DISCOURSES OF DIFFERENCE? EXAMINING GENDER DIFFERENCES IN LINGUISTIC CHARACTERISTICS OF WRITING

Susan Jones and Debra Myhill University of Exeter, UK

Set in the context of international concerns about boys' achievements in writing, this article presents research that explores gender differences or similarities in linguistic competence in writing. Drawing on the results of a large-scale analysis of the linguistic characteristics of secondary-aged writers, we outline gender difference in the sample. The article explains the limited differences revealed through this analysis but highlights the repeated pattern of differences in boys' writing, mirroring parallel patterns in able writers. The findings are discussed light of the prevalent discourse of difference that permeates academic, professional, and political consideration of gender and writing.

Keywords: linguistic development, writing processes, identity

Dans le droit fil des inquiétudes que suscite le rendement scolaire des garçons en écriture, cet article présente une recherche sur les différences et les similitudes selon le sexe quant à l'aptitude à écrire. Analysant les résultats d'une vaste étude portant sur les caractéristiques linguistiques d'élèves du secondaire, les auteurs tiennent compte des différences selon le sexe dans l'échantillon. Ils expliquent les différences limitées qu'a révélées cette analyse tout en soulignant le profil répétitif des différences dans les écrits des garçons, faisant en cela écho à des caractéristiques parallèles chez les élèves ayant une aptitude à écrire. Les auteurs discutent des conclusions à la lumière du discours sur la différence partout présent dans les considérations pédagogiques, professionnelles et politiques sur le genre et l'écriture.

Mots clés : développement	t linguistique, p	rocessus d'écrit	ure, identité	

CANADIAN JOURNAL OF EDUCATION 30, 2 (2007): 456-482

The perception that girls are more successful at language-based activities than boys is not new, although, as Cohen (1998) points out, it has not always been perceived as a problem. Reflecting on gender difference in language from a historical perspective, Cohen provides comments from the eighteenth century that note the elegancy of women's language, an achievement all the more remarkable because women did not learn grammar. However, women's accomplishments in language domains were positioned not as intellectual advantages, but as testimony to their innate inferiority to men. Citing Hannah More in 1785, Cohen observes that men's apparent reticence and inarticulary was a sign not of intellectual deficit, but of the depth of masculine reflection and strength By contrast, a woman's verbal facility indicated female superficiality and thoughtlessness: female linguistic dexterity was regarded as mere transient talkativeness, reflecting shallow thought, while male taciturnity was evidence of intellectual superiority. Thus were women's linguistic capacities effectively constructed as valueless when set against the image of masculine intellectual strength, exemplified in reserved and self-regulated verbal skills. In the context of the present concern for boys' underachievement in literacy relative to girls, scholars have argued that once again girls' achievements have been overlooked, and that the case for boys' under-achievement has been overstated, particularly when set against the socio-economic disadvantages that contribute underachievement to Commission 2006; Gillborn & Mirza, 2000; Osler, Street, Lall, & Vincent, 2002) Indeed, Delamont (1999) has described this discrepancy as giving rise to an irrational sense of panic about the state of boys in education. Likewise, Smith (2003) contests the moral panic surrounding the debate and illustrates through statistical analysis of examination results in English that the gap between boys and girls has remained pretty stable since the early 70s and is currently at its lowest.

Nonetheless, a concern that boys are less successful than girls in reading and writing is shared across the English-speaking Western world (Collins, Kenway & Mcleod, 2000; Evans 1999). In the UK, the present concern was kick-started by the publication of the report *Boys and English* (Office for Standards in Education [OfSTED], 1993) which highlighted for the first time the differences in achievement in literacy of

boys and girls. Although the report explicitly states that it was "not a formal research project" (OfSTED, 1993, p. 1), based on school inspection observations from 57 secondary or middle schools, and one Sixth Form College, it raised public and professional awareness of apparent achievement differences by gender in literacy. However, some of the evidence suggests the achievement discrepancies may be attributable, not to gender difference per se, but to teaching contexts such as "limited opportunities for boys to discuss the more affective aspects of experience and little scope for writing with conviction about personal feelings" (OfSTED, 1993, p. 9). Much of the subsequent research has focused on reading rather than writing; indeed there have been few robust studies exploring the impact of gender on writing development. Nevertheless, test reports on the writing elements of the English curriculum have consistently shown that boys have not matched girls' achievement (Department for Education and Skills [DfES], 2006; OfSTED, 1996, 1998;, 2002; Qualifications and Curriculum Authority [QCA], 1998). Reasons offered for this differential attainment have been various. Barrs and Pidgeon (2002) argue that under-achieving boys remain unmotivated and demonstrate a particular resistance to revisiting and revising their own written work. Browne (1994) suggests that boys become less committed to writing as they get older and perceive writing as a passive, quiet, reflective activity and therefore a female activity. One outcome of this focusing of attention on the under-performance of boys has been the strongly held belief within the teaching profession (Jones & Myhill, 2004) not only that boys are naturally weaker at language than girls but also that boys do not like English, and especially that boys do not like writing.

