1-1-2011

Verbal -s in Vernacular Newfoundland English: A Combined Variationist and Formal Account of Grammatical Change

Philip Comeau
York University, comeau.philip@uqam.ca
Verbal -s in Vernacular Newfoundland English: A Combined Variationist and Formal Account of Grammatical Change

Abstract
While most studies of generalised verbal –s report the effects of the Northern Subject Rule (subject type and adjacency between the subject and the verb condition verbal –s), work on this feature in Vernacular Newfoundland English (VNE) report a lack of NSR effects. Instead, verbal –s in VNE is associated with habitual aspect and verb stativity. This paper integrates generative and variationist approaches to account for variation and change in the VNE aspect system. Quantitative results confirm a change in progress: there is a decrease in overall rate of verbal –s and a change in constraints across apparent time. Older consultants’ use of verbal –s is constrained by both habituality and stativity while the middle-aged cohort’s system involves only verb stativity. Younger consultants show a different system within which particular adverbials favor verbal –s. Formally, since both habituals and statives are imperfective, I posit that verbal –s is an imperfective marker in this variety. The linguistic change can be accounted for under Minimalism by positing a change in the featural specification of the Aspect head from one which is intrinsically specified for the imperfective feature prior to syntax to one which must be bound by an operator, in this case, quantificational adverbials.
Verbal -s in Vernacular Newfoundland English: A Combined Variationist and Formal Account of Grammatical Change

Philip Comeau*

1 Introduction

Generalized verbal -s is a vernacular feature that has been studied in many varieties of English (e.g., African American Vernacular English, Appalachian English, Devon English, Irish English, and Vernacular Newfoundland English, among others). It involves the possibility of affixing the suffix -s to all persons and numbers of present tense verbs. (1) shows an example with verbal -s while (2) shows the absence of -s-marking.

(1) Her mom and dad loves red wine. (PH R)
(2) They read the paper to keep up with it. (PH F)

Prominent in the research literature on this variable is the effect of the Northern Subject Rule (NSR), a constraint involving the subject type and adjacency between the subject and verb. The NSR stipulates that a non-adjacent pronominal subject or a noun phrase subject is likely to result in verbal -s presence. Conversely, an adjacent pronominal subject is likely to occur without -s-marking on the verb. Many studies have found the NSR to be operating in varieties of English on both sides of the Atlantic, such as in early African American English (Poplack and Tagliamonte 1989), Southern Irish English (McCafferty 2004), Devon English (Godfrey and Tagliamonte 1999), etc. However, work on Newfoundland varieties of English has found a lack of NSR effects (Clarke 1997). In these varieties, verbal -s is arguably used to mark aspectual distinctions rather than linear adjacency.

This paper presents an analysis of verbal -s in a variety of Vernacular Newfoundland English spoken in the neighboring communities of Petty Harbour and Maddox Cove, located close to the city of St. John’s, the provincial capital of the Canadian province of Newfoundland and Labrador. The analysis combines variationist methodology and formal generative theory to account for variation and change. The use of this integrated approach contributes to current work which seeks to bridge the gap between these two (seemingly disparate) areas of research (e.g., Adger 2006, Adger and Smith 2010, Cornips and Corrigan 2005, Parrott 2007).

2 Prior Research on Verbal -s

Verbal -s is a remnant of a more complex system of verbal agreement found in earlier stages of English. It likely originated as a second person singular suffix which, following a period of variation, supplanted -b which had been suffixed to verbs with both third person singular and all plural subjects (Holmqvist 1922). While verbal -s originated in the north, by the Middle English period it had spread throughout Britain. By the fifteenth century, it was found with all persons and numbers. Although modern standard English retains the -s suffix with third person singular subjects, generalized verbal -s persists in many varieties.

While studies of North American and British varieties of English reveal a range of constraints which condition verbal -s, the NSR has been found to be operative in most varieties. However, as noted above, work on varieties of Newfoundland English reveals a system in which verbal -s is used to mark particular aspectual distinctions (Clarke 1997, 1999, Van Herk, Childs, and Thorburn 2009). While some studies report high rates of verbal -s use in varieties of Newfoundland English

*I thank Ruth King and Rick Grimm for comments on earlier versions of this paper. Thanks also to Gabriela Alboiu, Sandra Clarke, Gerard Van Herk, James Walker, and the students at the MUSL lab for discussion and comments.

