

# Think *really* different: Continuity and specialization in the English dual form adverbs<sup>1</sup>

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This paper analyses variation between *-ly* and  $\emptyset$  in English dual form adverbs by examining conversational data from York, U.K. Using multivariate analysis and the comparative method we assess the constraint ranking, significance and relative importance of external factors (age, sex, education level) and internal factors (lexical identity, function and meaning). The results show that *-ly* is dominant and has increased dramatically in apparent time. However, cross-tabulations with individual lexical items reveal that this correlation with speaker age is restricted to a single item – *really*. In conjunction with evidence from the history of English, we suggest that this does not reflect ongoing developments in English adverb formation, but is the result of continuous renewal in the encoding of ‘intensity’. In contrast, separate analysis of the other adverbs shows that variation between *-ly* and zero is retained in part as a socio-symbolic resource, in particular for marking less educated male speech. Underlying this social meaning however, is a linguistic constraint which operates across all speakers. The zero adverb encodes concrete, objective meaning – a tendency which can be traced back 650 years or more. This provides yet another example of the interface between social and historical developments in language variation and change.

KEYWORDS: English dual form adverbs, adverbialization, social marker, *really*

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## 1. INTRODUCTION

In English, adverbs are usually recognizable by their *-ly* suffix such as *slowly*, *happily*, *tremendously*. However, it has long been recognized that there is variation as well – sometimes adverbs are marked by *-ly* but sometimes they are not. In contemporary spoken corpora, variability is rampant even in the speech of the same individual in the same conversation, as in Extract (1):

1. a. I mean, I was *real* small and everything you-know *really* tiny built and I was small in stature as well. (YRK)<sup>2</sup>

- b. I mean, you go to Leeds and Castleford, they take it so much more *seriously* . . . They really are, they take it so *serious*. (YRK)
- c. We get our pension on a Monday and pension day comes around so *quickly* doesn't it? . . . It does come round *quick*, you-know, you can't believe it. (YRK)

Use of what we will refer to as the zero form,<sup>3</sup> i.e., *real*, *serious*, *quick*, is associated with non-standard (Quirk et al. 1985) or colloquial language (Poutsma 1926: 634). It is typically associated with the 'language of the illiterate' (Poutsma 1926: 634; Pulgram 1968: 385) and is sometimes viewed as 'vulgar' (Van Draat 1910: 97), as in (2):<sup>4</sup>

### 2. *Language of the illiterate?*

- a. 'You're *desp'rate* hard upon me, gen'lman,' said Gamfield, wavering. (*Oliver Twist*, Ch. III) (Dickens 1966: 15)
- b. 'Mr. Sedley was *uncommon* wild last night, sir,' he (=Sedley's valet) whispered in confidence to Osborne. (*Vanity Fair*, Vol. 1 Ch. VI) (Thackeray 1910: 68)

At the same time it appears to be associated with certain genres. Alford (1864: 203) for example, suggests that 'this adverbial use of adjectives is entirely poetical and not ever to be allowed in prose'. Similarly, Poutsma (1926: 632) observes that zero forms are used when accommodating metre or rhythm in poetry, but 'literary English would hardly tolerate' them (1926: 385). The zero adverb has also been associated with pidgins and/or creoles, presumably due to the fact that pidgins at least, are known to have reduced inflectional and derivational morphology as compared to the source languages (Arends, Muysken and Smith 1995: 31). For example, according to Crystal (1992: 347), in creoles 'adjectives are routinely used in adverbial function'. Yet, Crystal (1992: 327), also lists the zero adverb as a characteristic of 'Estuary English', a variety of British English held responsible for ongoing dialect levelling throughout the U.K.

The zero form has also been linked to specific varieties of English, particularly American English (Ross 1984: 243; Görlach 1991: 103), as in (3). Indeed, Mark Twain is said to have had 'a marked fondness' for the zero form (Mencken 1961: 390) as in (4).

### 3. *American English*

- a. Some manufactures who sell *direct* in non-dealer areas. (Brown E06: 047, cited in Opdahl 2000a: 177)
- b. 'We can catch him *easy!* . . . ' (Brown N02: 136, cited in Opdahl 2000a: 227)

### 4. *Huckleberry Finn*

- a. . . . in the night some time he got *powerful* thirsty. (*Huckleberry Finn*, Ch. 5, Twain 1996: 43)
- b. Once he locked me in and was gone three days. It was *dreadful* lonesome. (Ch. 6, Twain 1996: 47)
- c. I didn't see how I'd ever got to like it so well at the widow's, where you had to wash, and eat on a plate, and comb up, and go to bed and get up *regular*. (Ch. 6, Twain 1996: 46)
- d. Then I slid out *quiet* and threwed the snakes clear away amongst the bushes. (Ch. 10, Twain 1996: 80)

The zero adverb is said to be widespread in American English (Wolfram and Schilling-Estes 1998: 338), and is both geographically and socially diffused (Mencken 1961: 388). It is also widely held to be more frequent in American English than in British English (Görlach 1991: 103). In fact, recent quantitative work comparing British and American spoken and written materials has demonstrated that American English does indeed have higher ratios of the zero adverbs compared to their British counterparts (Liddle 1999: 13; Opdahl 2000b: 78). However, correlation of the zero form with social factors has not yet been quantitatively investigated. Given these widely separated locales and varieties in which the zero adverb is reported, a reasonable question that arises is where did this variation come from and why?

In fact, variation between *-ly* and zero adverbs is the result of longitudinal change in which zero is the earlier form that gradually gives rise to *-ly*. This historical perspective is provocative since it presents an antithetic trajectory of change to that which more contemporary observations suggest, i.e., that the zero form in some contemporary dialects (especially in American English) is an innovative form replacing the *-ly* form. Of course it may well be the case that the type of linguistic change involved in adverbialization may be cyclical – moving first toward *-ly* and then back again toward more use of zero. Without further analysis, however, it is impossible to determine which explanation best fits the facts.

In this paper we contribute to the understanding of the variable phenomenon of adverbs in *-ly* and zero by systematically examining their behaviour in a large and sociolinguistically stratified sample of spoken data from a small city in northern England – York. In so doing, we will be led to draw comparisons with other dialects of English that show similar variability, as well as with facts from the history of the English language. Consistent with the prevailing observations in the literature, we demonstrate that external factors are statistically significant contributors to this variability. Such findings reveal that *-ly/Ø* variation is indeed an important resource for marking a number of social meanings in contemporary York English, including age, education level and sex, particularly the combination of less education and maleness. However, in addition to these effects there is an important demarcation amongst different types of adverbs that must also be taken into account. Once *really* is separated out from the other adverbs there are actually two stories to be told. While *really* represents a dramatic change in apparent time, it is not due to adverb formation processes. Instead, it is the result of changes in fashion amongst English intensifiers (Tagliamonte and Ito 2001). The zero adverb amongst the remaining adverb cohort on the other hand is a stable sociolinguistic marker in the local vernacular. Yet, the most important constraint operating on its appearance is internal and this constraint can be traced to the earliest stages in the development of variation between *-ly* and zero in the English adverb system. We now turn to a discussion of the development of adverb formation in order to contextualize this study within the history of English.

## 2. HISTORICAL DEVELOPMENT OF ADVERB FORMATION

Adverbs were originally formed from adjectives simply by adding *-e*, as in (5) (Robertson 1954: 134; Mustanoja 1960: 314):

5. a. *georn* 'eager', *georne* 'eagerly'  
 b. *wid* 'wide', *wide* 'widely'

These are very common in Old English and Middle English, as in (6) (Wyld 1927: 253):

6. Wel coude he sitte on hors and faire ryde. (Chaucer ca. 1343–1400)

However, if the adjective itself already ended in *-e*, this created a situation where there was no formal distinction between adjective and adverb, as in (7):

7. a. *bliðe* 'joyful' or 'joyfully'  
 b. *clæne* 'clean' or 'cleanly'

This means that there was a certain amount of ambiguity between adverb and adjective from the very beginning. There were also adjectives that ended in *-lic* and these too underwent *-e* suffixation, as in (8):

8. a. *freondlic* 'friendly' (adj.), *freondlice* 'friendly' (adv.)  
 b. *earmlic* 'wretched' (adj.), *earmlice* 'wretchedly' (adv.)

