1. Introduction

What is referred to as verbal groups signify complex ensemble of all the auxiliary and main verbs conveying modal, tense and aspectual imports in a given sentence where the first occurring auxiliaries take finite forms and other verbs remain in nonfinite form (Quirk et al. 1984: 149), as in the example:

I must have been being introduced in the dark, large hall of the place.

OE allowed expansion of verbal groups of modal-passive, modal-progressive, and modal-perfect, thus licensing a complex of three verbs (main verb included) at maximum in a group, as is illustrated by the scheme below:
Aux → *ense (Modal [Inf]) \{ BE [Progressive] \\
\quad BE [Passive] \\
\quad Have [Perfect] \} (Lee 1999: 565)

Present Day English (PDE henceforth), however, permits a combo of five consecutive verbs at maximum in a group:

\[(\text{Modal}) + (\text{Perfect} = \text{HAVE}) + (\text{Prog} = \text{BE}) + (\text{Pass} = \text{BE}) + V = \text{Lexical Verb} \] (Lee 1999: 565)

With this development modals were allowed to be complemented with other verbal components of modal perfect progressive, modal perfect passive, modal progressive perfect, which were not exemplified in OE. Historically, it is widely admitted that both modals and the auxiliary have undergone a significant transition in late Middle English phases. But how closely related the two auxiliary items were in forging verbal groups remains problematic.

This pilot study will focus on modal constructions conjoint with auxiliary *Have to investigate into tokens and frequencies of the verbal groups, and related distributions contingent upon modal types. A standardization process that expelled non-modal and non-auxiliary deviations away will be elucidated in the light of grammaticalization process, and favoritism of the verbal group for specific set of modal types will also be reported and analyzed.

2. Previous studies

2.1 Modals

What is of foremost interest in morphosyntactical aspect about modal is their complementation structure. Unlike plain verbs, modals are only complemented by a plain infinitive, which renders modals not to be complemented by other modals because they are devoid of non-finite forms. Other corollary derivable from the fact is that there are no perfect or progressive of a modal, neither a passive, nor a NP complementation as in the case of lexical verbs. As a natural consequence modals are only allowed to occupy the first site of a finite verb group and always be accompanied by
presence of main verbs except in ellipsis. And despite the restraint in derivability in surface structure only in finite forms, they are free from person-number agreement.

A typological account of modal like the above, however, was not always true of them diachronically. Forefathers to present-day modals that linguistic historicists categorized as pre-modals, or preterite-present verbs included verbs of *sculan, willan, magan, cunan, motan*, which were basically closer to the lexical verbs than to their PDE descendants. According to Lightfoot 1979, they had full person-number agreements, infinitive forms, and normal complementation including nominal direct objects. Also, they could occur in sentence-final position as was frequent in baseline OE phrasal orders of SOV(M), which can be more approximated to the behavioral pattern of the lexical verbs.

It is generally agreed that English modals have their own existence settled in between 15th and 16th century (Denison 1993, Lee 1999, Lightfoot 1979, Visser 1963-73). A discrepant change in their character seems to have taken place some point chiefly around the year 1500. Syntactically the transition from OE full verb to PDE can be summarized as the following (Denison 1993: 327, Lee 1999: 480):

(A) (mainly Middle English) a gradual increase in exceptionality as a result of independently occurring surface changes spaced out over time

(B) (sixteenth century) a radical restructuring of syntactic categories and sentence structure, resulting in a clutch of simultaneous surface changes

(C) (approximately sixteenth century) further transformational and lexical innovations consequent on the restructuring of B.

Loss of direct object complementation and retarded underdevelopment of to-infinitives in pre-modal constructions are ascribable to the phase A, which became furthered by loss of infinitives and - ? forms of modal and extinction of multiple modals and perfect *Have + past participle forms of modals at the phase B. It appears that the current standard form of modal verbal
group at the focus of this study had not fully established itself as it is now until the sixteenth century. And it is by virtue of this finding that a pilot study is possible that excavates unorthodox verbal group constructions from the standpoint of PDE and their gradual extinction, which eventually led to a homogeneous standardization of modal group verbs.

What is worth noticing in dealing with modal Have construction is an unbalanced emergence of modals in apodosis of conditionals. According to Visser 1963-1973 (§§ 1532, 1607, 1638, 1672), Modals of should, might record back to Old English in apodosis uses, would to the thirteenth century, and could only from the sixteenth century. But relevant tokens of must and ought in the use are rarely found. Then it can be inferred that modal did not present an even rate of development in constructing apodosis clauses, the most frequent environments where modal + Have phrases make their presence.