1 Codes refer to speaker number and line number in the Petty Harbour/Maddox Cove Corpus (Van Herk, Childs, and Thorburn 2009). Examples are reproduced verbatim from speaker utterances.
(e.g., Clarke 1997 reports an overall rate of 68% for small communities in the Burin area, \(^2\) at some remove from the capital), others report lower rates (Van Herk, Childs, and Thorburn 2009 report an overall rate of 5.6% for Petty Harbour/Maddox Cove). However, Van Herk, Childs, and Thorburn (2009) report that while the overall rate of verbal -s in Petty Harbour/Maddox Cove is in decline, it has become a salient feature of Vernacular Newfoundland English (i.e., it may be used to index Newfoundland identity).

3 Community and Methodology

3.1 Petty Harbour/Maddox Cove

The data for this study were collected in the neighboring communities of Petty Harbour and Maddox Cove (with a population of approximately 1,000), located 15 kilometers southeast of St. John’s. In recent years, Petty Harbour/Maddox Cove has shifted from a traditional economy (one based largely on the fishing industry) to a community economically dependent on non-traditional sources of income, such as tourism. Many residents also commute to the capital for work.

The data on which this study is based were extracted from the Petty Harbour/Maddox Cove Corpus (Van Herk, Childs, and Thorburn 2009) housed at the Memorial University Sociolinguistics Laboratory. The corpus currently comprises 51 sociolinguistic interviews collected since 2006. This paper makes use of 28 of these interviews, 24 of which were reported on by Van Herk, Childs, and Thorburn (2009).

Prior research on Vernacular Newfoundland English (hereafter VNE) has argued that verbal -s functions as an aspect marker. In particular, Sandra Clarke’s work (1997, 1999, 2010) shows that it functions as a habitual aspect marker in traditional varieties, as shown in (3), while Van Herk, Childs, and Thorburn (2009) argue that in Petty Harbour/Maddox Cove, particular clauses with an adverbial function introduced by when and whenever favor verbal -s, as shown in (4). They also argue that it functions to mark stativity on the verb, as shown in (5).

\[
\begin{align*}
(3) & \quad \text{...and I do} a \text{ lot of speeches.} & \text{(PH q)} \\
(4) & \quad \text{When I look} \text{ back at it now.} & \text{(PH a)} \\
(5) & \quad \text{I’m still interested in the fishing. Loves look at the, the boats.} & \text{(PH &)}
\end{align*}
\]

Van Herk, Childs, and Thorburn conducted quantitative analyses for the community as a whole and found a general decline in rates of use of verbal -s across (apparent) time. The additional four interviews included in the present analysis increase the sample size and amount of data from that of the 2009 study in order to allow for separate multivariate analyses to be conducted for different age cohorts. This approach will allow us to determine whether there is a change in the linguistic system across time since the effects of potential linguistic conditioning factors will be tested separately for each age cohort. A change in the linguistic constraints would suggest, beyond declining overall rates, that the aspextual system of Petty Harbour/Maddox Cove speakers is currently undergoing a change.

3.2 Methodology

The methodological approach used in this paper integrates current variationist methodology with recent developments in formal generative theory. As such, this paper contributes to a fairly recent line of inquiry which seeks to account for variation by building optionality in the grammar. Work by a number of researchers (Adger 2006, Adger and Smith 2010, Cornips and Corrigan 2005, Parrott 2007) has made use of Distributed Morphology (Embick and Noyer 2007, Halle and Marantz 1993), a framework within the Minimalist Program (Chomsky 1995, 2000, 2001) which argues that morphological processes involve the same mechanisms as do the syntactic component. The morphological processes can apply at different points in the grammar such as at Spell-Out or within the level of Morphological Structure which occurs following Spell-Out, but prior to Phonetic...
Form, as shown in Figure 1.

Figure 1: The inverted Y-model of grammar.

For the quantitative analyses, I used Goldvarb X, a main effects logistic regression program widely used in variationist sociolinguistics. Following current variationist practice, I circumscribed the variable context and considered a number of potential conditioning factors. As noted above, independent quantitative analyses were performed for each age cohort.