The ending *-lice* was sometimes used even when the ending *-e* was called for, as in (9):

9. *eornost* 'earnest', *eornostlice* 'earnestly' (rather than *eornoste*)

Between the late Old English and Middle English period final unstressed *-e* ceased to be pronounced in English. This means that any of the words which had previously taken the *-e* suffix, lost the distinction between adjective and adverb, as in (10):<sup>5</sup>

- |                      |   |   |
|----------------------|---|---|
| 10. OE               |   | ME  |
| <i>heard</i> (adj.)  | → | <i>heard</i> (adj. & adv.) 'hard = difficult' |
| <i>hearde</i> (adv.) |   |   |

Old English *heard* in adjectival function and *hearde* in adverbial function became alike: *heard* ('difficult'). Here, the adverb form is 'zero' marked.

It has been argued that the ambiguity between adjective and adverb function in these cases is what promoted the use of the suffix *-lice* (and its descendant *-ly*) to form adverbs in order to distinguish them from adjectives (Robertson 1954: 134–135; Mustanoja 1960: 314). This led to *-lice* and later *-ly* becoming 'the real indication of adverbial function' and it was thereafter used 'to an ever increasing degree' (Jespersen 1954: 408). Yet the zero forms prevailed. They are said to have been 'common' throughout the Elizabethan period (1558–1603), in Shakespeare in particular, as in (11) (see also Abbott 1879; Emma 1964: 80):

11. a. Which the false man do's *ease*. (*Mach.*, II, 3.156)  
 b. 'Tis *noble* spoken. (*Ant.*, 8, 2.99)

They can also be found in Milton (1608–1674), as in (12) (Emma 1964: 115):

12. a. . . . and to the 'Eastern Gate/ Led them *direct*. (II 401) (PL, 12. 638–640)  
 b. And sits as *safe* as in a Senat house. (I 99) (CO, 388)

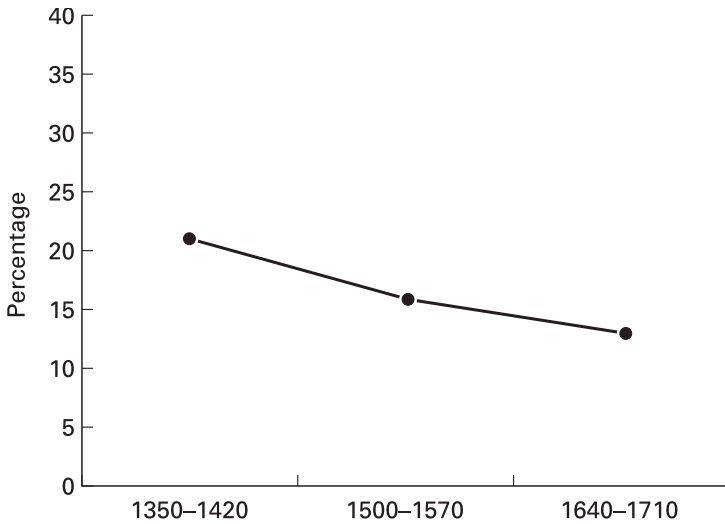
Lowth's influential grammar book (1762/1967: 125) quotes Swift (ca. 1667–1745), as saying '[a]djectives are sometimes employed as adverbs, improperly, and not agreeably to the Genius of the English language', e.g. **extreme** *elaborate*, **marvellous** *graceful*, etc. Yet Jespersen (1961a: 371–372) reports the following examples from Swift himself, as in (13):

13. 'tis *terrible* cold . . . it has snowed *terribly* all night. (Swift J 132)

According to Van Draat (1910: 97), use of zero form is 'of the most frequent occurrence in the eighteenth' century. Such statements are supported by Nevalainen's (1994a, 1994b, 1997) research where variation between the new adverbial suffix *-ly* and the older 'suffixless form' is analyzed with texts from Late Middle and Early Modern English in the Helsinki corpus.<sup>6</sup> Her examination of all dual-form adverbs in these materials reveals that the 'zero-forms lose ground in the Early Modern English period' (Nevalainen 1994b: 142). In a later analysis (Nevalainen 1997) based on the five Late Middle and Early Modern English sub-periods in the Helsinki corpus, this can be graphically illustrated, as shown in Figure 1.

Between 1350 and 1420 zero forms represented 21 percent of the adverbs whereas in the later period they represented only 13 percent. The distributional difference over the three periods is statistically significant ( $p < .05$ ,  $X^2 = 7.76$ ) and the difference between the Late Middle and the latter part of Early Modern English period is highly significant ( $p < .01$ ,  $X^2 = 7.60$ ) although the differences between adjacent periods are not. Nevalainen interprets this as an indication of 'the demise of zero derivation as a regular process of adverbialization in Standard English' (Nevalainen 1997: 183) and that this process is 'gradual' (Nevalainen 1997: 163).

Thus, there is gradual loss of the zero adverb in Early Modern English with many replaced by *-ly* by the 18th century (Nevalainen 1994b: 141). Then, in the 19th century under the influence of an expanding educational system and the development of strong prescriptive norms in Britain the zero form fell into disrepute (Van Draat 1910: 97). In contrast, by the turn of the same century in North America, Noah Webster (ca. 1758–1843) was sanctioning its use (Mencken 1961: 389). Indeed, according to some American commentators the zero adverbs are 'an ancient and dignified part of our language, and the pedantry which discountenances them is not to be encouraged' (Greenough and Kittredge 1901). By the end of the 19th century in the United States the zero form of the adverbs was treated as being 'etymologically sound' and are



**Figure 1:** Overall distribution of  $-\emptyset$  adverbs in the Helsinki Corpus (Nevalainen 1997: 161)

reported to be 'constantly heard in the professional and social conversation of cultured people' (Mencken 1961: 389).

This scenario of long-term variation and change in English adverb formation presents an interesting area for study. First, if the trend in the trajectory from 1350-1710 reported by Nevalainen (1994a, 1994b, 1997) has continued, we might expect an even lower frequency of  $-\emptyset$  adverb formation in the 1990s. Second, the relatively gradual rate of change and the fact that the zero adverb is still in use suggests that the distribution of *-ly* and  $-\emptyset$  in apparent time in contemporary varieties may reflect ongoing developments in the morphological derivation processes. Taken in context with reports from the historical record then, we should be able to track the underlying mechanisms or constraints by which this change has spread or is spreading through the linguistic system. On the other hand, reports on the same variability in North America, but with much higher frequencies of the zero form, point to the fact that this historical trend may be taking a turn and going back in the other direction, that is towards a situation of *more zero* adverbs. Further evidence about the direction of change, even in one variety, will shed light on this mystery. Third, the grammaticalization of *-ly* has apparently been highly sensitive to external (social) factors at least in the last century. Moreover, it appears to have been subject to more overt social stigma in Britain compared to North America. These differing sociocultural contexts (ecologies) for the development of the *-ly* suffix may shed light on the interrelationship between grammatical and social factors in language

change. Given this backdrop what is the nature and character of *-ly* and zero adverbs in contemporary varieties?

### 3. THE SYNCHRONIC PERSPECTIVE

Despite the sanctions against the use of the zero adverb by prescriptive grammarians, variation between *-ly* and zero forms is reported in virtually all non-standard dialects in Britain (Wright 1898–1905: 299; Edwards and Weltens 1984: 113; Hughes and Trudgill 1987: 20; Trudgill 1990: 80). The many attestations of *-ly/Ø* variability in different dialects include Cockney (Matthews 1938: 214), and locales such as Dentdale (Hedevind 1967), Egton (Tidholm 1979), Herefordshire (Leeds 1974), etc. Some examples from Reading in the south (Cheshire 1982: 80–81) and Wheatley Hill in the north (Tagliamonte 2000–2001) are shown in (14) and (15):

14. *Reading English, Southern England* (Cheshire 1982: 80)
  - a. We had it on fire one night, **honest**.
  - b. He writes really **quick**.
15. *Wheatley Hill English, Northern England* (Tagliamonte 2000–2001)
  - a. It was all carpetted **beautiful**. (WHL)
  - b. He's a **real** good gardener; he's a **real** good grower. (WHL)

The zero adverb is also widely reported in North America (Pooley 1933; Mencken 1961; Ross 1984; Görlach 1991; Wolfram and Schilling-Estes 1998). Similarly, in North American dialect studies, one can easily find attestations of the zero form or examples in the text. Ozark and Appalachian English are shown in (16), Alabama English in (17), Vernacular Nova Scotian English in Canada in (18):

16. *Appalachian and Ozark English, U.S.A.* (Christian, Wolfram and Dube 1988: 168, 169)
  - a. I come from Virginia **original**. (AE/96: [26])<sup>7</sup>
  - b. It **certain** was some reason. (AE/37: [321])
  - c. People do it **different**. (OE/34: 4)
  - d. . . . **spotless** clean (OE/38: 2)
17. *Alabama English, Southern U.S.A.* (Feagin 1979: 331)
  - a. Lots of times in hospitals, people have s-people [sic] that's **real** sick.
  - b. . . . and two boys come around right **quick** and run right into the front of the bus.
18. *Nova Scotian English, Guysborough Village, Nova Scotia, Canada*
  - a. They'd feel **awful** depressed. (GYV)
  - b. They had two or three **real** heavy gales. (GYV)

