorporated within the verb itself. Since the projected argument is a Target and not a Goal, non-contact between it and the Theme argument is implicated.

3.3 Transitive frame

This discussion of the transitive frame continues to focus on the unified class of verbs identified in Chapter 2 as those that appear in the impact frame. Specifically, these are the PUNCH/KICK and POKE/JAB verbs, which modify the kind of impact that the event has on the direct object of the transitive frame. As the object of an impact event, the internal argument of the impact transitive frame is an ‘affected argument’ and falls within Jackendoff’s definition of the Patient argument. The exact characteristics of the Patient role have previously not been examined in any depth. One of the aims of this thesis is to shed some light on this issue.

13. (a) Greg poked the fire.
(b) What happened to the fire was that Greg poked it.
(c) What Greg did to the fire was poke it.

14. (a) Ellen punched the cushion.
(b) What happened to the cushion was that Ellen punched it.
(c) What Ellen did to the cushion was punch it.

The Patient role of the impact verbs can be clearly distinguished from the Theme argument of the event, which is understood as the entity that ‘carries out’ the manner of impact lexicalised by the verb. As with the conative frame discussed above, the Theme of the transitive frame is not usually separately projected at the level of syntax. Instead, it is collapsed into the verb itself. It may be projected separately in a with-phrase, although this may seem pragmatically redundant unless extra information is being contributed.
15. (a) Greg poked the fire with the old stick.
(b) Ellen punched the cushion with her fist.

The impact transitive frame carries over the same motion element shown in
the conative frame. Unlike the impact conative frame, however, it entails contact with
the internal argument. Its semantic content is therefore ‘motion towards + contact’.
Its underlying representation needs to represent this and this is explored further below
in Section 3.6.

In its expanded form, with the understood Theme projected, the transitive
frame seems to be a typical Theme-Goal construction.

16. (a) Greg caused the old stick to go to the fire.
(b) Ellen caused her fist to go to the cushion.

In the transitive frame the verb lexicalises⁵ the Theme and the Path that the Theme
takes to reach the Goal. This information is incorporated within the verb itself and
together provide the appropriate manner component. This is most obvious with the
KICK/PUNCH verbs since they incorporate a specific body part. In the transitive frame
these verbs can be understood as incorporating the information shown in example 17.
x is the argument projected into the direct object position.

17. (a) Punch: cause fist to go to x
(b) Kick: cause foot to go to x
(c) Poke (as in boxing): cause fist to go to x

The collapsing of the Theme and the Goal into the verb has a number of
different effects. Firstly it alters the bounding implications of the Goal argument.
This is discussed in more detail in Chapter 4. Secondly, since the Path is incorporated
into the verb and is no longer separately projected, the Path becomes integral to the
shape and understood completion of the event. This is also discussed further in

⁵ “Lexicalisation” is expressed as “incorporation” in Hale & Keyser’s discussion, presented in Chapter
3.4. For consistency, I adopt the use of their term.
Chapter 4. Thirdly, the incorporation of the Path into the verb promotes the Goal argument to the direct object position, rather than being the object of a prepositional phrase. Further implications of this are discussed in Chapter 5.

The impact transitive frame focuses on the motion element that is also central to the impact conative frame. The main contrast between the two frames is that contact is entailed in the transitive frame. Contact with the Goal argument licenses compression of the Theme and Path into the verb. The incorporation of these elements promotes the Goal argument to the direct object position.

### 3.4 Hale & Keyser: Lexical Argument Structure

Hale & Keyser explore ‘the relation between lexical items, particularly verbs, and the syntactic structures into which they enter’ (1993, 53). Their framework of Lexical Argument Structure (LAS) accords meaning to phrase structure. They represent LAS in branching structures that are isomorphic in the corresponding VPs. This accords some semantic content to the structures themselves, at both the sublexical and phrasal levels.

In this section, I outline the basic assumptions behind Hale & Keyser's theory, including the basic forms that they prescribe to the argument structures of verbs. In the following sections I extend their analysis to the conative and transitive forms of the impact frame that I discussed above in Sections 3.2 and 3.3.

In their theory of Lexical Argument Structures, Hale & Keyser describe a ‘constrained nature of argument structure’ that is based on the principle assumption that ‘Argument structure is defined in reference to two possible relations between a head and its arguments, namely the head-complement relation and the head-specifier relation’ (Hale & Keyser 1999, 52).

### 3.4.1 Basic Structures

Different head categories project different configurations to represent the basic argument structures. There are three structural types that appear and one that does not, example 18(c), although logically it might be expected to. The structural configurations are not assigned any specific morphosyntactic category, although there is a favoured categorial realisation (1998, 82).
Each of these structures is discussed in more detail below. Although Hale & Keyser use both upper and lower case in their presentation of categories and heads, I will use lower-case letters throughout my discussion to indicate and reinforce that these structures are sublexical.

The first structure 18(a) is lp-monadic (lp = lexical projection). The argument structure projected by the head contains just one argument in its complement position. This is the basic verbal projection (1998, 75).

The second structure 18(b), shown in example 20, is projected by a prepositional head. It is an ‘inherent and fundamental property of canonical prepositions that they project a structure containing both a complement and a specifier’ (Hale & Keyser 1998, 77). This structure is consequently lp-dyadic. Hale & Keyser appeal to the notion of predication to explain the structural relationship between the complement and the specifier. The head (p) and the complement (n) together form a predicate. By definition, a predicate requires a ‘subject’ and this is supplied by the specifier (1998, 78).
20. (a) (put) the books on the shelf

(Hale & Keyser 1998: p.76, e.g.(4))

The whole structure of example 20(a) can appear as the complement of a
ermal head of the lp-monadic structure, within a lexical projection. This gives a
complex structure which consists of the P-projection (dyadic) embedded as a
complement to a V projection (monadic).

20. (b) Put the books on the shelf.

(Hale & Keyser 1998: p.77, e.g.(5))

The specifier within the P-projection will normally appear as the grammatical object
of the verb in sentential syntax (1998, 77) and since it is governed and locally c-
commanded by a verb head, it must receive grammatical case (80).

The structure for intransitive verbal projections of unaccusative verbs is
similar and introduces a further mechanism into the system when alternated into its
transitive variant.\(^6\) The intransitive projection shows the same predication pattern as
for the P-projection. The substructure (head and complement) demand a specifier,
just as a predicate requires a subject.

\(^6\) Unergative transitive verbs are discussed further below e.g. *kick*
21. (a) Leaves turn red

(Hale & Keyser 1998: p.78, e.g.(7))

For the transitive variant, the V-projection is inserted into a second V-projection, a monadic structure which takes the dyadic V-projection as its complement, to give the ‘surface form of the verb’ (1998, 81).

21. (b) Turn the leaves red.

(Hale & Keyser 1998: p.80, e.g.(8))

The upper head v₁ is empty. This introduces the major mechanism of Hale & Keyser’s theory- Conflation or Incorporation. If an upper head is not filled, a general principle of the theory holds that an empty phonological matrix must be eliminated from the morphosyntactic representation of sentences. This occurs through the process of conflation which is a specific kind of incorporation (1998, 80). Conflation is constrained by a basic Head Movement Constraint that holds that the phonological matrix of a complement (i.e. the head of the complement) replaces the empty matrix of the governing head (1998, 81). As a concomitant of the Minimalist Syntax Program’s Merge principle, conflation is a relation holding strictly between a head and its complement (1998, 88).

In example 21(c) the phonological matrix [τ∈ν] is transferred from the lower head to the upper head. Hale & Keyser suggest that it leaves a trace of ‘as yet unknown character’ behind it, which may simply be a copy of v₂ (1998, 81).
21. (c) Turn the leaves red

![Diagram](image)

(Hale & Keyser 1998: p.81, e.g.(9))

Hale & Keyser also discuss ‘synthetic’ verbs, which take full advantage of the concept of conflation (1998, 85) by deriving verbs from other grammatical categories. De-adjectival verbs, such as `clear`, which can be found in both an intransitive and transitive frame have the properties of requiring a specifier but not taking a complement. The transitive form therefore appears as the output of conflation.

The intransitive variant is formed from the incorporation of a with the phonologically null v, under the relationship of head-complement conflation.

22. (a) The screen cleared.

![Diagram](image)

(Hale & Keyser: p.85, e.g.(18))

Transitivisation occurs with the verbal projection as a complement in the (a)-type argument structure configuration. Conflation occurs twice. First from the complement of the embedded structure to its head and then from this complement position to the head of its structure. Presumably traces of each movement are left behind.
22. (b) I cleared the screen.

![Diagram]

The Hale & Keyser model proposes a finite number of basic forms and uses a productive combination of complementation and conflation to derive other verb forms. The head-specifier and head-complement relationships are ‘privileged’ and conflation, in their model, can only occur in a manner consistent with the Head Movement Constraint.

3.4.2 Treatment of Patient verbs

In later work, as part of a discussion on the transitivity alternation characteristics of Patient-manner and Agent-manner verbs, Hale & Keyser discuss ‘impact’ verbs, such as *kick, punch* and *slap* (1999).

23. (a) I kicked the wall.

(Hale & Keyser: p.69, e.g.(46))

Their proposal of the representation of ‘impact’ verbs provides an interesting contrast to my proposed analysis of the conative alternation, given in Section 3.5, since the group of ‘impact’ verbs predominantly participates in the conative construction. Hale & Keyser suggest that impact verbs have the structure of a v with p-projection complement and the complement of p is a noun (the ‘impact noun’, e.g. *kick, punch, slap, jab, poke, knee, elbow*) (Hale & Keyser, 1999: 70). This provides a basic structure for the impact verbs of:
24. (a) Kick the bag

Through the process of conflation on example 24(a), *kick* moves to fill the phonologically empty matrix of *p* and this in turn conflates with the *v* node through head to head movement. This structure provides an ideal basis for deriving a representation of the light verb construction of the ‘impact’ verbs, shown in example 24(b). In this structure, the *v* node is already filled by *give* and the second step of conflation is therefore unnecessary, although *v*₂ conflates with *v*₁ to form the transitive surface form of the structure.

24. (b) He gave the bag a kick.

This provides a neat relationship between the basic analysis of *kick* as a denominal verb, hence its relationship with the ‘light verb’ construction, and the transitive frame. As their analysis currently stands, it seems difficult to represent the conative frame within it. This issue is discussed in more detail in Section 3.5.4. An alternative analysis will be given and compared with the Hale & Keyser version.
3.5 Proposed representation of the conative and transitive frames

In this section I propose a sublexical representation for the impact frame that attempts to work within the constraints of Hale & Keyser’s theory. I propose means to reconcile difficulties that arise and advance solutions that are intended to fit within the spirit of the parameters of their framework. I outline the advantages of my approach in Section 3.5.3.

3.5.1 Representation of the Conative frame

In Section 3.2 I presented a conceptual analysis of the conative frame which proposed that the at surface preposition was similar to a [State ORIENT]. This structure entailed missed contact with the object of the preposition. I also suggested that, in the impact conative frame, the Theme of the event is incorporated into the verb itself. An impact conative event can therefore be formally represented as:

25. x CAUSE y GO AT z

where x is the Agent of the event, and y is the Theme that has its Path of motion oriented towards z the Target of the event. The GO function indicates the centrality of motion to the verbs that participate in the frame. The orientational AT modification on the Path is static, even though the Path is defined by a motion. I propose that p can be a relation, as presented in Hale & Keyser’s model, where it includes a specifier, or p can also project a pp without a specifier. This latter projection expresses a path and is predicated onto the verb GO. Integral to the meaning of orientational AT is that it implicates non-contact between y and z. This analysis gives a reading for conative kick of:

26. (a) Thomas kicked at the ball.

(b) Thomas CAUSE “foot” GO AT ball.

Drawing on Hale & Keyser’s approach, at a sublexical level I suggest that this should be represented as:
27. (a) Thomas kicked at the ball (sublexical)

```
  vp
   \ /  \\
  x v'
   / \  \\
  v   CAUSE
    /   \\
   n   v'
     /     \\
    "foot" v
     /     \\
    GO pp
      /     \\
     p n
      \   \\
    AT ball
```

Between the sublexical ‘input’ stage and the ‘output’ stage of syntax, certain elements of the structure need to be incorporated. *Kick* is a manner of impact verb, so the two v nodes need to be merged. The other central element of the conative frame is that the Theme argument is not projected into the syntactic realisation, so this too must be incorporated. *AT* cannot be incorporated because the action of the verb is not implicated in the argument that the preposition introduces, since non-contact is implicated. Hale & Keyser’s mechanism of conflation provides a means of bringing about these required movements. *CAUSE-foot-GO* conflates into the top v node to give a lexical output of *kick*.

27. (b) Thomas kicked at the ball (conflation)

```
  vp
   \ /  \\
  x v'
   / \  \\
  v   CAUSE
    /   \\
   n   v'
     /     \\
    "foot" v
     /     \\
    GO pp
      /     \\
     p n
      \   \\
    AT ball
```

After conflation, the structure that remains is projected into syntax.
27. (c) Thomas kicked at the ball (syntactic projection)

```
            VP
           /  \
          DP    V'
         /   \
       Thomas V
          |     PP
          |   [CAUSE foot GO] P
          |    kick        DP
          |           at   ball
```

This proposal raises a significant issue to do with the mechanism of conflation that permits the incorporation of material at the sublexical level. Under Hale & Keyser’s proposal this relationship is intended to hold strictly between head to head movement. This means that incorporation of material from the specifier position should not be possible. Consequently, if I wish to propose that the Theme argument is incorporated into the head of v, then the scope of conflation must be extended to include specifier to head movement. This may be seen as a weakness of my proposal. However, Hale & Keyser’s ban on the incorporation of specifiers is based upon the Economy Conflation Principle (ECP) of syntax. They propose that it should extend to sublexical structures in order to prevent non-possible transitive ‘location’ verbs such as example 28. Hale & Keyser suggest that a movement of book to the v node is blocked because of the Head Movement Constraint on conflation. An argument cannot move out of the specifier position to a head position because conflation is a relation ‘holding strictly between a head and its complement’. The only ‘visible’ relations are specifier-head and head-complement (Hale & Keyser 1998, 88).
28. *He booked on the shelf (cf. He put books on the shelf/shelved books)

My proposal for the conative and transitive frames can only work if the constraints on conflation are relaxed.

3.5.2 Representation of the Transitive frame

The main semantic distinction between the conative frame and the transitive frame is that the collapsed Theme-Goal composition of the transitive frame entails contact. Rather than ‘movement towards’, the frame encodes ‘movement to’. The difference between the conative and transitive frames is similar to the respective difference between the following two examples. The (a) examples do not entail contact whereas the (b) examples do.

29. (a) Jack ran toward the shop.
      (b) Jack ran to the shop.

30. (a) Thomas kicked at the ball.
      (b) Thomas kicked the ball.

31. (a) Mark hit at the ball.
      (b) Mark hit the ball.

32. (a) Jayne jabbed at the cushion.
      (b) Jayne jabbed the cushion.

The difference in +/- CONTACT is represented in the sublexical structure by different prepositions. The conative frame takes AT which means 'orientation towards'
and the transitive frame has an underlying Path structure which selects a TO
preposition. This preposition entails contact and affectedness of the object of the
prepositional phrase. The underlying transitive frame can therefore be represented as:

33. \( x \text{ CAUSE} y \text{ GO TO} z \)

As with the impact conative frame, \( x \) is the Agent and \( y \) is the Theme. Unlike the
conative frame, \( z \) is the Goal argument, not the Target. As discussed in Section 3.3,
contact with the Goal argument permits compression of the Path and Theme, and
projection of the Goal as direct object. This compression means that in the syntactic
projection the \( z \) argument is promoted to the direct object position which entails
contact or affectedness but not change-of-state as may occur with Theme arguments
found in the same syntactic position. This means that the underlying representation of
the transitive \textit{kick} is:

34. (a) Thomas kicked the ball.
(b) Thomas CAUSE “foot” GO TO ball.

35. (a) Mark hit the ball.
(b) Mark CAUSE “bat” GO TO ball.

Example 34 can be represented following Hale & Keyser's model as example
36(a).\(^7\)

\(^7\) Although the following diagrams focus on the verb \textit{kick}, the structures are relevant for any of the
impact verbs.
Unlike the AT of the conative frame, the TO of the transitive frame can incorporate into the verb because contact with the n argument is a conventional analysis of affectedness in traditional discussions of patienthood. By means of conflation the preposition and the Theme argument are incorporated into the uppermost v. The GO verb is also incorporated and together these give the manner reading of kick. The incorporation of the prepositional Path provides the entailed contact to the reading.

After conflation has occurred, the ‘pruning’ of the sublexical tree leaves behind the syntactic output. The lexical entry for transitive kick includes both a manner component, brought about through the incorporation of the Theme, and a Path component, brought about through the incorporation of the preposition.
36. (c) Thomas kicked the ball (syntactic projection)

In the syntactic projection the Goal argument has been promoted to the direct object position. Here it fulfills the role of a Patient argument. It is not, as some claim (e.g. Goldberg 1996), the Theme of the event. The Theme has been incorporated into the verb itself.

Although the JAB/POKE verbs have fewer restrictions on what the Theme argument can be, the same structure applies. At a sublexical level:

37. (a) Mark hit the ball (sublexical)

This structure is then conflation:
37. (b) Mark hit the ball (conflation)

```
     vp
    /   \\
   x     v'
    |     |  \\
   v     vp
      CAUSE
       n  v'
       "bat"  v
            pp
            GO
            p  n
            TO ball
```

And the conflated structure is then projected into the syntax:

37. (c) Mark hit the ball (syntactic projection)

```
     VP
    /   \\
   x     V'
  Mark    \\
     v  DP
         |
    kick  the ball
       [CAUSE "bat" GO TO]
```

From this point on, I focus my discussion on *kick*, but the same conclusions should be understood to apply across all the impact verbs.

3.5.3 Advantages of my proposal

My proposed representation of the conative and transitive frame is inconsistent with some claims of Hale & Keyser’s framework. In this section I wish to expand on my motivation for extending their theory in the way I have and suggest that my approach has particular strengths and does not materially affect or contradict the basis of what they propose.

First, I approach my representation of the two frames of the conative alternation, particularly the transitive frame, from the perspective of a motion event. This is consistent with the thematic relations tradition and permits the relevant material to be clearly represented. At the underlying sublexical level, the event is
understood and represented as ‘GO y to z’. This representation has a Theme argument, which, for *kick*, is identified as *foot* since this is the entity that moves, and a Goal argument. At the projected syntactic level, this motion-event structure is collapsed with the Theme incorporated into the verb and the Goal promoted to the direct object position.