2.2 Auxiliaries Have constructions along with conjoint modals

The Have perfect is a syntagm made up of Have and a lexical past participle. The lexical verb shares same argument structure with the perfect AUX, which only differs from a simple present or past in time reference and/or 'aspect' or 'phase.' Usually the head of the Have-engaged phrase turns to the lexical verb, to which Have serves as an auxiliary determiner. Historically Have competed with Be in assignment of passive role to the late day of middle English, but gained predominance in the process of grammaticalization of the arena, presumably due to the rather heavier semantic weight of Be. Though more prevalent with finite forms, the paradigm of Have also included tokens of infinite forms, always in collocation with a modal[1].

Also noticeable in infinitive Have occurrences in companion with modals are those of causative roles, where *Have* holds agentive and the participle assumes passive. Visser provides various examples from the sixteenth to the early eighteenth centuries (Visser 1963-73 § 21).

(2) **1711 Swift, Jnl to Stella 230. 27 (3 Apr)**

*He* would have had me dined [edn: dine] with him

Also worth noticing is that distinct types of modal perfect complexes of 3- and 4-verb combinations exhibit different dates of initial occurrence. The earliest instance of each variant is illustrated in the following (Dennison 1993: 447)

(A) modal + perfect HAVE + progressive BE + V: ?a1425
(B) modal + perfect HAVE + passive BE + V: a 1325
(C) perfect HAVE + progressive BE + passive be + V: 1886/1929
(D) modal + progressive BE + passive BE + V: 1915

What is interesting is that among each adjacent of the pair in a verbal group, first pairings always precede the second pairings, and then 3-auxiliaries that emerge last. It might be too hasty to conclude any solid generalization from so a scanty collection of findings, but roughly there seems a preliminary conjoint between modals and Haves as perfect auxiliaries that precede other pairings and other patterns. Earliest dates of each paring are reported as follows: (Dennison 1993: 47, Dennison 1999:26)
3. Methodology and research design

The advantage that corpus-laden methodology carries in the light of grammaticalization studies is not any rate small. Both approaches prioritize to the actual token of utterances rather than researcher-invented fragments. Both rely heavily upon frequency data and statistic, over which significant generalization over historical trends may well be elicitable. Thus a closer collaboration between corpora-based approach and philological study as adumbrated above will bring mutually enhancing effects to the approach to grammaticalization.

Helsinki Corpus (HC below) is a representative endeavor of the kind with approximately 1.5 million tokens of lexicon extracted from fourteen different text types, which are registered along division of period that followed traditional distinction of Old English (-1150), Middle English (1150-1500), and British Early Modern English (1500-1710). What makes this pilot study particularly available is its subdivision of each period into ones with one hundred year span, which permits a handy approach to grammatical transition from late ME to earlier phase of EME.

Subperiods in focus of this article are covered by the following table.

<table>
<thead>
<tr>
<th>Subperiod</th>
<th>Dates</th>
<th>Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME3</td>
<td>1350-1420</td>
<td>184,230</td>
</tr>
<tr>
<td>ME4</td>
<td>1420-1500</td>
<td>213,850</td>
</tr>
<tr>
<td>EME1</td>
<td>1500-1570</td>
<td>190,160</td>
</tr>
<tr>
<td>EME2</td>
<td>1570-1640</td>
<td>171,040</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>795,280</td>
</tr>
</tbody>
</table>

Table 1. Diachronic corpora of the HC concerned
Selection of the subperiods is based upon findings of the previous studies which indicate upon pivotal nature of transitional period between ME and EME ranging around c1500 when pre-modals were becoming more and more reluctant to be complemented by anything but infinitives and devoid of their non-finite forms. Given the widely accepted account of incremental foundation of the modal class, it still raises a curiosity upon whether this macroscopic change would have happened evenly among different type of modals. Granted with another observation of individual course of development of each modal type (Lee 1999: 465-475, Hopper et al.: 55-88) It is more likely not to be so than otherwise, since it is more natural to assume minutely stratified adaptability of each modal to more complex verbal expansions contingent upon relative grade of grammaticalization, and concomitant incorporation into synchronic grammaticality. Different weights of each modal item in terms of modal Have construction kept in sight, research questions as the following can be raised in guide of the study:

(a) How heavy does the modal + Have construction weigh in terms of entire modal constructions? Wasn't there any difference in frequency and occupancy between modals?