There is also evidence for zero adverbs in widely separated locales elsewhere in the world, for example Tristan da Cunha as in (19) (Zettersten 1969: 80), and in the Channel Islands as in (20) (Ramisch 1989: 161):

19. *Tristan da Cunha* (Zettersten 1969: 80)  
 a. 'Fred!' I say, 'Fred! Jump up *quick!*' (MS 141)  
 b. Every thing is coming on *nice* . . . (Letter 1965: 16)
20. *Channel Islands* (Ramisch 1989: 161)  
 a. You get wherever you're going pretty *quick*. (37.180)  
 b. I can't tell you *exact*, but say about 3 pound fifty. (18.345)

Most of these studies, if they comment on the appearance of zero adverbs at all, suggest that it is a characteristic of colloquial, informal or dialectal speech (e.g. Zettersten 1969; Christian, Wolfram and Dube 1988). This is echoed in most descriptions of this variation in contemporary grammar books (Poutsma 1926: 635; Leech and Svartvik 1975: 196; Quirk, Leech and Svartvik 1985: 404).<sup>8</sup> The standard/non-standard dichotomy is also said to be an important factor (Hughes and Trudgill 1987; Trudgill 1990). Supportive evidence for this can be found in Macaulay's (1995) research on a Scottish dialect (Ayrshire) where the most important factor in the choice between *-ly* and zero was socio-economic class. Yet in a number of reports there are distinct hints that the zero form does not just occur anywhere, but is preferred in certain linguistic contexts. So, perhaps the zero adverb is not simply a sociolinguistic variable.

The foremost linguistic constraint associated with the use of *-ly* and zero is whether the adverb modifies a verb which conveys abstract as opposed to concrete meaning. Jespersen (1961b: 48) reports that *-ly* is used for describing 'manner, and often in a figurative sense'. Similarly, in his grammar book, Schibsbye (1965: 152) suggests that literal usage promotes the zero adverb, while figurative or metaphorical uses tend to be marked with the suffix. Thus, *his hands were stuck deep into his pockets* but, *solidarity represents a real and deeply felt article of trade union faith*. Evidence for the existence of such a constraint comes from Donner's (1991: 4) quantitative study on Middle English where he found that the zero form is preferred in contexts with concrete meaning. Thus, '*foul* may refer to how pigs root, *fully* to how men sin'.<sup>9</sup> Another factor which is reported as far back as Early Modern English is the effect of adverb function. Jespersen (1961b: 371) notes that Shakespeare (1564–1616), employs the zero form for modifying adjectives and adverbs but *-ly* for modifying verbs (i.e. manner adverbs). This is repeated in Poutsma (1926: 634–635) with the added observation that the zero form is especially frequent with adverbs of degree and with intensifiers (see also Peters 1994: 284; Nevalainen 1997: 169).

In sum, variation between *-ly* and zero adverbs presents an interesting linguistic phenomenon as well. A grammatical change, adverbialization via the suffix *-ly* has resulted in longitudinal variation (or layering) between an older form – 'suffixless or flat adverbs' (Mencken 1961: 390) – and a newer morphologically marked version of the same adverb. This is succinctly put by Schibsbye (1965: 151):

A development is taking place in the direction of *-ly* as the general adverbial ending; most adverbs have reached this final stage, but a number have not yet acquired the



suffix, and a group is still at some point of the development, so that some adverbs occur both with and without the suffix.

As far as we can ascertain this variability must have begun at least by the Middle English period, nearly 700 years ago. Clearly observable from Nevalainen's work is a trajectory of gradual change towards increasing use of *-ly* in the Early Modern English period. Yet, ongoing variation is still widespread. This shows that the change is still not yet resolved, neither in Britain nor North America, nor in locales far flung from these major varieties.

We now turn to a quantitative examination of *-ly/Ø* variation.

## 4. DATA AND METHODS

### 4.1 *Community and data collection*

The data come from the York English Corpus, a 1.2 million word machine readable data set comprising conversations with the indigenous population of the city of York in north-east England. (see also Tagliamonte 1998; Tagliamonte and Lawrence 2000; Tagliamonte 2001). York is a relatively small city with a population of only 177,000 in 1999. It is somewhat unique amongst English cities in its cultural and economic conservatism and monolithic population base. The reason for this can be traced not only to its centuries long association with government, education and the church but also to the strong influence of the guilds. More interestingly perhaps is that the industrial revolution virtually passed York by. The city did not undergo the massive economic upheaval (e.g. population growth, rebuilding) found in other English cities (Wenham 1971; Feinstein 1981). Also in contrast to other English cities, York is somewhat monolithic. The population of the city up to the 20th century has been predominantly 'northern', with by far the largest group of in-migrants from the immediate environs (north-east England and Yorkshire) (Armstrong 1974). For these reasons, York has retained a somewhat conservative character while at the same time representing a relatively standard (northern) variety of British English.

Because one of the main goals of the York English Project was to obtain a representative sample of York English speech, the speakers were chosen on the basis of their native status in the community. Each person was required to meet the sampling criteria of having been born and raised in York. Anyone who had spent more than a cursory amount of time away from the city (i.e. for university education, military service or other) was excluded. Following the techniques developed by Labov (1970, 1971) we first set up a sample design with a broad range of ages and a balance between males and females. Then, in keeping with our goal of obtaining vernacular data, we followed the techniques of Milroy (1987) by entering the community through 'friends-of-friends' in three independent social networks: (1) acquaintances in the University service personnel; (2) neighbours and friends of the interviewers; and (3) a senior citizens'

community care centre. As contacts were made, the sample schema was filled until all the cells were represented. The current corpus consists of 91 individuals, ranging in age from 15 to 91 years of age and divided among 37 men and 54 women. Table 1 shows the stratification by age and sex.

Due to the notorious difficulties in categorizing speakers for social class we did not specifically seek out individuals a priori for their class affiliation. Instead, due to the three-pronged network strategy the speakers represent a range of occupations and education levels, generally reflecting the norms for the city at large. The majority (75%) of the speakers was educated to the minimum school leaving age of 16 currently required by law. Among the older speakers in the sample however the minimum schooling leaving age had been 14 and so amongst the oldest generation there are many speakers who had been educated to 14 years of age only. The occupations of the speakers range from pig farmers, labourers and undertakers to information technology specialists and psychiatric nurses.<sup>10</sup> However, across the corpus as a whole white collar, non-manual jobs (e.g. clerks, shop assistants, office workers) were in the majority – not surprising in a city with a non-manufacturing industrial base.

The speakers were interviewed in their own homes by one or both of the two female interviewers. Neither interviewer was native to York; however both were northerners and had resided in York for some time. They were trained in sociolinguistic fieldwork methods (see Labov 1971) and in addition had (non-academic) work experience in talking informally with a broad range of people. The interviews range from 45 minutes to 3½ hours in length. They are consistently casual. Even the most ‘interview-like’ amongst them contain elements of informal discourse – personal reminiscences, narratives of personal experience, folk stories, gossip and many vibrant characterizations of the city of York today and in the past. While there are undoubtedly formality effects operating within the context of the interview situation, these are within the normal parameters of stylistic variation found in casual speech amongst acquaintances (see also Labov 1972: 21). None of this material contains dramatically shifting styles of speech or the performance speech that appears to be present in fieldwork sites where the interviewers are alien to the community (Schilling-Estes 1998). Dialect features of North Yorkshire are widely represented in the materials, including the glottalized definite article as

**Table 1:** Sample design of the York English Corpus

	Male	Female	Total
< 35	11	12	23
35–65	13	22	35
66+	13	20	33
<b>Total</b>	37	54	91

in (21a), the ‘Yorkshire cleft’ as in (21b), the zero definite article as in (21c), and the use of *owt* and *nowt* as in (21d, e). The corpus is also filled with many non-standard tense/aspect features that are commonly attested in British English more generally (Milroy and Milroy 1993). These include demonstrative *them* (22a), plural *-s* absence (22b), *never* as a past tense negator (22c), *sat* and *stood* following *be* auxiliary (22d), non-standard strong preterits (22e, f), bare past participles in the PERFECT (22g), non-3rd singular verbal *-s* (22h), multiple negation (22i), regularisation of reflexive pronouns (22j), among many others.