The second issue that I wish to discuss affects both the impact conative and the impact transitive representations. After conflation occurs, assuming that we accept that conflation is possible from the specifier to the head position as discussed in Section 3.5.1, what happens to branches that are left behind? Does their structure still remain, or is it ‘pruned’ away leaving only the filled nodes in the structure? I have assumed the latter, which seems to be more consistent with the Minimalist Program principle of avoiding empty categories. The resulting syntactic structure is therefore a condensed version of the original sublexical structure. The lexical verb now contains the Theme, motion and manner of the event, which together combine to give the appropriate manner of impact verb. It selects a PP which is headed by the *at* preposition as its object when in the conative frame.

This is not without its own difficulties. In the transitive frame, because so much material is incorporated into the verb head, the Goal argument is left suspended without the appropriate structures to support or license it.

38. Thomas kicked the ball (conflation)
By accepting the need to prune the empty branches away, the verb can be more clearly seen as a synthetic lexical unit which can then be inserted in this condensed form into a syntactic projection.

The third advantage of my proposal is that it addresses an oversight in earlier discussions of the conative alternation. One difficulty with previous analyses (e.g. Goldberg 1996) was that they analysed the internal argument of the transitive frame as a Theme argument. This makes it difficult to explain how to reconcile the basic construction with its related form where the displaced Theme appears in a with-phrase. This related construction can appear in both the conative and the transitive frame.

39. (a) Martin poked the sheep with the stick.
    (b) Martin poked at the sheep with the stick.

My proposal provides an explanation for where this Theme argument appears from without a need to reanalyse the frames and reassign the thematic roles of the arguments. The displaced Theme highlights another difficulty with the Hale & Keyser model, which is that it does not easily permit additional arguments, such as with-phrases, to be represented at the sublexical level. It is beyond the scope of this thesis to investigate this issue further.

The fourth issue that I address is the positioning of the Theme argument in the sublexical structure. Hale & Keyser provide a brief sketch of where this should be located but because they are dealing primarily with Theme-Goal verbs rather than Patient verbs, an alternative analysis seems to be motivated. On the basis of their structures for the different formations, that I presented above in Section 3.4, they proposed that a v selects a predicate as its complement. This can either be an a-structure or a p-structure. The p-structure is presented as a binary and relational structure which projects its own specifier. Under Hale & Keyser's concept of predication, the head and the complement together form a predicate. By definition, a predicate requires a “subject” and this is supplied by the specifier (1998, 78).

In a traditional Theme-Goal relationship, the Theme would be the ‘subject’ of the predication relationship and should therefore be in the specifier position. This would give a structure like:
However, the conative frame does not bear the hallmarks of a traditional Theme-Goal relationship. Instead, it is a motion event which implicates that the Theme does not arrive at the Goal and the Theme is not projected into the syntactic direct object position. In determining how to represent a motion verb, the issue then becomes what is the ‘subject’ of this predication relationship, as this should be found in the specifier position.

Under my proposal, the motion itself is viewed as the ‘subject’ of the Path pp that the conative at heads, since the Path structure modifies configuration of motion, rather than location. The Theme argument is the ‘subject’ of this motion, and therefore should be found in the specifier of vp position. In my analysis of kick, this is foot since this is the entity that moves. The v itself selects a pp that does not project a separate specifier position and is instead a Path pp rather than a Location pp. This is consistent with the analysis of AT as a projection of an orientation event. v is a non-specific GO function that gets its manner content by means of conflation with the Theme argument.
40. (c) Configuration of Impact Conative structure

This proposal assumes that two different types of predication are possible. This permits a different analysis of an endstate reading which can accommodate both the impact transitive and the impact conative frame within it. The impact transitive frame is understood as being a typical Theme-Goal motion structure in its sublexical representation. It is understood conceptually as [BECOME [BE-AT (Theme, Goal)]]).

For kick, the foot is the Theme of the event and the ball is the underlying Goal. As the Theme argument, foot is found in the spec of vp and the pp is predicated of this position. For a JAB/POKE verb, like hit, the Theme would appear in the same structural position but without the same degree of constraints on its characteristics.

41. (a) Transitive sublexical representation

In contrast, the impact conative frame does not entail or implicate an endstate, either underlyingly or at surface structure level. Therefore, because of the absence of an endstate, the pp does not predicate to an n specifier. The Theme argument is still found in the spec of vp position. This is because a pp without a specifier as a Path,
since it does not predicate an endstate, can itself be predicated onto GO. The pp is
predicated of its sister v. This gives a different predication relationship than the usual
specifier predication.

41. (b) Conative sublexical representation
Thomas kicked at the ball.

Under this analysis, the Theme position is also licensed in a different way in
the impact conative frame. It is not licensed by predication from the pp but is instead
predicated off the v node. This is a different kind of predication than that traditionally
proposed in Hale & Keyser’s theory. This predication emphasises the manner
component of the event, which is present in both the impact transitive and impact
conative frames, but particularly in the latter.

Perhaps the greatest advantage of my approach is that it focuses on the close
relationship between the conative frame and the transitive frame by proposing a
structure that incorporates similar elements and is distinguished by a single feature.
Significantly, the relationship between the two frames is not presented as a
derivational relationship. In other words, I am not suggesting that either of these
frames or constructions is more ‘basic’ or ‘primary’ than the other. Instead, each
frame is characterised by similar features that are unique to the impact verbs, namely
manner, motion and incorporation of the Theme, but is distinguished by the different
Path phrases which encapsulate the meaning contrast between the two frames and are
represented through different predication relationships. The AT of the impact conative
frame indicates orientation of the Path towards the Target argument and does not
entail contact. The underlying TO of the transitive frame indicates contact with the
Goal argument and the incorporation of the preposition promotes the Goal to the
direct object position.

3.5.4 Hale & Keyser’s 1999 *kick* analysis

In Section 3.4.2, I outlined Hale & Keyser’s proposal for the representation of
impact verbs within their model. Given that their analysis is quite distinct from my
own approach, it seems appropriate to compare the two proposals. Their structural
representation for the impact verb *kick* is given here again for ease of reference.

24. (a) Kick the bag

\[ \text{v2} \]
\[ \text{n} \quad \text{v2} \]
\[ \text{the bag} \]
\[ \text{v2} \quad \text{p} \]
\[ \text{p} \quad \text{n} \]
\[ \text{kick} \]

24. (b) He gave the bag a kick.

\[ \text{v1} \]
\[ \text{v1} \quad \text{v2} \]
\[ \text{n} \quad \text{v2} \]
\[ \text{bag} \]
\[ \text{v2} \quad \text{p} \]
\[ \text{give} \]
\[ \text{p} \quad \text{n} \]
\[ \text{kick} \]

The first point to note is that Hale & Keyser advocate a vastly different
underlying structure. Whereas I approach the conative construction as a motion
event, they choose to relate the transitive frame to the light verb construction of ‘give
it a n’. The event is therefore understood as an endstate structure which can be
formalised as:

42. (a) BECOME [bag WITH kick]
In this representation, the specifier position is strictly related to the syntactic projection. The argument that is found in the direct object position of the transitive frame is in the specifier of vp position at the sublexical level.

Although this analysis of kick is conceptually understandable, two significant difficulties arise from it. Firstly, there are impact verbs, to which this representation is intended to apply, that are incompatible with the light verb frame. Consider the following examples.

43. (a) She struck the ball. (strike 2)
(b) She struck at the ball.
(c) *She gave the ball a strike.

44. (a) He shot the tin can. (shoot 1)
(b) He shot at the tin can.
(c) *He gave the tin can a shoot.

45. (a) The fighter hit his opponent. (hit 4)
(b) The fighter hit at his opponent.
(c) *The fighter gave his opponent a hit.

Since the light verb construction is not available to these impact verbs, it is unclear how Hale & Keyser would approach their representation, since there is seemingly no motivation to derive the transitive form from a non-existent ‘give’ form.

The second issue that arises is if Hale & Keyser’s representation of impact verbs is accepted, notwithstanding the difficulties indicated in the previous paragraph, it is unclear how the relationship with the conative frame would be expressed. As it currently stands, the impact transitive frame is shown to be related to the light verb construction. If this relationship is to be maintained, the meaning of the conative frame must be given as some form of ‘kick going towards the bag” without actually reaching it. One means to represent this seems to involve an alternation of the argument order, to something more like example 46(a). This would place the prepositional argument in the complement position.
46. (a) kick at the bag

However, in order to represent the conative form consistently with the argument order expressed in Hale & Keyser’s transitive frame, a quasi-preposition which means something like “nearly with” or “near miss” would need to be posited. Hale & Keyser do not do this. This would give a representation like example 46(b) with its related reading of 46(c).

46. (b) kick at the bag

This representation still attempts to work within an endstate reading, even though a significant feature of the conative frame is that it does not entail an endstate.

Hale & Keyser’s analysis of the impact verbs also has no means of representing or explaining the appearance of the displaced Theme in a with-phrase. Their analysis, even if you extend it to include a quasi-preposition, assumes that the bag, or whatever argument is in the direct object position at surface level, is the Theme argument.

The representation of kick that Hale & Keyser propose is more suited to the verb when used in its transitive propulsive sense. In this form, transitive kick is a
synthetic verb formed from a ‘CAUSE kick GO’ construction. Assuming that post-incorporation verbs can be inserted into another sublexical frame, which seems to be motivated by Hale & Keyser’s general approach that verbs are derived forms, kick can be inserted into a conventional Theme-Goal structure. First it is derived from a basic v-structure of ‘DO kick’.

47. (a) “do kick”

\[
\begin{array}{c}
v \\
v' \\
v \\
v \\
DO \quad \text{kick} \\
\text{(conflation)}
\end{array}
\]

After conflation, this structure can be inserted at the CAUSE node of the transitive frame. Kick is now understood to mean “do by kicking” where any contact that is made with an object is a pragmatic consequence of a kicking action. The ball functions as a Theme in its movement towards the Goal argument of the sideline. The GO function is conflated into the uppermost v node in head to head movement.

47. (b) Thomas kicked the ball to the sideline.

\[
\begin{array}{c}
vp \\
x \\
v' \\
v' \\
v \\
v \\
kick \\
ball \\
GO \\
to \\
\text{sideline}
\end{array}
\]

\text{kick'= 'cause by DO kick'}
Propulsive *kick* therefore fits within a conventional Theme-Goal framework and although related to the ‘do kick’ form is distinct from the transitive frame’s compressed Theme-Goal characteristic that I have proposed.

### 3.6 Conclusion

In this chapter I have suggested an approach to the analysis of the impact conative and impact transitive forms that draws upon the analogy of a motion event and makes a significant distinction between the sublexical level of representation and the syntactic surface realisation. Under this approach, at the sublexical level the impact conative frame consists of an orientational *at* which introduces an atelic Path argument to the structure of the event and indicates ‘missed contact’. Before being projected into the syntax, the Theme argument is incorporated into the verb.

This contrasts with the impact transitive frame which lexicalises ‘motion towards + contact’. The sublexical representation is a basic Theme-Goal structure. Before syntactic projection the Theme and Goal structure is compressed. This results in the conflation of the Theme and its Path into the verbal head of the event and the promotion of the Goal to the direct object position.

My representation of the impact conative and transitive frames within the Hale & Keyser framework extends their Lexical Conceptual Argument proposal. I advocate the possibility of another predication relationship and advance the need for an extension of the conflation principle to include specifier-to-head movement. I suggest that the relationship between the transitive and conative frames is more primary and persuasive than Hale & Keyser’s proposal for a relationship between the light verb construction and the transitive frame. A transitive-conative structural relationship has greater explanatory value for the occurrence of displaced Theme arguments, and the bounding implications of the impact conative frame that I discuss in Chapter 4.

My analysis also gives a strong contrast between two kinds of direct objects, Themes and non-Theme Patients. In the following chapters I discuss the bounding characteristics of these different direct objects and show how this relates to other discussions of telicity and bounding that are found in the aspectual literature.
4 Chapter Four- Bounding Issues

This chapter explores the claims made in relation to the significance of bounding to the conative alternation, particularly the impact frame. First, I look at the verbs that participate in the frame from the approach of event classes and identify semelfactives as the typical participants. The second section examines and questions Ghomeshi & Massam’s (1994) claims about the centrality of bounding to any analysis of the conative alternation with a review of the data that is involved in the four distinct forms that I identified in Chapter 2. The aspectual nature of the semelfactive class is explored further in the following section and I propose an aspectual distinction between telicity and bounding that supports a notion of the semelfactive as a ‘self-bounding’ form. The fourth section expands on this characteristic of the semelfactive verbs.

4.1 Preliminaries

In this section the event classes of processes, achievements, accomplishments and semelfactives and their respective aspectual characteristics are introduced to my analysis of the conative frame. The impact frame is found predominantly with the semelfactive class and particular focus is therefore given to this grouping.

4.1.1 Event Classes

The aspectual event classes or aktionsarten of modern philosophy and linguistics are based upon Aristotle’s philosophical division of events. Work since then, drawing particularly from the groupings identified by Vendler (1967), has led to the identification of four main classes. Vendler’s work forms the basis of most modern work involving event semantics. He distinguishes four event classes, or ‘eventualities’ (Bach 1986). These classes are determined by the features boundedness, duration and change. The classifications are determined by the verb phrase as a whole, rather than the individual event or verb. For the purposes of this thesis, the most significant features are the aspectual characteristics of boundedness and duration.

Verbal aspect encodes characteristics about the internal structure of an event in verb phrases (Kearns 2000, 200). The duration and temporal bounds of an event are significant aspectual properties and can be targeted by in and for adverbials.
In adverbials, such as *in an hour* and *in ten minutes*, modify and target the duration of telic and bounded events. An *in* adverbial places a time point provided by the event within the stated interval (Kearns 2000, 205). If the event has a definite terminal bound beyond which the same event cannot continue, an *in* adverbial will express event duration. If the event is unbounded, there is no duration for the adverbial to modify and it may be semantically anomalous, or have a secondary reading with the time interval interpreted as the delay before the onset of the event.

In contrast, *for* adverbials, such as *for an hour* and *for ten minutes*, modify the duration of unbounded events since they do not require an endpoint to the event. *For* adverbials are semantically anomalous with bounded events because the adverbial emphasises the duration of an event and does not allow its natural endpoint to be realised.

Four aspectual event classes are identified by Vendler. These are states (durative, unbounded), activities or processes (durative, unbounded), achievements (non-durative, bounded) and accomplishments (durative, bounded). A fifth class known as semelfactives has also been identified (Mittwoch 1991 and Talmy 1985), which falls somewhere between accomplishments and achievements in its bounding and durative characteristics. States will not be discussed further in this chapter as they are irrelevant to the conative frames.

4.1.1.1 Processes

Processes are unbounded but durative. They are complex events, in the sense that they involve internal change.

1. She walked.

A process of walking involves movement of each leg independently of the other in contact with the ground. The combination of the leg movements is what gives the process of walking.

Processes fall into two separate groups which have parallels to NPs in their internal structure. Some process verbs are like mass nouns and are composed of a single ongoing action, without internal division. Examples of this include *chat*, *watch*, and *listen* (Kearns 2000, 219). Since they are internally stable, there are no
identifying boundaries to count them by. In example 2 we cannot say how many ‘watchings’ John did.

2. John watched television.

Processes can also appear like vague plural nouns in that they seem to consist of individual components. In order to give the durative reading of a process event, the action or event is repeated. The event described by the VP is therefore inherently iterative and unbounded. Examples of this type of process verb include:

3. (a) She hammered the nail.
   (b) He beat the rug.
   (c) She nibbled the sandwich.

The verb itself cannot be used to describe a single cycle of the action. Therefore, although an event of ‘hammering’ can be broken down into individual cycles of the hammer making contact with the nail, the lexeme hammer does not capture a single cycle of the event. Multiple cycles are required for the event to have occurred and for the verb hammer to represent it.

Since process verbs are unbounded and the event continues without any endpoint being realised, they are semantically anomalous with in adverbials because there is no terminal bound within which the adverbial can attach. Example 4(b) cannot mean that the conversation of the old ladies lasted ten minutes, except as a possible repair reading where it is understood that this is a routine ‘chat’ that the old ladies have on regular occasions. Under this secondary reading the event is interpreted as an accomplishment event with a meaning like ‘the old ladies finished their usual conversation in ten minutes’ and the in adverbial gives the duration of the event.

4. (a) The old ladies chatted.
   (b) *The old ladies chatted in ten minutes.

5. (a) Sally played Patience.
(b) *Sally played Patience in an hour.

6. (a) She nibbled the sandwich.
(b) *She nibbled the sandwich in ten minutes.

The more natural repair reading for process predicates and an *in* adverbial provides a point of time to which the adverbial can be anchored. This gives an ‘onset’ reading for the event. Under this reading, in example 5(b), Sally waits an hour and then starts playing her card game. Similarly, example 4(b) can be interpreted as the old ladies waited ten minutes, perhaps to drink their tea, and then began to chat. Although these repair readings are available, from this point I intend only the basic reading for the examples I discuss, unless otherwise stated.

Although process verbs are incompatible with the *in* adverbial, they are consistent with the *for* adverbial. This is to be expected since the *for* adverbial targets unbounded predicates.

7. (a) Sally played Patience for an hour.
(b) She nibbled the sandwich for a couple of minutes.
(c) They chatted for ten minutes.

The adverbial tests show that process verbs are unbounded and durative. They may either be internally simple, as with *watch*, or consist of individual components that are inherently repeated to form the process predicate, as with *hammer* and *nibble*.

4.1.1.2 Achievements

Achievements, the second of Vendler’s verb classes, are non-durative and bounded. They describe minimal moments of change from one state to another, which provides a bound to the event. In example 8, Sally experiences a mental change-of-state from being in a state of unawareness to one of awareness.

8. (a) Sally noticed the marks on the wall.
(b) Sally realised there were marks on the wall.
Although they are bounded by the change-of-state that they lexicalise, achievements consist of no more than this bound and therefore have no duration period to be modified by the *in* adverbial, even though they have a defined temporal boundary. The available repair reading then becomes a delayed onset reading, where the whole of the achievement, that is the moment of recognition, is understood to occur at the end of the specified time interval (Kearns 2000, 205).

