DRIFT AND THE EVOLUTION OF ENGLISH STYLE:
A HISTORY OF THREE GENRES

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The present study uses a multidimensional approach to trace the historical evolution of written genres of English. We briefly present a model of stylistic variation developed in our previous work, focusing on three empirically defined dimensions of linguistic variation that are associated with differences among 'literate' and 'oral' varieties: 'Informational versus Involved Production'; 'Elaborated versus Situation-Dependent Reference'; and 'Abstract versus Nonabstract Style'. We then show how fiction, essays, and letters have evolved over the last four centuries with respect to these dimensions. Although they have evolved at different rates and to different extents, we show that all three genres have undergone a general pattern of 'drift' towards more oral styles—more involved, less elaborated, and less abstract. We discuss several possible functional and attitudinal influences on the observed patterns of drift; these include the rise of popular literacy and mass schooling, the demands of scientific and expository purposes, and conscious aesthetic preferences. In so doing, we extend Sapir's notion of drift to include the evolution of genres and the influence of nonstructural underlying motivations.*

> *Language moves down time in a current of its own making. It has a drift.* (Edward Sapir, *Language*)

1. INTRODUCTION. Historical linguists and sociolinguists have traditionally taken very different approaches to the analysis of variation. Besides the obvious difference of focus on diachrony or synchrony, there are two other fundamental differences: placing the locus of variation in linguistic forms or linguistic varieties, and analyzing the variation itself in absolute or relative terms. Within historical linguistics, variation has generally been considered in terms of absolute differences between two or more competing forms, leading to the eventual displacement of one form by another. Sociolinguists, by contrast, have typically characterized variation in terms of the differences among language varieties with respect to their relative use of linguistic forms.

Certain types of variation have been slighted by both of these approaches. For example, morphological and syntactic variation have been overshadowed by phonological variation. Further, although sociolinguistic studies focus on the relations among varieties, they have been directed primarily to the analysis of social dialects of urban speaker groups and have largely ignored situational variation. Only a few studies have attempted to combine the concerns of historical linguistics and sociolinguistics. The groundbreaking work of Labov (1972, 1981) and Weinreich, Labov, and Herzog (1968) in this area focused on the way that diachronic sound change evolves out of synchronic variation. Romaine (1982) advocates a broader 'socio-historical' linguistics, which in-

cludes analysis of the relative frequency of forms in situational varieties from different historical periods. She illustrates such an approach through an analysis of the alternation among relative clause markers in Middle Scots English. Kytö & Rissanen (1983) and Rissanen (1986) advocate this approach in studying historical syntax in early British and American English.

As far as we know, no study within linguistics has traced the overall historical development of particular situational varieties. There has, however, been a good deal of investigation within the related field of diachronic stylistics. This research, undertaken from a literary perspective, describes the linguistic and rhetorical characteristics of 'period styles' in English (e.g. Gordon 1966, Adolph 1968, Bennett 1971, Fowler 1987). Although the linguistic analyses typically found in these studies are less complete than those proposed for sociohistorical analyses, they provide an important source of background information on the historical development of genres in English.

The present study uses a sociohistorical approach to analyze the evolution of three written genres[1] in English over the last four centuries. In particular, we trace the evolution of essays, fiction, and letters. Our study is social in that it analyzes the linguistic characteristics of these genres in relative terms, conditioned by a variety of situational factors. It is historical in that it traces the linguistic evolution of these genres across four centuries. Rather than focusing on the evolution of individual forms, this study shows how language varieties can evolve; and it describes striking patterns of historical change in the RELATIVE frequency of linguistic forms (rather than in the displacement of one form by another).

The notion of linguistic co-occurrence is central to sociolinguistic analyses of style (see Ervin-Tripp 1972, Hymes 1974, and Brown & Fraser 1979:38–9), and several researchers have described the distribution of co-occurring linguistic features across particular social and situational varieties. In the present study we analyze linguistic co-occurrence in terms of underlying DIMENSIONS of variation (Biber 1986, 1988). Dimensions are continuous parameters of variation, such that each parameter comprises a group of co-occurring linguistic features. These co-occurrence patterns are identified empirically (rather than being proposed on a-priori functional bases). Our previous studies have shown that no single dimension is adequate in itself to account for the range of linguistic variation in English; rather, a multidimensional analysis is required.

Dimensions have both linguistic and functional content. The linguistic content is defined by a group of linguistic features (such as nouns, attributive adjectives, and prepositional phrases) that co-occur with a markedly high frequency in texts. On the assumption that co-occurrence reflects shared function, these co-occurrence patterns are interpreted functionally. Each dimension thus characterizes the situational, social, and cognitive functions most widely shared by the co-occurring linguistic features.

In turn, the dimensions are used to define the RELATIONS among texts. A

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[1] We use the term 'genre' for those varieties readily distinguished by native speakers, corresponding to situational differences in purpose, mode, speaker/listener relationship, etc.

text has a characterization with respect to each dimension, determined by the frequency of occurrence in that text of the group of features defining the dimension. By considering the characterizations of texts along all dimensions simultaneously, we can define the overall linguistic similarities and differences, i.e. the textual relations, among texts.

In earlier investigations we have used the notions of dimension and relation to characterize and compare varieties of use in English. For example, we have analyzed spoken and written varieties (Biber 1986), British and American varieties (Biber 1987), and complex and simple varieties (Finegan & Biber 1986). Biber 1988 develops a multidimensional model of stylistic variation in English. In the present study we turn to the historical evolution of English genres within this model of variation. Specifically, we show that the linguistic characterizations of essays, fiction, and letters have changed dramatically over the last four centuries. We further show that, although these genres have been evolving at different rates along three independent dimensions, these developments have not been random; rather, they reflect a single underlying pattern of drift towards more ORAL linguistic characterizations. We use the term DRIFT essentially in the same sense as Sapir (1921:Chs. 7 and 8) to suggest a cumulative series of gradual linguistic developments in a consistent direction: 'The drift of a language is constituted by the unconscious selection on the part of its speakers of those individual variations that are cumulative in some special direction' (Sapir 1921:155).

In the conclusion, we discuss possible functional and attitudinal motivations (conscious and unconscious) for this pattern, offering an elaboration and refinement of Sapir's 'elusive drift' (1921:169).

2. OVERVIEW OF THE DIMENSIONS OF VARIATION. Of the six major dimensions of variation identified in Biber 1988, we focus here on three dimensions that are associated with 'oral' and 'literate' differences in English.[2] The dimensions were identified by analyzing the distribution of 67 functionally important linguistic features across 481 spoken and written texts of contemporary British English. The texts, which were taken principally from the Lancaster-Oslo/ Bergen and London-Lund corpora, represent 23 different genres (e.g. academic prose, press reportage, conversation, radio broadcasts). The linguistic features represent sixteen grammatical and functional categories: (i) tense and aspect markers, (ii) place and time adverbials, (iii) pronouns and pro-verbs, (iv) questions, (v) nominal forms, (vi) passives, (vii) stative forms, (viii) subordination features, (ix) prepositional phrases, adjectives, and other adverbs, (x) lexical specificity, (xi) lexical classes, (xii) modals, (xiii) specialized verb classes, (xiv) reduced forms and discontinuous structures[3], (xv) coördination, and (xvi) negation. The features are identified automatically in texts by computer programs.[4] A full discussion of the model of variation as well as the methodological

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[2] The dimensions labeled A, B, and C in the present study correspond to Dimensions 1, 3, and 5 of Biber 1988.

[3] For example, split infinitives and stranded prepositions.

[4] The frequency counts of all linguistic features are normalized to a text length of 1000 words.

approach, including description of the texts, linguistic features, and compu-
tational and statistical techniques, is given in Biber 1988; we present only a
condensed overview of the dimensions here.

The co-occurrence patterns among features are identified quantitatively by
a factor analysis. This procedure identifies sets of linguistic features that co-
occur frequently in texts; a set of co-occurring features is called a factor. In a
factor analysis, a large number of original variables (in this case the linguistic
features) are reduced to a small set of derived variables—the factors. Table 1
summarizes the important defining features for the three factors used in this
study.[5] The number listed after each feature gives the weight of that feature
on the factor in question. For instance, some of the important features on Factor
A are nouns, word length, and prepositions (at the top, with positive weights)
and private verbs, *that*-deletions, and contractions (at the bottom, with negative
weights). The clusters with negative and positive weights on a given factor
represent two groups of features that occur in a complementary pattern. That
is, when the features with positive weights occur together frequently in a text,
the features with negative weights are markedly less frequent in that text, and
vice versa.[6]

2.1. INTERPRETATION OF THE DIMENSIONS. The interpretation of a factor as a
functional dimension is based on the assumption that a co-occurrence pattern
indicates an underlying communicative function shared by the co-occurring
features. That is, it is assumed that particular sets of linguistic features co-
occur frequently in texts because they serve a related set of communicative
functions. The interpretation of a factor thus involves an assessment of the
communicative function(s) most widely shared by its defining features. In the
interpretation, it is important to consider the likely reasons for the comple-
mentary distribution between positive and negative feature sets as well as the
reasons for the co-occurrence patterns within those sets.

Consider Factor A again. To interpret this dimension, we assess the functions
shared by these co-occurring features. We begin with the features having posi-
tive weights, because they are relatively few and their interpretation is rela-
tively straightforward. Nouns, word length, prepositional phrases, type/token
ratio, and attributive adjectives all have positive weights larger than .45, and
none of these features has a larger weight on another factor. High frequencies
of all these features are associated with communicative situations that have an
informational focus and provide ample opportunity for careful integration of
information and precise lexical choice.

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[5] Each factor is a simple summation of all of the linguistic features, with different features having
different weights (known as FACTOR LOADINGS). A restricted set of the linguistic features has salient
weights on a given factor, identifying these features as good representatives of the construct, or
textual dimension, underlying the factor. In the factor interpretations, features with weights smaller
than | .35 | are not considered salient and are not included.

[6] The polarity of Dimension A has been reversed from that of Dimension 1 in Biber 1988 to make
the oral/literate correspondences of the dimensions more transparent.

