The Social Meaning of Stress Assignment in Hønefoss Norwegian*

Nanna Haug Hilton

University of York

There are two ways of assigning stress to loan words in East Norwegian dialects. In the case of loan words, stress can be assigned on the same syllable as in the language from which it was borrowed, in which case stress is lexical. Alternatively, a loan word can be subject to the Initial Primary Stress Rule (IPSR) (Kristoffersen 2000), a rule which moves stress from the ‘borrowed’ position to the initial position. Røyneland (2005) suggests that stress assignment conveys social meaning, and calls for more research from different areas of Norway. This study uses data from the town of Hønefoss to see whether factors of social background correlate with an individual’s choice of stress assignment. It also investigates which internal factors might influence the choice of stress assignment. I demonstrate that the social meaning of stress assignment in Hønefoss Norwegian is strongly tied to a speaker’s occupational status and that word frequency might play a role in the choice of stress assignment.

1 INTRODUCTION

In Norwegian morphologically simplex words, stress generally falls on the leftmost syllable of the root. In words of foreign origin, however, this is not always the case. In loan words stress is often assigned to positions to the right in the word, which means they are stressed on the same syllable as in the language they are borrowed from. The loan word *maskin* ‘machine’ for instance was borrowed from Latin through French, and is assigned stress on its second syllable resulting in pronunciation (1).

(1)  [ma ˈʃiːn]

Speakers of some East Norwegian dialects however have a choice when it comes to stressing these loan words. There exists a rule called the Initial Primary Stress Rule (IPSR) that moves stress from any right bound syllable to the initial syllable (Kristoffersen). If the IPSR is applied to the word *maskin*, stress is moved to the initial syllable, a consonant geminate is created and the word is pronounced

(2)  [ˈmaʃiːn]

2 THE VARIABLE AND SOCIAL CONSTRAINTS

The variation of stress assignment is, to a certain degree, governed by social constraints. Although the Norwegian Language Council, an institution that advises in linguistic matters, has stated that both variants of stress assignment are accepted in spoken Norwegian (Språkrådet 2001) the application of stress on a loan word’s initial syllable is possibly one of the most socially stigmatised features of rural or lower prestige East Norwegian speech, at least as seen by people in the capital (Røyneland 2005: 159). Indeed studies of young people’s

---

*I would like to thank all the subjects who volunteered to take part in this project; I am extremely grateful for your participation! I also owe many thanks to my supervisors Dr. Ros Temple and Dr. Bill Haddican for help and valuable input that resulted in this paper.

© 2007 by Nanna Haug Hilton

CamLing 2007: 88-95
speech also indicate that stressing loan words on this syllable is hardly ever found in Oslo (Jahnsen 2001). A study from another major urban area, Drammen, shows that applying stress on a loan word’s initial syllable is seen as an unattractive feature of speech (Kristiansen 1995). Data from towns in more rural areas like Romerike however suggest that stressing loan words on the initial syllable is still more common than stressing them on the borrowed position and that this dialect feature is not dying out (Skolseg 1994). Stress assignment variation in areas further away from Oslo appears to carry other kinds of social meaning, for example Royneland (2005) finds that in the town of Røros which is situated in the north of East Norway, there is a significant gender difference in usage of stress and that stress assignment on the initial syllable of loan words indexes a masculine identity. She calls for more research to see if similar conclusions can be drawn about stress assignment and its correlations with social variables in other places.

Although the social position of stress assignment to loan words is fairly well known in Norway, at least in larger urban areas, the internal factors that might influence stress assignment have not been looked at to the same degree. Kristoffersen (2000) notes how in the dialects in the area close to Oslo only loan words that have tonal accent 1 can undergo the IPSR and have stress moved to the initial syllable, which seems to be right for Hønefoss as well. There is mostly intra-speaker variation when it comes to stress assignment however, and there seem to be certain loan words that are more readily pronounced with initial stress than others. Some internal factors will be investigated in this paper to see if there are any clear patterns that could explain this variation.

A study of stress assignment could also help illuminate patterns of dialect levelling. Hønefoss is in an area that is said to currently be experiencing regional dialect levelling, a process where local forms are lost to supra-local ones (Skjekkeland 2005). Although the variable of stress assignment is not a local feature but something traditionally found in many areas of East Norway, an investigation of its usage in Hønefoss will still be worthwhile. Stress assignment on the initial syllable of loan words is a feature that is traditional to the Hønefoss dialect but losing ground in the urban centres nearby. It can therefore be claimed that if the urban Hønefoss dialect is converging with other urban varieties in the area, people will be stressing loan words on their borrowed position and will refrain from moving stress to the initial syllable.