(b) Has every type of modals undergone even rate of development within modal Have constructions total? In what type or register can predominance be found?

(c) Is there uneven distribution between each class of extended modal verbal groups among the modal + HAVE constructions? Did the groups converge in or diverge from a certain standardized form?

(d) What attributes characterizing pre-modals do modal + HAVE constructions retain despite gradual extrication from non-auxiliary uses, if reanalysis form pre-modals to modal took place around 1500?
4. Description and analysis

4.1 Outcome at surface and its relevant weight compared to modal constructions total

Aligning with the questions above a reliable amount of data was excavated from the concerned corpus for each of the periods at stake. The tokens and standardized frequency (occurrences/10,000 words in a corpus) of entire modal usages total and the constructions comprising the auxiliary Have and five distinctive classes of emerging modals are summarized as in the table 2. Every token was elicited from the HC with help of Wordsmith program\(^2\). Semantic ambiguity of coding mandated Have tokens of causative uses to be included, and only Have tokens within 5 words from the centered modal that became keywords in searching were taken into consideration to impose a palpable limit to the attempt. Orthographic variants of each modal and Have items were referred and analogized to entries in Oxford English Dictionary (2nd Ed.) on CD-ROM.

<table>
<thead>
<tr>
<th>ME3</th>
<th>ME4</th>
<th>EME1</th>
<th>EME2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>have</td>
<td>total</td>
<td></td>
</tr>
<tr>
<td>can</td>
<td>2</td>
<td>327</td>
<td>1</td>
</tr>
<tr>
<td>could</td>
<td>15</td>
<td>'155</td>
<td>'10</td>
</tr>
<tr>
<td>may</td>
<td>1</td>
<td>420</td>
<td>2</td>
</tr>
<tr>
<td>might</td>
<td>19</td>
<td>'147</td>
<td>16</td>
</tr>
<tr>
<td>must</td>
<td>6</td>
<td>231</td>
<td>5</td>
</tr>
<tr>
<td>shall</td>
<td>11</td>
<td>778</td>
<td>10</td>
</tr>
<tr>
<td>should</td>
<td>60</td>
<td>349</td>
<td>57</td>
</tr>
<tr>
<td>will</td>
<td>6</td>
<td>789</td>
<td>4</td>
</tr>
<tr>
<td>would</td>
<td>84</td>
<td>818</td>
<td>68</td>
</tr>
<tr>
<td>total</td>
<td>204</td>
<td>3677</td>
<td>173</td>
</tr>
</tbody>
</table>

\(^{1}/10,000\) 5.05 194.28 6.30 187.14 9.11 170.75 10.76 193.73

Table 2. Token and frequencies of Modal Have items

At a glance grasped is the steady trend of the standardized frequency of the Modal *Have* group on increase since mid-14th until mid-17th century, which nearly doubled during the three hundred years. The increment, in detail, seems to have experienced a relatively steep curve within transition phase from ME to EME by increasing from 6.30 to 9.11 tokens per 10,000 words, compared to flatter developments between ME3 and ME4, and EME1 and EME2. This observation appears to carry more significance in comparison to the development that modals in general had taken, which seems to have taken rather a random walk during the periods. The verbal group, however, had not had a prominent share in modal usages total at any given era, ranging from about 2.5% in ME3 (5.05 to 194.28) to slightly more than 5% in EME2 (10.76 to 193.73).