The present study seeks to answer three research questions: 1) What is/are the function(s) of verbal -s in this variety of VNE? That is, does it mark habituality and/or stativity of the verb? 2) Has the aspectual system of Petty Harbour/Maddox Cove VNE speakers changed across time? 3) If the age cohorts pattern differently, how might we account for these differences in the VNE grammar(s)?

4 Quantitative Analysis

4.1 The Variable Context

In order to determine the contexts where verbal -s occurs, I first considered all present temporal reference simple verbs, as these are contexts where verbal -s can potentially occur.\(^3\) This broad definition, however, needed refinement. First, tokens were excluded if they occurred with a third person singular subject, since these invariably occur with an -s in the data (6).

(6) He smokes. \((\text{PH R})\)

Tokens with the lexical verb got were excluded since these were likewise invariant, never taking s-marking (7) (Clarke 1997).

(7) Yes I got a dog named (name).\(^4\) \((\text{PH f})\)

Tokens with invariant be were excluded, as in (8), since they likewise never bear s-marking in the data.\(^5\)

---

\(^3\)This excludes composed forms, such as verbs with auxiliaries such as have, do, etc., which do not bear s-marking other than with a third person singular subject.

\(^4\)The Petty Harbour/Maddox Cove Corpus is anonymized; therefore, any identifying information for this small community, such as the consultant’s pet’s name in this example, is removed.

\(^5\)Another form of be, called habitual be, was rare in the data, though it is attested in other varieties of VNE (Clarke 2010).
(8) I be like my mom. (PH d)

Tokens with the lexical verb have were excluded for the younger and middle-age cohorts since they were invariant, as shown in (9), but not with the older cohort as these consultants use verbal -s with this verb, as shown in (10).

(9) We have concerts. (PH i)
(10) Yes! We have a ball [at regularly held neighborhood parties]. (PH F)

Clarke notes that while lexical have behaves like other lexical verbs in conservative VNE, auxiliary have and auxiliary do never take s-marking, even in the third person singular, illustrated in (11) and (12), taken from Clarke (2010:75).

(11) No, she haven’t been nowhere the (‘this’) summer. (Lanari 1994/FL)
(12) B. wants me, do she? (MUNFLA C404, northeast coast)

Sentence fillers (e.g., you know, I think) and false starts were also excluded. Tokens from consultants who did not themselves display variable usage were also excluded. In all cases, these subjects did not use s-marking except with a third person singular subject. Table 1 provides the social characteristics of the six invariant speakers as well as the number of tokens which were subsequently excluded from the multivariate analyses.

<table>
<thead>
<tr>
<th>Consultant Code</th>
<th>Sex</th>
<th>Age cohort</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>c</td>
<td>female</td>
<td>younger</td>
<td>111</td>
</tr>
<tr>
<td>b</td>
<td>male</td>
<td>younger</td>
<td>22</td>
</tr>
<tr>
<td>z</td>
<td>female</td>
<td>younger</td>
<td>3</td>
</tr>
<tr>
<td>i</td>
<td>female</td>
<td>younger</td>
<td>47</td>
</tr>
<tr>
<td>x</td>
<td>female</td>
<td>younger</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>female</td>
<td>middle-age</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 1: Categorical -∅ speakers (excluded from the multivariate analyses).

It is predominantly younger female consultants who categorically avoid non-standard verbal -s. This observation lends support to Van Herk, Childs, and Thorburn’s claim that young females are the leaders in the loss of verbal -s in VNE.

4.2 The Social and Linguistic Constraints

A number of potential conditioning factors (both social and linguistic) were considered to determine their influence on variant choice. In terms of social factors, both age and sex were considered. For age, the same three-way division used by Van Herk, Childs, and Thorburn is adopted here (younger: <30, middle-age: 30–59, older: >60). As for the linguistic factors, a number of factor groups were included based on hypotheses found in the literature. Since previous studies on VNE have argued that verbal -s is related to habitual aspect, the sentential aspect for each token was coded as either habitual (13) or non-habitual (14). Habitual aspect is defined as situations which occur repeatedly on separate occasions.