3 THE SAMPLE

This study examines variation in a corpus of collected data from ten speakers. The subjects are between the ages of 24 and 37, are all originally from Hønefoss and have decided to settle in the town. Six of the ten speakers in the analysis were recorded in pairs. The remaining four were recorded individually by the author. There are four men and six women in the sample. All subjects were asked the same questions by the interviewer regarding biographical information, attitudes against the local dialect and the local area. The length of the interviews range from 20 minutes for a speaker recorded individually to 1.5 hour for a pair. Only loan words of non-Germanic origin were used for this analysis as they are the easiest to discriminate from the native vocabulary. This resulted in a total of 246 tokens from the 10 speakers, ranging from 9-36 tokens per speaker.

To examine the competing effects of different internal and external factors on stress assignment in the data, a multivariate analysis was performed with Goldvarb X (Sankoff D., Tagliamonte S.A., & Smith E. 2005). Four social variables are examined; gender first of all, as Royneland found indications in Røros that stressing loan words on the initial syllable indexes a masculine identity. Subsequently, three factors that have traditionally determined

---

1 Most Norwegian dialects differ between two distinct word melodies often described as tonal accent 1 and 2 in literature. For accounts of Norwegian prosody in English see Jahr & Lorentz (1983) and Kristoffersen (2000)
people’s socio-economic class are looked at: education level, occupational status and income. These are tested for because stress assignment on loan words’ initial syllables is described as a feature with lower social prestige in literature (Kristiansen 1995; Royneland 2005). Educational attainment is categorised into 3 levels, which are:

1) No higher education: The informant has not obtained any degrees after finishing secondary school. (N= 2)
2) Vocational training: The informant has attended vocational training after finishing secondary school. (N=3)
3) University education: The informant has a university level degree. (N=5)

The occupational status groups used in Kerswill’s study of migrant speech in Bergen (1994: 53) were used as a basis for this study, but collapsed into three groups. These three categories are:

1) Unskilled workers: this category consists of the same subjects as those without higher education above. (N=2)
2) Skilled workers: civil servants, lower clerical workers, in general workers that hold positions of a low degree of responsibility. (N=5)
3) Higher professionals: managers and other worker groups who hold positions with a high degree of responsibility. (N=3)

Perhaps due to the small size of this sample, the income disparity between the subjects is not very big: the seven working subjects’ incomes range between approximately 200,000 NOK a year to 320,000 NOK a year which in my personal view means that their incomes create a natural class and can only with difficulty be divided into separate groups. Informants’ incomes will therefore not be looked at any further and will not be included in the statistical analysis.

Four internal variables are included in the analysis to see whether they might tell us whether specific kinds of loan words are more likely to undergo the stress movement rule and be stressed on the initial syllable. The first factor group tested for is word class:

1) Nouns (N=163)
2) Verbs (N=29)
3) Adjectives: there were two adverbs that originally did not fall in this category, both tokens were eventuelt ‘alternatively’, they were collapsed into this group as the adjectival form of the word is identical to the adverbial one. (N=54)

The second internal constraint tested for was word length, measured in number of phonological syllables. Naturally, only polysyllabic words have variation in stress assignment, and so the three categories tested for were:

1) Two phonological syllables (N=47)
2) Three phonological syllables (N=118)
3) Four or more (there were some words in the data with five phonological syllables) (N=81)

A third internal factor is morphological form. There is variation to be found in suffixes of certain Norwegian verbs and nouns: the definite article suffix in certain singular and plural nouns can vary between –en(e) and –a, while some past tense verbs can either get the tense

---

2 The unemployed subject was put in the category of last held job. Two of the subjects were students but both were working part time in a job they aspired to stay in and were thus put in the category this job would fall in.
suffix –et or –a. The –a forms in all cases are a traditional dialectal form while –en and –et suffixes are forms probably influenced by Danish through the written standard Bokmål. The latter forms are generally associated with urban varieties or varieties of the higher social classes. There might therefore be a correlation between usage of these suffixes and stress assignment. Unfortunately, there was only a small portion of the words in the sample that fell in this category. They were still included in the test and three groups were created:

1) Used form derived from Old Norwegian –a (N=12)
2) Used form derived from Bokmål –en(e)/-et (N=9)
3) Not applicable for token (N=225)

The last internal factor looked at in the investigation is word frequency. Bybee (2001) suggests that highly frequent words are more easily subject to change than words with low frequency. The relative frequencies of the different loan words in this study are looked up in a corpus of spoken language collected in Oslo consisting of 900,000 words (Norsk talespråkskorpus). The categories of frequency distinguished between are:

1) Infrequent words: words with 0-54 instances in the Oslo corpus (N=212)
2) Frequent words: words with 70-235 instances in the Oslo corpus (N=34)

Perhaps rather ironically, there are not very many tokens of frequent words, but this does not change the fact that there might be a difference in the amount of usage of different loan words, and the categories are tested for as they stand.