Not all the preoccupation with boys and English has been concerned with an achievement or motivation deficit. An alternative account has been to present boys, as the title to Millard's (1997) book suggests, as *Differently Literate* rather than deficiently literate. Millard's findings suggest that girls' writing is more typical of the approved literary canon than that of boys because their experiences of reading prepare them better for this. Boys are presented as relying too heavily on visual literacies such as TV and computer games; consequently their writing is typified by an overuse of fast action at the expense of other details:

Even when girls wrote much less complex narratives, they often used a narrative tone that showed an awareness of how 'voice' works within the text. Boys' narratives left many details of the story, including the narrator, implicit. It is as if the young male writer is observing a scene passing before his eyes and transcribing on paper only what has been heard, so that the reader is expected to reconstruct the events in the same way. (Millard, 1997, p. 143)

The "differently literate" discourse has also frequently attested the importance of technology in boys' literacy endeavours. (2000), for example, argues that computer usage creates a synergy between boys' out-of-school literacy practices and in-school expectations, and contests that computers act as motivators to reading and writing for under-achieving boys. A further recurrent theme is the belief that boys prefer non-fiction reading and writing genres, rather than narrative. In terms of reading some evidence suggests that boys may prefer nonfiction texts (Barrs & Pidgeon 1998; Hall & Coles 1999; Moss 1999; White 1987). However, scant empirical evidence exists to suggest the same is true for writing; indeed, growing evidence indicates that it is not genre but topic that is a stronger factor in influencing boys' preferences. Daly (2002) argues that the "belief in boys' disposition to the writing of nonfiction texts is over-generalised" (p. 9) and suggests that, unless they are writing about a hobby or interest of their own, they can find non-fiction writing restrictive. Similarly, in an earlier study, Myhill (2001) found that boys expressed a strong view that they liked the freedom to choose what to write about and to take their writing in a direction of their choice, rather than having to "stay with some fixed idea which is boring." However, the freedom that narrative provides to pursue one's own ideas and plot lines can lead boys to write action-packed narratives, sometimes with narrative content that their teachers dislike, creating a dissonance between boys' preferences and their teacher's approval (Maynard, 2002).

Other contributions to the notion of differently literate boys and girls have looked closely at writing, rather than literacy in general. Analysing the writing of 8 to 10 year olds in Melbourne, Australia, Kanaris (1999) argues that girls write longer more complex texts that contain more subordinate clauses and a wider range of adjectives. She also highlights a tendency for boys to use *I* and girls to use *we* as

indicative of boys' positioning themselves as the agents in their own narratives, while girls position themselves as participants and observers. She describes male writers as "event-oriented" and egocentric, while girls are presented as more skilled both at word and text level. Kanaris maintains that the children reveal deeply embedded gender identities through written language, and that the pictures they present of power and powerlessness in relation to boys and girls respectively will be more influential on future outcomes than the observation that girls are better writers. Similarly, Peterson (2002) speaks of grade-8 writers preserving the recognized gender order of the powerful male and the empathic female through what they write and how they write it, arguing that the discourses available to them are constrained particularly for boys by their gender identity. In exploring why more male graduates at Oxford and Cambridge have achieved first-class degrees than women, Clarke (1994) argues that in adopting an assertive, argumentative, bold, and self-confident writing style, male graduates write with a voice that is perceived as intrinsic to the first-class academic brain, a perception not made for the more conciliatory female voice.

Implicit in many of these findings is the notion of an identifiable gender characteristic in writing, a perception that is questioned by Francis, Read, and Melling (2003) who demonstrated that university assessors were generally unable to identify the gender of an author of a piece they were marking, suggesting that few gender characteristics are clearly visible in any writing produced. Francis et al. make reference to the criteria used by these assessors in making a judgment about gender: for male writers they speak of boldness, carelessness, and a perception of logic and focus, while for female writers they refer to fluency, being more articulate, using personal expression, and a tendency to waffle. These perceptions, however, were not borne out by their ability to identify the gender of the writing they were assessing. Indeed, as those correctly identified were less than might be predicted by pure chance, it would seem that gender stereotypes about writing are more significant than the actual differences in writing by males or females.