21. a. The main thing is be happy. And if I get a bit miserable with miself, I go *t’* top of *t’* garden and talk to mi tomatos. (YRK)
- b. He *were* a nice fellow, was Teelee. (YRK)
- c. And he took him back to  $\emptyset$  hotel. (YRK)
- d. No, we haven’t had any late drinks or *owt* lately, have we? (YRK)
- e. But you get big bonus and stuff, don’t you? We don’t, we don’t get *nowt*. (YRK)
22. a. Don’t know how many pubs there were in *them* days. (YRK)
- b. Well it took me nearly all day yesterday to sew two *pair* $\emptyset$ . (YRK)
- c. She *never* come back for a long long time. (YRK)
- d. I *was sat* on the snow and I could feel the snow rumbling. (YRK)
- e. He was born and *brung up* in York. (YRK)
- f. You never *seed* a paper, you never *seed* a van of no description, we were down there weeks and weeks over end and never *seed* a soul. (YRK)
- g. Then I came back. I *been* back since nineteen-sixty-seven. (YRK)
- h. I *says* ‘Look.’ I *says* ‘just send them a threatening letter back yourself.’ (YRK)
- i. You didn’t do *nothing* like that. You were out to work then, you-see. (YRK)
- j. He had a business for *hisself* on his own. (YRK)

The interactional tone of these materials together with the presence of a multitude of non-standard features makes us confident that the data reflect the typical conversational style found in York. This places the York English corpus among other large-scale community samples in the U.K. and elsewhere in representing a contemporary variety of English from a community-based perspective. Coupled with York’s socio-cultural conservatism, this corpus also provides an excellent site for examining language variation and linguistic change within a well circumscribed social setting.

#### 4.2 Circumscribing the variable context

The focus of this investigation is the variation between *-ly* and  $\emptyset$ . Therefore the analysis is necessarily restricted to dual form adverbs only, i.e. those that can take either the *-ly* or  $\emptyset$  form, without a difference in function.<sup>11</sup> Thus, adverbs such as *early*, *late*, *long* and *high* which have the same forms for adjective and adverb (see Leech and Svartvik 1975: 195) were excluded.<sup>12</sup> Also excluded were adverbs whose adjectival form (i.e. zero form) is not semantically related to their *-ly* counterparts (e.g. *lately*, *hardly*, *directly*, *shortly*, etc.) (Leech and Svartvik 1975: 195). Thus, for example, *directly* as in (23a) is excluded because

it means 'immediately' in this context. However, the token in (23b) is included because *direct* in this context can alternate with *directly* meaning 'in a direct way without deviation':

23. a. He drove home *directly* after arriving (= 'immediately'). (Leech and Svartvik 1975: 195)  
 b. 'Cos in those days as well you used to get er milk *direct* from a- a dairy on a morning. (YRK)

Following Quirk et al. (1985: 405) we excluded all pre-verbal contexts where the zero form does not occur. Thus, *gently* in (24), which cannot alternate with *gentle*, is excluded. However, *slowly* in the same example, is included. By the same reasoning *really* as intensifier in (25a) is included, but not the one in (25b), where *really* is used to emphasize speaker's belief (i.e. 'modal' use Quirk et al. 1985).

24. They were just *gently* moved up and down, very *slowly*. (YRK)  
 25. a. So I was *really* bummed out, but um, you know. (YRK)  
 b. She *really* is butch. (YRK)

Other adverbs not included in the study include those occurring with verbs of perception such as *smell*, *feel*, *look* and *sound* as in (26). According to Quirk et al. (1985: 407) the former context is said to be marginally acceptable with the *-ly* form as in (26a). This is confirmed in Thorndike's (1943: 34) analysis of American English where the use of *-ly* is rare in this context. In our data these were categorically zero, as in (26b). Tokens of comparatives and superlatives with suffixes (*-er* and *-est*) as in (27a) were excluded. However, periphrastic forms (with *more* and *most*) were kept for analysis (27b). In the case of repetition, as in (28), only one of the repeated items was included. Incomplete utterances, as in (29) were excluded:

26. a. ?The flowers smell *sweetly*. (Quirk et al. 1985: 407)  
 b. So everybody looks *stupid*. (YRK)  
 27. a. If I do that they get over it much *quicker* than if I interfere. (YRK)  
 b. They take it so much more *seriously*. (YRK)  
 28. a. And then *funny* enough, *funny* enough, I think in one year four of us got married, you-know! (YRK)  
 b. She's brilliant, *really really* good. (YRK)  
 29. It was *really* diff- it was refreshing to go somewhere. (YRK)

Over and above these procedures we adopted a strategy of examining the data itself for evidence of a particular lexical item's potential for variability. This is because the literature and our own intuitions often failed to make the appropriate judgment about an adverb's propensity for variation in this variety. This was particularly true with sentence adverbs. For example, in our corpus, we found zero form sentence adverbs as in (30a) and (31a). Thus these tokens

as well as their *-ly* counterparts (30b and 31b) were included in the analysis. However, when such adverbs were uttered as a single response accompanied by expressions such as *oh*, *yes* and *yeah*, they turned out to be categorically *-ly* marked as in (30c) and (31c). Thus, these contexts were excluded from our analysis.<sup>13</sup>

30. a. I was an angel. *Absolute*. (YRK)  
 b. And I had years of utter misery. *Absolutely*. (YRK)  
 c. [077] Oh yeah but it'd mount up in two years wouldn't it? [078] Oh *absolutely* yeah. (YRK)
31. a. And she usually baby-sits once a week. *Definite*. (YRK)  
 b. But she's number one. *Definitely*. (YRK)  
 c. [Interviewer] Would you ever move from York? [008] Yeah, *definitely*. (YRK)

Like many morpho-syntactic variables this one is quite rare. After the careful circumscription of the variable context as just outlined and including all 91 speakers from the corpus, we were left with 980 tokens. In order to tap into the social meaning of the variable, each token was coded for the individual speaker, their age, sex, education level and employment history. Correlation of these factors with variation between *-ly* and zero will be taken as a measurement of the social significance of the variants. In this respect we employ the term 'social meaning' as it has been used in traditional sociolinguistic surveys (Chambers 1995: 1). Testing the use of the zero adverb according to style, level of formality or using more ethnographic methods (e.g. Eckert 2000) was not undertaken due to the nature of the data and the linguistic variable.<sup>14</sup> Finally, we coded for the linguistic factors implicated in the development of the *-ly* suffix, including adverb meaning, function and the specific lexical item.<sup>15</sup> First, we will conduct a distributional analysis of the dual form adverbs, then, we will assess their constraint ranking, significance and relative importance of factors when all of them are considered simultaneously using multivariate analysis.

## 5. RESULTS

### 5.1 Distributional analysis

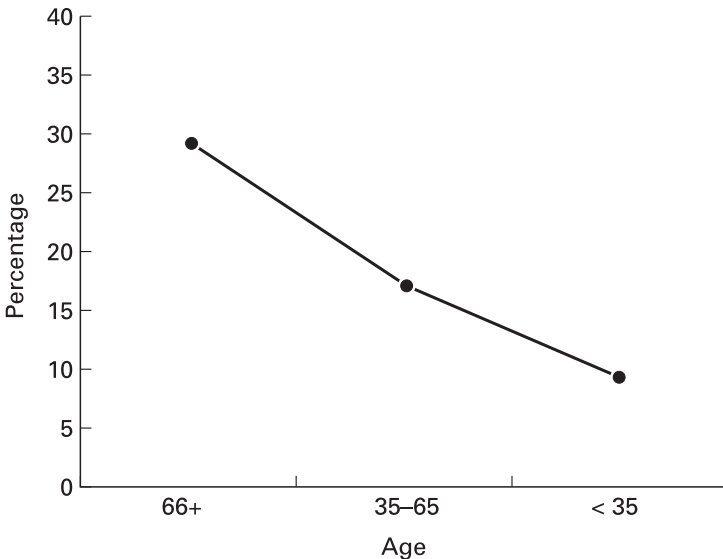
Table 2 reveals that the *-ly* form represents 85 percent of the data. This confirms that *-ly* is the dominant and over-riding form for adverb formation amongst the dual form adverbs, yet there are still quite a few – 15 percent – that are zero marked. When speaker age is taken into account, as in Figure 2, we observe an exceptional pattern in apparent time – zero adverbs are gradually decreasing from oldest to youngest speakers. This rate of decline is remarkably similar to the diachronic trajectory of increasing use of *-ly* for adverb formation found by Nevalainen (1997) (see Figure 1). How can this be? The zero forms had already been declining, representing only 13 percent of all adverbs in the mid 17th to early 18th century. Here it appears that they are still declining, representing 10

**Table 2:** Overall distribution of  $-\emptyset$  adverbs in York English  
Total N = 980

<b>-ly</b>		<b><math>-\emptyset</math></b>	
%	N	%	N
85	831	15	149

percent of all adverbs amongst the under 35 year olds, yet this trajectory is 200 years later in the 20th century (compare Figure 1 and Figure 2).