FACTOR A		FACTOR B	
nouns	.80	wH-relative clauses on object	
word length	.58	positions	.63
prepositions	.54	pied-piping constructions	.61
type/token ratio	.54	wH-relative clauses on subject	
attributive adjectives	.47	positions	.45
- - - - - - - - - -		phrasal coördination	.36
private verbs	−.96	nominalizations	.36
that-deletion	−.91	- - - - - - - - - -	
contractions	−.90	time adverbials	−.60
present-tense verbs	−.86	place adverbials	−.49
2nd-person pronouns	−.86	other adverbs	−.46
DO as pro-verb	−.82		
analytic negation	−.78		
demonstrative pronouns	−.76	FACTOR C	
general emphatics	−.74	conjuncts	.48
1st-person pronouns	−.74	agentless passives	.43
pronoun *it*	−.71	past participial adverbial clauses	.42
BE as main verb	−.71	*by*-passives	.41
causative subordination	−.66	past participial wHIZ deletions	.40
discourse particles	−.66	other adverbial subordinators	.39
indefinite pronouns	−.62	- - - - - - - - - -	
general hedges	−.58	[No negative features]	
amplifiers	−.56		
sentence relatives	−.55		
wH-questions	−.52		
possibility modals	−.50		
nonphrasal coördination	−.48		
wH-clauses	−.47		
final prepositions	−.43		

TABLE 1. Summary of the three dimensions.

The set of features with negative weights on Factor A is more complex, although all of these features have been associated in one way or another with an involved, noninformational focus, related to a primarily interactive or affective purpose and highly constrained production circumstances. Private verbs (e.g. *think, feel*) and present-tense verbs are among the features with largest weights on this factor, indicating a verbal, as opposed to nominal, style. These features can also be considered interactive or 'involved', as can first- and second-person pronouns, wH-questions, emphatics, amplifiers, and sentence relatives; all of these features mark interpersonal interaction or expression of personal feelings.

Other features with negative weights on Factor A mark a reduced surface form, a generalized or uncertain presentation of information, and a generally fragmented production of text; these include *that*-deletions (e.g. *I think [that] he went*), contractions, the pro-verb DO, the pronominal forms, and final (stranded) prepositions. In these cases a reduction in surface form also results in a more generalized, less explicit content.

Overall, Factor A thus represents a dimension marking high informational

density and exact informational content (the features above the dashed line) versus affective, interactional, and generalized content (the features below the dashed line). Two separate communicative parameters seem to be entailed here: the primary purpose of the writer/speaker (informational versus involved) and the production circumstances (those enabling careful editing possibilities versus those dictated by real-time constraints). Reflecting both of these parameters, the interpretive label INFORMATIONAL VERSUS INVOLVED PRODUCTION can be used for the dimension underlying this factor.

On Factor B, three different forms of relative clauses are grouped as the primary positive features: WH-relative clauses on object positions, WH-relative clauses on subject positions, and pied-piping constructions. These features can all serve as devices for the explicit, elaborated identification of referents in a text. The co-occurrence of phrasal coördination and nominalizations with these relativization features indicates that referentially explicit discourse also tends to be integrated and informational.

Three features have large negative weights on Factor B: time adverbials, place adverbials, and other adverbs. Place and time adverbials are used for locative and temporal reference (e.g. *above, behind; earlier, soon*); these forms typically mark exophoric reference to places and times outside the text itself, often serving as deictics that can be understood only by reference to an external physical and temporal situation. The class of 'other adverbs' includes manner and other adverbials.

Considering both positive and negative features, the dimension underlying Factor B seems to distinguish between highly explicit, 'context-independent' reference, on the one hand, and nonspecific, 'situation-dependent' reference, on the other. WH-relative clauses are used to specify the identity of referents in an explicit and elaborated manner so as to leave no doubt about the intended referent. Time and place adverbials, on the other hand, usually require the addressee to identify the intended place and time referents in the actual physical context of the discourse. Overall, the label ELABORATED VERSUS SITUATION-DEPENDENT REFERENCE thus seems suitable for this dimension.

On Factor C, the features with positive weights are conjuncts, agentless passives, past participial adverbial clauses, *by*-passives, past participial WHIZ deletions (e.g., *the textbook [which was] used in that class*), and other adverbial subordinators. These forms are all used to present propositions with reduced emphasis on the agent, giving prominence to the patient, the entity acted upon. This promoted element is typically an inanimate referent and is often an abstract rather than a concrete entity. Discourse with very frequent passive constructions is thus typically abstract and technical in content, suggesting the label ABSTRACT VERSUS NONABSTRACT STYLE for Dimension C.

2.2. TEXTUAL RELATIONS AMONG CONTEMPORARY ENGLISH GENRES. In the same way that the frequency of nouns in a text might be called the 'noun score' of that text, DIMENSION SCORES (or FACTOR SCORES) can be computed for each text. A dimension score is computed by summing the frequencies of the features

having salient loadings on that dimension.[7] For example, for each text a dimension score for Dimension B can be computed by adding together the frequencies of WH-relative clauses on object positions, pied-piping constructions, WH-relative clauses on subject positions, phrasal coördinators, and nominalizations—the features with positive loadings—and then subtracting the frequencies of time adverbials, place adverbials, and other adverbs—the features with negative loadings.

In the present study, all frequencies are standardized to a mean of 0.0 and a standard deviation of 1.0 before the dimension scores are computed. A dimension score for each dimension is computed for each text; then the mean of each dimension score for each genre is computed. Plots of these dimension scores permit linguistic characterization of any given genre, comparison of the relations between any two genres, and a fuller functional interpretation of the underlying dimension.

Consider Figure 1, which plots the mean dimension scores of seven contemporary English genres for Dimension A, Informational versus Involved Production. The genres with large negative values, such as conversation, have high frequencies of present-tense verbs, private verbs, first- and second-person pronouns, contractions, etc. (the features with salient negative weights on Dimension A), together with markedly low frequencies of nouns, prepositional phrases, long words, etc. (the features with salient positive weights on Dimension A). Genres with large positive values, such as academic prose, have very high frequencies of nouns, prepositional phrases, etc., plus very low frequencies of private verbs, contractions, etc. The relations among genres shown in Fig. 1 confirm the interpretation of Dimension A as distinguishing among texts according to the demands and possibilities of informational production. Conversational texts are largely interactive and involved, since participants typically do not have time for highly informational production, nor are they inclined to highly informational purposes. Genres such as spontaneous speeches are intermediate because they have a relatively informational purpose but participants are constrained by on-line production. Finally, genres such as academic prose are extremely informational in purpose and produced under highly controlled and edited circumstances.

It is possible to characterize particular genres as relatively LITERATE or ORAL, where 'literate' refers to language produced in situations that are typical for writing, and 'oral' refers to language produced in situations typical of speaking. Conversation is a stereotypically oral genre, and academic prose a stereotypically literate genre. However, there is no necessary correspondence between literate and oral characterizations, on the one hand, and the physical modes of writing and speech on the other. For example, personal letters are among the most involved, and therefore 'oral', genres on Dimension A, even though they are written.

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[7] Some features have salient loadings on more than one factor; to ensure the experimental independence of factor scores, each feature was included in the computation of only one factor score. (See Biber 1988 for further discussion.)

INFORMATIONAL

```
         |
  15  +     Academic prose
         |

         |
  10  +
         |

         |
   5  +     Broadcasts
         |   Professional letters

         |
   0  +     Fiction
         |

         |
  -5  +
         |

         |
 -10  +
         |

         |
 -15  +
         |

         |   Spontaneous speeches
 -20  +     Personal letters
         |

         |
 -25  +
         |

         |
 -30  +
         |

         |
 -35  +     Face-to-face conversations
```
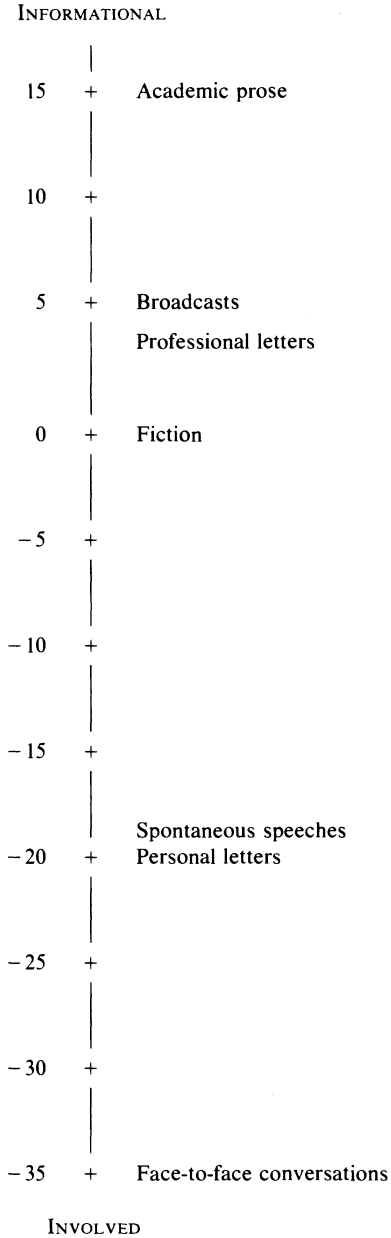
INVOLVED

FIGURE 1. Mean scores of Dimension A (Informational versus Involved Production) for seven contemporary English genres.

From this perspective, Dimensions A, B, and C can be considered literate/oral dimensions in that the poles of each dimension characterize academic exposition and conversation, respectively. However, these three dimensions are by no means equivalent: each is defined by a different set of co-occurring features, and each defines different relations among genres. This can be illustrated by considering the different relations among spontaneous speeches, general fiction, professional letters, and broadcasts with respect to these three dimensions, as shown in Figs. 1–3. With respect to Dimension A (Informational versus Involved Production), spontaneous speeches are relatively involved and therefore oral, while fiction, professional letters, and broadcasts all have similar, intermediate values not markedly oral or literate (see Fig. 1). With respect to Dimension B (Elaborated versus Situation-Dependent Reference, Figure 2), the same four genres have quite different relations to one another and to the oral and literate poles: professional letters are even more literate than academic prose, marking highly explicit, elaborated reference; broadcasts have the lowest score by far, marking reference that is extremely situation-dependent and therefore oral; spontaneous speeches have a moderately high literate score, and general fiction has a moderately low oral score. Finally, Dimension C (Abstract versus Nonabstract Style, Figure 3) shows yet another set of relations among these four genres: none of the four is abstract and therefore literate; professional letters have an intermediate score; and broadcasts, spontaneous speeches, and fiction all have nonabstract, oral scores. Thus, although Dimensions A, B, and C all distinguish between oral and literate discourse in some sense, each defines an independent set of relations among genres. In the following sections we explore the historical drift of three written genres towards more oral styles, as defined by this three-dimensional model of oral and literate relations.