(13) They come here in the morning. (PH &)
(14) I stay alone. (PH k)

Since Van Herk, Childs, and Thorburn (2009) report that constructions which have an adverbial function condition use of verbal -s, the data were coded based on whether the token was in the subordinate clause of a conditional sentence (15), or in a clause with when(ever) (16), or with a habitual adverb (17), or with another adverb (18), or with no adverbial specification (19).
If you throws a case of beer, they were only more than happy to help. (PH %)
(16) That’s when you gets into freezing spray at the cold times of year. (PH O)
(17) …usually we put a filet, a couple of filets of fish in. (PH %)
(18) Well, I just love a traditional fish feed. (PH %)
(19) I loves them all. (PH f)

Van Herk, Childs, and Thorburn also report that verbal -s is associated with stative verbs. In order to test whether this finding holds for the current expanded data set, each lexical verb was coded for lexical aspect independent of the situational aspect of the clause. The coding is based on Walker 2001, who operationalized this factor by adopting Olsen’s (1997) analysis of stative verbs as lacking the privative feature [dynamic]. The same approach is taken here whereby each lexical verb was coded as either stative (20) or non-stative (21).

(20) I live in Maddox Cove. (PH p)
(21) …and you put milk on it. (PH H)

The literature on verbal -s also suggests the possible effect of phonological conditioning on variant choice (Poplack and Tagliamonte 1989). Therefore, I coded for the following segment, vowel (22) and consonant (23).

(22) You put out your thumb. (PH a)
(23) So, I let them decide. (PH p)

Since prior research on varieties of VNE, including the prior study of Petty Harbour/Maddox Cove, found no effect of the NSR, factor groups relating to the grammatical subject (e.g., subject type and adjacency) were not considered in this study.

4.3 Quantitative Results

The initial results reveal that verbal -s occurs at an overall rate of only 8% (N=1,261). However, once the effects of social factors are considered, the quantitative results confirm Van Herk, Childs, and Thorburn’s (2009) finding that rates of verbal -s decrease across (apparent) time and that females consistently have lower rates of verbal -s than males in all age groups. The results for the social factors are shown in Table 2.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Weight</th>
<th>%</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;60</td>
<td>.64</td>
<td>14</td>
<td>353</td>
</tr>
<tr>
<td>&lt;30</td>
<td>.45</td>
<td>7</td>
<td>653</td>
</tr>
<tr>
<td>30–59</td>
<td>.44</td>
<td>6</td>
<td>255</td>
</tr>
<tr>
<td>Range</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>.60</td>
<td>12</td>
<td>732</td>
</tr>
<tr>
<td>female</td>
<td>.43</td>
<td>6</td>
<td>529</td>
</tr>
<tr>
<td>Range</td>
<td>17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Multivariate analysis of social factors conditioning verbal -s usage.

The results in Table 2 show that the oldest cohort favors verbal -s with a factor weight of .64. However, the overall rate of use is low (14%). The youngest cohort shows a disfavoring effect with a factor weight of .45. Likewise, the middle-aged cohort disfavors verbal -s with a factor...

Due to low numbers, only a broad categorization could be tested for this factor group.
weight of .44. This pattern of decline suggests a change in progress in the direction of the loss of verbal -s. Beyond a decrease in overall rates, this paper seeks to address whether the change in progress entails a change in speakers’ linguistic systems. Separate multivariate analyses for each age cohort will reveal whether the linguistic systems of VNE Petty Harbour/Maddox Cove speakers have changed across time. Speaker sex also emerges as statistically significant, with men favoring verbal -s use. This again supports Van Herk, Childs, and Thorburn’s claim that young females are leading the change in the loss of verbal -s.

The results for the linguistic constraints are shown in Table 3. In contrast to Van Herk, Childs, and Thorburn’s (2009) analysis of data from the same community, I conducted separate multivariate analyses per age cohort in order to determine whether the linguistic system of the community has changed across time.