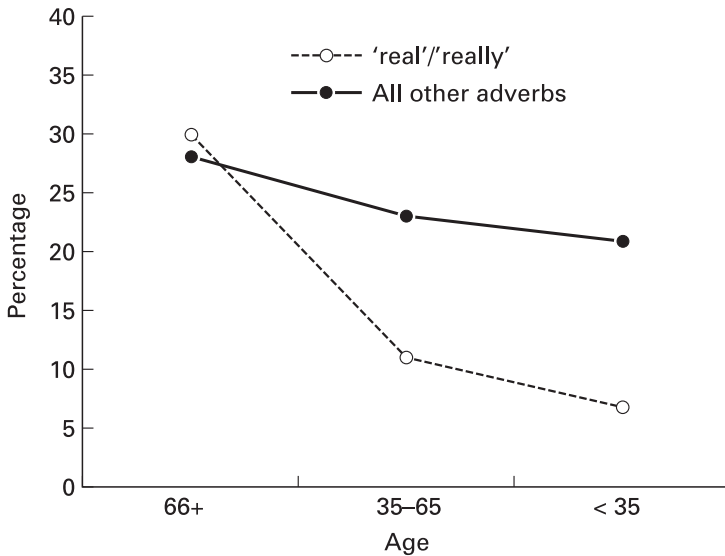
According to Opdahl (2000a, 2000b), one of the foremost factors that constrains the use of zero adverbs is the particular lexical item. Table 3 separates our data according to the individual adverbs. Although there are 59 different adverbs in our data, the majority of these occur only once or twice. Table 3 tabulates those which occurred more than 4 times. There are substantial differences in variability, ranging from 50 percent zero forms for the adverbs *quickly* and *awfully* to 0 percent zero forms for the adverbs *properly*, *strangely*, *badly* and *slowly*. This shows that the lexical distribution of adverbs in a sample must be taken into account. However, the most notable result is that one adverb represents by far the bulk of the total number of adverbs in the data – out of 980 adverbs, 645 are ‘*real/really*’ representing 66 percent of the data. Obviously, this will skew overall distributional results. Therefore, from this point onwards we will analyze *really* separately from all the other adverbs. Figure 3



**Figure 2:** Overall distribution of  $-\emptyset$  adverbs by age in York English

**Table 3:** Frequency of  $-\emptyset$  adverbs by lexical item (N > 4) in York English

Lexical identity	%	N
<i>really</i>	11	645
<i>absolutely</i>	5	64
<i>quickly</i>	50	44
<i>funnily</i>	29	24
<i>properly</i>	0	19
<i>easily</i>	18	17
<i>honestly</i>	29	17
<i>regularly</i>	31	13
<i>luckily</i>	8	13
<i>awfully</i>	50	12
<i>nicely</i>	11	9
<i>strangely</i>	0	8
<i>badly</i>	0	8
<i>slowly</i>	0	7
<i>seriously</i>	29	7
<i>rightly</i>	20	5
All other adverbs	39	68
	15%	980



**Figure 3:** Distribution of  $-\emptyset$  adverbs by age in York English

reanalyzes the data in Figure 2 this time separating the adverbs by type – *really* vs. the others. This presents quite a different perspective. A definite divergence between the pattern of the adverb *really* as opposed to all the others is exposed. For the oldest generation the rate of zero adverb formation for *really* and all other adverbs is virtually the same (30% and 28%, respectively). This generation is unique in having a high frequency of *real*, as in (32):

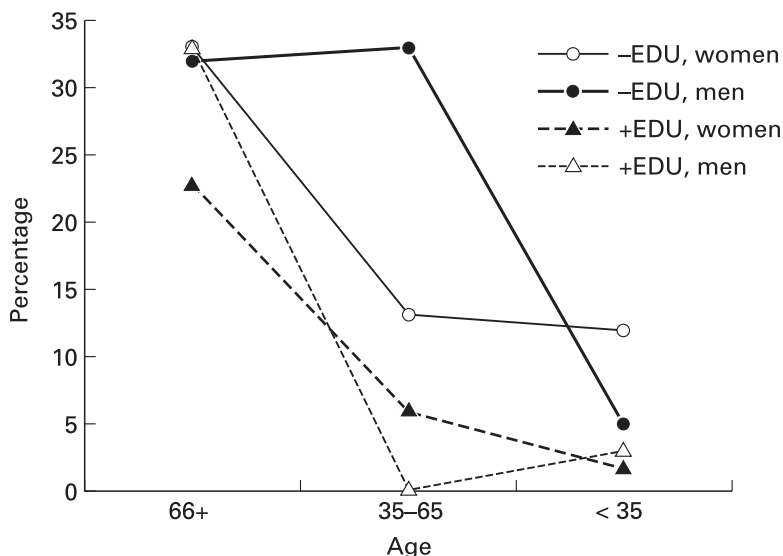
32. a. Maureen's husband's a *real* placid man. (YRK)
- b. People are *real* down, and they're starving up pops Hitler. (YRK)
- c. He was having *real real* bad health, was Michael. (YRK)
- d. They all were farmers and did *real* well. (YRK)

However, the frequency of use of *really* increases markedly from oldest to youngest, with the youngest speakers hardly ever using the zero-marked form – only 7 percent. In contrast, the frequency of the zero form amongst all the other adverbs decreases only marginally across the generations. What can explain this difference?<sup>16</sup>

As we outlined earlier, the most pervasive observation about the use of the zero adverb has been its correlation with colloquial, as opposed to formal, language. These data however comprise generally informal, unmonitored casual speech. Nevertheless stylistic variation could be reflected in other social characteristics of these speakers. For example stylistic variation has long been known to be closely intertwined with social class variation (Labov 1972), and in fact stylistic variation may actually *derive* from social class variation (Bell 1984: 151). Two of the most important indexes of social class are education level and employment history (e.g. Chambers 1995: 41–48) – thus, these factors may shed light on the social value associated with the variation between *-ly* and zero and in turn hint at their possible stylistic import. In order to test for the effect of education level, we divided the speakers into those who had been educated up to the age of 16 as opposed to those who had gone beyond the legal school leaving age. For employment history, we adopted Macaulay's (1976: 174) schema which is based on the Registrar General's classification of occupations in Britain. In the end, however, the majority of the speakers in the corpus was categorized as either white collar or manual. Not surprisingly this measure of social class interacted tremendously with education level, with education level providing the more consistent and robust pattern.<sup>17</sup> Consequently, the following distributional analyses present the results in terms of education level – Figures 4 and 5 show the distribution of the zero adverb by age, sex and education.

Figure 4, which shows the distribution of *really* only confirms the patterning shown in Figure 3. However, the separation of men and women according to education now reveals that the more educated women in the oldest generation may well have led the shift toward the use of *really*. In contrast, the less educated men lag behind, at least amongst the middle generation, and this lends support to the idea that the change was spearheaded as a change from above.





**Figure 4:** Distribution of *-Ø real*, e.g. *real good* by age and sex and education

Despite these differences however, the general trend is obvious – there is a dramatic shift in apparent time regardless of education level or sex of the speaker. The norm in the older generation is for constructions such as *real good*, while *really good* has taken over as the preferred form amongst the younger generation.

Figure 5 shows the distribution of the other zero adverbs by the same social characteristics of the speakers; however it points to a very different story. Here, the predominant users of the zero adverb in this community are within one highly circumscribed sector of the population – the less educated men, nearly all of whom work in manual labour jobs. Regardless of age, these men use the zero adverb at the highest frequencies, well above those of the others.<sup>18</sup> The women, on the other hand are moderate users of the zero form (with a range in frequency from 15–24%). However, there is little or no difference in its use amongst more or less educated women in any generation. The more educated men (who only have tokens of this type in the middle and younger generations) either pattern with the women or, as in the youngest generation, are even more conservative. Thus despite the obvious correlation of the zero adverb with less educated, and for all intents and purposes working class men, all speakers in the community use the zero adverb some of the time. Moreover, the effect of age is minimal. The next question is are they using it in the same way? We now turn to the internal factors said to condition the appearance of *-ly* and zero adverbs.