9. (a) Sally noticed the spots on the wallpaper (with)in five minutes.
(b) He recognised her in a couple of minutes.

Since they are non-durative, achievement predicates are also inconsistent with a *for* adverbial, since there is no duration to be modified. The repair reading is to understand the event as a series of repetitions of the change-of-state.

9. (c) *Sally noticed the spots on the wallpaper for a week.
(d) *He recognised her for a couple of minutes.

Under this reading, example 9(c) is understood as ‘Sally repeatedly noticed the spots on the wallpaper for a week’. In order to do this, Sally must revert back to her original state of mind each time to permit the whole event to occur again.

Achievement predicates are characterised by the non-duration of their event and the boundedness provided by the change-of-state that they lexicalise.

4.1.1.3 Accomplishments

Accomplishment predicates consist of a process stage that culminates in an achievement-like ending and provides a bound to the event. They are therefore both durative and bounded.

10. (a) She sewed a shirt.
(b) She sewed the shirt in a couple of days.

In an event of *sewing*, there is a process made up of different parts such as cutting out the pattern, sewing the body together, putting the sleeves and collar on, adding the buttons and making the buttonholes. At not one of these stages in isolation is a shirt
completed. It is only at the end of the process, when all the disparate parts have been completed, that it is true to say that a shirt has been sewn.

Since they are bounded and durative, accomplishment predicates are compatible with the *in* adverbial. It provides a timeframe beyond which the same event cannot occur. In example 11(b) the event of building the house is complete after six months. If any further building should happen, it must be a separate event, such as another house or an addition to the original building.

11. (a) He built the house.
    (b) He built the house in six months.

However, *for* adverbials are inconsistent with accomplishments, because of the telic, bounded ending to the event. Their duration is not ongoing.

10. (c) *She sewed the shirt for 10 minutes.
11. (c) *He built the house for six months.

Accomplishments have a clear endpoint and temporal boundary but also have a clearly identifiable process stage leading up to it. They are therefore both durative and bounded.

4.1.1.4 Plural events

In Section 4.1.1.1, I discussed process events and suggested that their internal form could be related to the internal nature of NPs. Accomplishment and achievement predicates can also be understood as repeated events, which gives them a process-like reading with *for* adverbials. The process readings are the (b) examples.

12. (a) Tom washed three cups.
    (b) Tom washed dirty cups.

13. (a) Ellen painted a picture.
    (b) Ellen painted pictures.

14. (a) Caitlin noticed the dirty mark.
(b) Caitlin noticed dirty marks.

The plurality of these events is different from the plurality of the process predicates that I discussed earlier. The process-like nature of examples 12, 13 and 14 is related to the bare plural NP that is found in the (b) examples, rather than any kind of internal complexity, as with the case with verbs like *hammer* and *nibble*. An event of ‘washing cups’ has individual countable parts defined by the concrete shape of the object. If the number of individual cups is specified then the duration of the event is clearly defined and aspectually bounded. Without any specification of the NP, the vague plural forces an unbounded process reading on the event.

As process predicates, these events display the aspectual behaviour of unbounded predicates. They are incompatible with *in* adverbials and compatible with *for* adverbials. As process events, they no longer behave aspectually as accomplishment or achievement predicates.

12. (c) Tom washed three cups in a couple of minutes.
    (d) *Tom washed three cups for a couple of minutes.
    (e) *Tom washed dirty cups in half an hour.
    (f) Tom washed dirty cups for half an hour.

13. (c) Ellen painted a picture in an hour.
    (d) *Ellen painted a picture for an hour.
    (e) *Ellen painted pictures in an hour.
    (f) Ellen painted pictures for an hour.

14. (c) Caitlin noticed the dirty mark in a minute.
    (d) *Caitlin noticed the dirty mark for a couple of minutes.
    (e) *Caitlin noticed dirty marks in five minutes.
    (f) Caitlin noticed dirty marks for five minutes.

Plural accomplishments and achievements display the same aspectual characteristics as process predicates. They are unbounded and durative.
4.1.1.5 Semelfactives

Semelfactives fall somewhere between achievements and accomplishments as a class. They are characterised by their short duration and their countability. Semelfactives may be classed as atelic on the grounds that an iterative reading is natural and not forced, when a semelfactive verb is combined with a for adverbial or a progressive.

Mittwoch (1991) describes semelfactive verbs as ‘punctual’ but comments that this alone is not a sufficient condition for membership of the class. She also observes that they do not initiate a change-of-state, unlike achievements. Instead they describe events that at an idealised level have the beginning and end of the event ‘squashed together’ into one moment (82).

Talmy’s (1985, 77) analysis that different aspect-types are lexicalised in different verb types is a useful proposition for understanding the nature of semelfactives. In his schema semelfactives, such as flash and hit, are classified as ‘full-cycle’ aspect-types and are contrasted with the inherently iterative process verbs discussed above, such as beat, which Talmy classifies as ‘multiplex’. This represents the fact that with the process verbs there must be more than one cycle of the activity for the event to be understood as having occurred (77). In contrast, the ‘full-cycle’ or semelfactive verbs require only one occurrence to constitute an event.

15. (a) The light flashed.
   (b) The boy sneezed.

The full-cycle characteristic of semelfactives means that they are naturally resettable and repeatable. The event they describe loops around and returns to the original point without finishing in an end-state, unlike achievements and accomplishments which necessarily entail an end-state. A semelfactive event can therefore be easily repeated and each individual component or instance of it clearly isolated. In this characteristic they are distinguishable from internally iterative process verbs, such as example 18, because of the countability of each individual instance or gesture.

16. (a) The light flashed three times.
(b) The light gave three flashes.

17. (a) The boy sneezed twice.
(b) The boy gave two sneezes.

18. (a) Ellen beat the rug.
(b) *Ellen gave the rug three beats.

The repeatability of semelfactives can also be contrasted with the behaviour of accomplishments. For the repetition of an accomplishment predicate, three separate events have to be understood to have occurred.

19. (a) ?She sewed a shirt three times.
(b) She sewed three shirts.

This means that, for example 19, three different events of sewing shirts have to take place for the situation to be true. In the real-world scenario, this means that three different processes of cutting out patterns, stitching together and putting on buttons takes place.

The behaviour of semelfactives in conjunction with the for adverbial is interesting as they display a characteristic plural reading. The short duration of the semelfactives would suggest that a for adverbial would be semantically inconsistent because there would be no duration for it to modify. A basic durative reading is indeed pragmatically impossible to achieve, since the brevity of a sneeze means that it cannot be extended to encompass a time period of five minutes.

20. Jill sneezed for five minutes.

However, an iterative reading is both characteristic and a primary reading for the semelfactives. Under this reading, Jill sneezes repeatedly for five minutes. An iterative reading is easily achieved with semelfactive events because of the ease of repeating the full-cycle of the event. The reading is therefore more natural than is the case for a repair reading.
Semelfactives resemble achievements in that there is no duration to the event and therefore nothing that the *in* adverbial can easily modify. On the basic reading, semelfactives are anomalous with *in* adverbials. Example 21(b) cannot meant that the flash of light was two minutes long.

21. (a) *Mary sneezed in ten minutes.
(b) *The light flashed in two minutes.

A repair reading of delayed onset is possible where the time that elapses before the event occurs is understood. In this situation, example 21(a) is understood as after ten minutes of silence, Mary sneezed. This repair reading for semelfactives with *in* adverbials will not be discussed further.

Semelfactives and achievements resemble each other in the brevity of the event they describe. However, unlike achievements, example 22, semelfactives do not lexicalise or describe moments of change from one state to another.

22. Sally noticed the marks on the wall.

23. (a) Jack sneezed.
(b) Sally blinked.

Since no change-of-state is involved and therefore no endstate entailed, semelfactives can be reset, ‘replayed’ and consequently easily repeated. The repetition of the semelfactive event does not require a reversion back to an original state of being, since no change-of-state or transition to an endstate has occurred. The repetition reading of semelfactives is therefore both motivated and countable.

4.1.2 The impact frame and semelfactives

The data review of Chapter 2 distinguished between four main *at* forms that have previously been identified together as the conative alternation. I indicated that the impact frame would be the main focus of later chapters, with its reading of ‘missed contact’. Chapter 3 clarified the *at* of this frame as an orientational AT that selected a Path phrase and a Target argument, rather than a Goal.
A closer focus on the impact verbs that are found in the conative shows that they are predominantly transitive semelfactive verbs. The self-contained nature of their event means that missed contact, the meaning of the frame, is possible without losing the inherent shape of the event.

24. (a) Mehrtens kicked the ball.
    (b) Mehrtens kicked at the ball.

25. (a) Sally jabbed his arm.
    (b) Sally jabbed at his arm.

The transitive semelfactives interact in the same way with the adverbial tests as their intransitive counterparts that I discussed in Section 4.1.1.4.

26. (a) *Sally jabbed John’s arm in five minutes.
    (b) Sally jabbed John’s arm for five minutes.

27. (a) *Tom punched the cushion in ten minutes.
    (b) Tom punched the cushion for ten minutes.

The *in adverbial test is incompatible with both the POKE/JAB class and the KICK/PUNCH class because of the shortness of duration of the events described. The *for adverbial is compatible but triggers the repair reading of iteration. This means that in example 26(b) Sally is understood to be jabbing John’s arm a number of different times over the period of five minutes. The repetition of the event provides a means of extending the shortened duration of the semelfactive event in a way that makes it compatible with the durative requirements of the *for adverbial.

The impact verbs that appear in the conative exhibit the characteristic of ‘countability’ because they belong to this semelfactive verb class. A *jab or a *punch is resettable, unlike a telic predicate, because it does not produce any enduring endstate. Despite not being canonically telic, it is countable and therefore conceptually bounded. It is shaped in a real-world situation by the gesture of its own action. An individual instance of the event is therefore identifiable because it is related to the
shape of the gesture and the path it follows rather than with the interaction with any other argument.8

The semelfactive verbs are central to the notion of the impact frame. Their bounding and aspectual characteristics are therefore significant to any discussion of aspect with relation to the conative frame.

4.1.3 The other conative and at frames

The other conative and at forms that I distinguished from the impact frame in Chapter 2 cancel the implicature of an endstate, if any, and suggest repetition of the task. These frames are predominantly filled by process verbs that are able to easily extend their duration because of their characteristic of unboundedness.

28. (a) Molly scrubbed the frying pan.
    (b) Molly scrubbed at the frying pan.

Process verbs that have been identified in the conative alternation (see Levin 1993) include the CHEW, CHOP and BRUSH/SWEEP groups. These groups all fall into the inherently iterative class of process verbs.

29. (a) Sally chewed her sandwich.
    (b) Sally chewed at her sandwich.

30. (a) She wiped the table (with a cloth).
    (b) She wiped at the table.

31. (a) He scraped the dishes (with a dishbrush).
    (b) He scraped at the dishes.

32. (a) She mopped the floor (with a mop).
    (b) She mopped at the floor.

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8 The distinction between telicity and bounding is discussed further in Section 4.3.2.
For these examples to be true, a complex event involving maintained contact between the instrument of the optional *with*-phrase and the direct object is required. ‘Missed contact’ is not possible. In example 30, unless the cloth is touching the table, an event of wiping is not occurring. A single touch of the cloth to the table is insufficient, as the event of wiping is brought about by infinitesimally small, and conceptually uninterrupted, touches of the cloth. An individual ‘touch’, even if it could be identified, does not equate with an actual event of wiping.

33. (a) The housekeeper beat the carpet.
(b) He hammered the metal.
(c) The mouse nibbled the cheese.

Example 33(a) describes an action of repeated beating on the carpet. The process is made up of separate blows to the carpet that are repeated. Similarly, example 33(b) describes an event of hammering that is made up of repeated instances of a hammer being brought down upon the metal. Although each time the hammer is brought down can be individually identified as a separate component, it is not true to say that an event of ‘hammering’ has occurred unless plural blows take place.

Process verbs that are more like mass nouns in their single ongoing action are also found in a conative frame. These include the *PULL/PUSH* group. The transitive frame has an implicature of change-of-location and the conative frame cancels this.

34. (a) The horse pulled the cart.
(b) The horse pulled at the cart.

35. (a) Bridget pushed the trolley.
(b) Bridget pushed at the trolley.

36. (a) Julia tugged the rope.
(b) Julia tugged at the rope.

As members of the process event class, the verbs of the contact and exerted-force frames should exhibit the same bounding characteristics as other process events.
In the conative frame, they are unbounded and are compatible with the *for* adverbial. The transitive frame shows more interesting aspectual characteristics.

37. (a) Sally brushed her teeth in ten minutes.
     (b) Sally brushed her teeth for ten minutes.
     (c) *Sally brushed at her teeth in ten minutes.
     (d) Sally brushed at her teeth for ten minutes.

38. (a) Jack scrubbed the floor in half an hour.
     (b) Jack scrubbed the floor for half an hour.
     (c) *Jack scrubbed at the floor in half an hour.
     (d) Jack scrubbed at the floor for half an hour.

39. (a) ?The horse pulled the cart in an hour.
     (b) The horse pulled the cart for an hour.
     (c) *The horse pulled at the cart in an hour.
     (d) The horse pulled at the cart for an hour.

In the transitive frame, a repair reading is possible for the *in* adverbial which forces an endstate reading upon the event. This provides the terminal bound required by the aspectual test. Under this reading, 38(a) means that Jack scrubbed the floor clean in half an hour. By providing an endpoint to the event, the repair reading forces the process predicate into an accomplishment frame. As discussed in Chapter 2, this endstate is a pragmatic collocation rather than an entailment. This explains why the event can be interpreted as either bounded or unbounded. Example 39(a) requires a Path phrase to give a satisfactory bounded reading based upon the collocation of change-of-location. The co-occurrence of the Path phrase with the conative frame is not possible because of the bounding information that the Path phrase provides.

39. (e) The horse pulled the cart to the edge of town in an hour.
     (f) *The horse pulled at the cart to the edge of town in a hour.
The natural duration of an unbounded process predicate makes it an obvious choice for the contact conative and exerted-force conative frames that emphasise a reading of repetition. Repetition demands increased duration which is more possible if there is no temporal bound to the event. This is a characteristic of the process event class.

4.2 Bounding and the conative frame

As discussed in Chapter 1, Ghomeshi & Massam (1994) analyse the conative frame as an alternation of aspect. Ghomeshi & Massam claim that in a direct object/indirect object alternation there is a ‘concomitant aspectual shift’ (193), since a ‘change from canonical position results in a different aspectual interpretation’ (194). This section explores Ghomeshi & Massam’s claims by looking at the data they discuss and then explores the bounding characteristics of the conative forms with the traditional adverbial tests. I conclude that the evidence shows that the aspectual characteristics of the conative frame differ between the distinct conative forms that I have identified. The contact and exerted-force frames show aspectual difference based mainly on pragmatic collocations. In contrast, the impact frame is generally aspectually inert but atelic on an iterative reading. It therefore denotes an atelic event.

4.2.1 Ghomeshi & Massam 1994

Ghomeshi & Massam discuss a number of transitive alternations and suggest that the properties of the direct object are such that it provides an ‘endpoint’ for the event which is ‘more traditionally referred to as yielding a telic aspect’ (Ghomeshi & Massam 1994, 179). In discussing the semantic characteristics of the frame from the syntactic perspective of the ‘direct object’, they make no distinction between the different argument types that can appear in that syntactic position and the different aspectual roles that they may play. However, the distinction between the Theme and Patient roles is crucial to understanding the conative frame.

Ghomeshi & Massam’s compositional semantics approach was outlined briefly in Chapter 1. Their proposal of a Flexible Linking Hypothesis and its counterpart of the Compatibility Constraint mean that any verb with an internal argument can appear in a syntactic frame with either the argument expressed as a direct or an indirect object (1994, 198) so long as the meaning contributed from all sources is compatible (1994, 178).
Verbs are divided three ways on an aspectual basis which, under their proposal, determines their compatibility with the requirements of the conative frame. These distinctions are [+bounded], [-bounded] and lexically unspecified (1994, 200). Only lexically unspecified verbs are able to participate in the conative alternation because of the contrast in lexical aspect that supposedly occurs between the transitive variant and the conative variant (1994, 199). Following Tenny (1992), Ghomeshi & Massam claim that when the argument is in the direct object position, it delimits the event and the event is result-oriented and bounded. In contrast, when in the conative frame, the event is no longer result-oriented nor bounded. It is this particular claim relating to the bounding distinction between the transitive and conative frames that I intend to focus upon in this discussion.

Ghomeshi & Massam use the verb *shoot* to illustrate their claims but confuse two different senses of *shoot* in their analysis, by being distracted by pragmatic collocations.

40. (a) Pat shot the duck.
    (b) Pat shot at the duck.

    (Ghomeshi & Massam: p.193, e.g.(30))

They suggest that the event in 40(a) is completed when the duck is wounded, or in other words when contact has been achieved, since

the most salient part of the meaning (…) is that the bullet entered the body of the duck, with the usual assumption that this resulted in death (Ghomeshi & Massam 1994, 194 [emphasis added]).

However, if the reading of *shooting dead* is the specific sense of *shoot* that Ghomeshi & Massam intend, then the conative frame itself is impossible. *Shoot dead* involves a change-of-state which is brought about through contact and the meaning contributed by the conative frame of ‘missed contact’ is pragmatically anomalous with such an interpretation.

41. (a) Pat shot the duck dead.
    (b) *Pat shot at the duck dead.
The confusion between the two senses is evident when Ghomeshi & Massam discuss the durative reading of the conative frame (1994, 194). They claim that a durative reading is not possible with the transitive frame and contrast this with their judgements for the conative frame. They give the following semantic judgements to support this:

42. (a) Pat shot at the duck for an hour.
    (b) ?Pat shot the duck for five minutes.
    (c) ??Pat shot the duck for an hour.
    (d) *Pat shot the duck for half a day.

(Ghomeshi & Massam: p.194, e.g.(32))

Their reasoning is that the durative adverb for forces an iterative reading on the event and suggest that the ‘normal assumption that death or serious injury results [from shooting] makes iterativity unlikely, especially when the length of time specified is long’ (1994, 194). However, as shown above in example 41(b), the conative frame itself is ungrammatical where shoot is interpreted as meaning results in ‘death or serious injury’. This occurs because the conative construction is combined with a resultative.