3. RELATIONS AMONG 17TH-CENTURY, 18TH-CENTURY, 19TH-CENTURY, AND MODERN GENRES. Because the co-occurrence patterns described in §2 are derived from a very wide range of spoken and written texts, they can be taken to represent basic functional dimensions of variation in English. As such, they can be used to compare other English varieties—for example, British and American writing, different styles of fiction, or, as in the present case, genres from different historical periods.

In our previous research we have found that adequate descriptions of language use require comparative analysis of several different kinds of texts with respect to the relevant dimensions. In the present study we focus on three genres that represent quite different types of communication: fiction, essays, and personal letters. Fiction and essays are both literate from a situational perspective: they are produced and edited carefully and directed towards a large, specific but unbounded and unindividuated audience. They differ in that fiction describes events and situations for purposes of aesthetic enjoyment, while essays have an informational and sometimes an argumentative or persuasive purpose. Personal letters differ from both these genres in that they are interactive and directed towards a specific individual. In personal letters the

ELABORATED

```
              |       Professional letters
              |
   6    +
              |
   5    +
              |
              |       Academic prose
   4    +
              |
   3    +
              |
   2    +
              |       Spontaneous speeches
   1    +
              |
   0    +
              |
  -1    +
              |
  -2    +
              |
  -3    +
              |       Fiction
              |       Personal letters
  -4    +       Face-to-face conversation
              |
  -5    +
              |
  -6    +
              |
  -7    +
              |
  -8    +
              |
  -9    +       Broadcasts
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SITUATION-DEPENDENT
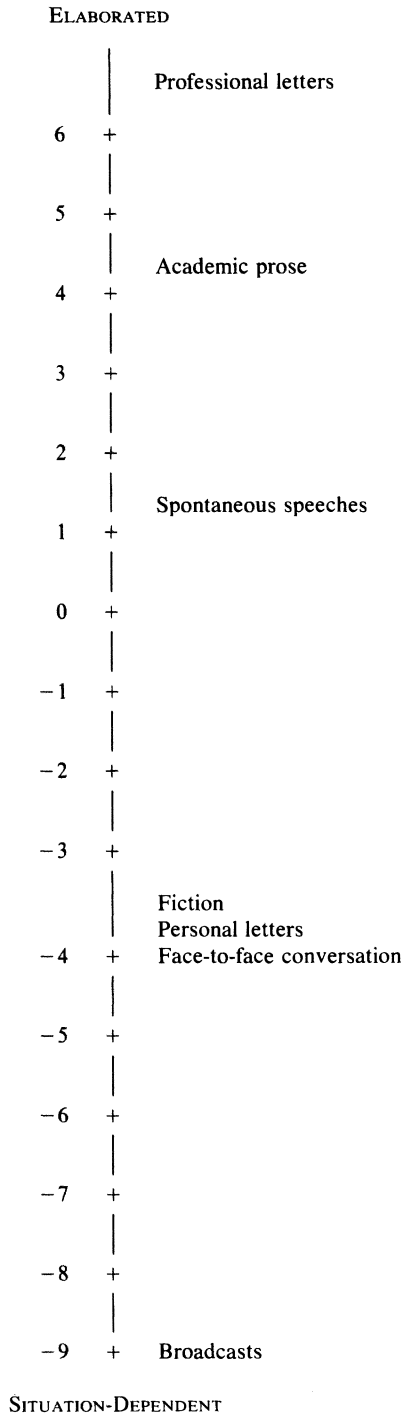
FIGURE 2. Mean scores of Dimension B (Elaborated versus Situation-Dependent Reference) for
seven contemporary English genres.

ABSTRACT

```
              |    Academic prose
              |
  5    +
              |
  4    +
              |
  3    +
              |
  2    +
              |
  1    +
              |
              |    Professional letters
  0    +
              |
 -1    +
              |
              |    Broadcasts
 -2    +
              |
              |    Fiction; Spontaneous speeches
              |    Personal letters
 -3    +
              |    Face-to-face conversation
              |
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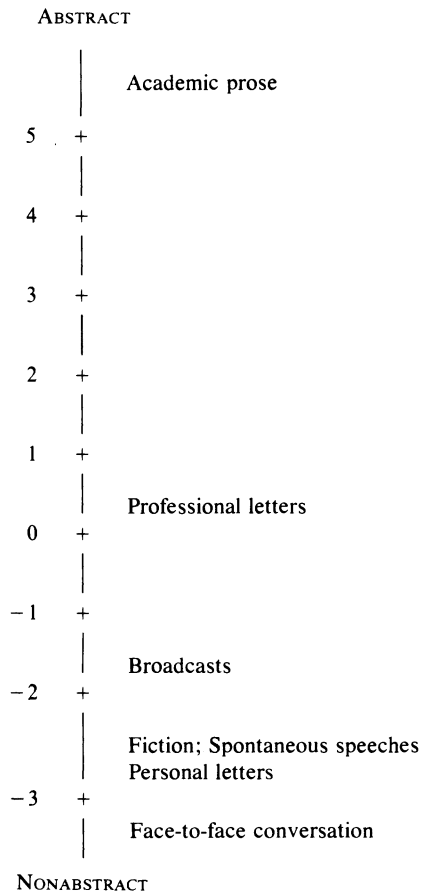
NONABSTRACT

FIGURE 3. Mean scores of Dimension C (Abstract versus Nonabstract Style) for seven contemporary English genres.

writer and reader typically know each other well and are familiar with each other's physical and temporal surroundings, so that a letter writer is free to refer directly to personal feelings and situations. These three genres thus have quite different communicative characteristics.

The authors of the texts used in the study are listed in Table 2. We divide texts into four periods: 17th century, 18th century, 19th century to the year 1865, and modern (from 1865 to about 1950). Altogether, we analyze 115 texts containing approximately 120,000 words. We have not distinguished between British and American texts, although in future research we will examine these two traditions separately.[8]

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[8] The fiction texts chosen for this study are narrative or descriptive and include almost no dialogue. We were guided in our selection of texts by representation in popular anthologies such as the Norton series, and we recognize certain limitations in our corpus. For example, most of our letters were written by literary figures and are not necessarily representative of popular letters from these periods. Most of our writers from all periods are male; in addition to any gender-based

A. 17th Century
    Essays (12 texts): Bacon; Browne; Burton; Butler; Dryden; Hobbes; Locke; Mather; Newton;
        Sprat; Temple
    Fiction (5 texts): Behn; Bunyan
    Letters (9 texts): Strype; Oxinden; Peyton
B. 18th Century
    Essays (18 texts): Addison; Boswell; Burke; Cooper; Defoe; Johnson; Mandeville; Paine;
        Pope; Steele; Swift
    Fiction (8 texts): Austen; Defoe; Fielding; Johnson; Swift
    Letters (6 texts): Gray; Jefferson; Junius; Walpole
C. 19th Century (to 1865)
    Essays (10 texts): Darwin; Dickens; Emerson; Macaulay; Melville; Mill; Poe; Whitman
    Fiction (7 texts): Dickens; Hawthorne; Kingsley; Melville; Mill; Poe
    Letters (6 texts): Dickens; Keats; Lamb; Lincoln; Melville
D. Modern (since 1865)
    Essays (11 texts): Arnold; Crane; Gosse; Hemingway; L. Huxley; Lawrence; Orwell; Twain;
        Woolf
    Fiction (13 texts): Harte; Hemingway; Lawrence; Lewis; Orwell; Steinbeck; Twain; Woolf
    Letters (10 texts): Hemingway; Steinbeck; Twain; Woolf

TABLE 2. Authors of the 115 historical texts from the 17th Century, 18th Century, 19th Century,
and Modern periods.

The mean dimension scores for each genre in each century are given in Table
3. This table also includes statistics that indicate whether the differences within
a genre across the four centuries are statistically meaningful. Table 3 shows
that, apart from essays on Dimension A and letters on Dimension C, the his-
torical developments of all genres on each dimension are statistically significant
(F score values) and important (R-squared values).[9] Figs. 4–6 plot the mean
scores for Dimensions A, B, and C given in Table 3 and show the relations
among the genres across the four centuries.

Generally, all three genres exhibit parallel developments on each dimension:
17th-century texts are relatively oral; 18th-century texts become more literate

differences, male writers would have been heavily influenced by formal, Latin-based educations
in the early periods (whereas female writers from these periods might represent a more 'natural'
English prose). 17th-century fiction is taken from only two writers because of the scarcity of fictional
prose in this period. Finally, the periods themselves are defined conventionally rather than deriving
from our linguistic analysis. We are investigating these and other issues in ongoing research. Our
present goal is to capture the range of variation in fiction, essays, and letters within each period,
and to trace the overall drift of these genres across the centuries; for that goal, our corpus provides
a solid database.

[9] The F SCORE summarizes a test of statistical significance; a value for p less than .05 indicates
a statistically significant result—that the differences among the mean scores for each century are
large relative to the differences among the texts within each century. The value for R-squared
indicates the importance or strength of the relationship; in particular, it shows the percentage of
variance in the dimension scores of texts that is accounted for by knowing the century of the text.
A relationship can be statistically significant ($p < .05$) but not important (R-squared $< 5\%$); con-
versely, a relationship can be important (roughly, R-squared $> 20\%$) but technically not significant
($p > .05$). We report the results for letters on Dimensions A and B because they have interestingly
large values for R-squared (around 23%), even though they do not quite have significant F scores
($p < .066$). None of the major generalizations of the paper, however, depends on these scores.

	FICTION	ESSAYS	LETTERS
DIMENSION A:			
17th Century	−1.0	6.1	−7.2
18th Century	7.2	8.7	−2.0
19th Century	11.6	9.7	−3.0
Modern	6.8	3.4	−10.9
F score	4.0	1.9	2.7
$p <$	.017	n.s.	(.066)
R-squared	29.4%	10.7%	23.0%
DIMENSION B:			
17th Century	5.4	6.2	−1.0
18th Century	9.6	8.4	3.3
19th Century	5.3	7.6	1.2
Modern	−1.1	2.7	−3.4
F score	6.2	5.0	2.7
$p <$	.002	.004	(.066)
R-squared	39.8%	23.9%	22.3%
DIMENSION C:			
17th Century	0.8	2.5	−0.3
18th Century	2.7	2.4	−1.8
19th Century	−0.8	1.7	−1.3
Modern	−1.6	−1.1	−1.8
F score	12.7	5.2	2.2
$p <$	.0001	.003	n.s.
R-squared	56.8%	24.6%	19.3%

TABLE 3. Dimension scores for fiction, essays, and letters in four centuries.

in style; and later texts then gradually shift to more oral styles. By the modern period, the three genres are usually considerably more oral than their 17th-century counterparts.