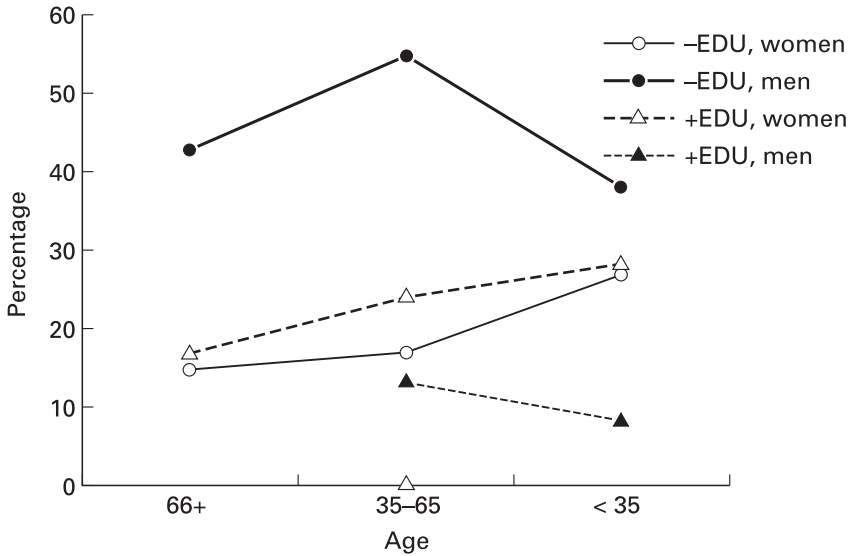


Figure 5: Distribution of -Ø other adverbs, e.g. *go slow*, by age, sex and education

*Function of the adverbs.* Adverb function is heavily implicated in the use of *-ly*. Diachronic change shows that at earlier stages of English, the intensifier use of adverbs (i.e. adverbs which modify either adjectives or adverbs) tend to be zero marked as in (33). Adverbs which modify verbs (i.e. manner adverbs) tend to be *-ly* marked (Poutsma 1926: 634; Peters 1994: 284; Nevalainen 1997: 169). However, as the examples in (34) show, the zero form is possible here too. Indeed, Opdahl (2000b: 32) states that alternation between -Ø and *-ly* will generally not exist except with manner adverbs in contemporary English.<sup>19</sup> No studies – as far as we know – report on the zero form with sentence adverbs, as we found in York, as in (35a–c). On inspecting various dialect studies however, we found the example in (35d) from Guernsey/Channel Islands (Ramisch 1989). This suggests that, the zero adverb may be more extended in regional dialects.

33. *Intensifiers*

- a. And then he had an **awful** big sheep. (YRK)
- b. If you do **absolute** perfect, you might get a C. (YRK)
- c. My first set of skids I used were **real** strong ones. (YRK)

34. *Manner adverbs*

- a. We heard him **regular** but he's pushing forward for him. (YRK)
- b. I mean you look at life **different**. (YRK)
- d. Couldn't get rid of me **quick** enough. (YRK)

35. *Sentence adverbs*

- a. And she usually baby-sits once a week. *Definite*. (YRK)
- b. *Funny* enough we had a telephone call. (YRK)
- c. *Honest* they did. (YRK)
- d. Golly, I've never thought about it like that. *Honest*, I haven't. (35.36)  
(Ramisch 1989: 161)

**Semantics of manner adverb.** Semantic factors also condition the zero adverb (Jespersen 1961b; Schibsbye 1965; Donner 1991; Nevalainen 1994a, 1994b, 1997). It is said to be used more with a concrete or objective sense, as in (36).<sup>20</sup> In contrast, the *-ly* form, is used with abstract or subjective sense, as in (37). This distinction, of course, is only relevant for manner adverbs.

36. *Concrete*

- a. I've walked upstairs dead *quick*. (YRK)
- b. I put winch-rope round on the back of t'axle and back t'trailer to pull it forward as *tight* as I could. (YRK)

37. *Abstract*

- a. Thursday was meat and potato pie, if I remember *rightly*. (YRK)
- b. They take it so much more *seriously*. (YRK)

We now assess the statistical significance, constraint ranking, and relative importance of these external and internal constraints using multivariate analysis.

## 5.2 *Multivariate analysis*

Table 4 shows two independent multivariate analyses of the contribution of factors to the probability of the zero adverb in the York English corpus. First, consider the external factors of education, age and sex. Overall, less educated speakers favour the zero form with a factor weight of .65 for *really* and .57 for the other adverbs. The range for this factor group (34 and 23, respectively) confirms that education is the strongest effect among the social factors for *really* and the other adverbs. However, there is no statistically significant sex effect for *really*. In contrast, there is a sex effect for the other adverbs: males favour the zero form at .62; females disfavour the form at .44.<sup>21</sup> Finally, the results for age confirm that the use of *really* is changing significantly in apparent time and with approximately the same strength as the effect of education. For the other adverbs, however, despite the differences across age groups observed in Figures 3 and 5, these are not sufficient to make the effect statistically significant.

Turning to the internal factors, note that adverb meaning is not applicable for the tokens of *really*. This is because *really* is virtually always used as an intensifier in this data. Indeed, 96 percent of *really* tokens were modifiers of adjectives as in (38a, b). Only 4 percent modified adverbs, as in (38c).<sup>22</sup>

**Table 4:** Two independent multivariate analyses of the contribution of internal and external factors to the probability of a *-Ø adverb* in York English. (Factor groups selected as significant in bold)

FACTORS CONSIDERED	<i>really</i>		all other adverbs		Ns/Cell	
	Factor weight	%	Factor weight	%	<i>really</i>	all other adverbs
Corrected mean	.08		.20			
Total N = 980	645		335			
<b>Adverb meaning (manner adverbs only)</b>						
Concrete			.69	38		
Abstract	N/A		.22	7	N/A	130
Non-manner adverb			.44	18	55	
<i>Range</i>			47		150	
<b>Education</b>						
Up to secondary	.65	17	.57	27	350	224
Secondary & beyond	.31	3	.34	15	270	97
<i>Range</i>	34		23			
<b>Age</b>						
66+	.75	30	[.53]	28	83	92
35–65	.51	11	[.51]	23	157	147
< 34	.44	7	[.46]	21	405	96
<i>Range</i>	31					
<b>Sex</b>						
Male	[.53]	9	.62	32	155	114
Female	[.49]	11	.44	20	490	221
<i>Range</i>			18			
<b>Adverb function</b>						
Manner			[.56]	29	185	
Sentence adv.			[.50]	23	71	
Intensifier	(adj.) [.52]	11	[.36]	14	616	79
	(adv.) [.22]	3			29	

38. a. But he was in a *really really really really* deep sleep. (YRK)  
 b. My first set of skids I used were *real* strong ones. (YRK)  
 c. She got on *really* well with hers didn't she? (YRK)

Once *really* has been separated from the total adverb cohort, the remainder are fairly well distributed across all the adverb functions – intensifier, sentential modifier and adverbs of manner. However, despite plenty of observations that this is the crucial internal factor that constrains the use of the zero adverbs (Poutsma 1926: 634; Peters 1994: 284; Nevalainen 1997: 169; Opdahl 2000b: 32), it is not statistically significant. Adverb meaning on the other hand is not only statistically significant, it is the strongest constraint on the variation between *-ly* and zero. Indeed it far outweighs the external constraints. The range here at 47, is more than double that of either of the external constraints. The constraint hierarchy of this factor reveals that adverbs which are associated with concrete meaning highly favour the zero-marked form at .69, while those associated with abstract meaning highly disfavour at .22, making them much more likely to be marked with *-ly*.<sup>23</sup> This effect is consistent across individual lexical items, despite the wide-ranging differences in frequency in Table 3. Moreover, it is still the strongest constraint even after the exclusion of one of the most frequent lexical items *quick*, which is categorically used with concrete meaning. Excluding categorical lexical items (*properly*, *badly*, *strangely* and *slowly*) or categorical speakers did not weaken this effect either. Furthermore, cross-tabulation of this factor with all the external factors (age, sex and education) showed that it is sustained across all of them. Thus, the effect is a real one. The major factor constraining the use of the zero form is adverb meaning.