The perception of boys as less successful in literacy may itself contribute through teacher expectations to their under-performance. This concern is supported by research that suggests the gender problem

is not intrinsic to the student but to the teacher. A raft of research studies in assessment practices indicate a teacher bias in favour of girls. Bennett, Gottesman, Rock, and Cerullo (1993) found that teachers adversely judged boys' achievement because of their poor classroom behaviour; Shorrocks, Daniels, Staintone, and Ring (1993) found an assessment bias towards girls in English; while Reeves, Boyle, and Christie (2001) highlighted a tendency for teachers to under-rate boys' performance and potential. Looking specifically at writing, Peterson and Kennedy (2006) explored the impact of the teachers' knowledge of the gender of the writer on their marking of the text. Using four scripts from grade-6 writers, two written by girls and two by boys, they asked teachers to mark and pass comment on the writing. However, half the teachers received scripts with the gender of the writer reversed. The teachers tended to make more corrections, to criticize, and make suggestions more when they believed the author was male. Some evidence suggests that girls themselves are aware that teachers regard their writing more positively, though Whitelaw, Milosevic, and Daniels (2000) found that girls interpreted the good marks achieved for writing as attributable to good behaviour, rather than good work. Moreover, being out of step with approved literacies can result in an undervaluing of what boys write. A mismatch between preferred reading and writing genres can mean that what boys choose to read is rarely what they are required to write. At General Certificate of Secondary Education [GCSE], Myhill (2001) notes it is possible that "teachers and markers are alienated by what boys chose to write about regardless of their skill in crafting the writing" (p. 22). The positioning of boys as weak writers has implications for teachers' high expectations of girls. Jones (2005) notes the disaffection of under-achieving girls with English, who, like underachieving boys, commonly cite it as a subject they do not like and speak of the literacy problems that they encounter. That literacy may be a recurring problem for all under-achievers, regardless of gender, may have become lost in the focus of attention on the under-achievement of boys:

[R]esearch, including teacher interviews, conveys a strong sense that the more teachers learn about the effects of gender on writing, the more unsure they are

that boys' issues are easily defined as boys' problems at all, and are more likely issues of how literacy is conceptualised in the classroom. (Daly, 2002, p. 5)

The focus within education on the under-achievement of boys in writing has taken place against a backdrop of changing perspectives with regard to gender identity in socio-cultural and socio-linguistic research. Cameron (2005) observes the shifting discourses related to gender and language, whereby the discourse of difference, emphasising binary oppositions of male and female, has been replaced by a discourse of diversity, which emphasises multiple, contextually-shaped, and overlapping constructions of masculine and feminine identity. Cameron argues that post-structuralist perspectives reject constructs such as the generic male or the generic female and that the post-modern view questions the grand narratives, which speak of fixed differences. For Baxter (2002a), this post-structuralist stance dismisses notions that "categories of gender are inherent, universal and all-encompassing" (p. 7), and seeks instead to understand competing discourses and plurality of interactions and influences. Both Baxter and Cameron point to a new "urge to deconstruct binary oppositions" (Cameron, 2005, p. 485) and to conceptualise masculine and feminine identities in more diverse, subtly nuanced ways. Gender identity may be constructed as much in contrast with the same gender as with the opposite gender, for example, the experience of being female in different cultural or social settings. Mac an Ghaill (1994) and Martino (1999) both explore multiple constructions of masculinity, pointing to the lack of internal homogeneity within boys as a group. More recently, Jackson (2006) in her exploration of laddettes, those girls who display behaviour that would stereotypically be described as laddish, demonstrates that both boys and girls can adopt this behaviour pattern, signalling a reluctance to be seen working hard in school or in synchrony with the values and aspirations of the school culture. She emphasises, in consonance with post-structuralist theory, that the motives for this laddishness are not single but diverse, shifting and multi-levelled. Judith Butler's seminal theorising of gender identity as essentially performative is relevant here. Butler (1990, 1993) argues that rather than gender influencing our actions, our actions shape our gender identity: gender is a habitual learned act, derived from cultural

norms, and is shaped through language, discourse, and culture. Gender is something you do, rather than something you are: "Gender is an act which has been rehearsed, much as a script survives the particular actors who make use of it, but which requires individual actors in order to be actualized and reproduced as reality once again" (Butler, 1990, p. 272). The scripts that shape the enactment of gender identity are predominantly constructed by hegemonic social conventions and ideologies.