If a non change-of-state interpretation is given to shoot, both the transitive and conative frames are consistent with the durative reading of the for adverbial. Ghomeshi & Massam give an example which demonstrates this possibility (198) but do not discuss it any depth or with reference to durative adverbials.

43. (a) Kinsey shot the target.
    (b) Kinsey shot at the target.

(Ghomeshi & Massam: p.198, e.g.(37))

With this sense of shoot, an event of shooting still occurs, but it is related to the pulling of a trigger and the discharge of ammunition, rather than with the result of ‘death or serious injury’ of the target. In this situation ‘death or serious injury’ to the object may occur, but whether it actually does or not has no effect on whether an
event of shooting has occurred. The transitive frame merely has a collocation of contact with the direct object. This is not entailed of the verb so can be cancelled by the conative frame.

Therefore, given that the internal object does not necessarily need to be killed or seriously injured in all events of shooting, the transitive frame can be consistent with a forced iterative reading brought about through the presence of a durative adverbial.

44. (a) Kinsey shot the target for hours.
(b) Kinsey shot at the target for hours.

It follows from this that shoot may actually be specified [-bounded] rather than lexically unspecified as suggested by Ghomeshi & Massam. The fact that the transitive variant can be consistent with a durative adverb suggests that it cannot be rendered [+bounded] by the Compatibility Constraint and further suggests that the direct object may not be delimiting the event when in this frame.

As an extension of their claim that the shift of the internal argument from the direct object to the indirect object position results in a change of aspect, Ghomeshi & Massam also claim that there is a change of Aktionsart from an accomplishment reading in the transitive frame to an activity or process reading in the conative frame (1994, 195). However, the in and for adverbial tests, which are a traditional means of assisting in the classification of verb classes do not always show this distinction. If the transitive frame is an accomplishment, then it should be compatible with an in adverbial since it should be bounded. It should also be incompatible with a for adverbial. This is not always the case.

45. (a) *Jayne stroked the cat in ten minutes.
(b) Jayne stroked the cat for ten minutes.

The only possible reading for 45(a) is the onset delay reading, which indicates that the event is unbounded. This is confirmed by the compatibility of the for adverbial. Ghomeshi & Massam’s claim that the transitive frame is bounded does not seem to be substantiated by the examples they discuss, although the unbounded
reading for the *at* or conative frame is more clearly supported. This brings into question the aspectual distinction that they propose between the transitive and conative frames.

### 4.2.2 Bounding characteristics of the conative and *at* frames

Since Ghomeshi & Massam's claims about the conative alternation and bounding do not seem to be supported by the data they present, a closer examination of the bounding characteristics of the conative and generic *at* frames is necessary. Although I intend to focus on the impact conative of ‘missed contact’ which is linked to semelfactive verbs, in this section I also discuss the contact and exerted-force frames and the process verbs of the generic *at* frame, as instances of what others have said about bounding. An examination of the data supports the view that the conative or *at* frames denote an atelic event and neither frame gives firm support to a claim of a bounding or telicity significance for the conative alternation.

The interaction of both the conative and generic *at* forms with the adverbial tests shows some interesting features. If Ghomeshi & Massam’s claim is interpreted to mean that the transitive frame must be understood as bounded and the conative frame as unbounded, their claim seems to be too strong. For two of the conative forms a weakened claim that only unspecified verbs can alternate because *at* cancels boundedness seems to be supported. Significantly even this second claim does not extend to the impact verbs. I discuss the three conative forms and the generic *at* form separately below.

#### 4.2.2.1 Contact transitive and contact conative and bounding

In Chapter 2, the BRUSH/SWEEP and CHOP verb groups were shown to be characterised by the pragmatic endstate reading that was possible with the transitive frame. The effect of the conative frame was to cancel this collocation. However, since the endstate reading is not entailed by the verb, the transitive frame can be understood as either bounded or unbounded. In other words, the transitive frame is unspecified for its bounding characteristics. The conative frame must be unbounded.

46. (a) Jack swept the floor in ten minutes.
(b) Jack swept the floor for ten minutes.
(c) *Jack swept at the floor in ten minutes.
(d) Jack swept at the floor for ten minutes.

47. (a) Milly chopped the carrots in five minutes.  
(b) Milly chopped the carrots for five minutes.  
(c) *Milly chopped at the carrots in five minutes.  
(d) Milly chopped at the carrots for five minutes.

If the choice of direct object forces a process reading, this too can participate in the *at frame. This is because what previously may have been read as a telic achievement or accomplishment verb with an entailed endstate, instead focuses on an atelic, unbounded process, which is inherently iterative.

The distinction that Ghomeshi & Massam wish to show between the transitive and conative frames is not as strong as they seem to suggest. It is not the case that *BRUSH/SWEEP and CHOP are lexically unspecified because they are realised as bounded in the transitive frame and unbounded in the conative frame. The transitive frame itself can be either bounded or unbounded, so the first part of their claim is falsified. Instead, the contrast lies in the more basic claim that the lexically unspecified verbs can alternate because the *at cancels the transitive bounded reading.

4.2.2.2 Exerted-force transitive and exerted-force conative and bounding

The exerted-force verbs that appear in the conative show similar aspectual behaviour to the contact verbs that appear in the conative discussed in the previous section. The transitive frame can be interpreted as either bounded or unbounded, sometimes requiring the projection of a Path phrase for the bounded reading, but the conative frame permits only an unbounded reading.

48. (a) Jack pushed the cart *(to the car) in a couple of minutes.  
(b) Jack pushed the cart *for a couple of minutes.  
(c) *Jack pushed at the cart in a couple of minutes.  
(d) Jack pushed at the cart *for a couple of minutes.

49. (a) The goat tugged the chain *(out of the pin) in ten minutes.  
(b) The goat tugged the chain for ten minutes.  
(c) *The goat tugged at the chain in ten minutes.
(d) The goat tugged at the chain for ten minutes.

The push of example 48 has different possible readings. The first, where Jack causes the cart to move, is unbounded and is a true process reading, as in example 48(b). If a Path phrase is projected the event becomes an accomplishment predicate and is bounded, as in example 48(a). In the conative frame, the implicature of movement is cancelled and the cart does not move as Jack pushes against it. In this reading, the event still remains unbounded, since there is no inherent end to the event of pushing, and the direct object argument is not implicated in any change-of-location or motion because it does not move. This non-movement reading is the more natural interpretation for the conative frame 48(d).

*Push the cart to the boundary* is therefore similar to *kick the ball to the sideline*. The path phrase appears in a separate phrase from the simple transitive or the conative frame. In other words, both push and tug, in the absence of a separate Path phrase, are atelic in both the transitive and the conative frame. It is the Path phrase that provides the bounding to the event.

These examples show that Ghomeshi & Massam’s claims about aspectual distinction are only supported to the extent that only lexically unspecified verbs can participate in the alternation because of the bounding differences possible within the transitive frame. The conative frame must be unbounded. The contrast between bounded and unbounded is therefore not necessarily present between the transitive and conative frames.

### 4.2.2.3 Impact frame and bounding

In Chapter 2 I indicated that the behaviour of the impact frame was the most interesting. Significantly, the *KICK/PUNCH* and *POKE/JAB* verbs do not show the aspectual difference claimed by Ghomeshi & Massam. Instead, the two frames are both incompatible with the *in* adverbial, compatible with the *for* adverbial and therefore the alternation is aspectually inert. The transitive and conative are aspectually the same. The impact frame’s aspectual characteristics are not as straightforward as was the case with the contact and exerted-force frames. Subtle observations are possible about the semelfactive class that participate in the

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9 see Chapter 3, example 44(b)
alternation that require more than just an assessment as to their grammaticality with
the adverbial tests. These subtle judgements do not affect the central point of this
section that there is no aspectual distinction between the conative frame and its related
transitive frame.

The semelfactive JAB/POKE and KICK/PUNCH verbs are, on face value,
inconsistent with the * in adverbial in both the conative and transitive frame.

50. (a) *Julia poked the cushion *in 5 minutes
(b) *Julia poked at the cushion *in 5 minutes

51. (a) *Mehrtens kicked the ball *in ten minutes.
(b) *Mehrtens kicked at the ball *in ten minutes.

The short duration of the semelfactive verbs does not accommodate the * in adverbial
except under a very forced onset delay repair reading. This suggests, under the
traditional analysis of the aspectual tests, that the semelfactive verbs are unbounded.
Their interaction with the unbounded * for adverbial seems to support this conclusion
further.

50. (c) Julia poked the cushion *for 5 minutes
(d) Julia poked at the cushion *for 5 minutes

51. (c) Mehrtens kicked the ball *for ten minutes.
(d) Mehrtens kicked at the ball *for ten minutes.

The transitive frame and the conative frame are aspectually the same. Both
are incompatible with the * in adverbial and compatible with the * for adverbial.
However, a closer reading of the transitive and conative frames with the * for adverbial
suggests a more subtle observation is in order. As discussed in Section 4.1.1.4, the * for
adverbial forces an iterative reading on the semelfactive event. This is required
because the short duration of an individual semelfactive event is incompatible with an
adverbial which focuses on the duration of an event. Iteration provides a means of
extending the course of the event. Significantly, however, within the repetition each
individual entity is still identifiable and countable. This is a feature of the semelfactive verb class. Example 50(c) cannot mean that one poke of the cushion by Julia was so slow that it took five minutes to complete. Instead, the most natural reading is that she repeated the gesture of poking for a period of five minutes. Since the for adverbial does not simply extend the length of a single instance of the event and each repetition of the event is individually isolatable, the semelfactive verbs have clear individual boundaries. These are emphasised by the addition of the adverbial.

The reason that the semelfactives are incompatible with the in adverbial is because of the real-world brevity of their duration. Although an in adverbial requires a bounded event to attach to, it also requires some duration within which it can modify the event. The Gestalt nature of a semelfactive event does not satisfy this condition. It is for this reason, rather than because it is unbounded, that the semelfactives give the grammaticality judgements that they do. This means that the nature of the semelfactive’s bounding is different from the telicity of an accomplishment. A more detailed discussion of the bounding characteristics of the semelfactives is given in Section 4.3. This will allow a more specific assessment of the aspectual characteristics of the semelfactive class and, by extension, the conative frame.

4.2.2.4 Generic at frame and bounding

I suggested in Chapter 2 that the verbs participating in the generic at frame should not be treated as a conative frame. A discussion of their aspectual characteristics is included here because they are often discussed as if they were verbs that appear in the conative in the literature (e.g. van der Leek 1996).

The at frame does not exhibit the aspectual distinction claimed by Ghomeshi & Massam. Both the transitive and the at frame are unbounded and are only compatible with the for adverbial.

52. (a) *The mouse nibbled the cheese in 5 minutes.
   (b) The mouse nibbled the cheese for 5 minutes.
   (c) *The mouse nibbled at the cheese in 5 minutes.
   (d) The mouse nibbled at the cheese for 5 minutes.

53. (a) *She rubbed the dirty mark in 5 minutes.
(b) She rubbed the dirty mark for 5 minutes.
(c) *She rubbed at the dirty mark in 5 minutes.
(d) She rubbed at the dirty mark for 5 minutes.

In both the transitive and the at frames, the event is internally iterative, being made up of individual components that are necessarily repeated in order to constitute an event. Unlike the impact verbs that appear in the conative, the repetition is not countable.

4.2.2.5 Ghomeshi & Massam conclusion

This discussion of the aspectual characteristics has shown that both the conative and generic at forms support a durative reading of an event. Semelfactives and processes have been identified as the event classes that do not entail an endstate and are easily iterative. Although semelfactives are shaped by each individual instance of their action, a central characteristic of this event class is the natural repeated reading they give in a durative frame because of the full-cycle ‘resettable’ quality of their action. ‘Plural’ processes are inherently iterative or ‘multiplex’ in their structure. Not surprisingly, these two groups are also the event classes that are found in the impact frame and generic at form respectively.

The data therefore shows that both the conative and the generic at forms interact with atelic events. Ghomeshi & Massam’s claim that ‘only lexically unspecified verbs are able to participate in the conative frame’ (1994, 199) needs to be modified to be supported by the data. It is not the case that the transitive frame is bounded and the conative frame is unbounded, as they extrapolate from their discussion of shoot. This particular example is misleading. The contact verbs and exerted-force verbs that appear in the conative support the view that a telic predicate can only be found in the transitive frame and it cannot occur in the conative frame. It does not follow from this, however, that only telic predicates can appear in the transitive frame. The transitive frame can support either a telic or atelic reading. Furthermore, the impact verbs that appear in the conative exhibit no aspectual difference between the impact transitive and impact conative frames. The data shows that the impact transitive frame is atelic. The appearance of the impact conative frame does not indicate a shift in aspect from bounded to unbounded as Ghomeshi & Massam propose.
4.2.3 Interaction with resultant phrase or endstate

In the previous section I concluded that the effect of *at* varied in the different conative forms. For the contact verbs and exerted-force verbs, the conative form forced a process reading on a predicate that in its transitive form could either implicate an endstate or be understood as a process event. The generic *at* verbs are process verbs that do not bring about an endstate in either frame and the *at* frame consequently has no aspectual effect. The impact transitive form of the impact frame does not entail or implicate an endstate and I suggested that this type of event was characterised by the countable shape of the gesture involved. For the impact verbs, the *at* also has no aspectual effect.

Traditionally, the conative frame has been associated with a shift to a reading which does not involve any endstate. This has been proposed as the reason for the non-occurrence of the conative with canonical change-of-state predicates (e.g. Levin 1993, Pinker 1989).

54. (a) He broke the cup.
   (b) *He broke at the cup.

55. (a) The bomb destroyed the city.
   (b) *The bomb destroyed at the city.

The BRUSH/SWEEP and CHOP verb groups support this idea that the conative is incompatible with endstate predicates. For these groups, the conative is only compatible with the non-endstate reading.

56. (a) Sally brushed her teeth clean.
    (b) Sally brushed her teeth.
    (c) *Sally brushed at her teeth clean.
    (d) Sally brushed at her teeth.

57. (a) John wiped the table clean.
    (b) John wiped the table.
    (c) *John wiped at the table clean.
(d) John wiped at the table.

This observation logically suggests that other constructions that provide an endstate or end-location will be effectively blocked from participating in the frame. This is because, first, the at frame under discussion conveys duration, in some cases repetition, and is incompatible with verbs which lexicalise an endstate. Second, a lexicalised endstate is not compatible with an iterative reading, which is the natural reading of the at frame. This incompatibility can be also be seen when a telic verbs are placed in other unbounded contexts, such as for modification or the progressive.

56. (e) *Sally brushed her teeth clean for 5 minutes.
   (f) *Sally was brushing her teeth clean.

57. (e) *John wiped the table clean for 5 minutes.
   (f) *John was wiping the table clean.

Endstates can either be lexicalised in the verb itself, as with change-of-state verbs, or realised as a separate resultant phrase. Since both of these provide an endstate for the event, they should also block the event from participating in either a conative or generic at frame.

As an example of this, accomplishment predicates do not participate in the conative frame because they provide an endpoint to the event.

58. (a) The contractors built the house.
   (b) *The contractors built at the house.

Levin & Rappaport Hovav’s (1991) discussion of verbs of removal involves this issue of the effects of an endstate on the conative frame, although it is not discussed in those terms. They discuss the appearance of verbs of removal with the conative frame. Verbs of removal lexicalise an endstate and obligatorily provide a boundary for the event. Levin & Rappaport Hovav contrast the following examples of rub and remove and suggest they behave similarly because they are verbs of removal (1991, 139).
59. (a) Monica removed the groceries from the bag.
   (b) *Monica removed at the groceries from the bag.

   (Ghosheshi & Massam: p.139, e.g.(26))

60. (a) Kay rubbed the dirty mark from the counter.
    (b) *Kay rubbed at the dirty mark from the counter.

   (Ghosheshi & Massam: p.139, e.g.(27))

   The behaviour of the at frame with respect to endstates that I introduced above
suggests that it is the presence of the endstate PP in example 60(a) and 61(a) that is
the reason that it cannot participate in the at frame. This can be seen when the from
PP is deleted. Since remove lexicalises the endstate and nothing more, there is no
separate manner component to the event. It is therefore blocked from participating in
the at frame even without the Goal phrase being projected separately because the
endstate is carried within the verb. In contrast, rub does not lexicalise an endstate but
carries some other manner component. If the PP is deleted the endstate is removed,
the event can be understood as a manner process event and is consequently
compatible with the at frame.

61. (a) Monica removed the groceries.
    (b) *Monica removed at the groceries.

62. (a) Kay rubbed the dirty mark.
    (b) Kay rubbed at the dirty mark.

   A PP does not block participation in the conative or at frame as long as it does
not provide a telic boundary to the event. A locational restrictive clause does not do
this and therefore is compatible with the at frame.

63. (a) She dug pipis near the wharf.
    (b) She dug at pipis near the wharf.
The impact frame seems to provide an exception to the observations discussed in this section. The aspectual behaviour with respect to the *in* and *for* adverbials showed that the *kick/punch* and *jab/poke* verbs did not lexicalise an endstate. In addition to being incompatible with the *in* adverbial, they do not satisfy the participal adjective test, that I discussed in Chapter 2 with respect to the *brush/sweep* and *chop* verbs, shown in example 66(b).

64. (a) Mehrtens kicked the ball.
   (b) *the kicked ball
   (c) Mehrtens kicked at the ball.
   (d) *the kicked at ball.

65. (a) John poked the fire.
   (b) *the poked fire.
   (c) John poked at the fire.
   (d) *the poked at fire

66. (a) Sally chopped the carrots.
   (b) the chopped carrots

Yet, although the impact frame does not provide an endstate to the event, the impact conative form is still incompatible with a construction that provides one for the event. Semelfactive verbs, like *kick*, which do participate in the conative frame are blocked by a syntactically realised goal phrase introduced by a prepositional phrase in an adjunct or complement position.

67. (a) Mehrtens kicked the ball.
   (b) Mehrtens kicked at the ball.
   (c) Mehrtens kicked the ball to the boundary.
   (d) *Mehrtens kicked at the ball to the boundary.

Given that no endstate is implicated by the verb *kick* in either its transitive or conative frame, an explanation for its inconsistency with an endstate predicate is needed. I
discuss the role of the PP in detail in Chapter 5. The peculiarities of the semelfactives’ behaviour with respect to endstate predicates is discussed below in Section 4.3.2.3.