3.1. HISTORICAL RELATIONS WITH RESPECT TO THE INVOLVEMENT DIMENSION (A). As Figure 4 shows, on Dimension A (Informational versus Involved Production) letters illustrate this typical development. 17th-century letters are quite involved and therefore oral (with frequent private verbs, contractions, first- and second-person pronouns, etc.). 18th- and 19th-century letters are much less involved, while modern letters are by far the most involved of the four. As an illustration of this development, consider the following two text samples. Sample 1 is a 19th-century letter by John Keats, and Sample 2 is a modern letter by Virginia Woolf. Both are written to personal friends, and both discuss literary concerns.

TEXT SAMPLE 1. John Keats letter (19th century)

You say "I fear there is little chance of anything else in this life." You seem by that to have been going through with a more painful and acute zest the same labyrinth that I have—I have come to the same conclusion thus far. My Branchings out therefrom have been numerous: one of them is the consideration of Wordsworth's genius and as a help, in the manner of gold being the meridian Line of worldly wealth,—how he differs from Milton.—And here I have nothing but surmises, from an uncertainty whether Milton's apparently less anxiety for Humanity proceeds from his seeing further or no than Wordsworth: ...

INFORMATIONAL

```
         |       Fiction—19th Century
  11     +
         |
         |
  10     +
         |
         |       Essays—19th Century
         |
         |       Essays—18th Century
   8     +
         |
         |       Fiction—18th Century & Modern
         |
   6     +       Essays—17th Century
         |
         |
         |
   4     +
         |
         |       Essays—Modern
         |
   2     +
         |
         |
         |
   0     +
         |
         |       Fiction—17th Century
         |
  -2     +       Letters—18th Century
         |
         |       Letters—19th Century
         |
  -4     +
         |
         |
         |
  -6     +
         |
         |       Letters—17th Century
         |
  -8     +
         |
         |
         |
 -10     +
         |
         |
 -11     +       Letters—Modern
```
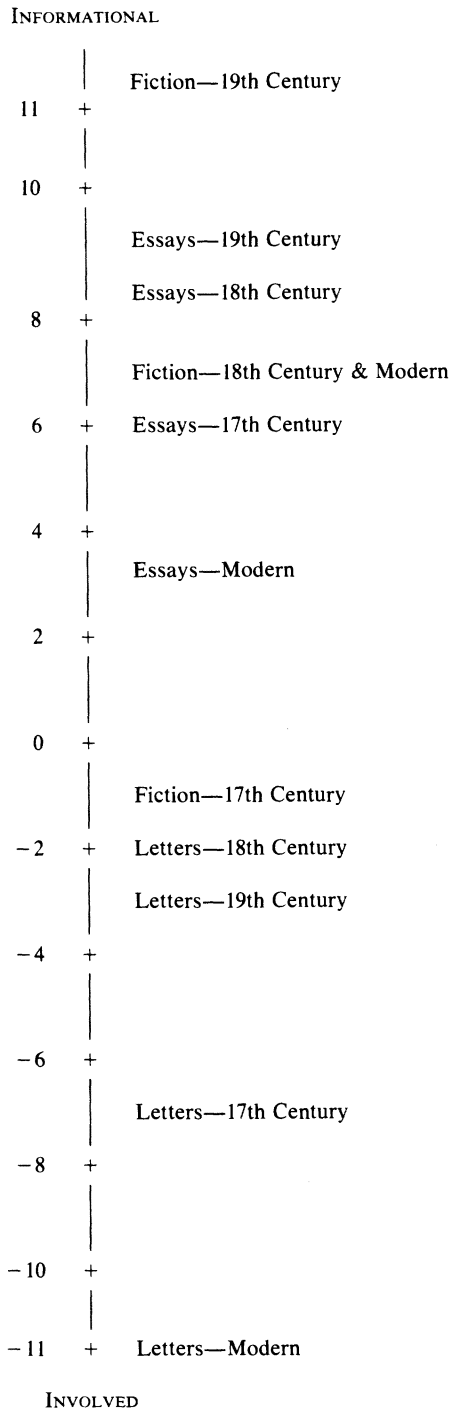
INVOLVED

FIGURE 4. Mean scores of Dimension A (Informational versus Involved Production) for fiction, essays, and letters in four centuries.

TEXT SAMPLE 2. Virginia Woolf letter (modern)

I'm reading David Copperfield for the sixth time with almost complete satisfaction. I'd for-
gotten how magnificent it is. What's wrong, I can't help asking myself? Why wasn't he the
greatest writer in the world? For alas—no, I won't try to go into my crabbings and diminishings.
So enthusiastic am I that I've got a new life of him: which makes me dislike him as a human
being. Did you know—you who know everything—the story of the actress? He was an actor,
I think; very hard; meretricious? Something had shriveled? And then his velvet suit, and his
stupendous genius? But you won't want to be discussing Dickens at the moment.

The difference between these samples is striking. The 19th-century sample
begins with one of the few direct acknowledgments of the addressee in the
entire letter, and then plunges into a detailed, informational exposition of
Keats's own thoughts. This exposition seems relatively unplanned in its overall
organization, but it is quite informational with respect to its Dimension A char-
acterization: many nouns, prepositions, and long words and a quite varied
vocabulary, coupled with very few involved features such as pronominal or
reduced forms and hedges. In contrast, the modern sample is extremely in-
volved. Woolf writes as if she were actually having a dialogue, with a series
of questions and answers assuming a very high degree of shared background
knowledge. This sample, which is by no means the most involved section of
the letter from which it is taken, illustrates very frequent use of the involved
features of Dimension A: first- and second-person pronouns, contractions, pri-
vate verbs (*you know, I think*), WH-questions, etc. These two samples illustrate
the development to a much more involved style that occurred in letters between
the 19th and 20th centuries.

Essays and fiction followed a similar pattern along the involvement dimen-
sion (A), although the differences among essays across these centuries are too
small to be statistically significant (as shown in Table 3). Fig. 4 shows, however,
that essays have followed the same general pattern of development: 18th- and
19th-century essays are more informational than 17th-century essays, while
modern essays are the most involved. Fiction is somewhat different from these
other two genres in that the 17th-century texts are quite involved relative to
all three of the subsequent periods. 19th-century fiction, on the other hand,
like 19th-century essays, is extremely informational and carefully planned.

3.2. HISTORICAL RELATIONS WITH RESPECT TO THE ELABORATED REFERENCE DI-
MENSION (B). On Dimension B (Elaborated versus Situation-Dependent Ref-
erence), all three genres have followed a single course, as Figure 5 shows: 17th-
century texts are relatively elaborated in reference (relatively high dimension
scores), 18th-century texts are more elaborated, while 19th-century texts have
shifted back towards a less elaborated style, and modern texts are relatively
situated and unelaborated in reference. The development of fiction along this
dimension is striking: 17th-century and 19th-century fiction are moderately
elaborated; 18th-century fiction is the most elaborated of our three genres; and
modern fiction is among the most situated. Text Samples 3, 4, and 5 illustrate
these differences. Sample 3 is from a 17th-century story by Mrs. Behn, Sample
4 from a story by Samuel Johnson (18th century), and Sample 5 from a story
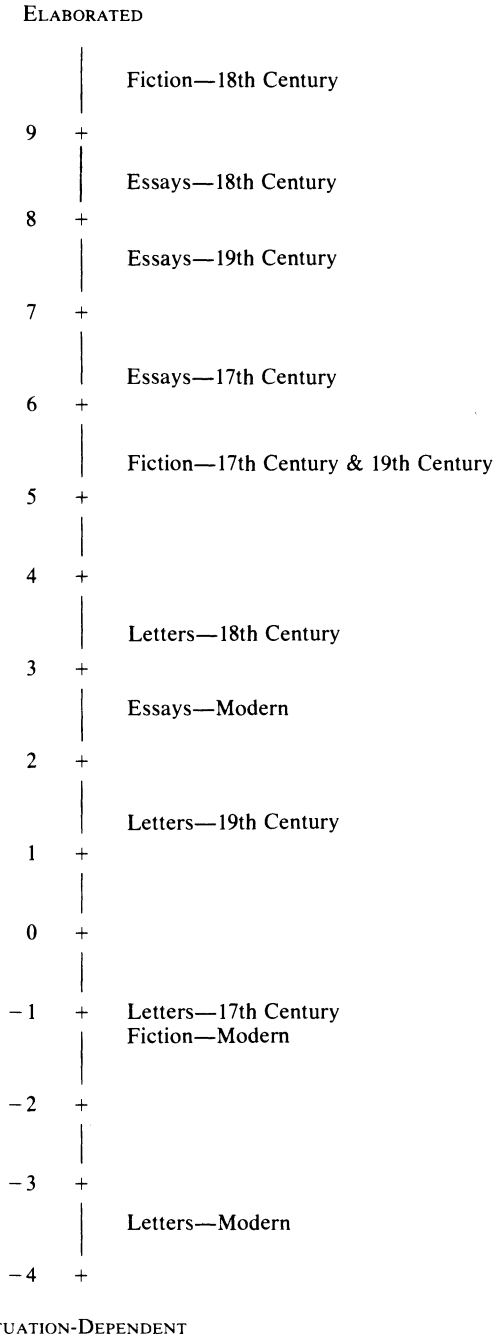by D. H. Lawrence (modern period). The major features of the elaborated

ELABORATED

```
           |
           |       Fiction—18th Century
           |
  9    +
           |
           |       Essays—18th Century
  8    +
           |       Essays—19th Century
           |
  7    +
           |
           |       Essays—17th Century
  6    +
           |
           |       Fiction—17th Century & 19th Century
  5    +
           |
           |
  4    +
           |
           |       Letters—18th Century
  3    +
           |       Essays—Modern
           |
  2    +
           |
           |       Letters—19th Century
  1    +
           |
           |
  0    +
           |
           |
 -1    +       Letters—17th Century
           |       Fiction—Modern
           |
 -2    +
           |
           |
 -3    +
           |       Letters—Modern
           |
 -4    +
```

SITUATION-DEPENDENT

FIGURE 5. Mean scores of Dimension B (Elaborated versus Situation-Dependent Reference) for fiction, essays, and letters in four centuries.

reference dimension (B) are capitalized in these samples. (Major features of the abstract style dimension [C], which will be discussed below, are underlined.)