<table>
<thead>
<tr>
<th>Sentential Aspect</th>
<th>Older</th>
<th>Middle-age</th>
<th>Younger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitual</td>
<td>Input .146</td>
<td>FW % N</td>
<td>Input .057</td>
</tr>
<tr>
<td>durative/punctual</td>
<td>.68 27 41</td>
<td></td>
<td>.64 10 113</td>
</tr>
<tr>
<td>Range</td>
<td>22</td>
<td>ns: following seg.</td>
<td>23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lexical Aspect</th>
<th>Input .157</th>
<th>Input .057</th>
<th>Input .077</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stative</td>
<td>.66 27 41</td>
<td>.64 10 113</td>
<td>.75 20 15</td>
</tr>
<tr>
<td>Non-stative</td>
<td>.43 12 91</td>
<td>.38 4 138</td>
<td>.25 3 148</td>
</tr>
<tr>
<td>Range</td>
<td>23</td>
<td>26</td>
<td>50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adverbial Specification</th>
<th>Older</th>
<th>Middle-age</th>
<th>Younger</th>
</tr>
</thead>
<tbody>
<tr>
<td>If clauses</td>
<td>[ ] 7 14</td>
<td>[ ] 9 109</td>
<td>[ ] 7 14</td>
</tr>
<tr>
<td>None</td>
<td>[ ] 6 54</td>
<td>[ ] 15 175</td>
<td>[ ] 6 54</td>
</tr>
<tr>
<td>When(ever)</td>
<td>[ ] 0 36</td>
<td>[ ] 15 175</td>
<td>[ ] 0 36</td>
</tr>
<tr>
<td>Habitual adverbs</td>
<td>[ ] 3 73</td>
<td>[ ] 15 175</td>
<td>[ ] 3 73</td>
</tr>
<tr>
<td>Other adverbs</td>
<td>[ ]</td>
<td>[ ] 15 175</td>
<td>[ ]</td>
</tr>
<tr>
<td>Range</td>
<td>[ ]</td>
<td>[ ] 15 175</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

Table 3: Separate multivariate analyses for each age group for linguistic factors conditioning verbal -s.

Due to interactions between factor groups, various combinations of factor groups had to be analyzed independently. For instance, for the older cohort, sentential aspect and lexical aspect could not be included in the same multivariate analysis because they interact with one another (the division is shown in Table 3 with a dotted line). Stative tokens were largely non-habitual and habitual tokens were largely non-stative. Despite employing low rates of verbal -s, the older cohort shows a conservative system whereby verbal -s is conditioned by both sentential aspect (habitual aspect favors verbal -s with a factor weight of .68) and lexical aspect (statives favor verbal -s with a factor weight of .66). For the middle-aged consultants, sentential aspect is no longer significant. For this cohort, it is only lexical aspect, specifically stative, which conditions verbal -s, with a factor weight of .64. The system of the youngest cohort no longer resembles the linguistic system of previous generations: for these consultants, verbal -s is triggered by if-clauses, the absence of adverbial specification, or by the presence of when or whenever clauses. In fact, this is similar to Van Herk, Childs, and Thorburn’s (2009) finding for the community as a whole. However, separate multivariate analyses reveal that this system obtains only for the youngest cohort, who seems to have lost the older constraints (i.e., lexical and sentential aspect). Table 3 thus shows that the sys-

---

7 The youngest cohort has a slightly greater factor weight than the middle-aged cohort since data from invariant speakers were excluded (cf. Table 1).
tem of verbal -s for the Petty Harbour/Maddox Cove consultants is undergoing a change in progress. The change involves the shift of verbal -s from playing a clear aspectual role in the older generation to a system where verbal -s is no longer conditioned by aspect, but rather by the presence of adverbial constructions in the system of the younger consultants.

A closer look at the disfavoring contexts reveals that the earlier system actually persists even in the system of the youngest cohort. All s-marked tokens which had no adverbial specification (the “none” factor) or which had other adverbs (habituals and others) were either stative or habitual. I interpret this as evidence that the youngest cohort still has a remnant of the older system, albeit one which is not strong enough to surface as statistically significant. The same is observed with the middle-age cohort: all non-stative, s-marked tokens were habitual. With the oldest cohort, all non-stative s-marked tokens were habitual and all non-habitual s-marked tokens were stative (i.e., there were no tokens with verbal -s which were simultaneously non-habitual and non-stative). These observations further support the interpretation of verbal -s as a marker of habituality and stativity. This system is most clearly observed in the speech of the older cohort. The middle-age cohort has partially lost this system in that it is only statives which favor verbal -s. As for the younger cohort, the aspectual functions are overshadowed by the association of verbal -s with particular adverbials.