The significance of bounding to the conative and generic \textit{at} forms is such that if the event is understood to have an endstate reading the conative or \textit{at} frame is blocked. This may occur if the verb lexicalises the endstate and provides an internal endstate to the event. It also occurs if an endstate is provided to the event by means of an external resultant phrase which provides a Path phrase and Goal argument and provides a terminal endpoint for the event. The conative or \textit{at} frame can only interact with an event, which if it has an endstate reading in the transitive frame can also accommodate a process reading that is not dependent on the endstate.

4.2.4 Conclusion – bounding and the conative frames

The different conative frames have different aspectual effects. The contact conative form and the exerted-force conative form cancel the implicature of an endstate or end-location which can be present in the transitive frame. However, the transitive form can also be unbounded. More significantly, the canonical impact frame shows no aspectual distinction between the impact conative form and the impact transitive form.

Ghomeshi & Massam’s proposal that the conative alternation is an alternation of aspect brought about by a change from the canonical direct object position is therefore not supported by an analysis of the data. The transitive frame of all the verbs that appear in the conative either does not implicate an endstate, or offers both an endstate reading and a non-endstate reading. The conative frame is only found with the non-endstate predicates and never implices an endstate reading. The conative or \textit{at} frame is therefore not found with change-of-state verbs or projected resultant state structures that provide an endstate to the event.

4.3 Bounding and semelfactives

In the previous section I suggested that Ghomeshi & Massam's conclusions with regard to differences in aspect between the transitive and conative frames were incorrect. However, in Section 4.2.2.3, I hinted at subtle aspectual differences between the impact verbs that distinguish them from the other verbs that appear in the conative. The impact frame that I have identified features predominantly with the
semelfactive event class of verbs. As the key event-class participant in this canonical conative frame, a further exploration of the aspectual nature of the semelfactives is merited.

In the following sections, I review previous discussions of the semelfactive class and then propose a distinction between the terms boundedness and telicity. This distinction is similar to but distinct from the work of Depraetere (1995) and Declerck (1979 and 1989).

4.3.1 Mittwoch, Talmy and Moens: Semelfactives

Mittwoch (1991) and Talmy (1985) both mention the aspectual peculiarities of the semelfactive verbs. Mittwoch points to their punctuality and describes how they can be idealised into events that ‘squash together’ the beginning and the end of an event into one moment. Talmy describes semelfactives as ‘full-cycle’ events. Both these descriptions emphasise the self-contained nature of the class.

Moens (1987) proposes a four-way distinction between ‘event’ classes that identifies the semelfactive class, which he calls Point events, as a separate grouping (42). He distinguishes events on the basis of those that have consequences and those that do not. This relates to whether a change of state takes place. The changed state is the ‘consequence’ of the event. This provides a means of clearly distinguishing between achievements, which are +consequence, and semelfactives which are – consequence (43).

<table>
<thead>
<tr>
<th>EVENTS</th>
<th>STATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>atomic</td>
<td>extended</td>
</tr>
<tr>
<td>+ conseq</td>
<td>CULMINATION</td>
</tr>
<tr>
<td></td>
<td>recognise, spot, win the race</td>
</tr>
<tr>
<td></td>
<td>CULMINATED</td>
</tr>
<tr>
<td></td>
<td>PROCESS</td>
</tr>
<tr>
<td></td>
<td>build a house, eat a sandwich</td>
</tr>
<tr>
<td>-conseq</td>
<td>POINT</td>
</tr>
<tr>
<td></td>
<td>hiccough, tap, wink</td>
</tr>
<tr>
<td></td>
<td>PROCESS</td>
</tr>
<tr>
<td></td>
<td>run, swim, walk, play the piano</td>
</tr>
</tbody>
</table>

Figure 5: Moens’ event class distinctions

(Moens: p.42, Fig. 2)

The distinction between ‘atomic’ and ‘extended’ is similar to the more common aspectual distinction of duration. Under Moens’s proposal, semelfactives are
classified as Point events that are +atomic – consequence. This is similar to Mittwoch’s analysis.

All three of these different analyses identify the self-contained nature of the semelfactive event. Since the event is self-contained, its completion is not dependent on any interaction with the direct object or an endstate. This characteristic is significant for the bounding analysis I propose in the following sections.

4.3.2 Distinction between (un)bounded and (a)telic

Bounding and telicity are terms used to clarify the aspectual distinctions between the different event classes. However, when used in the literature two different concepts are often confused in the classifications that are proposed. Depraetere (1995) and Declerck (1989) both suggest a means of clarifying the distinction between (un)bounded and (a)telic. After discussing their respective distinctions, I introduce a further distinction between ‘telic’ and ‘bounded’ which allows a clearer definition and understanding of the characteristics of the semelfactive event class and its behaviour with respect to the conative alternation.

4.3.2.1 Depraetere 1995

In Depraetere’s approach, (a)telicity is to do with whether a situation is described as having an inherent or intended endpoint. (Un)boundedness relates to whether a situation is described as having reached a temporal boundary (1995, 2-3).

A clause is therefore telic if the situation is described as having a natural or intended endpoint which has to be reached for the situation to be complete and beyond which it cannot continue. Otherwise the event is atelic (1995, 3).

68. (a) She killed the rabbit. (telic)
(b) Sheila collapsed. (telic)
(c) Shelia is working in the garden. (atelic)
(d) Shelia lives in Venice. (atelic)

(examples (b) – (d) from Depraetere: p.3, e.g.(1))
A sentence\textsuperscript{10} is \textit{bounded} if it represents a situation as having reached a temporal boundary, irrespective of whether the situation has an intended or inherent endpoint. The event cannot continue beyond this temporal boundary. It is \textit{unbounded} if it does not represent a situation as having reached a temporal boundary (Depraetere 1995: 3).

69. (a) Judith played in the garden for an hour. (bounded)
    (b) Julian lived in Paris from 1979 until May 1980. (bounded)
    (c) She lives on the corner of Russell Square. (unbounded)
    (d) She is writing a nursery rhyme. (unbounded)

    (Depraetere: p.3, e.g.(2))

In example 69(a) and (b) the adverbials \textit{for an hour} and \textit{from 1979 until May 1980} attach to underlyingly unbounded situations. However, the presence of the durative adverbial provides a temporal boundary or temporal unit for the event and the available reading becomes bounded. There are no comparable temporal boundaries for 69(c) and (d) and they remain unbounded.

Significantly, under Depraetere’s classification situations need not necessarily bring about a change-of-state in order to be called telic situations (8, footnote 7). This means that no distinction is made in her system between achievements and semelfactives, which are both classified as telic events.

70. (a) She killed the rabbit.
    (b) The light flashed.

Depraetere’s discussion is useful in the sense that it clarifies the need for a distinction between the terms (a)telic and (un)bounded. However, in including any situation that has an inherent ‘endpoint’ within the classification of telic she ends up mainly discussing the significance of tense and temporal adverbials to aspect and bounding. There is no indication of what an atelic bounded situation would be like, or indeed, whether or not this is possible under her system. There is also no discussion

\textsuperscript{10} My use of the terms ‘clause’ and ‘sentence’ in this section follows Depraetere (1995).
of the possibility of different types of potential terminations and how these might be represented.

4.3.2.2 Declerck 1979; 1989

Depraetere sources her discussion on the distinction between telicity and boundedness back to Declerk’s (1989) work. Declerck defines a situation as telic if it is represented as tending towards a ‘goal’, within which he includes ‘result’ and ‘terminal point’. The reference to the goal is an essential part of the description of the situation. Boundedness, as with Depraetere, refers to whether the goal is reached. If the sentence implies that it is, then it is understood to be bounded (1989, 277). More specifically, a bounded sentence represents a situation as terminating and cannot, therefore, be used to refer to a situation that has not yet reached the terminal point referred to in the sentence (1979, 766). Under this approach, for adverbials attach to unbounded situations and render them bounded (1989, 277).

Declerck does not define what he includes within his classification of telic and gives no indication of whether the ‘goal’, ‘result’, or ‘terminal point’ must entail a change-of-state and/or an endstate. It is consequently unclear by what means he would approach the semelfactive verbs. These are not addressed in his discussion. Declerck does, however, categorise the combination of a state with a durative adverbial as atelic bounded.

4.3.2.3 A proposed extension of ‘bounded’ to semelfactives

Much of the confusion in the literature about the terms ‘bounded’ and ‘telic’ is because the discussion of aspect in the linguistics literature tends towards using the term ‘boundedness’ in an autohyponymous way.¹¹ Events which have a temporal end of any sort are grouped together as a class of bounded events. My proposal draws on distinguishing two types of bounding.

The group of bounded events can be split into two subclasses, distinguished by whether the temporal end of the event is entailed by the presence of an endstate or not. If the event has an endstate which entails the temporal end, it falls into the subclass of telic events. Telic events can be contrasted with the other subclass where events have a temporal end but this is not brought about by an endstate. This subclass of bounded

¹¹ This means that the term for the whole class is an autohyponym. It has a reading which is a hyponym of its own broad reading.
atelic events is referred to as bounded events. Unbounded events do not entail a temporal end of any kind.

<table>
<thead>
<tr>
<th>BOUNDED EVENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Telic events</strong></td>
</tr>
<tr>
<td>have an endstate which usually entails a temporal end</td>
</tr>
<tr>
<td><strong>Bounded (atelic) events</strong></td>
</tr>
<tr>
<td>have a temporal end but do not entail an endstate</td>
</tr>
</tbody>
</table>

Figure 6: Proposed distinction between ‘telic’ and ‘bounded’ events

In this section I propose a distinction between the boundedness of semelfactives and the telicity of change-of-state verbs. This is a different distinction than has previously been made by Depraetere and Declerck and is more closely related to the +/- CONSEQUENCE classification of Moens. For the remainder of this thesis, a distinction is drawn between telic events and bounded events. The use of ‘bounded’ refers to the subclass category of bounded atelic events that do not entail an endstate and contrasts these with the other subclass of ‘telic’ events. Notwithstanding this distinction, I will continue to use the adverbial tests to indicate bounding in the traditional, broader sense.

Under my proposal, for a clause to be **telic** it must entail an endstate that provides the bounding of the verb. A telic verb usually has a projected Theme and the situation of ‘Theme BE-AT endstate’ gives the telicity and bound to the event. This can be formalised as:

71. BE-AT (Theme, Goal)

The relation between the Theme and the Goal gives the ‘telos’ or telic endpoint. The endstate can be lexicalised within the verb, as with change-of-state verbs, or it can be defined by the final location of a projected Theme. Accomplishment predicates exhibit these characteristics and their internal argument, if any is projected, is implicated in the bounding of the event.

In a change-of-state verb, the Theme is usually expressed as the direct object and the Goal is carried within the verb itself.
The telos is brought about by the metaphorical movement of the cup, following Gruber and Jackendoff’s analysis of change-of-state events as motion events, from a state of wholeness to a state of brokenness. Until the Theme, the cup, has reached the Goal of ‘broken’, the event cannot be said to have occurred. If the event has occurred then the change-of-state of the cup is necessarily entailed. In other words, it must be broken.

With a non change-of-state telic predicate, the Theme is, again, usually in the direct object position and the Goal is projected separately.

In an event like this, the telos is reached by the movement of the Theme argument, bike, to the Goal of park. If the Theme does not reach the Goal, that is if the bike does not make it to the park, then the event is not telic and is not completed. For pragmatic purposes a Path that the Theme traverses must be understood at a sublexical level. However, its projection is not essential to the telicity of the event and may be backgrounded. The event focuses on the position of the Theme with respect to the Goal argument.

A telic event can be forced into an atelic frame by the addition of a for adverbial and this forces a repetition reading. Telic verbs vary in how easily they can fit within a repetitive frame and if the endstate cannot be easily reversed, or cancelled out by some means, the repetition must involve separate entities and be understood to mean separate events. This provides some explanation for the different grammaticality judgements.
A bounded predicate has a natural endpoint to its event but crucially this does not entail an endstate. It is therefore classified as atelic, but bounded. The bounding of the event comes about through the conceptual shape of the event. It is bounded by the self-contained action of a verb and the shape of the event, regardless of whether other arguments are also projected, such as a separate Path argument.

These characteristics can be clearly seen with the intransitive semelfactives. The event has a clearly defined endpoint beyond which it does not continue. The event is self-contained and is determined by the conceptual shape of the event. This provides the outline to the event since there is no separate argument projected or understood as providing a boundary.

75. (a) He winked.
(b) The cat sneezed.

A sneeze has a clearly defined terminal point when the forced emission of air and accompanying sound ceases. Since no endstate is entailed, the event can be easily repeated. Yet each sneeze is still independently identifiable and defines a shape to its event. Following Talmy, semelfactives are a full-cycle of action (1985, 77). Talmy’s description provides an alternative means of understanding the concept of bounding that I am proposing. After the occurrence of the event it can return to its starting point. It is potentially resettable because there is no endstate entailed, yet able to be repeated because there is a clearly defined structure to the event. A repetition reading is therefore a natural reading that emphasises the bounded instances of the individual event.

76. (a) He winked three times.
(b) The cat sneezed three times.

Verbs that lexicalise a gestural movement also exhibit the same bounding characteristics. The path of the gesture provides the shape to the event and gives it its natural endpoint. Again, no change-of-state is entailed and no endstate is reached.

77. (a) Ellen punched.
(b) Anna kicked.

The typical shape of a punch involves a clenched fist moving in an arc from close beside the body to the end of an extended arm. The Path that the arm travels provides the shape to the event and gives the event a bound. The end of the punch is evident when the arm is fully extended. It is naturally resettable by retracting the arm back to its original starting point and there is no endstate entailed which might otherwise make this difficult to achieve. Since no endstate is entailed it is atelic but the internal ‘completeness’ of the event means that it is bounded.

Even if another argument is present in such an event, it does not change the bounding characteristics. The shape of the punch remains the bounding determiner so the direct object is not involved or implicated in the bounding of the event. The following examples are all bounded by the shape of the punch, just as the intransitive variant was also bounded by the shape of the punch. The direct object is therefore different in kind from the direct object that is usually considered in aspectual discussions (e.g. Tenny 1992).\(^\text{12}\)

78. (a) Ellen punched the air.
    (b) Ellen punched the cushion.
    (c) Ellen punched at the cushion

Even though contact is an integral part of the event in 78(b) it does not contribute to the bounding nature of the verb. This is independent of the direct object. The fact that contact is not aspectually significant gives further support to the conclusion drawn above that the conative and transitive frames are aspectually identical for the semelfactive verbs. In both frames the event is bounded by the shape of the punch, regardless of whether contact is achieved or not. The duration adverbial tests discussed in Section 4.2.2.3 also support the conclusion that the two frames are identical in their aspectual characteristics.

Since contact is irrelevant to the bounding of the event, if contact does not eventuate, the event is still understood to have happened. The event of slapping is

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\(^{12}\) I discuss the aspectual claims that Tenny and Dowty make with respect to direct objects in more detail in Chapter 5.
complete when the teacher’s hand has reached the conceptual end of its path of spatial motion. This conceptual path provides the bounding for the event.

79. (a) The teacher slapped the pupil.
    (b) The teacher slapped at the pupil but missed.

Example 79(b) therefore does not mean that an event of slapping did not occur. Rather, it highlights that the contact with the direct object is inconsequential to whether the event occurred and whether the event is bounded.

This can be contrasted to the telicity of an accomplishment event, such as example 80, where a change-of-state is entailed and the event is therefore telic.

80. (a) Anna built a table.
    (b) *Anna built a table but did not finish it.

In example 80(a) the event described is complete when the whole table is complete. Any further addition, such as a drawer, that the Anna may engage in constitutes a separate event. Example 80(b) has no terminal point since the table never comes into existence. This reading is inconsistent with the aspectual schema of build.

To summarise, telic events entail an endstate that provides the bounding of the event. The event’s bound is determined by the Theme reaching the Goal argument or endstate. Accomplishment predicates exhibit these characteristics and their internal argument is implicated in the bounding of the event. Bounded events, or, more strictly, atelic bounded events, have a terminal endpoint but it is not brought about by an endstate. Instead, they are bounded by the conceptual shape of their event which, with semelfactive verbs, is emphasised by the resettable nature of their verbal aspect. Even in a transitive frame the direct object is not relevant to the bounding of the event and the alternation between the transitive and conative frames is aspectually inert. Semelfactives are therefore atelic because they do not entail an endstate but bounded because of their self-bounding form.
4.3.3 Self-bounded form of semelfactives

Semelfactives, whether in the conative frame or the transitive frame, have their bounding provided by the shape of the Path travelled by the lexicalised Theme.\textsuperscript{13} Their form is self-bounded because it is not related to any interaction with the other argument. However, the transitive frame entails contact with the direct object. Unlike an accomplishment event, this does not make the event telic. This characteristic requires further explanation.

At the sublexical level, the transitive frame of an impact semelfactive can be represented as what seems to be a conventional Theme-Goal structure.\textsuperscript{14}

\begin{enumerate}
\item[(a)] John kicked the ball.
\item[(b)] “foot” BE-AT ball.
\item[(c)] Theme BE-AT Goal
\end{enumerate}

Under the distinction proposed above for telic and atelic bounded events, this would seem to be no different from a typical telic event. However, peculiarities of the semelfactive class make it distinguishable. The internal argument projected by the verb, the ball, is not the Theme, as is the case with a telic change-of-state verb. No separate Path is projected by the verb, although at the sublexical stage it is present. Underlyingly, 81(a) can be represented as:

\begin{enumerate}
\item[(d)] John kicked his foot to the ball.
\item[(e)] John CAUSE foot BE-AT ball.
\end{enumerate}

However, at the sublexical level, both the Path and the Theme are collapsed into the verb. This has the effect of taking the bounding of the event into the verb itself. A telic reading is not possible because the Theme is no longer visible to the syntax.

For a telic event, the crucial projection is of the Theme argument. A lexicalised Theme argument is not sufficient to give telicity to an event. This allows

\textsuperscript{13} It should be noted that, although kick has been the main example discussed, the lexicalised Theme analysis is proposed generally for impact verbs, but has been illustrated with body-part verbs.

\textsuperscript{14} Double quotation marks “ ” indicate a lexicalised thematic role.
two different projections for a telic predicate. In the first projection, where a change-of-state is entailed and the endstate is a State, the Goal is lexicalised within the verb but the Theme is still projected.

82. (a) [The lake] [froze].
   (b) BE-AT (lake, frozen)

With a change-of-location event where an end-location provides the telos to the event, both the Theme and Goal must be projected.