Second, table 2 provides an uneven distribution between modal types along the progress of time, perhaps contrary to benign premonition about flat development among the modals. There is a sharp discrepancy in tokens between the *can* and *may* group and *shall* and *would* one, where frequency of the one has been about three times less than the other at each period in question. The findings would be deepened by calculating weights of the modal group frequencies compared to entire bulk of constructions involving each modal at every given period in the study, which is illustrated in the following table 3.
For valid analysis all the listed numbers are processed to fit the model standard of 10,000 words. Percentages of each modal group in combined use of the modal and the auxiliary Have to the respective total of each modal usage turns in an interesting generalization for the observable trend. For one, there is a significant difference in the rate of increase of occupancy of the verbal groups contingent upon modal types. Although every type exhibited a gradual increase in its shares, they could be classified to 1) those sprang from a virtual nil to a recognizable presence, though a mere existence in the light of other types (can and must group) 2) one that maintained and incremented a given weight at ME3 up to EME2 without wavering surge or downfall (may group) and 3) those that kept a significant share as well as bulk but underwent acknowledgeable growth until EME2 (would and shall group). The diachronical dynamism is illustrated by fig.1.
Synchronically, it is also observable that each historical strata allows different latitudes of tolerance for each verbal group. The highest share the verbal group holds at ME5 is that of *will/would* group, 4.58%, which marks a nearly 2.5% gap with those of *shall/can* and a reap of more or less than 4.5% p from those of *can/must*. But the bottoms and caps of the shares gradually moves upward as it comes to close to EME, the last phase of which exhibit a range from 2.63% to 7.10% for modal *Have* constructions among modals in total. The ranking between modal types, however, had been almost fixed, with *will/would* group being always foremost and *shall/should* group following just behind and the other groups competing heavily against each other. The discrepancy between the top and bottom, however, does not seem to embody any significant disposition, neither a convergence nor a divergence. An overview on the verbal group reveals many things about them compared to the lump of entire modal constructions, but still many things await an analysis for what happened within the modals complemented by the perfect and causative auxiliary.
4.2 Distribution among modal types within Modal Have total

Shares of each modal as described so far, somewhat running contrary to the insightful implications, are in a sense not juxtaposable to each other. They are relative shares of the verbal group at stake to a population of respective modal usages in total, which in turn varied widely from 111 (must) to 853 (shall/should) tokens. This fact renders the shares hardly interpretable as a well-controlled specimen for mutual comparison sampled from homogeneous pool, but rather as independent numbers, only faintly related to each other. One available approach to make up the shortcomings is to congregate all the modal usages accompanied by auxiliary Have from the corpora to forge into a mother populace. Then contributions each modal Have made to the populace can be distilled out from the bulk. The results from the attempt is summarized in table 4.

<table>
<thead>
<tr>
<th>Corpus</th>
<th>ME3</th>
<th>ME4</th>
<th>EME1</th>
<th>EME2</th>
</tr>
</thead>
<tbody>
<tr>
<td>can/ could</td>
<td>0.00</td>
<td>0.23</td>
<td>0.58</td>
<td>0.90</td>
</tr>
<tr>
<td>% (V.G./total modal)</td>
<td>0.0%</td>
<td>3.7%</td>
<td>6.4%</td>
<td>8.4%</td>
</tr>
<tr>
<td>may/ might</td>
<td>0.87</td>
<td>1.17</td>
<td>0.95</td>
<td>1.05</td>
</tr>
<tr>
<td>% (V.G./total modal)</td>
<td>17.2%</td>
<td>18.6%</td>
<td>10.4%</td>
<td>9.8%</td>
</tr>
<tr>
<td>Must</td>
<td>0.00</td>
<td>0.09</td>
<td>0.26</td>
<td>0.32</td>
</tr>
<tr>
<td>% (V.G./total modal)</td>
<td>0.0%</td>
<td>1.4%</td>
<td>2.9%</td>
<td>3.0%</td>
</tr>
<tr>
<td>shall/ should</td>
<td>2.06</td>
<td>2.57</td>
<td>3.53</td>
<td>3.74</td>
</tr>
<tr>
<td>% (V.G./total modal)</td>
<td>40.8%</td>
<td>40.8%</td>
<td>38.7%</td>
<td>34.8%</td>
</tr>
<tr>
<td>will/ would</td>
<td>2.12</td>
<td>2.24</td>
<td>3.79</td>
<td>4.75</td>
</tr>
<tr>
<td>% (V.G./total modal)</td>
<td>42.0%</td>
<td>35.6%</td>
<td>41.6%</td>
<td>44.1%</td>
</tr>
<tr>
<td>verbal group</td>
<td>5.05</td>
<td>6.30</td>
<td>9.11</td>
<td>10.76</td>
</tr>
<tr>
<td>corpus size</td>
<td>184,230</td>
<td>213,850</td>
<td>190,160</td>
<td>189,800</td>
</tr>
</tbody>
</table>

Table 4. Modal type dividends in rate to modalized Have constructions total

First to be noticed is the leveled weight between shall/should group
and will/would one, contrary to what was once predominance of the will/would faction in the shares in total modal occurrences. This is because the will family had higher frequency of Have complements but also analogous superiority in its total amount. The two types combined account for nearly eighty percents of the verbal groups total, only to a slight dwindling as they come close to later phases of Early Modern English May/might group, however, undergoes rather a plunging spiral in occupancy within the remnant from a conspicuous in ME3 (17.2%) to its half (9.8%) in EME2, the slots made vacant by which being exploited by marked growth of can/could group (0.0% to 8.4%). Tokens of must, on the other hand, shows relatively languid walk thought three hundred years of span. This might be partly due to lack of past form of this type.