I conclude, then, that the quantitative results support both Clarke’s (1997) and Van Herk, Childs, and Thorburn’s (2009) analyses of verbal -s as a marker of habituality and as a stative marker. The separate multivariate analyses show how the verbal -s system changes across time. The remainder of this paper will account for the linguistic change in the grammar(s) of VNE speakers from a formal perspective.

5 Formal Analysis

5.1 The Formal Approach

The variationist analyses above show that verbal -s functions as a habitual aspect marker as well as a stative marker in VNE. While habituality relates to aspect at the sentential level, stativity is a property of the verb, both shown in Figure 2. Despite this difference, both habituality and stativity share a property in that both are aspectually imperfective (Comrie 1976, Smith 1991). Therefore, I argue that verbal -s in VNE is an imperfective marker.

\[ \text{AspP} \]
\[ \text{Asp'} \]
\[ \text{Sentential Aspect} \rightarrow \text{Asp} \]
\[ [\text{HAB}] \]
\[ \text{vP} \]
\[ \text{DP} \]
\[ \text{Subject} \]
\[ \text{v'} \]
\[ \text{v} \]
\[ \text{VP} \]
\[ \text{Lexical Aspect} \rightarrow \text{v} \]
\[ [\text{STATIVE}] \]

Figure 2: Sentential and lexical aspect.

Most varieties of English do not possess a rich system of morphemes denoting only aspect, such as is found in aspectually rich languages (e.g., Russian). However, the literature on varieties of VNE suggests that these varieties do possess a wider range of aspectual morphemes than does standard English. For instance, Clarke (2010) refers to a number of ways of expressing habitual aspect: preverbal bees, unstressed do be, etc. Likewise, the after-perfect construction found in Hiberno-English is also found in widespread use in VNE. This construction involves a perfect using be + after + the present participle (-ing), as shown in (24), taken from Clarke (2010:79).

8 Asp (short for Aspect) is a separate functional projection, as is v (‘little v’), in this model of grammar.
For the variable speakers, optionality is accounted for as follows: when Asp\textsuperscript{1} is selected, it enters the Numeration already specified with an imperfective feature (labelled here as [HAB]). As such, this traditional system does not require the presence of adverbials (or Gen) to function as operators. The innovative system on the right involves an aspect head (labelled Asp\textsuperscript{2}) which does not bear an intrinsic specification. As such, I represent the feature as a variable feature, labelled here as [\alpha]. For this variable [\alpha] to have a feature, it requires an operator to bind it. When overt quantificational adverbs are present, they satisfy this role at LF. In their absence, I argue that Gen functions as an operator. Structurally, the quantificational adverbs do not necessarily surface in the [Spec, Asp] position, since I assume that they undergo covert movement. Following the syntactic component, an -s is inserted (either at Spell-Out or in the Morphological Structure component) if the aspect head bears a [HAB] feature, otherwise -∅ is inserted, as shown in (26).

\begin{equation}
\begin{array}{c}
\text{Traditional VNE system} \\
\text{Asp}^1 \\
[\text{HAB}] \\
\end{array} \quad \rightarrow \quad \begin{array}{c}
\text{Innovative VNE system} \\
\text{Asp}^2 \\
[\alpha] \\
\end{array}
\end{equation}

I assume that verbal -s is inserted in relation to an imperfective feature [HAB] and the absence of verbal -s (i.e., -∅) is the elsewhere Vocabulary Item.