83. (a) Push [the cart] to [New York].
   (b) BE-AT (cart, New York)

The endstate of this event is not the Goal argument *New York* but is instead a locational situation of ‘the cart BE-AT New York’. The Goal is therefore only expressing part of the endstate. The relative position of *the cart* to the Path phrase *to New York* provides the telicity to the event.

In contrast, the impact semelfactives are not strictly telic. As I discussed in Chapter 3, they are characterised by the lexicalisation of the Theme argument and only the Goal is projected into the syntax. They are bounded but, without the projection of the Theme, they cannot be understood as telic events.

84. (a) [kick] [the ball]
    “Theme” Goal

The self-bounded form of the impact semelfactives can therefore be explained by the incorporation of elements of the event structure at the pre-syntactic level of sublexical structure. This concept was introduced in Chapter 3. There I proposed that the projected structure of the impact semelfactive verbs involved incorporation of the Theme argument into the lexical verb. The Theme-Goal structure that provides the telos for telic events is not present in the self-bounded form of the impact semelfactive verbs. Instead, the Theme-Goal complex is collapsed before the projection is realised.
In the conative frame the Path expression remains indicated by the *at* preposition. This indicates orientation towards the Target argument and implicates missed contact. In the transitive frame, neither the Path preposition nor the Theme is projected and contact is entailed because of the promotion of the Goal argument to the direct object position, but telicity does not follow from this. This ‘self-bounding’ is like the intransitive semelfactives, such as *cough, sneeze, wink*, in that the event or action itself has a conceptual shape.

### 4.4 Conclusion

This chapter has discussed the issue of bounding with respect to the conative and generic *at* forms. An examination of the data showed how, contra Ghomeshi & Massam, there is only limited evidence to support the claim of an aspectual difference between the conative frame and its related transitive frame. This evidence is restricted to the specific frames of the contact verbs and the exerted-force verbs and even then further limited to the idea that the conative frame can only be understood as an unbounded predicate. Crucially, the impact frame is aspectually inert between its transitive and conative realisations. Similarly, with the generic *at* form, there is no evidence of an aspectual difference between the two frames and only atelic predicates are found within it. Both the conative and *at* forms are incompatible with a structure that provides telicity to the event, whether this be by means of a lexicalised endstate or a separate resultant phrase.

Although there is no aspectual distinction between the conative and transitive forms, the impact frame does exhibit interesting aspectual characteristics. These are related to the characteristics of the class of semelfactive verbs which are the main participants in the conative frame.

I proposed that semelfactive verbs should be classified as bounded but atelic. They have an endpoint to the event they describe but do not entail an endstate. This distinguishes them from accomplishment and achievement predicates. Semelfactives have a self-bounding aspectual form which allows them to be repeated without difficulty and gives them a natural iterative reading when placed with durative adverbials. Even if a direct object is projected by a semelfactive verb it is of no aspectual significance.

The bounding of an atelic bounded semelfactive is provided by the collapsed and incorporated Theme-Goal structure. The conative frame is distinguished from the
transitive frame because it still projects the Path preposition, although it is the shape of the verb’s action that still provides the bounding to the event. In contrast, the transitive form does not project the Path preposition and instead incorporates this along with the Theme into the verb. The underlying Goal argument is promoted to the direct object position but because no Theme argument is projected there is no means of providing telicity to the event.
Chapter Five- Thematic Issues

Discussions of telicity are usually presented as the role that the direct object plays in influencing the telic nature of an event. Tenny (1992) and Dowty (1991) both focus particularly on the significance of the direct object and refer to it in their respective theories on bounding. In this chapter, I discuss their claims with respect to the verbs which appear in the conative and suggest that broad claims about bounding usually refer to the Theme argument of a construction rather than to the argument that is found in the direct object position. Verbs which appear in the conative do not project a Theme argument, but instead project a Patient argument as their direct object. They do not display the characteristics of bounding that are traditionally associated with the direct object position and described in the aspectual theories.

I also explore the behaviour of different Path phrases and propose a three-way distinction and a Proto-goal role. This explains the restriction on multiple events within a single clause and how Paths can stack in combination with each other.

5.1 Bounding and direct objects

Tenny (1992) and Dowty (1991) both discuss the role of the direct object in providing a measure or delimit to an event. In this section, I present each of their claims separately, then analyse them with reference to the impact verbs. I suggest that my analysis of the verbs that appear in the conative, and my distinction between telicity and bounding, is not inconsistent with the conclusions proposed by these theorists.

5.1.1 Tenny: Aspectual Interface Hypothesis

Tenny has some strong statements to make about aspect and its syntactic effects. Her hypothesis is that all mapping between the lexical level and the syntactic level relates to aspectual grounds (1992, 2). Rather than talking about aspect in terms of bounding, Tenny uses the term ‘delimited event’ to talk about an event that has an endpoint in time (1992, 5) and is bounded. Her use of the term ‘bounding’ is more closely aligned to what I classified as ‘telicity’ in Chapter 4, since it entails the reaching of an endstate.

Tenny’s proposal is encapsulated in her Aspectual Interface Hypothesis (AIH).
1. **Aspectual Interface Hypothesis**: The mapping between thematic structure and syntactic argument structure is governed by aspectual properties. A universal aspectual structure associated with internal (direct), external and oblique arguments in syntactic structure constrains the kinds of event participants that can occupy these positions. Only the aspectual part of thematic structure is visible to the syntax.

   (Tenny: p.2)

   Tenny is primarily concerned with simple non-stative verbs and places a constraint on the potential scope of the AIH by restricting the aspectual influence of an internal argument. This has the effect of limiting the aspectual role of direct internal arguments to Theme arguments, since she defines them in the same motion terms as used by Gruber and Jackendoff to provide a definition for the Theme argument of an event.

2. **Constraint**: The internal argument of a simple verb is constrained so that it either undergoes no change or motion, or it undergoes change or motion which “measures out the event” over time.

   (Tenny: p.3)

   ‘Internal arguments’, following Williams (1981), are defined as those that are generated within the verb phrase. A direct internal argument is generated as a structural object of the verb, and is assigned structural case, while an internal indirect argument, or oblique argument, does not receive structural case from the verb. (Tenny 1992, 4)

   The direct internal argument that does undergo change or motion is understood to “measure out” over time the event described by the verb (Tenny 1992, 4). The event is measured out by the direct internal argument’s spatial extent, volume or some characteristic of its properties. In the following examples, the bound to the event is provided by the internal argument.

3. (a) Perform a play.

   (Tenny: p.5, e.g.(4)a)

   (b) Ripen the fruit.

   (Tenny: p.6, e.g.(6)b)
When you perform a play, you perform act one, then act two, and so on, until you come to the end of the play. The end of the play is the end of the event (Tenny 1992, 5).

The property of the ripeness of the fruit provides the measure to the event in example 3(b).

Although Tenny’s constraint limits the aspectual significance of internal direct arguments to those that undergo change or motion, the constraint still entails that all direct internal arguments that do undergo change must measure out the event, even if the event is not ostensibly delimited. In such a case, Tenny suggests that an indirect internal argument, or Goal phrase, provides the delimit to the event by referring to that property of the direct argument that is undergoing the central change in the event (1992, 6).

4. (a) Push the cart (*in an hour/ for an hour) -non-delimited  
   (b) Push the cart to New York (in an hour/ *for an hour) -delimited  
      (Tenny: p.6, e.g.(7))

Tenny claims that the cart measures out the event in both 4(a) and 4(b).

The delimitedness of (b) is achieved through reference to the very property of the direct internal argument that is measuring out the event: namely its location’ (Tenny 1992, 6).

I discuss this assertion in more detail in Section 5.2.

5.1.2 Dowty 1991: Incremental Theme

Dowty addresses the significance of the direct object to bounding within a broader discussion on thematic roles which proposes that discrete thematic roles should be replaced with Proto-Roles which function as cluster concepts. In his discussion he suggests that a new role category of Incremental Theme should also be recognised (1991, 567). Through this role he attempts to formalise observations that have been made about the relationship between NPs and the bounding of events under the general principle that 'the meaning of a telic predicate is a homomorphism from its (structured) theme argument denotations into a (structured) domain of events' (Dowty 1991, 567). Essentially, an Incremental Theme is an argument in a telic event that is
gradually affected during the course of the event, so that it provides a measure and reflects the telic endpoint of the event in its own properties.

Dowty uses example 5 to explain the concept more clearly.

5. Mow the lawn.

(Dowty: p.567)

If someone is requested to 'mow the lawn' an observer can look at the lawn and from the state that it is in determine something about the aspect of the event. The event may not have begun, it may be half-finished or it may be completed, depending on how much of the lawn has been cut. In contrast, an observation of the person who is pushing the lawnmower over the lawn does not reveal any similar information about the aspectual progression of the event. The lawn is therefore understood as the Incremental Theme of the event (Dowty, 1991, 567).

Examples of Incremental Themes given by Dowty include 'effected' objects, 'destroyed' objects, and objects entailed to undergo a definite change of state (1991, 568). The direct objects of the following examples are Incremental Themes.

6. (a) Build a house, write a letter, perform a sonata ('effected' objects)
    (b) Destroy a presidential finding, eat a sandwich ('destroyed' objects)
    (c) Paint a house, polish a shoe, proofread an article (definite change of state)

(Dowty: p.568, e.g.(20))

In contrast to Tenny's proposal, Dowty does not include all traditional Themes in his grouping. If the verbs themselves only imply an 'indefinite' change of position or state, such as the following examples, he does not include them as Incremental Themes (1991, 568).

7. Push a cart, raise the thermostat, dim the lights.

(Dowty: p.568)
Most achievement predicates are also not included in his grouping of Incremental Themes because their arguments do not undergo a change in distinguishable separate parts or subevents (1991, 568).

However, Path predicates are included in Dowty’s notion. Dowty recognises that what is affected in a motion event is not the Theme of the event, contra Tenny, but is instead the Path that is traversed. He refers to this particular group as Holistic Themes, since they undergo a change of state in stages, as the Theme moves along the Path, but the Path itself does not change part by part (1991, 569). The following Path phrases are Holistic Themes and are a subgroup of Incremental Themes.

8. (a) Grow into an adult, become an architect.
    (b) Walk from the bank to the post office, drive (a car) from New York to Chicago, run a mile.

(Dowty: p.568, e.g.(21))

The (a) examples show an extension of the notion of Holistic Themes to include the traversal of metaphorical Paths. Such an extension is consistent with the general approach to thematic roles that I introduced in Chapter 3.

Dowty further distinguishes himself from Tenny's claims by permitting Incremental Theme arguments to be found in syntactic positions other than the direct object. The role of measuring out an event is consequently associated with a thematic argument rather than with a syntactic position, as Tenny assumes. Incremental Themes can therefore be found in subject position, when the subject argument is a space-occupying body that gradually traverses a threshold or boundary (Dowty 1991, 571).

9. (a) John entered the icy water (very slowly).
    (b) The crowd exited the auditorium (in 21 minutes).
    (c) Moving slowly, but inexorably, the iceberg took several minutes to pierce the ship's hull to this depth.

(Dowty: p.570, e.g.(25))
Dowty's proposal for a thematic category of Incremental Theme brings the discussion of bounding back to the scope of semantic roles rather than syntactic positions, as Tenny would have it. Under this approach the Incremental Theme argument is not directly associated with the direct object position and so is not inconsistent with an analysis of the conative frame as atelic. If a conative event is atelic, the internal argument cannot be considered an Incremental Theme. Under Dowty's proposal it is unlikely to be confused with one because there is no step-by-step change in its state that can be identified as measuring out the event.

5.2 Patient Role

In this section I examine the relationship between the work of Tenny and Dowty and my own observations with respect to the bounding behaviour of the impact semelfactive verbs. I suggest that the notion of a Proto-Role of Patient provides a means to accommodate the semelfactives’ characteristics within thematic theory and gives an explanation for its relationship to the Theme role.

5.2.1 Proto-Patient role

In the earlier chapters I showed that the argument that is projected into the direct object position of the impact transitive frame was distinct from the direct object argument of change-of-state constructions because it does not implicate any endstate or translocation. In the transitive frame, the direct object was ‘affected’ in the sense that contact was made with it, but it did not have any aspectual role. Another characteristic of the impact semelfactives that I have shown is that at the sublexical level the Theme is incorporated into the verb itself and the Theme-Goal structure of the transitive frame is collapsed.

Dowty (1991) proposes the notion of a Patient Proto-Role which contrasts with the Agent Proto-Role. He suggests particular ranked properties which help to determine what argument should be understood as a Patient argument and which as an Agent argument (Dowty: 1991, 572). He gives the following as contributing properties for the Patient Proto-Role:

10. (a) undergoes change-of-state
    (b) incremental theme
    (c) causally affected by another participant
(d) stationary relative to movement of another participant
(e) does not exist independently of the event, or not at all

(Dowty: p.572, e.g.(28))

He also discusses Levin’s hit verbs, which I have listed in Chapter 1, with respect to the notion of Patient Proto-Role. Dowty uses a displaced Theme construction, example 11, to suggest that the verbs are like break in entailing a ‘significant if less visible change-of-state in their direct-object argument’ (Dowty 596).

11. swat the boy with a stick.

(Dowty: p. 596, e.g.(65)a.)

I wish to suggest that it is more useful to treat the Proto-Patient role as a thematic role which can have different realisations, rather than attempting to explain all Patient-like arguments in the same terms. Dowty’s attempt to describe the hit verbs as change-of-state verbs gives an indication of what the main realisation type of the Patient-Proto role is.

The central type of Patient argument is the Theme role. This has been discussed widely and is found with change-of-state and translocation verbs. Peripheral types, or non-Theme Patients, are less clear in their characteristics. They are ‘affected’ arguments but in a different way to Theme arguments, since they are not implicated in any change-of-state or translocation.

![Figure 7: Patient Proto-Role](image)

One major type is the direct object argument of impact verbs which shows the characteristics I have identified in previous chapters. These include an analysis as a
‘promoted’ Goal at a sublexical level brought about because of a compressed Theme-Goal structure. If the Theta Criterion is employed at the Proto-Role level, this provides an explanation for why a ‘promoted’ Goal-Patient cannot occur alongside a Theme argument.

5.2.2 Tenny and the conative frame

The purpose of this section is not to critique Tenny’s work extensively, but it is necessary to examine the implications of her assertions for the analysis of the impact conative form that I proposed in Chapters 3 and 4.

Tenny’s aspectual proposal generally encompasses the behaviour of what she calls ‘affected’ arguments. She defines an ‘affected’ argument as an argument which both measures out and delimits the event (1992, 8). Basically, these are change-of-state verbs which are clearly telic. The direct internal argument forms both the measure and the delimit to the event.

12. (a) She broke the cup.
   (b) Destroy the city.

In example 12(a), the relative physical state of the cup provides the measure to the event. Strictly speaking the delimit of the event is not really found in the internal direct argument itself but is instead lexicalised within the verb stem as some derived form of broken. Until the cup has reached the state of ‘brokenness’, the event is not complete. The same situation can be seen with example 12(b). The state of the city provides the measure to the event, since as it is gradually destroyed the progression of the destruction can be seen. Although the event is completed once the city is ‘destroyed’, the endpoint or delimit is not simply to be found in the direct internal argument itself. Instead, the relationship of the measuring argument to the endstate lexicalised by the verb determines whether the event is completed and delimited. The final state of the city is what determines the telicity or otherwise of the event. Tenny is correct in her claims to the extent that the direct internal argument is both the measure and the delimit with change-of-state verbs. The problem with her analysis lies in where this final state is specifically found in the deep structure.

This same problem can be seen more clearly with the verbs of motion that Tenny discusses. In a non-delimited sentence, the Theme may appear independently
of a Goal argument. Tenny suggests that even if the event is not delimited, the internal direct argument still measures it out (1992, 6). This must be the case if her claim that all direct internal arguments undergoing change are constrained to measure out the event is to hold true. In the basic transitive form, as in 13(a), Tenny claims that the Theme, or direct object, is measuring out the event but does not expand on exactly how this is done.

13. (a) Sally drove the car.

When this argument is combined with a Goal argument, as in 13(b), Tenny suggests that the event becomes delimited by virtue of the Goal argument and the direct internal argument continues to measure out the event. She claims that with a verb of motion the Goal argument refers to the 'location' of the Theme argument which is 'that property of the direct argument that is undergoing the central change in the verb' (Tenny 1992, 6).

13. (b) Sally drove the car to the garage.

Telicity therefore involves more than the presence of a measuring out argument and a delimiting argument. Specifically, it requires a locational situation of:

14. BE-AT (Theme, Goal)

The difference between examples such as ‘drove the car to the garage’ and 'break the cup' is that the Theme in the former is a Theme of motion. It does not undergo any internal change, as occurs with change-of-state verbs, and therefore does not provide a measure to the event in the same way as the direct object of those constructions can. The simple progression of the Theme alone cannot be understood to be measuring out the event. With verbs of motion it is the progression of the Theme along the Path phrase to the Goal that measures out the event. The Path phrase itself, rather than the Theme argument, provides the measure to the event. The Theme simply provides a reference point of the temporal progression of the event. Dowty incorporates this distinction with his Incremental Theme role.
The Patient-Proto role that I introduced above allows some clarification to be given to Tenny’s claims. The ‘affected’ argument that she emphasises is more specifically a Theme argument. The first difficulty with her proposal is that she claims that aspect is a syntactic property that is associated with the direct object position. Dowty (1991) has shown some problems with this claim through his examples of non-direct object bounding arguments, such as example 9 above.

My alternative is to explain aspectual behaviour from the sublexical perspective. In this proposal, aspect is a sublexical property and not a surface issue. The argument that is in the specifier of vp position at the sublexical level is the bounding argument of an event. If this argument is projected into the direct object position or even the subject position at surface level, then it can be interpreted as a “bounding Theme”15 and the event is telic. What is significant is its sublexical position rather than its surface realisation. If the specifier of vp is incorporated into the verb and not separately projected, as with the impact semelfactive verbs, then the event cannot be telic because the surface direct object is not underlyingly found in the specifier of vp, since it is a promoted Goal. However, the event can still be atelic bounded because this information is present at the sublexical level.