Viewed from wider perspective, however, what is striking is relative stable distribution of shares for each modal group during the transition period that denies convergence to an even pentagonal partition among the modals. This implies that widely accepted grammaticalization process of modals diverting away form pre-modals (Lightfoot 1979, Denison 1993 & Lee 1999) had little to contribute in macroscopic allocation of modals to employment in perfect and causative constructions, which might have owed more to semantic roles than levels of grammatical immersion. The rise of can/could group, however, gives more room to reconsider along with the observed incorporation of this type to the modal system that took place during the very eras. The findings are visualized in fig. 2.
4.3 Verbal group classes of modal Have and interim unorthodox forms

In summary, each modal went through another sieve of complex modal group classes, which derived a cobweb of interdependent auxiliary verb. What degree of complexity in combining the modal, perfect, progressive and passive auxiliaries the late ME and EME did license, and what frequency was allocated to the respective classes, is, then, undeniably both an essential and interesting question in the line of study. For this purpose the population of modal *Have* construction in total (describe above) was reanalyzed according to the classes that each verbal group was derived into.

Emphasis in the search was given to partitioning tokens of *simple* modal + *Have* + past preterite (pp.) and more complex modal + *Have* + *been* ones, with an aim on search on modal *Have* + *been* + being + pp. forms, if there were any. In addition, those heterogeneous forms that do not fit in orthodox formats of extended modal groups but frequented in interim phases of grammaticalization were also counted in order to track up the rate of standardization of the constructions concerned. Among these inflected forms of *Have* adjoined to *modal* were specified as an individual entry. Also, causative uses of the auxiliary *Have* were counted to account for remainder of the population that cannot be explained away as a part of regular usages. Table 5 represents what was found from the approach.
<table>
<thead>
<tr>
<th></th>
<th>ME3</th>
<th>ME4</th>
<th>EmE1</th>
<th>EmE2</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. modal <strong>have</strong> pp.</td>
<td>60</td>
<td>74</td>
<td>107</td>
<td>137</td>
</tr>
<tr>
<td>/10,000</td>
<td>3.26</td>
<td>3.46</td>
<td>5.62</td>
<td>7.17</td>
</tr>
<tr>
<td>b. modal <strong>have</strong> infl</td>
<td>6</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>/10,000</td>
<td>0.33</td>
<td>0.42</td>
<td>0.89</td>
<td>0.00</td>
</tr>
<tr>
<td>c. modal <strong>have</strong> been</td>
<td>9</td>
<td>11</td>
<td>17</td>
<td>23</td>
</tr>
<tr>
<td>/10,000</td>
<td>0.49</td>
<td>0.51</td>
<td>0.89</td>
<td>1.21</td>
</tr>
<tr>
<td>d. Unorthodox forms</td>
<td>10</td>
<td>22</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>/10,000</td>
<td>0.54</td>
<td>1.03</td>
<td>0.63</td>
<td>0.05</td>
</tr>
<tr>
<td>e. causative</td>
<td>8</td>
<td>19</td>
<td>37</td>
<td>42</td>
</tr>
<tr>
<td>/10,000</td>
<td>0.43</td>
<td>0.89</td>
<td>1.94</td>
<td>2.21</td>
</tr>
<tr>
<td>total (a+b+c+d+e)</td>
<td>93</td>
<td>135</td>
<td>173</td>
<td>204</td>
</tr>
<tr>
<td>total (/10000)</td>
<td>5.05</td>
<td>6.30</td>
<td>9.11</td>
<td>10.76</td>
</tr>
<tr>
<td>modal uses total</td>
<td>194.28</td>
<td>187.14</td>
<td>170.75</td>
<td>193.73</td>
</tr>
</tbody>
</table>