TEXT SAMPLE 3. Mrs. Behn: *Oroonoko* (17th century)

The prince return'd to court with quite another humour than BEFORE; and though he did not speak much of the fair Imoinda, he had the pleasure to hear all his followers speak of nothing but the charms of that maid, insomuch that, even in the PRESENCE of the old king, they were extolling her, and heightening, if possible, the beauties they had found in her: so that nothing else was talk'd of, no other sound was heard in every corner WHERE there were whisperers, but "Imoinda Imoinda".

TEXT SAMPLE 4. Samuel Johnson: *The History of Rasselas, Prince of Abyssinia*
(18th century)

Ye WHO listen with CREDULITY to the whispers of fancy, and pursue with EAGERNESS the phantoms of hope; WHO expect that age will perform the promises of youth, and that the DEFICIENCIES of the present day will be supplied by the morrow—attend to the history of Rasselas, prince of Abyssinia.

Rasselas was the fourth son of the mighty emperor, IN WHOSE dominions the Father of waters begins his course; WHOSE bounty pours down the streams of plenty, and scatters over half the world the harvests of Egypt.

According to the custom WHICH has descended from age to age among the monarchs of the torrid zone, Rasselas was confined in a private palace, with the other sons AND daughters of Abyssinian ROYALTY, till the order of SUCCESSION should call him to the throne.

The place, WHICH the wisdom or policy of ANTIQUITY had destined for the RESIDENCE of the Abyssinian princes, was a spacious valley in the kingdom of Amhara, surrounded on every side by mountains, OF WHICH the summits overhang the middle part. The only passage, BY WHICH it could be entered, was a cavern that passed under a rock, OF WHICH it has long been disputed whether it was the work of nature or of human industry. The outlet of the cavern was concealed by a thick wood, and the mouth WHICH opened into the valley was closed with gates of iron, forged by the artificers of ancient days, so massy that no man could without the help of engines open or shut them.

TEXT SAMPLE 5. D. H. Lawrence: 'The Fox' (modern)

'He could not sleep. He could not keep still. He rose, QUIETLY dressed himself, and crept OUT on to the landing ONCE more. The women were silent. He went SOFTLY DOWNSTAIRS and OUT to the kitchen.

THEN he put on his boots and his overcoat and took the gun. He did not think to go AWAY from the farm. No, he only took the gun. As SOFTLY as possible he unfastened the door and went OUT into the frosty December night ... He went STEALTHILY AWAY DOWN a fence-side, looking for something to shoot.'

Both the 18th-century and the modern samples (4 and 5) have strikingly marked characterizations with respect to the elaborated reference dimension. In the relatively short 18th-century passage by Johnson (Sample 4) there are ten WH-relative clauses, including four pied-piping constructions; in addition, there are seven nominalized forms. Many of the descriptive details in this passage are contained in the relative clauses, resulting in a text that is extremely elaborated in reference. The modern passage from Lawrence (Sample 5), in contrast, is markedly unelaborated in reference while making several direct references to the temporal and physical context (e.g. *out, away, down*). Contrasting with both these samples, the 17th-century passage from Behn (Sample 3) is intermediate, with few of the features marking elaborated reference (such as WH-relative clauses and nominalizations) as well as few of the features mark-

ing situated reference. These samples illustrate the extreme shift along Dimension B in fiction norms from the 18th to the 20th centuries—from a heavily elaborated and nominalized style to a relatively situated and unelaborated description of referents and events.

Over the centuries essays have changed less than fiction or letters along the elaborated reference dimension, but the trend has been in the same direction. As Fig. 5 shows, 17th-century essays are relatively elaborated in reference, 18th- and 19th-century essays are extremely elaborated, and modern essays are much less elaborated than those of the previous periods. Text Samples 6–8 illustrate these differences. Sample 6 is by Thomas Sprat (17th century), Sample 7 by Joseph Addison (18th century), and Sample 8 by Mark Twain (modern period). Again, features of the elaborated reference dimension are capitalized (features of the abstract style dimension are underlined).

TEXT SAMPLE 6. Thomas Sprat: *The History of the Royal Society* (17th century)

They have therefore been most rigorous in putting in EXECUTION the only remedy that can be found for this EXTRAVAGANCE: and that has been a constant RESOLUTION to reject all the AMPLIFICATIONS, DIGRESSIONS, AND SWELLINGS of style, to return BACK to the primitive PURITY AND SHORTNESS, WHEN men delivered so many things almost in an equal number of words. They have exacted from all their members a close, naked, natural way of SPEAKING positive EXPRESSIONS, clear senses, a native EASINESS bringing all things as NEAR the mathematical PLAINNESS as they can; and preferring the language of artisans, countrymen, and merchants before that of wits or scholars.

TEXT SAMPLE 7. Joseph Addison: from *The Spectator*, No. 591 (18th century)

Though there is a great deal of pleasure in contemplating the material world, BY WHICH I mean that system of bodies INTO WHICH nature has so curiously wrought the mass of dead matter, with the several RELATIONS WHICH those bodies bear to one another, there is still, methinks, something more wonderful and surprising in CONTEMPLATIONS on the world of life, BY WHICH I mean all those animals WITH WHICH every part of the universe is furnished....

EXISTENCE is a blessing to those beings only WHICH are endowed with PERCEPTION and is, in a manner, thrown AWAY upon dead matter any further than as it is subservient to beings WHICH are conscious of their EXISTENCE.

TEXT SAMPLE 8. Mark Twain: *Christian Science* (modern)

There are plenty of people WHO imagine they understand this book; I know this, for I have talked with them; but in all cases they were people WHO also imagined that there were no such things as pain, SICKNESS, and death, and no REALITIES in the world; nothing actually existent but Mind. It seems to me to modify the value of their testimony. When these people talk about Christian Science they do as Mrs. Fuller did: they do not use their own language, but the book's; they pour out the book's showy INCOHERENCES ...

The 17th-century Sprat selection (Sample 6) is relatively unelaborated in its use of relative clauses but shows a frequent use of nominalized forms. In contrast, Addison (Sample 7) illustrates the extremely elaborated style of reference common in 18th-century essays, marked by very frequent relative clauses that permit exact referential specification and supply descriptive details, and by the frequent use of nominalized forms. Finally, the Twain passage (Sample 8) illustrates the relatively unelaborated style found in the modern essay, which is not nearly as situated as modern fiction but is much less elaborated than the essays of earlier centuries.

The development of letters from the 17th century to the modern period is also very pronounced, as Fig. 5 shows. 17th-century letters are relatively situ-

ated in reference, whereas 18th- and 19th-century letters are markedly elaborated in their Dimension B characterization. As with fiction and essays, then, letters underwent a dramatic shift between the 19th century and the modern period, so that modern letters are the most situated genre considered here.

To summarize, a single trend has influenced all three genres with respect to their characterization on the elaborated reference dimension (B): from an intermediate characterization in the 17th century to an extremely elaborated and explicit marking of reference in the 18th century, followed by a transition to a much more situated and less elaborated style in the modern period.

3.3. HISTORICAL RELATIONS WITH RESPECT TO THE ABSTRACT STYLE DIMENSION (C). The development of genres along the abstract style dimension (C) is slightly more complex, but the overall direction of change—towards less passive, and therefore more oral, styles—is parallel to that along the other dimensions, as Figure 6 shows. Fiction follows essentially the same pattern as on the elaborated reference dimension: 17th-century fiction is moderately abstract and passive in style, 18th-century fiction becomes extremely passive in style, and there is then a transition to relatively nonabstract styles in 19th-century fiction, which continues to the markedly nonabstract style of modern fiction. Samples 3–5 illustrate these styles, with the major features of the abstract style dimension underlined. In particular, note the extreme frequency of passive forms in the 18th-century Johnson passage (Sample 4), in contrast to the total absence of such forms in the modern Lawrence passage (Sample 5).

The development of essays and letters on the abstract style dimension has been more direct, beginning with an abstract style in the 17th century followed by a steady progression to a less abstract style in the modern period. The shift within essays has been quite dramatic, with 17th- and 18th-century essays being extremely abstract in style while modern essays are among the least abstract genres. Text Sample 9, written by Johnson in the 18th century, illustrates the extreme passive and abstract style adopted in typical essays of this period.

TEXT SAMPLE 9. Samuel Johnson: 'Preface' to A *Dictionary of the English Language* (18th century)

> The language most likely to continue long without ALTERATION would be that of a nation raised a little, and but a little, above BARBARITY, secluded from strangers, and totally employed in procuring the CONVENIENCES of life; ... But no such CONSTANCY can be expected in a people polished by arts, and classed by subordination, WHERE one part of the community is sustained AND accommodated by the labor of the other.

By contrast, the Twain text (Sample 8 discussed earlier) illustrates the direct, nonpassive style common in modern essays.

Finally, there has been relatively little change in the style of personal letters with respect to the abstract style dimension, as shown by the nonsignificant F score in Table 3 and the relatively similar scores plotted on Fig. 6. Seventeenth-century letters are relatively nonabstract in form, and those of the more recent periods have become even less abstract.