## 6. DISCUSSION

The results we have presented here have confirmed that variation between *-ly* and  $\emptyset$  is a robust sociolinguistic variable in York English, but not entirely in the classic sense. We suggest that two different phenomena are involved. The history of adverbialization by *-ly* in English is a story replete with lexical and frequency effects. However, the history of intensifiers more generally is unique on a number of counts. As Stoffel (1901: 2), Bolinger (1972: 18), Quirk et al. (1985: 590) and Peters (1994: 269) have pointed out, the most rapid rate of change and the most interesting semantic developments occur in linguistic categories which maximize or boost meaning. Moreover, these are constantly in flux, as speakers target new lexical items to renew the sense of 'intensity' (Stoffel 1901; Peters 1994). Thus, intensifiers have changed substantially over the centuries. According to Mustanoja (1960: 319–327), the most popular one in Middle English was *full*, which was taken over by *right*, which was in turn taken over by *very* in the middle of 16th century. Nevalainen's quantitative work on earlier stages of English reveals these changes quite dramatically. Table 5 shows

**Table 5:** The ten most frequent zero adverbs in the Helsinki Corpus (Nevalainen 1997: 174)

	1350–1420		1500–1570		1640–1710	
1	<i>full</i>	253	<i>very</i>	174	<i>very</i>	424
2	<i>right</i>	202	<i>even</i>	96	<i>even</i>	69
3	<i>long</i>	56	<i>long</i>	96	<i>long</i>	63
4	<i>alone</i>	32	<i>right</i>	71	<i>still</i>	52
5	<i>most</i>	30	<i>still</i>	38	<i>just</i>	39
6	<i>sore</i>	24	<i>sore</i>	23	<i>pretty</i>	31
7	<i>still</i>	24	<i>full</i>	18	<i>alone</i>	26
8	<i>even</i>	23	<i>near</i>	18	<i>near</i>	20
9	<i>late</i>	17	<i>alone</i>	17	<i>right</i>	20
10	<i>near</i>	17	<i>like</i>	17	<i>most</i>	17

the most frequently used zero adverbial intensifiers in the three sub periods in the Helsinki Corpus. We observe the changing popularity of three older intensifiers: *full*, *right* and *very*. *Full* has 253 instances between 1350 and 1420, but only 18 in the early Modern English period. *Very* comes in strongly during this period (N=174), and more than doubles between 1640 and 1710 (N=424). Some examples are given in (39):

39. a. Maneȝe beoþ þeah æȝþer ȝe *full* æþele ȝe *full* welȝe and beoþ þeah *full* unrote.  
 ‘Many are nevertheless both very noble and very rich and are nevertheless very sad.’  
 (c. 888 K. ÆLFRED *Boeth.*xi. §I) (Cited in OED Vol. IV p. 591)
- b. þuss miht tu ledenn her þatt lif *Rihht* wel, wiþþ Godess hellpe.  
 ‘Thus, you might lead that life here very well with God’s help.’  
 (c. 1200 ORMIN 6281) (Cited in OED Vol. VIII p. 675)
- c. *Very* erly in the mornȝng, *au plus matyn*.  
 ‘Very early in the morning.’  
 (1530 PALSGR. 814/1) (Cited in OED Vol. XII p. 153)

In contrast to these ‘older’ intensifiers, *real*, as in (40a), is first attested much later – not until 1658, according to the OED. It is tellingly absent in Nevalainen (1997), and in Peters’ (1994) research it is not present in personal letters until the early 18th century.<sup>24</sup> We easily found (40b):

40. a. The *reallest* good turn that can be done from one man to another. (1658  
*Whole Duty Man* xiii. §35)
- b. An Opportunity of doing a *real* good Office. (1718 J. Fox *Wanderer* No. 17.116)  
 (Both are cited in OED Vol. VIII p. 201)

Consistent with Labov’s (1985) observations for American English, we suggest that the increase in use of *really* in this data represents a vigorous new development, but not necessarily one that relates to adverb formation per

se. Put in context with the development of intensifiers more generally, we suggest this result simply reflects the coincidence of two things: first, the development of the adverb *really* at a point in history when *-ly* was the pervading adverb formation process; and second, the appropriation of *really* as the favoured lexical item to maximize or boost meaning in York English. In order to confirm this, and further to understand the trajectory of change and diffusion in this area of grammar in more detail, an analysis which encompasses all the intensifiers, including the ones that do not have dual forms like *very*, *right*, *well*, etc. will have to be conducted. If our preliminary results are any indication, this area of grammar is the locus of tremendous generational change in contemporary English (Tagliamonte and Ito 2001). We conclude therefore that the overwhelming use of *-ly* in *really* does not reflect ongoing developments in English adverb formation, but is the result of a particular lexical choice taking over in ongoing renewal in the encoding of intensity.

However, use of *really* is so frequent and dramatic in its recent trajectory of development that it obscures the stable variation between *-ly* and zero in the English dual form adverbs in this community. Once adverb function and adverb meaning are disentangled, lexical effects taken into account, and all the internal factors tested simultaneously with external factors, we discover that the zero adverb is not disappearing nearly as fast as earlier research has suggested, at least not in this variety of British English. Indeed, it bears at least one of the classic characteristics of a sociolinguistic marker – identification of a particular social group (Labov 1972). However, the social meaning of the zero adverb is not simply to be attributed to ‘style’ (e.g. Van Draat 1910; Partridge 1969) nor a class marker as in Ayr in Scotland where use of the zero form sharply splits the difference between middle and working class (e.g. Macaulay 1995). In York the divide is between a particular sector of the male population and everyone else. Given this distribution pattern, the variable use of *-ly* or zero with adverbs in York may be less of a generalized stylistic marker than the literature suggests, at least in the north. Support for this observation comes from Macaulay’s study where, despite class differentiation, there was no difference in the use of adverb variants according to style or register (Macaulay 1995: 55).<sup>25</sup>

More generally, these findings taken from a representative sample of contemporary (British) English reveal that the process involved in adverb formation is not simply a matter of extension of *-ly* to all adverbs equally. Despite the statistically significant, socio-symbolic values associated with the zero adverb in this community, one internal constraint overrides them all in strength – a propensity for *-ly* with abstract meanings and zero with concrete meaning. Interestingly, this constraint has been operable since Middle English (Donner 1991). Here we see that it is still the most significant factor contributing to variation in adverb formation in 1996. Thus, just as variants in a dialect mixture may be subject to redistribution of variants according to social class, formality or style (Trudgill 1986), the zero adverb appears to be a case of reallocation of variants involved in longitudinal linguistic change according to education (and/

or social class). If so, it provides yet another example of the interface between social and historical developments in language (Labov 1989: 96).

By considering these results from an historical perspective we also discovered that the practice of dropping the suffix *-ly* has been around since the 14th century, but it was at its height of usage in British English in the 18th century (Van Draat 1910: 97; Partridge 1969: 214). Given that this corresponds to the time period of massive migration from Britain into North America (Bailyn 1986; Bailyn and DeWolfe 1986; Fischer 1989), American English was undoubtedly predisposed by its founders to develop from a stage of frequent use of the zero adverb. Frequent citations of the zero adverbs *quick* and/or *slow* in American English, as in (41), (see also Rice 1927), along with easily found 18th century examples of the same forms, as in (42), underline this connection:

41. a. They need it **quick** and they don't care how. (American English, written, NY Times)  
 b. We'll come back **quick**. (American English, spoken) . . .
- f. No matter how fast or **slow** an observer moves . . . (American English, written) (all from Liddle 1999: 14–15, 22)  
 g. He's got to thaw **slow**. (American English, written, Brown K24: 182) (Opdahl 2000a: 464)  
 h. . . and two boys come around right **quick** and run right into the front of the bus. (Southern American English, Alabama) (Feagin 1979: 331)  
 i. The widow said I was coming along **slow** but sure, and doing very satisfactory. (*Huck Finn* Ch. 4)  
 j. But I slid out of the jacket **quick** as lightning, and saved myself. (*Huck Finn* Ch. 6)
42. a. It grew so **slow**, as provoked him to take it up. (W. Ellis Chiltern and Vale Farm. 109. c. 1773) (OED IX, p. 240)  
 b. I am told you speak very **quick**. (Chesterf *Lett* II, 25 c. 1748) (OED VIII, p. 53)  
 c. . . you place your Churn in a paille of cold water as deep as your Creame riseth in the Churne; and in the churning thereof let your stroakes goe **slow** and be sure that your churne be cold when you put in your creame. (EmodE2, Markham, 112) (Nevalainen 1994a: 250)

The fact that the zero adverb was championed by Noah Webster must have given it considerable social sanction in North America (Mencken 1961: 389). We suggest, therefore, that in contrast to the British context, in North America the zero adverb started out as a robust variant and continued to develop unchecked by social pressure in a receptive environment. This may be why zero adverbs in North America are more frequent than in Britain. But this does not necessarily entail that they are currently engaged in linguistic change such that they are increasing in frequency in contemporary American English. They may, as in York, simply be circumscribed to similar sectors of the population, specialized for particular types of modification and maintained this way across generations. Of course, such speculation requires further study, particularly through studies in apparent time which would confirm or mitigate claims



for the putative increase in frequency of the zero adverb in contemporary North American dialects (e.g. Wolfram and Schilling-Estes 1998: 338). Further research would also be able to assess whether the zero form is expanding across contexts as well as increasing in frequency.