Table 5. classes of the verbal group

As can be easily expected, simplistic modal *Have* + *pp* complexes have held a superior churk relative to other classes, never holding less than fifty percents of the population. A supremacy of this kind was not achieved with sweeping rise of the class, however. Fig. 4 below summarizes the ebb and tide of each class, where the shares of modal *Have* + *pp* is depicted as actually having experienced a retreat at ME4 and EM1. It is not until EM1 that the class recovers previously retained stake at ME3. Unorthodox deviants, though shrinking ultimately, was actually expanding from 10% (0.54 tokens /10,000 words) to 18% (1.03 tokens / 10,000 words) from ME3 to ME4. A similar development of inflected *Have* occurrences can be observed below, another evidence that modals still have not been extricated of pre-modal characteristics, though not so violently wavering as that of other unorthodox forms. The class of modal *have* been carries a steady presence within the population with gradual increment. Causitive uses, unexpectedly, also provides seamless expansion in their shares, depleting unacceptable forms at EM2 in terms of PDE grammar.
Two things are worthy of further comments. It is remarkable that no tokens of modal perfect progressive passive class were observed as yet. Lee (1999) argues that progressive and perfect be were evasive to each other in taking the other as their own complement, for the auxiliary be allowed only nonfinite forms of lexical verbs up until emergence of being as one of the lexical item in mid-18th century. A construction like The book was reading was not possible by the period in question in this study, which had no other way but to be expressed as in a form ‘The book was reading’, with the copular holding the dual role of marking both passive and progressive. And through this investigation into the copula this hypothesis came to be reconfirmed, at least at the tail of the data.

Have inflected following the modals represents a clearly pre-modal facet that these operators retained. As illustrated in previous studies (Quirk et al. 1984, Dennison 1993), precluded admission but to infinitive forms is a necessary condition to render a modal as modal in PDE, always elevating modals as a head of finite modal complex. Affinity to lexical verbs of pre-modals, however, permits them to take complements of finite forms, rather blurring what comes to the head position of extended verbal group. Ultimate extinction of such forms, as well as of other heterogeneities, indicates upon grammatical standardization in operation. A brief
selection from the corpora of the inflected Haves combined with modals are listed below:

(3) **THE PRICKE OF CONSCIENCE (STIMULUS CONSCIENCIAE). ED ME3**
    Gracce o goddes grete and gode, geis vs samples o rode. Mar mightes has vrt lauerd wroght, a thing in thoght.

(4) **CHAUCER, GEOFFREY. THE TALE OF MELIBEE. ME3.**
    Lo Abigayl, by good conseil how she Saved hir housbonde Sholde han be slayn.

(5) **THE YORK PLAYS ED. ME4**
    This will euer endure, thereof am I paide, Forwhy It is better wroght Then I coude haif thoght.

(4) **WALTER. WALTER HILTON'S EIGHT CHAPTERS ON PERFECTION. ED. ME4**
    Than sawe I wele, with the faythe that y felyd, that thare ware nathynge betwyx the crosse & heuen that myght hafe desesyd me.

4.4 Nonstandard forms in the light of PDE

Other variants of unorthodox forms are highly varied, not allowing any simple generalizations. Deviants from standard modal usages include 1) double modals, 2) inverted modal and perfect in plain indicative, and 3) perfect Have preceding modals, to just name a few major instances. Variants related to the auxiliary Have vary more, encompassing 4) double Haves following modal, 5) nonstandard complements to Have such as to-inf., plain inf., finite and progressive verbs & 6) Unorthodox word orders. Samples of each interim form are exampled below, without much in-depth syntactical analysis.
4.4.1 Variants of **pre-modal** uses

4.4.1.1 Double modals

(7) **THE YORK PLAYS ED. ME4**
But Ladi, b Sonne b, b shalte haue shall not be litill of valowe

(8) **THE TRIAL OF SIR NICHOLAS THROCKMORTON KNIGHT, 1554. EMEI**
I had thought partly to haue remembred you and others here in Commission in the beginning, if I might haue had leaue.