Variation and change in the Petty Harbour/Maddox Cove system can thus be accounted for by positing the variable insertion of Asp\textsuperscript{1} and Asp\textsuperscript{2} in the derivation prior to syntax. Recall that there were no consultants who categorically had verbal -s. In fact, the oldest cohort, which had the highest overall rate of verbal -s, only use it at a rate of 14%. As such, I argue that they have a variable system: they may insert either Asp\textsuperscript{1} or Asp\textsuperscript{2}, though Asp\textsuperscript{2} gets selected far more frequently, at a rate of 86% in the corpus studied here. In the case of invariant (predominantly younger female) consultants, they only have the Asp\textsuperscript{2} head available, and this results in a system with no verbal -s.\footnote{Except in the case of a third person singular subject.} For the variable speakers, optionality is accounted for as follows: when Asp\textsuperscript{1} is selected, it enters
the derivation with the [HAB] feature already specified prior to syntax. Following Spell-Out, an -s is inserted on the lexical verb. With Asp\(^1\) there is no requirement to have operator-variable binding. When a speaker selects the Asp\(^2\) head, the derivation proceeds to PF and LF following Spell-Out, but -s does not get inserted. At LF, the operator binds the variable feature, as this is the stage where operator-variable binding occurs. Variation between verbal -s and the absence of verbal -s is dependent upon which Aspect head is selected by the speaker prior to syntax.

The younger cohort has a different linguistic system from the two previous generations. For them, verbal -s is used in the presence of particular adverbials, such as if-clauses, when(ever), etc.\(^{10}\) For these consultants, verbal -s co-occurs with particular adverbial constructions. These adverbial constructions, beyond conditioning verbal -s, are also quantificational adverbs which can serve as operators capable of satisfying the requirement of [HAB] to have an operator in its specifier position. In the absence of these adverbials, I posit that the null operator, Gen, satisfies this requirement. The change in constraints across age cohorts suggests that verbal -s is gradually losing its function as an aspect marker, at least in this variety of VNE, and is increasingly co-occurring with these adverbial operators which can bind the variable feature on the Aspect head. We can assume that Gen is Merged in this position in the absence of quantificational adverbs. In the presence of such adverbs, but where they are not overtly found in this position, they have been analyzed to bind the variable at LF, so we can assume covert movement.

For the younger, variable speakers, I posit two Aspect heads which are available to be selected by the speaker: Asp\(^1\) and Asp\(^2\). If Asp\(^1\) is selected, -s spells out on the verb. If Asp\(^2\) is selected, the verb always surfaces bare. For the invariant consultants, I argue that only Asp\(^2\) is available, and that their aspect system is similar to other varieties of English which have fewer aspect markers than some conservative varieties of VNE. For the younger, variable consultants, verbal -s is associated with particular adverbial constructions. In order to account for this apparent “double-marking” (both verbal -s and adverbials), I argue that these are in fact cases of Asp\(^1\). In other words, the quantificational constructions are present, but they do not yet function as operators which bind a variable feature. This is perhaps unsurprising, as we would expect a period whereby quantificational structures are at the very least present in the system before they can be analyzed by speakers as operators. The invariant consultants only have Asp\(^2\) available, and, for these speakers, the adverbials always function as operators for the purpose of operator-variable binding.

6 Conclusion

This paper provides an analysis of change in progress using both variationist methodology and generative theory. The variationist analysis proposes that VNE verbal -s functions to mark both habitual events and stativity, in line with previous studies of VNE (Clarke 1997, 1999, 2010, Van Herk, Childs, and Thorburn 2009). I further argue that verbal -s is in fact an imperfective marker. While the progressive -ing is also an English imperfective marker, I argue that verbal -s likewise functions to mark imperfective, but more specifically habituals and statives.

The separate multivariate analyses for each generation provide clear evidence that verbal -s is undergoing a change in progress in Petty Harbour/Maddox Cove. The results from the multivariate analyses show that the linguistic constraints differ across generations, which provides evidence of a changing linguistic system.

Finally, this paper has attempted to account for variation and change within a formal approach. I propose that variation and change of VNE verbal -s can be accounted for by assuming the loss of an Aspect functional head with an intrinsic specification to one which does not bear such specification. The increased use of the innovative head (Asp\(^2\)) results in a system which closely resembles other varieties of English, including standard English. This suggests that this particular variety of VNE is undergoing a change from an aspectually rich variety to one which is less so, at least in terms of its overt aspectual morphology.

\(^{10}\) Recall that absence of adverbials also favored verbal -s. However, upon close inspection, all -s-marked tokens with no adverbials were either stative or habitual. I interpret this to suggest that this factor captures a remnant of the older system whereby verbal -s is conditioned by sentential and lexical aspect.
References