In Britain, on the other hand, the rise of prescriptive norms in the 19th century heavily stigmatized the zero form (e.g. Lowth 1762/1967: 126; Poutsma 1926). It is reported to be restricted to highly informal styles, often characterized as part of 'colloquial usage' (Partridge 1969: 14) and 'familiar speech', even 'vulgar' (Van Draat 1910: 97). However, its continuity in British dialects cannot be underestimated. It persists as a healthy variant, particularly amongst certain sectors of the population, and in all speakers in certain specialized contexts. This may be especially true of the north where our data originate. As Trudgill (1990: 65–78) and others have argued, northern British dialects are generally more conservative than the southern ones. In this case, the use of the zero adverb in York according to constraints which can be traced to earlier stages in the language is consistent with this view. It also highlights the fact that northern dialects in general provide an important historical perspective on linguistic variables of English which have been undergoing grammatical change over the last few centuries. This prompts another question: do contemporary British dialects (particularly given the difference between those in the north and those in the south) differ with respect to the nature and character of the zero adverb? If such asymmetries exist, they may be linked to specific points on the trajectory of change (see Tagliamonte forthcoming). This would provide yet more evidence not only for identifying the social mechanisms of linguistic change, but also for the enterprise of reconstructing the history and development of dialects in time and space. Such possibilities remain for further research.

To conclude, the zero adverb is retained in York English as a socio-symbolic resource, particularly for identifying less educated male speech. However, it also encodes a specific type of function – concrete, objective meaning – a tendency which can be traced back 650 years or more. Thus, it is not the case that the zero adverb is being used in a new way, but in the same old way – a reflection of the inherent and structured variation of centuries. The socio-symbolic value of the zero variant is quantitative, not qualitative, built out of existing grammatical constraints and patterns. Given this perspective, the longitudinal continuity of the zero adverb, at least in this variety, cannot simply be attributed to illiteracy, informality, creolization or dialect levelling. This type of interface between external and internal conditioning provides yet another reminder that even variables with strong social significance must still be examined within the context of their grammatical distribution and historical development.

## NOTES

1. We gratefully acknowledge the generous support of the Economic and Social Research Council (ESRC) of Great Britain for Research Grant R000238287.
2. The examples in the text are followed by reference codes which identify the origin of the example. The three-place alphabetic code refers to the corpus (e.g. York English corpus = YRK; Wheatley Hill = WHL; Guysborough Village = GYV).
3. These forms of the adverb have been referred to by many terms in the literature: 'adjectives as adverbs' (Emma 1964: 80); using an adjective instead of an adverb (Abbott 1879: 5; Matthews 1938: 214); 'flat' adverbs (Emma 1964: 114); 'simple adjectival forms' (Partridge 1969: 214); and 'dual form' adverbs (e.g. Donner 1991: 3). Here we will simply refer to them as zero adverbs or zero forms.
4. When used in literary language the zero forms undoubtedly reflect the authors' deliberate choice in order to create a vivid image of a particular character.
5. The dating of this event differs slightly from scholar to scholar: 'the end of the OE period' (Nevalainen 1994b: 140); 'late northern OE and ME' (Mustanoja 1960: 314); 'early ME' (Pyles and Algeo 1993: 266); and 'ME' (Jespersen 1954: 408; Pulgram 1968: 384).
6. The Helsinki Corpus is a one and a half million word collection of English texts spanning 850–1710, a time period which encompasses Old to Early Modern British English (Kytö 1993: 2). The corpus is particularly useful for the study of diachronic change in the English language in that it provides a controlled sample for different periods, genres and registers.
7. These references are from the original text.
8. Indeed, as one reviewer of this manuscript pointed out, use of *-ly* in informal contexts in contemporary varieties e.g. *hold tightly*, can be heard as hypercorrect due to the more common use of *hold tight*. Similar observations can be found early in the 20th century. For example, Rice (1927: 491) chides '[i]magine a traffic policeman, even in Harvard Square saying "Slowly, slowly" or "More slowly" to anybody!' Although the use of the zero form in such cases may be due to a frequent adverb collocation simply becoming conventionally frozen, we will argue that an underlying semantic constraint may be at work here as well.
9. Nevalainen (1994a: 251) reports that this type of semantic distinction is not systematically observed in data from 1350 to 1710; however, she did not specifically test for its application quantitatively.
10. Retired speakers were classified according to their pre-retirement occupation. Unemployed speakers were classified according to their previous/most recent job.
11. For a different methodological approach see Opdahl (2000a, 2000b) where all adverbs were targeted for investigation whether they varied in the use of *-ly* and zero or not.
12. Adverbs which have the same forms for adjective and adverb are typically connected with TIME, POSITION and DIRECTION (Leech and Svartvik 1975: 195) or TIME and PLACE (Nevalainen 1997: 751).
13. It is curious that the zero variant is possible in (30a) and (31a) but not in contexts such as (30c) and (31c). As a reviewer of this manuscript pointed out, the existence of adverbs which do not present the option of *-ly* absence, e.g. *She arrived late*, and others which are categorically zero, e.g. *Take it easy*, raise the question of the blurred borderline between adverbials and complements more generally. We cannot address this broad question in this particular analysis; however, it warrants consideration, particularly in spoken corpora.

14. Because dual form adverbs are very infrequent, the total number of occurrences per speaker range from as low as none (2 speakers did not use a single dual form adverb in an hour of running conversation) to a high of 54 tokens. In addition, this variable has strong lexical constraints (see Table 3). Even if we had coded the interviews along stylistic lines (if this could be done consistently with the generally informal data base), the small cell sizes and chance lexical distributions within them, would have obscured any stylistic effect. Moreover, as we shall see there is also a strong underlying linguistic constraint which comes in to play as well which would also have confounded being able to tap a stylistic effect. In any case, exploratory examination of a number of speakers revealed that the zero forms were not localized to particular conversational topics, turn types or points in the interview.
15. Numbers of syllables in the adverb and adverb position were also coded, but neither was statistically significant. We do not discuss these factors further here.
16. Nevalainen (1997: 171) noticed a difference in the behaviour of manner adverbs vs. intensifiers with respect to preference for *-ly* or  $\emptyset$  as well.
17. In the two employment groups which had varying education levels the fact that education was the more relevant factor was easily observable. White collar workers consistently use more *-ly* than manual workers. Similarly, within each education group, those educated beyond the age of 16 consistently used more *-ly* than the less educated speakers.
18. When the same distributional analysis as in Figure 5 was done using social class (not shown) the patterning was the same, though somewhat obscured by the small cell sizes created by the added division between professionals and white collar workers.
19. It is not clear whether the statement applies only to the 20 lexical items which she examined or written English in general or both written and spoken English. In either case, however, function is still an important factor for the variation of  $\emptyset$  adverbs.
20. Terminology in the discussion of semantic differences varies from scholar to scholar. Jespersen (1961b: 48–51) used the term ‘figurative sense’ while Donner (1991: 4) used the term ‘objective’ vs. ‘subjective’ sense. Nevalainen (1994: 251, 1994: 141) used the term ‘concrete’ vs. ‘abstract’. In order to test this contrast objectively, we coded as ‘concrete’ meanings associated with concrete/physical events or activities, while ‘abstract’ readings involved mental phenomena. Thus, for example, *heavily* in *He drunk heavily* is coded as concrete.
21. Even when male/female differences were tested on each age group separately (not shown), none of them exhibited statistically significant male/female differences for *really*. In contrast, old and middle aged groups exhibited a strong statistically significant sex effect for the other adverbs with males highly favouring the zero variant. The same constraint ranking was visible amongst the younger cohort. In this case, however, education was selected as significant over and above the male/female contrast.
22. All the *really* tokens which modified adverbs were modifiers of *well* (N=29). Of these, there was only one zero token as in (32d).
23. It is also important to note that it is not the case that the more educated speakers use abstract manner adverbs more frequently than less educated speakers. In fact, the proportion of use of abstract vs. concrete adverbs is fairly equally distributed across age, sex and education.
24. Peters (1994) examined personal letters written between the 15th and mid 18th century: The Cely Letters, Shillingford Letters, Paston and Stonor Letters, The

Wentworth Papers and The Basire Correspondence. Neither *real* nor *really* was used until in the Wentworth Papers which were written between 1705–1739.

25. Such differences underscore the fact that linguistic variables which encode stylistic meaning may differ from one community to another.

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