4.4.1.2 Inversion in plain indicative

(9) **THE LYFE OF SIR THOMAS MOORE, KNIGHTE, EMEI**
But if your grace mind to vnderstand the truth, suche counsellors may you haue devised

4.4.1.3 Perfects preceding modals

(10) **POLYCRONICON BK VII ME4**
I haue coude or myght/ and presente this sayd book to his good & noble lordshyp

4.4.2 Have variations

4.4.2.1 Double Haves

(11) Stevenson, William. **GAMMER GVRTONS NEDLE EMEI**
I wylbe at mine anon.” And laye downe by her, and strayght would haue had to do with her

4.4.2.2 nonstandard complements to Have

(12) **MANNYNG, ROBERT. ROBERT OF BRUNNE'S "HANDLYNG SYNNE", PART I. ME3**
And P is one of rediest & souereynist tokin P • a soule may haue to wite bi, wheD he be clepid or not to worche in P werk:

(13) THE PRICKE OF CONSCIENCE (STIMULUS CONSCIENCIAE), ED. ME3
P sevend payn of purgatory es P : P saules er als in wildernes, P . defaut es of alkyn thyng Of wilk man mught haf lykyng

(14) Unidentifiable source, ME3
For summe of hem wolden haue take hym, but no man sette hondis on hym.

(15) HOW THOMAS OF LANCASTRE WAS BIHEUEDEDE ATTE POUNTFRETT, & V BARONS HONGEDE AND DRAW P RE. ME3
And Gutlagh wolde haue went into his countree; but P re come oppon him a stronge tempest, P : .v. dayes Laste

5. Discussion and conclusion

A complex development of modal Have construction were adumbrated above. Previous studies indicated on the role of commingled interplay between modals and the auxiliary Have in molding modal perfect and causative constructions, both of which were on the process of grammaticalization in the periods in question from 1350 to 1640. Modal Have verbal groups were no exception to pre-modal properties like taking inflected verbs as complements and overlap of modals, even with more complex unorthodox variant generated both by modals and Have on the interim phase of standardization. But the very emergence of complex verbal group consisting of three auxiliaries (modal + Have + progressive/ passive been), an unfeasible extension in OE, were confirmed (Lightfoot 2979, Dennison 1993) with significant amount of data, though not yet reaching the complexity of four AUXs conjoint. An account of unbalanced development among modal
types (Visser 1963-73 n. 532, 1607, 1438, 1672) also gained strength, with *will*(would)/*shall*(should) groups predominant but others only subsisting.

Unfolding of verbal group classes is interpretable as an exemplary of standardization process among competing forms for a given semantic arena (Hopper & Traugott 2003). Even though nonstandard forms form the standpoint of PDE grammar once prospered, they never had been predominant nor had inflicted intermingling or transforming influence to the forms that eventually survived into future. This might partly be due to the reanalysis process of pre-modals to modals and from lexical items to functional operators of *Have* (Lightfoot 1979), by which modals became intolerant of finite verb complements and *Have* became so to those other than past/passive participles. A rather elastic fluctuation among classes (Fig.4) then signifies tension rivalry between converging and diverging forces inherent in the grammaticalization process.

Predilection for a specific type of modals of the verbal group is somewhat harder to interpret. Different from verbal group classes, they are not entirely ascribable to the grammaticalization process, for modals except *can* exhibited similar rates in the operation. The findings run contrary to Visser (ibid.) and Dennison (1993) which argue for *should* and *might* employment in apodosis usages in conditional clause from OE, whereas *would* being observed only since 13th century in the role. Frequencies found from the corpora, however, show a parallel distribution between those of *would* and *should*, but with *might* far falling; short of the two in terms of occupancy within modal *Have* constructions in total. Something more than a mere syntactic drive is strongly alleged to be accountable for the results.

Unbalance between semantic weights among the modals is one of such a possible hypothesis. Though not thoroughly pursuable in a pilot study like this, will and *shall* group is generally acknowledged of wider scope in semantic coverage than *may*, *can* or *must*. The two widely used modals are mitigated of their deontic meanings by relying more upon imports of future development, which deems them more liable to uses in simple tense conveyance than the other three modal. Veridically neutral, tense-laden focus of theirs would have rendered them easier to be counted upon in delivering
hypotheticality that they were most frequently employed to convey, as in apodosis clauses in conditionals. A semantic heterogeneity like this might have contributed to distinguished occurrence of will/shall groups. But why past forms are more prevalent awaits further investigation.

So far has been what was excavated from the corpus concerning the modal Have constructions. Prospectus for further study is not small, though. Expansion in diachronical coverage is more due than necessary to have the gradual standardization process pursued up to later stages in Modern English, and to have origins of uneven distribution among modal types detailed at the outset of Middle English. Typologically, a huge question of which modals have experienced which verbal group type, how long and how much? remains, which requires minutely grained sub-classification for each modal at each era. Quantificational study with a help of expanded corpus will no doubt be of irreplaceable help for these uncharted waters.
References

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