We thus see a single direction of change in all three genres along the abstract style dimension, towards a less passive and less abstract style. Unlike their
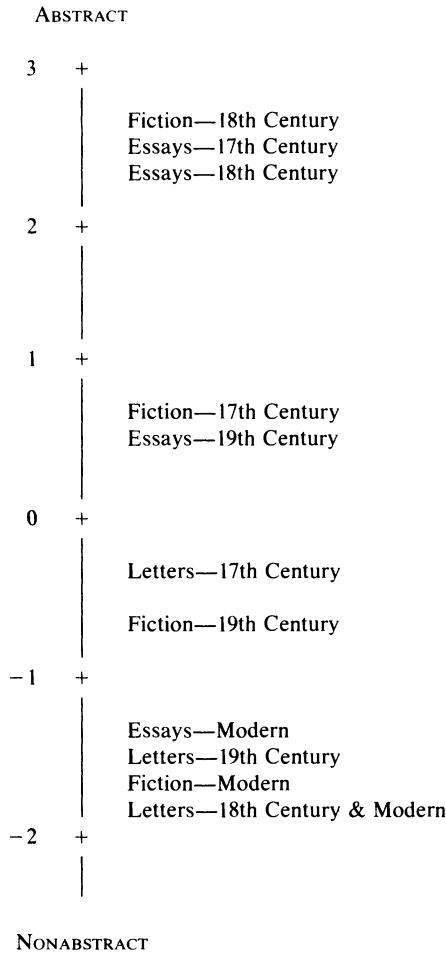
ABSTRACT

```
3     +

      |       Fiction—18th Century
      |       Essays—17th Century
      |       Essays—18th Century
      |
2     +

      |
      |
      |
1     +

      |       Fiction—17th Century
      |       Essays—19th Century
      |
      |
0     +

      |       Letters—17th Century
      |
      |       Fiction—19th Century
      |
-1    +

      |       Essays—Modern
      |       Letters—19th Century
      |       Fiction—Modern
      |       Letters—18th Century & Modern
-2    +

      |
```

NONABSTRACT

FIGURE 6. Mean scores of Dimension C (Abstract versus Nonabstract Style) for fiction, essays, and letters in four centuries.

characterizations on the other dimensions, 17th-century essays and letters have quite literate characterizations on this dimension, and their development since then has reflected a steady progression towards more oral styles.

4. THE DRIFT OF STYLISTIC NORMS ACROSS THE CENTURIES. To summarize our findings to this point, we can consider the generality of these historical developments from four perspectives: the dimensions; the genres; the chronology; and the overall development of style.

(i) There have been very major changes along Dimension A (Informational versus Involved Production), Dimension B (Elaborated versus Situation-Dependent Reference), and Dimension C (Abstract versus Nonabstract Style).

(ii) The three genres—fiction, essays, and letters—have all undergone major changes with respect to the three dimensions. Although the differences among

essays on the involvement dimension (A) and among letters on the abstract style dimension (C) are not statistically significant, the direction of change within each genre is consistent with the other observed patterns.

(iii) With respect to the chronology, all genres tend to follow the same general pattern on all dimensions: 17th- and 18th-century texts tend to be moderately or extremely literate, with a transition towards more oral styles in the 19th century and the development of a distinctly oral characterization in the modern period.

(iv) As far as style is concerned, all genres have been drifting towards more oral characterizations. That is, across the four centuries all genres have tended towards more involved, more situated, and less abstract styles.

We can get a feel for the processes involved in these historical developments by examining the range of variation within each genre in each period, as plotted in Figs. 7–9. These figures indicate a strong relationship between synchronic variation and historical change in the overall evolution of these genres, parallel to that shown for the evolution of particular phonological features in the work of Labov and others. It would appear that during some periods the range of variation becomes extended as writers experiment with new forms. Then, as a new norm becomes accepted, we see a shift in the central tendency of the genre and a narrowing of the range of acceptable variation.

For example, on the elaborated reference dimension (B) and the abstract style dimension (C) (Figures 7 and 8), there was a considerable extension of variation in the 18th century relative to both the preceding and the following centuries. Thus, as Fig. 7 shows, the 18th century was a period of quite fluid norms for fiction, essays, and letters with respect to elaboration; Fig. 8 shows the same thing with respect to abstract style. In all these cases, the range of variation in the 17th century was quite restricted relative to that of the 18th century. Then, in the 19th century, new norms of variation began to emerge which were more restricted than those of the 18th century.

These developments were also systematic with respect to the literate and oral poles. Figs. 7 and 8 show an overall transition to more oral styles. The very wide range of variation found in the 18th-century texts represents a period of considerable experimentation, including some texts that are more elaborated and more abstract than in any other century, but also some texts that are more oral than any found in the 17th century. The 19th-century texts tended to be less elaborated and less abstract than 18th-century texts, while those of the modern period show a marked shift towards more oral styles as the accepted norm (more situated and less abstract).

Along the involvement dimension (A; Figure 9) the picture is not so straight-forward, although the same general pattern holds. The 18th century witnessed considerably expanded norms for fiction and letters along the involvement dimension, and this expansiveness was narrowed in the 19th century. The general drift of all three genres with respect to the literate and oral poles is roughly analogous to Dimensions B and C: relatively involved (oral) in the 17th century, followed by a marked shift to informational styles (literate) in the 18th century and then a gradual return to involved styles in the modern period.
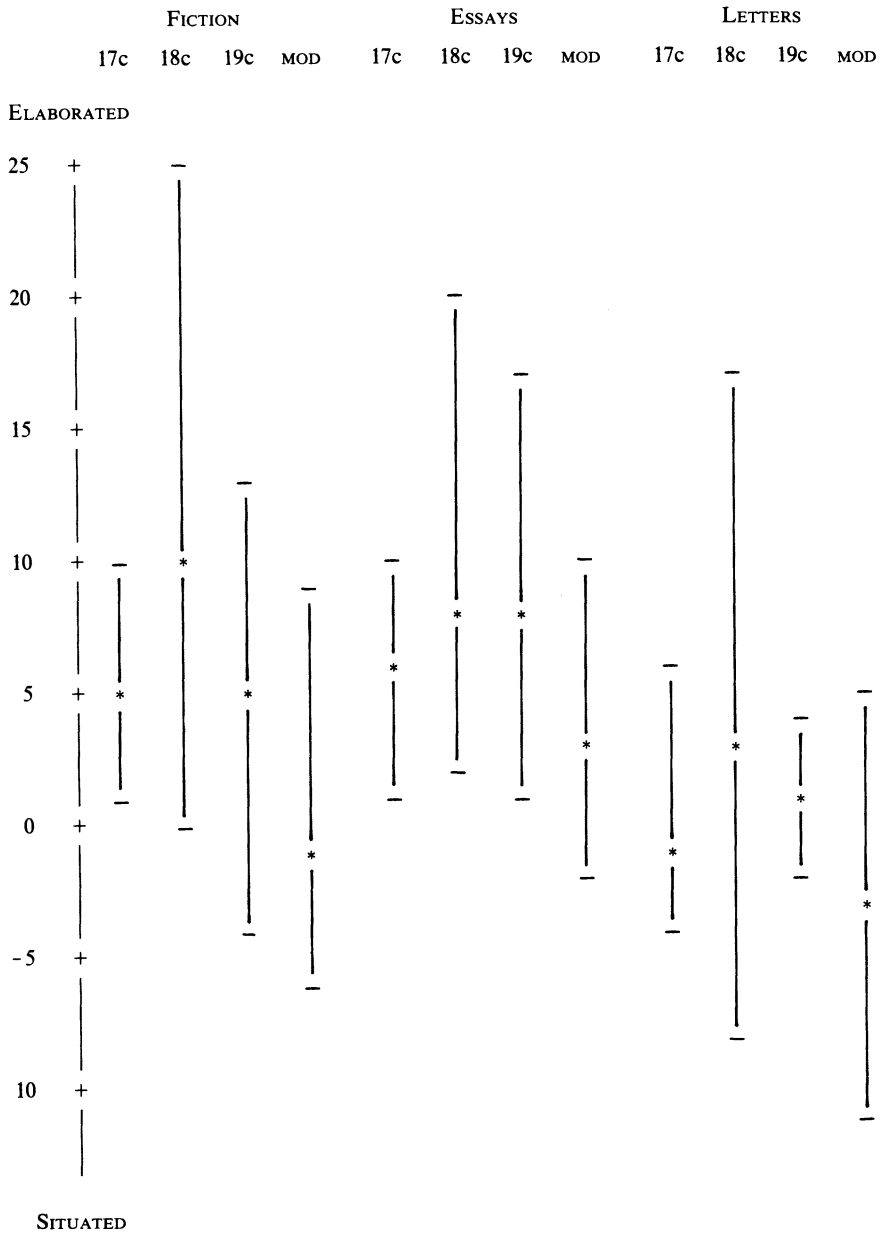
FIGURE 7. Drift of norms along Dimension B (Elaborated versus Situation-Dependent Reference) for fiction, essays, and letters. ('*' marks the mean score of each genre.)

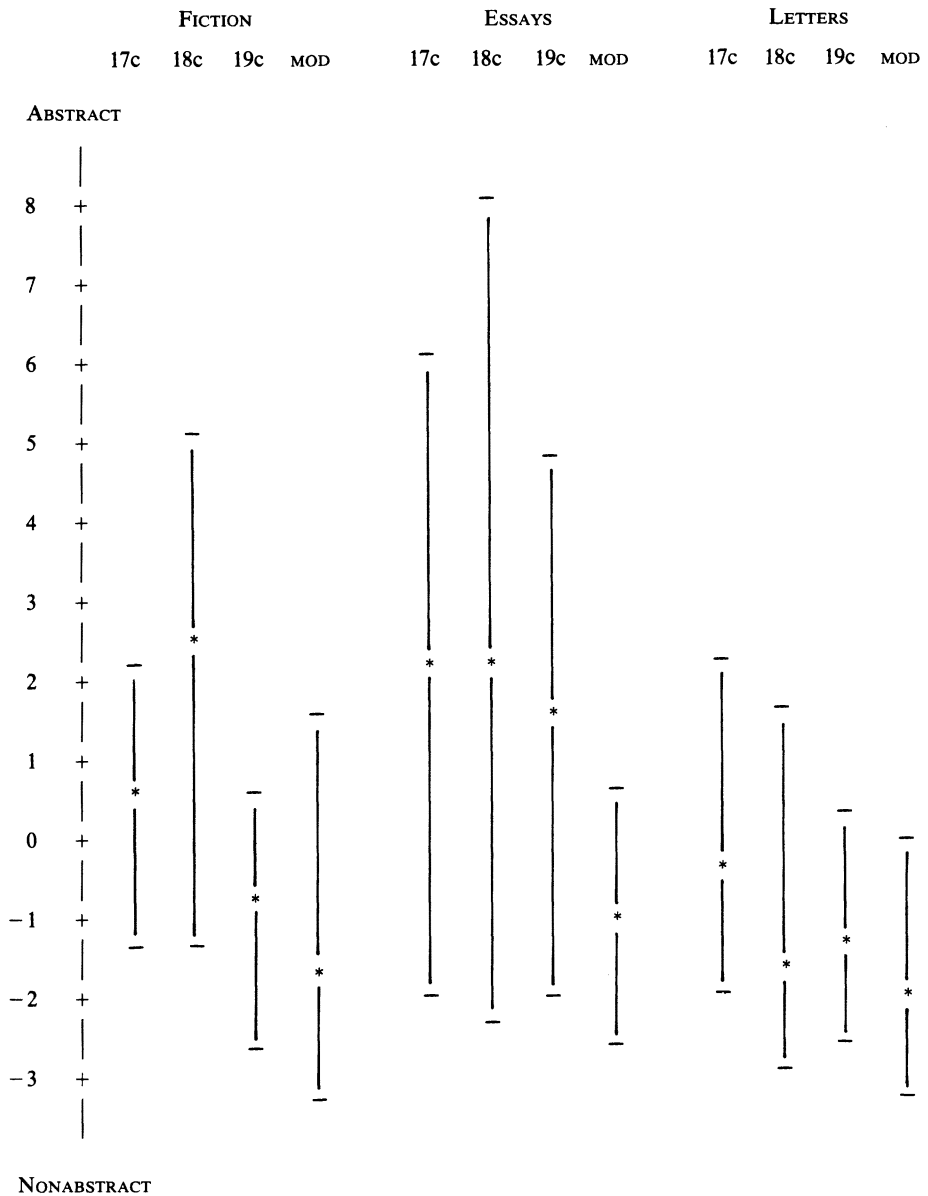FIGURE 8. Drift of norms along Dimension C (Abstract versus Nonabstract Style) for fiction, essays, and letters. ('*' marks the mean score of each genre.)