The conative frame provides another interesting perspective to Tenny's claims. As I demonstrated in Chapter 4, the transition between the transitive frame and the conative frame has no aspectual significance for the event. Both remain atelic or, in Tenny's terms, non-delimited. The transitive frame, although having a direct object, is not telic or delimited and the direct object is irrelevant to the bounding. This is not inconsistent with Tenny's claims, as long as the direct object argument of the impact semelfactives is understood as not undergoing change or movement and therefore is excluded from an aspectual role by the Aspectual Constraint.

However, Tenny has no way of accounting for atelic bounded forms like the impact semelfactive verbs. Since the direct object is irrelevant to their bounding, they do not fall within her AIH. Tenny’s proposal entails that if an event is delimited, the argument that brings about the endpoint must be located in the direct object position. She therefore has no means of explaining the boundedness of a semelfactive event such as example 15, since her claims only encompass distinctions of telicity.

15 A “bounding Theme” encompasses both Dowty’s holistic Theme and Incremental Theme.
15. (a) Mehrtens kicked the ball.
(b) Joost punched the cushion.

As I discussed in Chapter 3, a significant characteristic of the verbs that appear in the conative is that in the transitive frame they do not take a Theme as their internal argument. The argument that is in the direct object position does not undergo change or motion and is not materially affected by the action of the verb. Under Tenny’s constraint, therefore, the arguments of verbs that appear in the conative should not measure out the event and consequently the event should not be delimited. This is compatible with the conclusion drawn above in Chapter 4 that a conative event is atelic but further explanation is required as to how the semelfactives that participate in the conative frame can still be understood as bounded.

Tenny’s AIH can only provide an explanation for telicity. However, my proposal that aspectuality is a sublexical property can also encompass semelfactives’ aspectual properties. In Chapter 3, I suggested that the sublexical transitive frame of impact semelfactives was essentially a Theme-Goal structure that was then collapsed. With the potential bounding argument of the specifier of vp being incorporated into the verb itself, the telicity of an external argument shifts to performing an internal bounding role within the verb.

This is not to suggest that the self-bounding form of semelfactives is related to the telic bounding of an event brought about through the movement of a Theme argument to a Goal argument. A self-bounded event does not implicate another argument in its bounding. Instead, the nature of the self-bounding form is quite distinct from telicity. Semelfactives are therefore bounded by the shape of their Path alone. Intransitive semelfactives, such as cough, clearly show that it is the Path that bounds the event, since a conceptual ‘shape’ is present even in the absence of a Goal argument.

5.3 Paths, the conative frame and multiple events

In Chapter 4, I introduced the idea of a paradigm of goal arguments. This provided a choice between Proto-goal arguments which influence the kind of
bounding, if any, that an event would entail. Two options were presented. First, a Goal argument which provides a telic endpoint to an event and second, a Target argument towards which movement occurs but the argument is not implicated in any bounding role. This section discusses the characteristics of the members of this paradigm and explores the ways they can interact with each other. I also introduce a third distinction of a Path which provides no bounding to an event and merely indicates a directional trajectory. I will show that although an unbounded Path can co-occur with other Paths, Goal and Target arguments are incompatible with each other.

5.3.1 Goal, Target and Path phrases

Bounding in a sentence is usually understood to be provided by either a Source argument, for leftward bounding, or a traditional Goal argument, for rightward bounding. Although a Target argument does not provide bounding to an event, it seems to block the appearance of an argument, such as a Goal role, that does. This can be understood as an extension of Chomsky’s Theta Criterion to Proto-Roles since each theta role is assigned to one and only one argument there cannot be two goal arguments in a VP. If the Goal and Target roles are understood to be members of the same Proto-Role, a choice must be made between a Goal argument and a Target argument to satisfy the Theta Criterion. However, if a Path phrase is projected that does not provide a temporal bound to the event, this can be compatible with the presence of a goal phrase. In this situation, since only one of the Path phrases fits within the goal Proto-Role, the Theta Criterion is satisfied.

Consider the following example:

16. (a) Mary handed the book across the table to John.

One analysis could suggest that both John and the table are functioning as Goal arguments in this sentence. As this means both would be members of the same Proto-Role, such an analysis is contrary to the Theta Criterion and should therefore be blocked from appearing. On closer examination it can be seen that the event of

16 I use lowercase for the Proto-goal role and Uppercase for the telic Goal argument to distinguish between the two.
handing the book is actually complete when it reaches John. John therefore provides the temporal bound for the event. The other PP across the table is functioning as a Path phrase which provides the direction of the book’s movement. The event of handing the book is therefore not complete merely upon travelling across the table. It must also reach John.

I have identified the need for three different PPs to be distinguished at the sublexical level. Jackendoff (1990) provides a useful means of representing the different roles that distinct PPs play in the event structure of the sentence. Jackendoff's VIA function provides a means of representing a Path that does not provide bounding but merely indicates the trail that the Theme traverses. He uses this to represent unbounded events such as:

17. (a) Walk across the field (to get to the other side).
    
    (b) [GO [VIA (FIELD)]]

A VIA Path is not a member of the Proto-goal class. FROM indicates a Source argument. A function of TO represents the Goal argument which provides the telic bound to the event. TOWARDS introduces a Target argument which does not influence the telicity or bounding of an event. Under this proposal, example 16(a) would be represented as 16(b).

16. (b) [CAUSE (MARY, [GO (BOOK, [VIA (TABLE)] [TO (JOHN)])])]

This analysis provides a means of describing and further exploring the behaviour of complex Paths with respect to each other. The first characteristic that is revealed is that PPs can ‘stack’ or co-occur with other PPs. By this I mean that it is possible for there to be more than one PP projected in a sentence. There are constraints on ‘stacking’ related to the Proto-Role distinctions discussed above. These are based upon the Theta Criterion which prevents the same role being assigned twice. In this case, the ‘role’ is a Proto-Role that can have more than one thematic realisation.
18. **Stacking Constraint**: In a single event, PPs may 'stack' as long as there is only one Source Proto-goal argument projected at either end of the temporal event.

In other words, there can only be one Source argument and, more significantly for our discussion, only one Goal or one Target argument. More than one Proto-goal argument cannot stack or co-occur.

Two Goal arguments cannot exist in the same event.

19. (a) *He threw the ball to his friend against the fence.
(b) *[CAUSE (HE [GO (BALL [TO (FRIEND)] [TO (FENCE)])])]
(c) He threw the ball to his friend and the ball went against the fence.

The reading of 19(c) is unavailable for 19(a). Similarly, Goal and Target arguments cannot stack and therefore cannot be expressed together in the same event. This is part of the reason for the non-occurrence of the conative frame with a Goal argument. This is discussed further in Section 5.3.2.

20. (a) She hit the ball.
(b) She hit at the ball
(c) [CAUSE (SHE [GO (BAT [TOWARDS (BALL)])])]
(d) She hit the ball to the boundary.
(e) [CAUSE (SHE [GO (BALL [TO (BOUNDARY)])])]
(f) *She hit at the ball to the boundary.
(g) [CAUSE (SHE [GO (BAT [TOWARDS (BALL)])][GO (BALL [TO (BOUNDARY)])])]

In 20(b), the ball is a Target argument. It has no bounding or telic effect on the event. In 20(d), the boundary is a Goal argument and provides a telic ending to the event. *The ball* is the Theme of the second event. The Target and Goal arguments are incompatible with each other, as in example 20(f) and (g) and cannot stack because this violates the Stacking Constraint, since there are two realisations of the Proto-goal argument.
‘Stacking’ is possible through the use of via PPs, since these PPs are not part of the same Proto-goal role as the Goal and Target arguments. Their function is merely to project a Path. The following example is therefore compatible with the Stacking Constraint.

21. (a) Julie walked from her front door, past the trees, over the little bridge, around the pond to school.
   (b) [GO (JULIE, [FROM (FRONT DOOR, [VIA (TREES)], [VIA (BRIDGE)], [VIA (POND)], [TO (SCHOOL)]))]

Leftward bounding is provided by the Source argument front door and rightward bounding and telicity by the Goal argument school. The Stacking Constraint is not violated because the same Proto-Role is not realised more than once.

5.3.2 Conative and Paths

One issue which I touched on briefly in Chapters 3 and 4 and the previous section was the interaction between the impact conative and Goal arguments. I suggested that an explanation was required for the inability of the conative frame to appear with a projected PP phrase.

22. (a) John kicked the ball.
   (b) John kicked at the ball.
   (c) John kicked the ball to the sideline.
   (d) *John kicked at the ball to the sideline.

23. (a) Mark kicked the ball.
   (b) Mark kicked at ball.
   (c) Mark kicked the ball to the sideline.
   (d) *Mark kicked at the ball to the sideline.

There are three points of discussion for this issue. The first is purely an observational point. Example 23(c) is an event of caused motion. In Chapter 2, in my discussion of the exerted-force conative push/pull verbs, I showed how the effect of the at frame was to cancel any implicature of motion. On closer examination, this can be seen to be regardless of the telic nature of the event.
24. (a) Sally pushed the cart to the car in five minutes. (telic)
(b) Sally pushed the cart to the car for five minutes. (atelic)
(c) *Sally pushed at the cart to the car.
(d) *Sally pushed the cart towards the car in five minutes.
(e) Sally pushed the cart towards the car for five minutes. (atelic)
(f) *Sally pushed at the cart towards the car.

The telicity of the event is irrelevant as to whether or not the conative frame can occur with a PP. Even if the PP is atelic, introduced by the preposition TOWARDS, the conative can still not occur with it. The caused motion reading of the event itself is incompatible with the conative or at frame. This means that there should be no prima facie expectation that the conative frame would be compatible with a preposition that introduces caused motion to the event.

The second discussion point gives a sublexical explanation for behaviour of the conative frame with Path PPs. I explored this point in Chapter 3. There I suggested that example 23(c) was a different verb entry for kick, which could be glossed according to 23(d).

25. CAUSE-GO ball to sideline by kicking

Under this interpretation, propulsive kick is a synthetic verb formed from a ‘CAUSE+kick+GO’ construction. It is a different verbal structure than the impact verb kick. Caused motion events are incompatible with the conative frame because they involve a different verb structure at the sublexical level, so once more there is no reason to expect the conative frame and a directional PP to co-occur.

The third point approaches the issue from the perspective of the event as a whole and draws upon the notion of the Proto-goal role, introduced above. In Chapter 4. I showed that in the sublexical conative structure, the argument of the preposition was a Target argument. In example 23(c), the sideline is a Goal argument, since it provides a telic ending to the event. As members of the same Proto-Role, the

17 See Section 3.5.6 for the full explanation and sublexical representation of propulsive kick.
combination of the conative frame with a telic PP is a Theta Criterion clash. The Target and Goal arguments are mutually exclusive realisations for the same motion event. For there to be coherence of an event, where there is one event, there can only be one Theme-Path complex projected in a single clause.

It is difficult to ascertain exactly how example 23(c) should even be interpreted. A similar event structure but with a different verb provides option to pursue.

26. (a) ?Milly swung at the lamp into the wall.
(b) Milly swung (her fist) at the lamp, missed it and hit the wall.

Example 26(a) permits a possible strained interpretation with a single Theme understood as participating in two separate events with different Paths. This interpretation is paraphrased in example 26(b). The first Path is ‘fist at lamp’ and the second Path is ‘fist into wall’. The reading is strained because of the Theta Criterion clash. The lamp is a Target argument and the wall is a Goal. However, it is still interpretable at some level of comprehension because it can be understood in a way that is compatible with the event constraint introduced above. Although there are two separate events, it is pragmatically sound for the same Theme to be implicated in a continuous Theme-Path complex.

Such an interpretation is difficult to achieve with example 23(c). Two readings are possible. The first is ‘foot at ball’ and ‘ball to boundary’. This reading is blocked for the reasons discussed above. Kick in this event must be a propulsive verb and there is no reason to expect a propulsive verb to be found in the conative frame. There must also be two different Themes understood for the two events, which are subsumed into the single clause. The second reading which permits a ‘coherent’ event if the same Theme is understood for both Paths gives ‘foot at ball’ and ‘foot to sideline’. As discussed above, this gives a Theta Criterion clash because of the presence of both a Target and Goal in the same event. It is also pragmatically difficult to conceive the movement of the foot to the sideline.

A coherent event requires more than the same Theme repeated if multiple Paths are projected. It must also be a single coherent event. This means that there cannot be two separate Paths within the same clause. Therefore, even though PPs can
stack, their combined effect must give a single coherent Path. The combination of the impact semelfactive and a Goal phrase does not satisfy this condition.

Coherent paths or coherent events are intrinsically related to the constraints on PP stacking. These constraints are not bounding constraints, because, as discussed in Chapter 4, the Target argument has no bounding role in an event. The following table provides a summary of possible stacking options. These are a restatement of the Stacking Constraint stated above in Section 5.3.1.

<table>
<thead>
<tr>
<th>Source (optional)</th>
<th>VIA</th>
<th>Goal Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>One only</td>
<td>Any number</td>
<td>One only</td>
</tr>
</tbody>
</table>

Figure 8: PP Stacking options

The behaviour of the conative and Path phrases can be understood on three different levels. Firstly, since causal motion verbs do not appear to interact with the conative frame, verbs that appear in the conative should therefore not be expected to be found with a Goal phrase predicated of a motion event. Secondly, if Target and Goal phrases are accepted as being members of the same Proto-Role, the Theta Criterion predicts that the two arguments should not be able to appear simultaneously in the same event. Thirdly, event coherence requires there to be a single coherent Path projected which has a single Theme throughout the event.

5.3.3 Multiple event stacking

In the previous section I expanded on the Stacking Constraint by looking at the concept of event coherency. In this section I examine Gruber’s recent claim that ‘elemental thematic functions may be combined into complex structures’ (2001, 259). By this he means that if a single thematic role is present more than once in a sentence, the sentence can be understood as separate events which have more than one bounding argument. This would seem to violate both the Stacking Constraint and the constraints required by coherent events that I have introduced. This section examines Gruber's claims and shows that the need for a coherent event questions Gruber’s proposal for the existence of complex structures.

Gruber proposes that an event can be understood as being composed of more than one subevent.
27.  (a) The stone knocked the pole into the road.

(Gruber: p.259, e.g.(5)b)

Under Gruber’s approach, this example would be understood as two events. The main event is that ‘the pole entered the road’. In this event, the pole is the Theme and the road is the Goal. A subsidiary event which brings about the consequence of the main event is that of ‘the stone hitting the pole’. In this subevent, the stone is the Theme and the pole fulfils the role of Goal (Gruber 2001, 259). If we accept Gruber’s analysis there seems to be a clear violation of the Stacking Constraint proposed above, since Gruber claims that the pole and the road are both Goals. In contrast, under my analysis, I propose that the pole is not a surface Goal, because the stone-to-pole Path is not projected and therefore there is no violation of the Stacking Constraint.

Crucially, under this analysis, only one Path is actually expressed in the clause. In other words, example 27(a) is exactly the same construction as kick the ball to the boundary, in which, as argued previously above, the ball is not a surface Goal. In other words, at the sublexical level, knock is formed as a synthetic verb compound.

This can be contrasted with another of Gruber's examples. His suggested reading is included below in brackets (2001, 259).

27.  (b) The stone knocked against the pole into the road.
(c) (The stone hit the pole and the stone entered the road).

(Gruber: p.259, e.g.(5)a)

This example seems to be somewhat strained in its intended reading. The difficulty is understandable once it is discussed from the perspective of event coherence and the Stacking Constraint. Gruber intends the example he gives to illustrate the same point as example 27(a), namely that when two arguments require two separate Paths, the event must be understood as two distinct events. For example 27(b) under Gruber's reading in the first event, the stone is the Theme argument and the pole is the Goal. In the second subevent, the stone continues to be the Theme and this time the road is the Goal.
However, Gruber's proposed reading is marginal at best. Compare the following which exhibit subtle differences in the kind of Paths used to describe the movement of the Theme:

28.  
(a) *The stone knocked against the pole into the road.  
(b) ?The stone bounced against the pole into the road.  
(c) The stone bounced off the pole into the road.

Example 28(a) has two separate Paths projected. Knock first projects a Path of ‘stone to pole’ and then a second Path of ‘stone to road’. In both Path traversals the stone is the Theme argument. Against cannot be interpreted as a VIA Path and the event breaches the Stacking Constraint. Since more than one Path is projected in the same clause and the Paths do not permit an unbroken traversal, the event is incoherent and the reading marginal.

A slightly better reading is possible for example 28(b). Bounce can be understood as projecting two Paths, one of which allows movement towards an object and the other requires movement away from an object. The first Path is lexicalised within the verb and therefore does not need to be projected. However, the problem with example 28(b) is that the preposition against forces this first Path to be more concretely understood and projected. Bounce therefore experiences the same difficulties as example 28(a) with a non-coherent event because of two Paths being projected in the same event without providing a continuous Path for the Theme to follow.

Example 28(c) gives the best reading. This is because only one Path is expressed. The event is ‘stone from pole to road’. In this event, the stone is the Theme that travels from the Source argument, the pole, to the Goal argument, the road. The event is well-formed and is compatible with the Stacking Constraint because there is only one Proto-goal role realised.

A closer examination of Gruber’s examples suggests that multiple events are dependent on event coherency constraints. If more than one Path is projected, they must provide a continuous, unbroken Path for the Theme to travel across.
5.4 Conclusion

In this chapter I have looked at the aspectual theories of Dowty and Tenny and have suggested that the claims they make do not extend to the impact frame. Traditional telicity discussions cannot explain the bounding characteristics of the impact semelfactives. I have shown that aspectual claims are more likely to be related to a sublexical position than to the syntactic projection and realisation of an argument.

The Patient Proto-Role was also introduced and some of the characteristics of the non-Theme Patient clarified. This argument cannot be projected into the syntax alongside a Theme argument because this is a breach of the Theta Constraint. It is not found with change-of-state or translocation verbs and is instead typically found as the object of impact verbs as an ‘affected’ argument. Its sublexical analysis shows it is a ‘promoted’ Goal argument, with an underlying compressed Theme-Goal structure that is not projected to surface level.

I have also examined the distinction between Goal and Target arguments in more depth than was possible in the earlier chapters. Goal and Target arguments are two options within the Proto-goal role and are incompatible with each other in the same event. They are distinct from VIA Path phrases which are not members of the same Proto-Role. The requirement for conceptual coherence gives rise to the observations made in this section about PP stacking. The Stacking Constraint therefore provides a formalisation for the behaviour of different Path phrases with respect to each other. For there to be coherence of an event, where there is one event, there can only be one Theme-Path complex projected in a single clause. Multiple event stacking, as Gruber discusses, is not interpretable, unless this constraint is satisfied.
Concluding Remarks

My investigation of the conative alternation has broadened into issues beyond the basic nature of the frame. It has focused on the behaviour and characteristics of the impact semelfactive verbs and this has led into an exploration of the non-Theme Patient argument.