4 THE RESULTS

As shown in Table 1, the speakers naturally fall into two categories; five speakers use the borrowed pattern and only stress loan words on the initial syllable 0-24% percent of the time, while the remaining five stress loan words on the initial syllable 70%-100% of the time.

![Figure 1](image-url)

Stress assignment patterns of the selected ten speakers
4.1 The Relative Contribution of the Variables

We now turn to the variables to see if any of these can explain the divide between the speakers. The variable rule application Goldvarb X (Sankoff D., Tagliamonte S.A., & Smith E. 2005) was used to find the degree of contribution of the different variables to the results. Table 2 shows the different independent variables or factor groups and within them each factor’s relative weight. Values above 0.5 favour application of the dependent variable, and values below 0.5 disfavour application of the dependent variable. The first variable tested for is gender, which was found not to be statistically significant. These data then do not suggest that speaker sex constructs the variation in the way that was reported for Røros by Røyneland (2005). The other two social variables, educational level and occupational status, were analysed in individual runs. Both were found to be contributing significantly to the results but the model with occupational status showed the best goodness of fit and educational level will therefore be excluded from the rest of the analysis. Table 2 shows us that speakers in the occupational status groups ‘unskilled’ and ‘skilled workers’ favour stress assignment on the initial syllable with factor weights of .90 and .65 respectively. Subjects who fall in the group of high professionals do not favour the application of initial stress with a factor weight of .28. Of the internal constraints, only word frequency is chosen as significant, while the others do not seem to be contributing to the results. ‘Frequent words’ favour the application of stress on the initial syllable with a factor weight of .72, while ‘infrequent words’ do not with a weight of .46. Finally, what we see from table 2 is that application of stress on the initial syllable is something happening approximately a third of the time in the data. This seems to contradict the pattern shown in table 1, but is due to the larger number of loan words produced by speakers who mainly stress words on the ‘borrowed’ position.

<table>
<thead>
<tr>
<th>Factor Group</th>
<th>Frequency</th>
<th>%</th>
<th>Weights</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Factor Groups</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>40/120</td>
<td>33.3%</td>
<td>.58</td>
</tr>
<tr>
<td>Female</td>
<td>27/126</td>
<td>21.4%</td>
<td>.43</td>
</tr>
<tr>
<td>Occupational Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unskilled workers</td>
<td>20/27</td>
<td>74.1%</td>
<td>.90</td>
</tr>
<tr>
<td>Skilled workers</td>
<td>34/94</td>
<td>36.2%</td>
<td>.65</td>
</tr>
<tr>
<td>Higher professionals</td>
<td>13/125</td>
<td>10.4%</td>
<td>.28</td>
</tr>
<tr>
<td><strong>Internal Factor Groups</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word Class</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nouns</td>
<td>46/163</td>
<td>28.2%</td>
<td>.51</td>
</tr>
<tr>
<td>Verbs</td>
<td>9/29</td>
<td>31%</td>
<td>.55</td>
</tr>
<tr>
<td>Adjectives</td>
<td>12/54</td>
<td>22.2%</td>
<td>.43</td>
</tr>
</tbody>
</table>

1 Educational level and occupational status are both significant, but the analysis shows that it is the model with occupational status that shows the best goodness of fit with a log likelihood of -115.456. Educational level has a log likelihood of -121.162. The unskilled workers and the subjects with no higher education are the same subjects in both groups. The differences between the two groups lie in the subjects put in ‘vocational training’, ‘university education’ and ‘skilled workers’ and ‘higher professionals’ respectively. Two of the five subjects with university education were assigned to the category ‘skilled worker’ in the ‘occupational status’ analysis as they do not hold positions with much managerial responsibilities. One of these was the only among the five subjects who had university education to stress loan words mainly on the initial syllables, in contrast to the others who had stress loan words mainly on their ‘borrowed’ positions. This subject falls in the ‘skilled worker’ category under ‘occupational status’ which might explain why this model has a log likelihood closer to 0 and thus better goodness of fit.
Table 1

Factor groups and their contribution to the results (insignificant groups between brackets).

Overall tendency: .23, N=246. Factor groups were selected in the following order:
Occupational Status; Word Frequency. The factor groups not selected were Gender, Word Class, Word Length and Suffix Form

4.1.1 The Contribution of the Social Factors

The table above indicates that occupational status plays a role in the social meaning of stress assignment in Hønefoss Norwegian. The question that arises is whether occupational status is an indicator for social prestige in general. This cannot be determined completely, but it should be noted that the category of occupational status does not only include status on the work floor, but also incorporates education, i.e. with a category for unskilled workers and two for workers with formal training. As education has often been seen as another indicator of social prestige together with economic security (which again generally is determined by occupational status), the category of occupational status can be treated as a strong indicator of social status in general. What we find then is that people with a high status seem to avoid stressing loan words on the initial syllable, while subjects with lower status in jobs where no formal skills are required do the opposite and mostly stress loan words on the initial syllable. The social meaning of stress assignment in Hønefoss Norwegian is thus closely tied to social status, and the form of stress which is likely to enjoy higher social prestige is the one on a loan word’s borrowed position.