The development along the involvement dimension (A) shows certain differences from the other two dimensions, however. First, the range of possibilities for all three genres has increased in the modern period along the involvement dimension; it is unclear whether such a range of possibilities will continue or will be narrowed as new norms establish themselves. In addition,
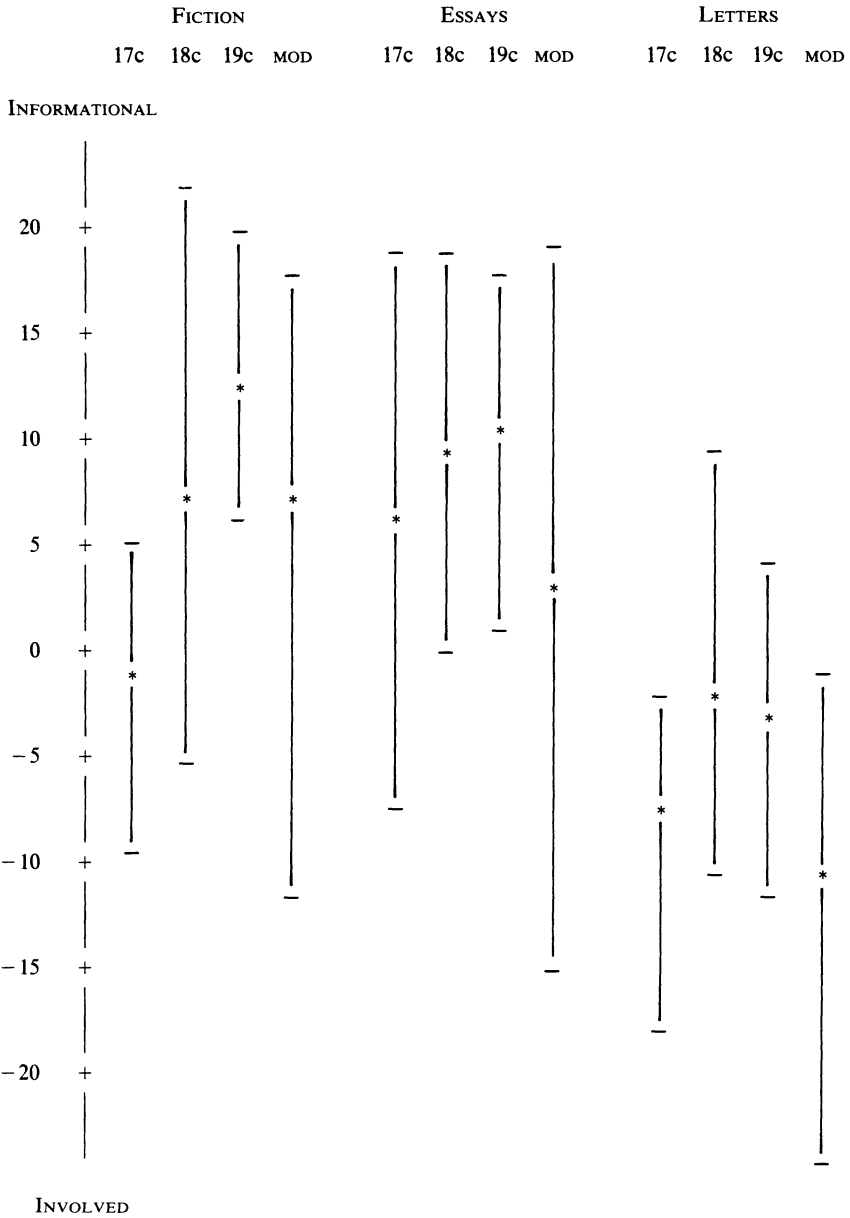
FIGURE 9. Drift of norms along Dimension A (Informational versus Involved Production) for fiction, essays, and letters. ('*' marks the mean score of each genre.)

modern fiction, while more involved (more oral) than 18th- and 19th-century fiction, is on average less involved (less oral) than 17th-century fiction.[10]

Apart from these relatively minor wrinkles, Figs. 7–9 show that a common overall pattern holds across all dimensions and genres—a drift towards more oral styles, with the middle centuries being periods of experimentation exhibiting a wide range of literate and oral styles. Both the central tendency and the extensions of the range of variation show a progression towards more oral styles from the 17th century to the modern period. In nearly every case, though, there is a reaction against this general drift in the middle periods. This reaction does not negate the general pattern of drift, because these middle periods generally show the presence of some texts that are more oral than any texts found in the previous period. Rather, the middle periods seem to represent a state of flux in genre norms, resulting in extreme experimentation with literate styles in addition to the general drift towards more oral styles.

It is possible to analyze the extent of this reaction in terms of the 'preferred pole' of a genre, which is determined by its primary situational characteristics and purposes. Essays have a consistently literate preferred pole: they are written in situations that permit careful planning and revision; they are addressed to a large, unknown audience; they do not often make direct reference to the time or place of writing; they generally do not permit interaction; and their purposes are typically informational. Letters, in contrast, tend towards the oral pole: they tend to be less carefully planned or revised; they are addressed to a specific individual and permit delayed interaction; and they have primarily interpersonal purposes. Fiction is more complex. It has a preferred literate pole in that it is carefully planned and revised, and it is not directly interactive; it has a preferred oral pole in that it is not written for strictly informational purposes, and it is very situated relative to its fictional context.

The preferred pole of a genre influences its development insofar as a genre tends to shift towards its preferred pole earlier, maintain an extended range of variation in the direction of its preferred pole longer, and shift further in the

---

[10] As an analysis of Fig. 9 shows, fiction was relatively involved in the 17th century and, with an expanded range of possibilities in the 18th century, it developed toward a relatively informational style in the 19th century. The modern period, in contrast, shows a much-expanded range of possibilities as compared to the 19th century, as well as a change of direction to a more involved (more oral) characterization. Its mean dimension score here (as given in Table 3) is 6.8, which is significantly more oral than 19th-century fiction (11.6) and slightly more oral than 18th-century fiction (7.2), but still less oral than 17th-century fiction.

In light of the expanded range of permissible variation along Dimension A and the direction of change with respect to 19th-century fiction, we would predict that fiction in the late 20th century is moving along Dimension A towards more involved, more oral characterizations. While we have not yet tested this hypothesis, there is some evidence that our interpretation is correct. Recall that we presented mean scores in §2.2 for selected contemporary English genres. In particular, Fig. 1 shows that contemporary fiction has a score of 0 on Dimension A. Given that the fiction texts in the LOB Corpus, on which this score is based, are from the year 1962, and that the modern texts in the present study date from 1865 until about 1950, the contemporary texts of Fig. 1 represent a later stage of development than the modern texts of Fig. 9. This score of 0.0 for contemporary fiction is very close to the score of −1.0 for 17th-century fiction, and we would predict that fiction will move still further toward involvement and orality as the century closes.

direction of its preferred pole. Consider the case of essays. On both the in-
volvement dimension (Fig. 9) and the abstract style dimension (Fig. 8), essays
have already extended towards the literate pole in the 17th century. They main-
tain this extended literate range of variation through the 19th century, and the
shift to a more oral style, when it comes in the modern period, does not progress
as far as in letters (with an oral preferred pole). The same generalizations hold
for essays on the elaborated reference dimension (Fig. 7), except that the lit-
erate extension does not occur until the 18th century.

Letters follow the opposite pattern. On all three dimensions, letters are al-
ready relatively oral in the 17th century. In the 18th century, the range of letters
is extended to include more literate styles, but then it contracts in the direction
of more oral styles in the 19th century and evolves into the most oral styles
in the modern period. The only exception to this pattern is on the abstract style
dimension (Fig. 8), where there is relatively little change across the periods.

As noted above, fiction is more complex. On the elaborated reference di-
mension (Fig. 7) and the abstract style dimension (Fig. 8), fiction follows the
general pattern of letters, with the 18th century being the only period of ex-
tension towards literate norms, and the eventual shift in the modern period
resulting in a considerably more oral style than that of essays. On the involve-
ment dimension (Fig. 9), fiction follows the pattern of essays, maintaining a
quite literate range of variation through both the 18th and 19th centuries and
beginning to shift to more oral styles only in the modern period.

5. DISCUSSION. Two major questions arise out of this historical description
of genre evolution. First, why does the overall pattern of drift move in the
direction of more oral styles? And second, what prompted the reactions against
this overall pattern in the middle periods?

It is possible to address these questions by reference to both conscious and
unconscious motivations. Certain conscious motivations are attested as atti-
tudes explicitly expressed by writers of these periods, while the overall de-
mographics and the purposes of writing in these periods may have influenced
conscious as well as unconscious motivations. Such influences, conscious or
not, were functional to the extent that styles evolved in response to situational
and communicative demands. Some of the conscious factors, though, might
be labeled aesthetic, because they represent evolving norms of taste apart from
considerations of function. Although these are not sharply distinct motivations,
we will attempt to differentiate between acknowledged influences in these pe-
riods and other functional influences. We recognize various minor trends and
attitudes but focus on the main developments in each century.