A central aspect of this thesis has been a literature review and a reclassification of the data that various writers have claimed participate in the alternation. One of my central conclusions is that the construction commonly referred to as the “conative alternation” in the literature actually breaks down to four distinct frames. Of these four frames, I have focused on one in particular, the “impact frame”. The KICK/PUNCH and JAB/POKE verb groups are found in the impact frame. The transitive impact frame entails contact with its direct object but not change-of-state. The conative impact frame carries a semantic meaning of movement toward the direct object but removes the implicated contact of the transitive frame. Its reading is therefore one of missed contact.

The verbs that are found in the impact frame are semelfactive verbs. Their key characteristics are that they are easily repeatable and each repetition is individually countable.

Theme Incorporation

A key feature of the conative alternation is that the direct object that is projected in the transitive frame is not a Theme argument. The Theme itself is not projected into the surface syntax. Instead, analogous to Hale & Keyser’s approach to sublexical representation, it is incorporated into the verb at the sublexical stage. I approached both the transitive and conative frames from the perspective of a motion event.

The sublexical transitive frame is therefore like a typical Theme-Goal structure that can be understood as x CAUSE y GO TO z. Before syntactic projection, the Theme-Goal structure is collapsed and the Theme and Path incorporated into the verb itself. The Goal argument is promoted to the direct object position because the Theme is no longer visible to the syntax. Its syntactic position entails contact with the incorporated Theme of the event. In this promotion the surface direct object loses
some of its core Goal-like qualities and is better analysed as a non-Theme Patient argument. The bounding characteristics of the Patient argument are discussed below.

The conative frame of the impact conative similarly does not project a Theme argument into the syntax. Its sublexical structure includes an AT preposition which projects an orientational Path that selects a Target argument as its potential endpoint. In terms of a motion event, the parallel structure would be $x \text{ CAUSE } y \text{ GO AT } z$. A Target argument does not entail contact with the Theme argument. Before projection to the syntax, the Theme argument is incorporated into the verb but the preposition and its Path remain projected.

In both the conative and transitive forms, the Theme argument is the ‘subject’ of the motion event.

**Bounding**

Other authors have commented on the aspectual characteristics of the conative alternation and suggested that there is an aspectual distinction between the two frames. I queried this claim and focused on the aspectual behaviour of the semelfactive verbs, the key participants in the impact frame.

I showed how the bounding of semelfactive events is not related to the direct object in the surface representation, and therefore how traditional telicity discussions do not accommodate it within their scope. I introduced a new distinction in the aspectual terminology, whereby ‘telic’ refers to events that have an entailed endstate reading (including translocation), and ‘bounding’ refers to events that have a temporal end but do not entail an endstate. The impact frames are therefore atelic but bounded and there is no aspectual difference between the two frames.

The semelfactive verbs illustrate the concept of atelic bounded through the shape of their event. No external argument, such as the direct object, is involved in the bounding of the event, even in the transitive frame when contact is entailed.

**Paths and multiple events**

As part of the discussion of sublexical representation, I made an explicit distinction between the roles of Goal and Target that appear in the transitive and conative frames respectively. I showed how these two roles are mutually exclusive
realisations of the same Proto-goal role. This characteristic impacts upon the general restraints on Path stacking and multiple event coherency.
References


6 Appendix

6.1 Contact Conative

6.1.1 Brush/sweep

<table>
<thead>
<tr>
<th>Verb sense</th>
<th>Judge 1</th>
<th>X V-ed Y</th>
<th>Judge 2</th>
<th>X V-ed at Y</th>
<th>X gave Y a V</th>
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<tbody>
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<td>brush 1</td>
<td>1</td>
<td>she brushed her teeth</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<tr>
<td>brush 3</td>
<td>1</td>
<td>she brushed the floor</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>she dusted the table</td>
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<td>she dusted the ornament</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>scrape 2</td>
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<td>she scraped the dishes</td>
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<td>1</td>
<td>1</td>
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<td>scrape 3</td>
<td>1</td>
<td>she scraped the old varnish on the table</td>
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<td>1</td>
<td>1</td>
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<td>1</td>
<td>1</td>
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<td>she wiped the table</td>
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<td>she wiped the spill</td>
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</tr>
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<td>1</td>
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<td>the machine ground the coffee</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
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<td>scour 3</td>
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<td>she scoured the dried weetbix that was stuck on the bowl</td>
<td>1</td>
<td>1</td>
<td>3</td>
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<td>1</td>
<td>she scoured the pot</td>
<td>1</td>
<td>1</td>
<td>3</td>
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<td>1</td>
<td>the buckle wore the leather</td>
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<td>1</td>
<td>3</td>
</tr>
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<td>eat 6</td>
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<td>1</td>
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<td>1</td>
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<td>she filed the metal</td>
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<td>file 3</td>
<td>1</td>
<td>she filed her nails</td>
<td>2</td>
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### 6.1.2 Grip

<table>
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<tr>
<th>Verb sense</th>
<th>X V-ed Y</th>
<th>Judge 1</th>
<th>X V-ed at Y</th>
<th>Judge 2</th>
<th>X V-ed away at Y</th>
<th>X gave Y a V</th>
</tr>
</thead>
<tbody>
<tr>
<td>squeeze 2</td>
<td>he squeezed her hand</td>
<td>1</td>
<td>he squeezed at her hand</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>clasp 4</td>
<td>the child clasped her hand</td>
<td>1</td>
<td>the child clasped at her hand</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>grip 1</td>
<td>she gripped the steering wheel</td>
<td>1</td>
<td>she gripped at the steering wheel</td>
<td>1</td>
<td>3</td>
<td>3</td>
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<tr>
<td>clutch 1</td>
<td>she clutched her handbag</td>
<td>1</td>
<td>she clutched at her handbag</td>
<td>1</td>
<td>3</td>
<td>3</td>
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<td>grasp 1</td>
<td>she grasped her handbag</td>
<td>1</td>
<td>she grasped at her handbag</td>
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### 6.1.3 Chop

<table>
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<th>X V-ed at Y</th>
<th>Judge 2</th>
<th>X V-ed away at Y</th>
<th>X gave Y a V</th>
</tr>
</thead>
<tbody>
<tr>
<td>chop 1</td>
<td>she chopped the vegies</td>
<td>1</td>
<td>she chopped at the vegies</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>hammer 1</td>
<td>she hammered the metal</td>
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<td>she hammered at the metal</td>
<td>1</td>
<td>1</td>
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</tr>
<tr>
<td>dig 4</td>
<td>she dug the sand (to get pipis)</td>
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<td>she dug at the sand</td>
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<td>she dug the vegie garden</td>
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<td>she dug at the vegie garden</td>
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<td>the editor hacked the manuscript</td>
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<td>the editor hacked at the manuscript</td>
<td>1</td>
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<td>chip 4</td>
<td>he chipped the design (into the stone)</td>
<td>2</td>
<td>he chipped at the design</td>
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<td>hack 7</td>
<td>he hacked the shrub</td>
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<td>cut 33</td>
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<td>the machine punched the leather</td>
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### 6.2 Exerted force frame

#### 6.2.1 Push/pull

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<tr>
<th>Verb sense</th>
<th>X V-ed Y</th>
<th>Judge 1</th>
<th>X V-ed at Y</th>
<th>Judge 2</th>
<th>X V-ed away at Y</th>
<th>X gave Y a V</th>
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<td>he pulled the cart</td>
<td>1</td>
<td>he pulled at the cart</td>
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<td>she pulled the rope</td>
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<td>he pushed the trolley</td>
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### 6.3 Impact Frame

#### 6.3.1 Kick/punch

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<th>Judge 1</th>
<th>X V-ed at Y</th>
<th>Judge 2</th>
<th>X V-ed away at Y</th>
<th>X gave Y a V</th>
</tr>
</thead>
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<td>kick 2</td>
<td>the boy kicked the dog</td>
<td>1</td>
<td>the boy kicked at the dog</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>jab 2</td>
<td>the fighter jabbed his opponent (with his right fist)</td>
<td>1</td>
<td>the fighter jabbed at his opponent</td>
<td>1 1 1</td>
<td>1 1 1</td>
<td></td>
</tr>
</tbody>
</table>
### 6.3.2 Jab/poke

<table>
<thead>
<tr>
<th>Verb sense</th>
<th>X V-ed Y</th>
<th>Judge 1</th>
<th>X V-ed at Y</th>
<th>Judge 2</th>
<th>X V-ed away at Y</th>
<th>X gave Y a V</th>
</tr>
</thead>
<tbody>
<tr>
<td>slap 1</td>
<td>the impatient teacher slapped the pupil</td>
<td>1</td>
<td>the impatient teacher slapped at the pupil</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>flick 8</td>
<td>she flicked his ear</td>
<td>1</td>
<td>she flicked at his ear</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>hack 8</td>
<td>she hacked her opponent's shins with her hockey stick</td>
<td>1</td>
<td>she hacked at her opponent's shins</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>poke 3</td>
<td>she poked the fire</td>
<td>1</td>
<td>she poked at the fire</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>poke 5</td>
<td>he poked the paper (with a pen) to make a hole</td>
<td>1</td>
<td>he poked at the paper</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>prod 1</td>
<td>she prodded his arm</td>
<td>1</td>
<td>she prodded at his arm</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>slash 1</td>
<td>he slashed the mangroves</td>
<td>1</td>
<td>he slashed at the mangroves</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>squirt 2</td>
<td>she squirted the wall (with her waterpistol)</td>
<td>1</td>
<td>she squirted at the wall</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>stab 2</td>
<td>the needle stabbed the cloth</td>
<td>1</td>
<td>the needle stabbed at the cloth</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>stab 3</td>
<td>he stabbed her arm (with his finger)</td>
<td>1</td>
<td>he stabbed at her arm</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>hack 3</td>
<td>the gardener hacked the shrub</td>
<td>1</td>
<td>the gardener hacked at the shrub</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>peck 2</td>
<td>the bird pecked the bread</td>
<td>1</td>
<td>the bird pecked at the bread</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>splash 1</td>
<td>she splashed the water</td>
<td>1</td>
<td>she splashed at the water</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>strike 2</td>
<td>she struck the ball</td>
<td>1</td>
<td>she struck at the ball</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>jab 1</td>
<td>he jabbed her stomach (with the pen)</td>
<td>1</td>
<td>he jabbed at her stomach</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>swat 1</td>
<td>he swatted the fly</td>
<td>1</td>
<td>he swatted at the fly</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>butt 2</td>
<td>the goat butted the fence</td>
<td>1</td>
<td>the goat butted at the fence</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>poke 1</td>
<td>he poked her arm</td>
<td>1</td>
<td>he poked at her arm</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>prick 1</td>
<td>the nurse pricked my finger (to get a blood sample)</td>
<td>1</td>
<td>the nurse pricked at my finger</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>hit 4</td>
<td>the fighter hit his opponent</td>
<td>1</td>
<td>the fighter hit at his opponent</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
### 6.4 Generic at frame

#### 6.4.1 Rub/scratch

<table>
<thead>
<tr>
<th>Verb sense</th>
<th>X V-ed Y</th>
<th>Judge 1</th>
<th>X V-ed at Y</th>
<th>Judge 2</th>
<th>X V-ed away at Y</th>
<th>X gave Y a V</th>
</tr>
</thead>
<tbody>
<tr>
<td>rub 1</td>
<td>she rubbed the spot</td>
<td>1</td>
<td>she rubbed at the spot</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>rub 3</td>
<td>she rubbed the itchy bite</td>
<td>1</td>
<td>she rubbed at the itchy bite</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>scratch 3</td>
<td>she scratched the itchy bite</td>
<td>1</td>
<td>she scratched at the itchy bite</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>sweep 1</td>
<td>her skirt swept the floor</td>
<td>1</td>
<td>she swept at the floor</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>mop 3</td>
<td>he mopped his brow</td>
<td>1</td>
<td>he mopped at his brow</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>rub 0</td>
<td>she rubbed the fingerprints (locatum)</td>
<td>1</td>
<td>she rubbed at the fingerprints</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>rub 0</td>
<td>she rubbed the table (location)</td>
<td>1</td>
<td>she rubbed at the table</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>brush 2</td>
<td>he brushed her cheek (with his lips)</td>
<td>1</td>
<td>he brushed at her cheek</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>brush 4</td>
<td>her skirt brushed the floor</td>
<td>1</td>
<td>her skirt brushed at/on the floor</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>itch 1</td>
<td>she itched her arm</td>
<td>1</td>
<td>she itched at her arm</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>scratch 2</td>
<td>the ostrich scratched the dirt</td>
<td>1</td>
<td>the ostrich scratched at the dirt</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>suck 2</td>
<td>the vacuum cleaner sucked the dirt</td>
<td>1</td>
<td>the vacuum cleaner sucked at the dirt</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>draw 15</td>
<td>she drew the card</td>
<td>1</td>
<td>she drew at the card</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>draw 12</td>
<td>she drew the cigarette</td>
<td>3</td>
<td>she drew at the cigarette</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Verb</td>
<td>X V-ed Y</td>
<td>Judge 1</td>
<td>Judge 2</td>
<td>X V-ed away Y</td>
<td>X gave Y a V</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>---------</td>
<td>---------</td>
<td>---------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>chew 1</td>
<td>she chewed the sandwich</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>gnaw 1</td>
<td>the dog gnawed the bone</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>nibble 1</td>
<td>she nibbled the sandwich</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>peck 1</td>
<td>the kea pecked the tyre</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>scratch 3</td>
<td>she scratched the itchy bite</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>chomp 1</td>
<td>she chomped the sandwich</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>munch 2</td>
<td>she munched the celery</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>paw 1</td>
<td>the bear pawed the door</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>rake 1</td>
<td>she raked her hair (with her fingers)</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>claw 3</td>
<td>the lion clawed its prey</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>crunch 4</td>
<td>she crunched the carrot</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>paw 1</td>
<td>the drunken man pawed the young woman</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>pinch 2</td>
<td>she pinched the pastry edges of the pie</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>lick 2</td>
<td>she licked the ice-cream</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>suck 1</td>
<td>she sucked the sweet</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
### 6.4.3 Sponge

<table>
<thead>
<tr>
<th>Verb sense</th>
<th>X V-ed Y</th>
<th>Judge 1</th>
<th>X V-ed at Y</th>
<th>Judge 2</th>
<th>X V-ed away at Y</th>
<th>X gave Y a V</th>
</tr>
</thead>
<tbody>
<tr>
<td>knock 2</td>
<td>she knocked the door</td>
<td>1</td>
<td>she knocked at/on the door</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>powder 2</td>
<td>she powdered her nose</td>
<td>1</td>
<td>she powdered at her nose</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>pump 1</td>
<td>she pumped the handle</td>
<td>1</td>
<td>she pumped at the handle</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>rap 1</td>
<td>the music teacher rapped the pupil's knuckles with the ruler</td>
<td>1</td>
<td>the music teacher rapped at the pupil's knuckles</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>rap 2</td>
<td>she rapped the table with her knuckles</td>
<td>1</td>
<td>she rapped at the table</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>tap 6</td>
<td>she tapped the table</td>
<td>1</td>
<td>she tapped at the table</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>sponge 1 (location)</td>
<td>she sponged the wine that the guest had spilt</td>
<td>1</td>
<td>she sponged at the wine</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>pound 2</td>
<td>he pounded the metal (with a hammer)</td>
<td>1</td>
<td>he pounded at the metal</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>batter 1</td>
<td>the wind battered the tent</td>
<td>1</td>
<td>the wind battered at the tent</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>beat 18</td>
<td>she beat the drum</td>
<td>1</td>
<td>she beat at the drum</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>beat 3</td>
<td>she beat the table with her shoe</td>
<td>1</td>
<td>she beat at the table with her shoe</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>beat 6</td>
<td>the rain beat the window all night</td>
<td>2</td>
<td>the rain beat at the window all night</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>daub 2</td>
<td>she daubed the wall (with paint)</td>
<td>1</td>
<td>she daubed at the wall</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>drum 1</td>
<td>she drummed the table (with her shoe)</td>
<td>1</td>
<td>she drummed at the table (with her shoe)</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>hack 1</td>
<td>he hacked the wood with his axe</td>
<td>1</td>
<td>he hacked at the wood</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>peck 4</td>
<td>she pecked the cake</td>
<td>3</td>
<td>she pecked at the cake</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>hew 2</td>
<td>he hewed the tree</td>
<td>1</td>
<td>he hewed at the tree</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>whip 4</td>
<td>the wind whipped her cheeks</td>
<td>1</td>
<td>the wind whipped at her cheeks</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>lash 1</td>
<td>the guard lashed the prisoner (with a whip)</td>
<td>1</td>
<td>the guard lashed at the prisoner</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>sponge 1 (localum)</td>
<td>she sponged the carpet after the guest spilt wine on it</td>
<td>1</td>
<td>she sponged at the carpet</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>pound 2</td>
<td>he pounded the metal (with a hammer)</td>
<td>1</td>
<td>he pounded at the metal</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>sponge 1 (localum)</td>
<td>she sponged the carpet after the guest spilt wine on it</td>
<td>1</td>
<td>she sponged at the carpet</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>dab 2</td>
<td>she dabbed the carpet</td>
<td>1</td>
<td>she dabbed at the carpet</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>bite 2</td>
<td>the chill wind bit her</td>
<td>2</td>
<td>the chill wind bit at her</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>peck 5</td>
<td>she pecked her husband (all day long)</td>
<td>3</td>
<td>she pecked at her husband</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Action</td>
<td>Phrase</td>
<td>Count</td>
<td>Modified Phrase</td>
<td>Count</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>-----------------</td>
<td>--------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>prick 6</td>
<td>the thought of her unhappiness pricked his conscience</td>
<td>1</td>
<td>the thought of her unhappiness pricked at his conscience</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>prick 2</td>
<td>the thistle pricked her arm</td>
<td>1</td>
<td>the thistle pricked at her arm</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kiss 2</td>
<td>the soft rain kissed the buds</td>
<td>1</td>
<td>the soft rain kissed at the buds</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>