4.1.2 The Contribution of the Internal Constraints

Only one internal factor group was found to be contributing significantly to the results for stress assignment. Word class, word length and suffix form do not seem to have any influence upon the results. It must be noted however that the sample in this analysis is rather small, and that for suffix form, for instance, only a fraction of the sample could actually be used. These factors will therefore be tested for on a bigger sample in the future to see if the number of tokens will make a difference. Although the statistical analysis shows that frequency is significant, only 34 tokens in the data are actually frequent words. The difference found however is interesting. The analysis shows that frequent words favour assignment of stress on the initial syllable. If looked at individually, these results might indicate that a change is going on where application of stress on the initial syllable is becoming more popular. In view of the
background and remaining results however, a more likely conclusion to draw might be that these frequently used loan words are such a common part of the vocabulary that speakers consider them to be ‘native’ and therefore assign them native prosodic properties, i.e. stress on the leftmost syllable of the root. Further investigation is needed to see whether this is actually the case.

4.2 Signs of Dialects Converging

Although there are clear signs of variability in the sample, it is fair to say that both variants of stress assignment are very much present in the dialect. The traditional pattern of stressing loan words on the initial syllable is not the most used form of stress assignment, it is used only about a third of the time overall, but this result is due to the larger amount of loan words produced by informants of higher statuses. If informants are looked at individually, we find a clear divide with half of the speakers using initial stress to a high degree and the other half to a low degree, as shown above in table 1. Thus examined, it is fair to say that stress on initial syllables is still very much present in the dialect. Another interesting fact is that two of the speakers who apply stress to the initial syllable, M and J, are the youngest informants in the sample - 24 and 25 years old - and so there are no indications that this is a feature disappearing from younger people’s speech, as seen in the findings in Oslo (Jahnsen 2001: 96).

An interesting similarity to findings from Oslo and Drammen however is the social evaluation the feature holds; it is the same in the major urban areas as in Hønefoss Norwegian. Stress assignment on the initial syllable of loan words seems to be a feature primarily found in subjects with lower occupational status who probably also hold a lower social status in general. This social stigma is noted to have been found in Oslo but not so much in other rural areas further away from major cities (Røyneland 2005: 159). From this, we might conclude that although the speech of Hønefoss may not have levelled with the bigger urban varieties, the same social constraints for variation exist in the areas.

5 DISCUSSION

A different result has been found among the group of speakers in Hønefoss than what Røyneland found in Røros; there is no sign that stress assignment on the initial syllable is part of a masculine identity in Hønefoss. It is worth noting however that Røyneland’s main focus was on adolescents and it could be that the adolescents in Hønefoss show a different pattern from the older generation investigated in this paper. Further analyses are needed to see whether this is the case. There is an indication that frequent words are more easily stressed on their initial syllable than infrequent words. This will be explored further in future work. Although there is variability when it comes to stress assignment in Honefoss, there are no signs that either of the two variants is the strongest as there were two equally large groups of subjects who either stress loan words on the initial syllable or do not. We can conclude however that the higher the occupational status one enjoys the greater the chance is that one does not stress loan words on the initial syllable, but keeps to the ‘borrowed’ pattern. The opposite is also true; the lower one’s occupational status, the greater the chance that one keeps to the traditional way of stressing loan words, by moving stress to the initial syllable. This pattern fits the description of stress in other East Norwegian urban areas, where stress assignment on initial syllables is described as a phenomenon with lower social prestige. There is proof therefore of similar social positions of the two variants in Hønefoss and bigger urban areas like Oslo and Drammen. Whether this similarity in social evaluation has implications for actual language change however remains unknown. Further investigation is needed to see whether the Hønefoss dialect is converging with urban speech from the rest of East Norway.
As stress on the initial syllable is the traditional pattern found in Hønefoss, stress on the borrowed position of a loan word can be seen as the focus of change, and I conclude that this changed form is the carrier of social meaning. By stressing loan words on the borrowed position and not moving stress, speakers of the Hønefoss dialect are conveying an association with higher levels of social prestige and the higher socio-economic classes.

**REFERENCES**


Norsk talespråkkorpus - *Oslodeelen, Tekstlaboratoriet, ILN, Universitetet i Oslo.*

http://www.tekstlab.uio.no/nota/oslo/index.html


Nanna Haug Hilton

Department of Language and Linguistic Science
University of York
York
YO10 5DD
United Kingdom

nhh500@york.ac.uk

http://www-users.york.ac.uk/~nhh500/