The 17th century witnessed the rise of experimental science and a general
preference for rationalism over emotionalism. For the first time, writers were
using English almost as much as Latin (Fowler 1987:124), and new genres such
as the scientific expository essay, biography, and history began to appear. To
serve these realistic, informational purposes, simple and 'plain' expository
styles were developed. As Sprat writes in *The History of the Royal Society*
(1667; cf. Sample 6), the emphasis was on 'things' rather than 'words'. Sprat

thus rejects all 'amplifications, digressions, and swellings of style', concluding that 'eloquence ought to be banished out of all civil societies as a thing fatal to peace and good manners'. He advocates a 'primitive purity and shortness' and a 'close, naked, natural way of speaking' as required for the new informational expository purposes. Attitudes concerning the centrality of scientific and rational pursuits, and the appropriateness of its plain expository style, were widely shared during the last half of the 17th century. Such attitudes are reflected in the relatively focused and oral norms for prose genres in this period.

In contrast, the 18th century witnessed considerable conflict over the appropriate purposes and styles of written prose. The 18th-century essay samples (7 and 9) are quite literate (elaborated in reference and passive in style). But much of the prose from this period was markedly colloquial and structurally simple. Consider, for example, the following passage by Addison (and contrast its style with Sample 7, by the same author).

TEXT SAMPLE 10. Joseph Addison: from *The Spectator*, No. 69

> For these reasons there are not more useful members in a commonwealth than merchants. They knit mankind together in a mutual intercourse of good offices, distribute the gifts of nature, find work for the poor, add wealth to the rich, and MAGNIFICENCE to the great. Our English merchant converts the tin of his own country into gold, and exchanges his wool for rubies. The Mahometans are clothed in our British manufacture, and the INHABITANTS of the Frozen Zone warmed with the fleeces of our sheep.

With respect to the elaborated reference dimension and the abstract style dimension, this sample is oral—with little referential elaboration, few nominalizations, and few occurrences of past participial features. These characterizations are in keeping with the informational expository purposes initiated during the 17th century.

In addition, the 18th century witnessed the rise of a popular, middle-class literacy for the first time in English history. The reading public grew throughout this period and came to include upper- and middle-class readers of both sexes. Although it is difficult to assess literacy levels in earlier periods, there was clearly a marked expansion of the general reading public during the 18th century. Laqueur (1976:255) notes that 'perhaps as many as 60% of men in England by 1754 and 40% of the women could sign the marriage register and there is evidence that an even higher proportion were probably able to read'. Based on self-reports, by the year 1800, male adults in England claimed 62% literacy, in Scotland 62%, and in New England 90% (Clifford 1984:475).

For the first time there were writers like Defoe and Richardson, who were from the middle class themselves and addressed themselves primarily to middle-class readers. Periodicals such as *The Spectator* and *The Tatler* began to appear in the early 18th century, and the first modern magazine (*Gentleman's Magazine*) appeared in 1731 (Abrams 1979:1735). This popular press was primarily informational, with essays and articles about politics, science, and philosophy as well as local scandal and gossip. These periodicals had substantial circulations; Addison, in the March 12, 1711, edition of *The Spectator*, estimates that there were 3,000 copies of the paper distributed every day, and twenty readers of each copy. By the late 18th century a large number of books,

tracts, almanacs, and magazines were in widespread circulation among ordinary people (Cook-Gumperz 1986:21).

There is another side to this picture, however. Much writing of this period, by such authors as Swift, Pope, and Johnson, remained distinctly aristocratic in its subject matter and intended audience. In addition, a strong conscious reaction arose against strictly expository purposes and their attendant plain styles. In the following passage (cited in Abrams 1979:1737), Johnson contrasts a rationalistic informational style, illustrated by Swift's prose, with his own preference for a more elaborated, emotional style. For Johnson, this stylistic preference is a natural result of the appropriate purpose of prose—to persuade rather than expound.

> 'His [Swift's] style was well suited to his thoughts, which are never subtilized by nice disquisitions, decorated by sparkling conceit, elevated by ambitious sentences ... He pays no court to the passions ... he always understands himself, and his readers always understand him ... For purposes merely didactic, when something is to be told that was not known before, it [Swift's style] is the best mode; but against that inattention by which known truths are suffered to lie neglected, it makes no provision; it instructs, but does not persuade.'

Similar sentiments were commonly expressed in the New World. For example, Benjamin Franklin writes in 1750: 'Art is long, and their [students'] Time is short. It is therefore propos'd that they learn those Things that are likely to be ... *most ornamental* ...' (cited in Baron 1982:123).

The 18th century was thus a period of considerable conflict concerning literacy, with markedly different views of intended readers, the appropriate purposes of prose, and appropriate styles. The extremely wide range of prose styles described in the present study reflects this conflict—many authors used markedly oral styles that were appropriate for didactic, informational purposes and intended for a broad popular audience; others, in reaction to this popular oral shift, used extremely elaborated, abstract styles to serve persuasive purposes among specialized, elite audiences.

By the 19th century, the shift towards a popular literacy began to be widely accepted as the norm. Mass schooling reinforced this shift and resulted in nearly universal literacy (Cook-Gumperz 1986, de Castell & Luke 1986). Fiction genres such as the novel and the short story became well established and were widely read by the general public.

This trend was also reinforced by an overt interest in nature and a philosophical preference for naturalness and utility, which found expression in Romantic art, music, and literature. In prose, these Romantic attitudes resulted in a preference for an individual, colloquial self-expression rather than an elaborated, impersonal, and abstract style of argumentation. For example, William Hazlitt in 1822 draws explicit parallels between the appropriateness of naturalness in the arts and in prose style:

> 'It is not pomp or pretension, but the adaptation of the expression to the idea that clenches a writer's meaning:—as it is not the size or glossiness of the materials, but their being fitted each to its place, that gives strength to the arch ... I hate any thing that occupies more space than it is worth' [*Table-Talk*, 'On Familiar Style'].

For many writers of the Romantic period, natural prose meant a colloquial style, reflecting conversation's place as the most basic mode of communication.

Wordsworth writes in his influential preface to *Lyrical Ballads* (1800) of his attempt to relate incidents and situations 'in a selection of language really used by men'—language which conveys feelings in 'simple and unelaborated expressions', as opposed to the 'arbitrary and capricious habits of expression' used by earlier authors.

This preference for colloquial, 'natural' language was found on both sides of the Atlantic, and it characterized grammatical as well as literary discussions (Finegan 1980). For example, Noah Webster wrote in his 1807 grammar of English that 'It struck me ... as the most monstrous absurdity, that books should teach us a language altogether different from the common language of life ...'; in fact, he goes so far as to ask 'why should we retain words in writing which are not generally recognized in oral practice!' (cited in Finegan 1980:42). By the time his *American Dictionary of the English Language* was published in 1828, Webster was enthusiastically endorsing a wholly naturalistic view of usage. He writes that the

> 'authority of universal colloquial practice ... I consider as the *real* and *only genuine language.* I repeat this remark, that *general and respectable* usage in *speaking* is the genuine or legitimate language of a country to which the *written* language ought to be conformed. Language is that which is uttered by the tongue, and if men do not write the language as it is *spoken* by the great body of respectable people, they do not write the *real* language' (cited in Finegan 1980:45).

These trends continued into the modern period. Literacy became nearly universal in the United States and England, so that readers had a very wide range of backgrounds and interests, and a large body of literature was written for this general reading public. The development of a popular literacy fostered a shift towards more oral styles, reflecting the general levels of literacy competence. This shift was reinforced by an aesthetic preference for natural and colloquial styles. These attitudes continue to the present time, as reflected by college handbooks on writing, which praise direct, 'active' styles and warn against passive, nominalized, and structurally complex styles.

6. CONCLUSION. In this article we have described a pattern of stylistic drift very much akin to Sapir's series of individual linguistic developments cumulative in a particular direction (1921:155). We have demonstrated how complex patterns of historical change, involving developments of three written genres along three dimensions of variation, are cumulative in the direction of more oral styles. We have traced the particular paths taken by fiction, essays, and letters across four centuries. Although the changes along each dimension have differed in rate and extent, all these developments reflect a steady progressson towards more oral styles. We have paid special attention to the 18th century because it was characterized by conflicting tendencies. On the one hand, many writers in tune with the general pattern of drift produced texts more oral than those of the 17th century. Other writers, though, consciously reacting against the drift to oral styles (and to the functional motivations underlying that drift), produced texts more literate than those in any other period of our study. The drift towards orality has been steady and cumulative—but not always without resistance.

This pattern of drift reflects a range of functional forces. The shift to more

oral styles served the demands of a progressively wider reading public. As large numbers of middle- and working-class speakers became literate, the reading public represented a wide range of interests, concerns, and competencies. A general, popular literacy, appealing to a broad spectrum of the population, was thus increasingly required. In addition, relatively oral, direct styles arose in the 17th and 18th centuries to meet the functional demands of the new informational, expository genres. Finally, the trend towards more oral styles reflects aesthetic attitudes, tied in particular to preferences for nature and naturalness. The reaction to this trend in the middle periods was due at least in part to conscious disagreement concerning the appropriate purposes and audiences for written prose. These counterpurposes resulted in the preference for extremely literate styles found in some writers during these periods.

The drift described here is similar to Sapir's in that it is long-term, consistent, and cumulative in a particular direction. We have refined and extended his notion, however. First, we have suggested a number of functional motivations for the patterns observed here, while Sapir focused chiefly on structural forces underlying drift. In addition, patterns of stylistic drift are often consciously accessible (and consciously advanced or resisted) rather than progressing below the level of consciousness. Whether such characteristics of drift pertain only to the evolution of styles or also influence the evolution of individual linguistic features remains to be investigated.

There also remain a number of questions concerning the evolution of other language varieties in English. Primary among these is the evolution of spoken genres (such as court proceedings, town meetings, congressional debates, sermons, and dramatic dialogue). In research currently under way, we are analyzing additional texts, to trace the evolution of style across smaller periods of time; additional genres, to assess the generality of these processes; older periods, to extend the analysis diachronically; and additional contemporaneous discussions of style, to explore the social motivations of such drift.

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