Hegemonic conventions operate in writing, too, with commentators (for example, Cook-Gumperz, 1986; Wyatt Smith & Murphy, observing that schooled literacies are often divorced from the social realities of sub-groups of students, and that written genres are normalizing and conformist (Kress, 1994). Socio-cultural perspectives theorise writing as a socially-situated act of social practice, an act of connection and communication with others, and classrooms as sociallydetermined communities of practice that shape both written texts and writing processes (for example, Lankshear, 1997; Street, 2003). Janks (2000), for example, maintains that learning to write and developing as a writer are intimately connected with issues of social identities, language, and justice. However, whilse research has been confident in attesting changing discourses, new understandings of gender identity, and the social practices that legitimate school writing, political and professional interest remains steadfastly rooted in the discourse of difference, positioning girls as writers against boys as struggling writers. The study described below sought to critically examine whether empirical evidence substantiated claims for gender difference in either written outcomes or the processes of writing.

METHODOLOGY

The findings reported here are taken from a two-year research project (Myhill & Jones 2005) funded by the Economic and Social Research Council that investigated a threefold line of enquiry: first, to investigate the linguistic characteristics of secondary age children's writing at sentence and text level; second, to determine what explicit knowledge these writers have of the linguistic characteristics evident in their writing; and third, to explore their understanding of their own

Because of international evidence of an composing processes. achievement gap between boys and girls in writing, this study took gender and writing ability as the two key variables, and also stratified the sample by year group to determine developmental patterns, and by text type to investigate whether text type had any impact on patterns in writing. The children participating in the project were all secondary-aged writers, drawn from years 8 and 10 (ages 13 and 15) in the first year of the project, then from years 9 and 11 (ages 14 and 16) in the second year. The project comprised two phases: the first was a detailed quantitative analysis of a large sample of children's writing at both sentence and text level. During the second phase, a sub-sample of this cohort was observed as they wrote, and their writing, pausing, reading, and editing behaviour was noted. During a follow-up interview, the writers were invited to comment on this behaviour, and on the composing patterns observed, and to reflect on the choices they made, and the problems they encountered as they wrote. Thus the focus of the first phase was the product of writing, while the focus for phase two was the process. It was possible, therefore, to investigate gender differences both in terms of writing outcomes and writing processes. The findings of the first phase, the linguistic analysis, is the focus of this article.

The sample of writing systematically analysed in phase one of the project was made up of 718 pieces of writing, stratified by text type, year group, gender, and ability (see Table 1).

Two pieces of writing were collected for the sample: the first, a narrative, based on personal experience; and the second, a persuasive piece, making an argument or expressing an opinion. The sample was collected from six schools – two were grammar schools, one of which was co-educational, the other a boys' school, and the remaining four were comprehensive schools. The year-8 sample was marked according to National Curriculum levels for Key Stage 3 and the Year 11 sample according to GCSE grades. High achievement was designated as those pieces of writing marked as A*/A at GCSE and level 6/7 at Key Stage 3; average achievement as those marked as B/C at GCSE and level 5 at Key Stage 3; and low achievement were those marked as D/E at GCSE and level 4 at Key Stage 3. The classroom teachers who taught the children

initially marked the sample, but then the Project Director moderated these marks to ensure cross-sample consistency.

High Average Low Total **Total Total** Achievement Achievement Achievement Y8 Y10 Y10 **Y8** Y10 **Y8** Y10 **Y8** 30 30 30 90 90 180 Narrative Boys 30 30 30 30 30 30 30 30 30 90 90 180 Girls 180 **Total Narrative** 120 120 120 180 360 Argument Boys 30 30 30 30 28 30 88 90 180 30 30 30 30 90 Girls 30 30 90 180 180 **Total Argument** 120 120 118 178 358 **Total Boys** 120 180 120 118 178 358 **Total Girls** 120 120 120 180 180 360 Total 240 240 240 358 360 718

Table 1: The Nature of the Writing Sample

The Project Director and two, part-time linguists, analysed these writing samples. Sentence level analysis was undertaken on a sample of 100 words using a coding frame that was modified from a previous research study for the UK Qualifications and Curriculum Authority (QCA, 1998). The 100-word sample was systematically selected by counting the first 30 words of the piece and then taking 100 words from the start of the next sentence, avoiding possible distortions caused by text openings. The samples were also analysed at whole text level, making judgements about paragraphing choices, topical organisation, and the linking of text and ideas through the script. undertook careful piloting and training prior to beginning the coding process to ensure coder reliability and a batch of 30 scripts were doublecoded to allow a further check on coder reliability during the coding A database was created to store the coded data and statistical analysis was undertaken using SPSS. The first phase of the project, therefore, was a detailed linguistic analysis at both sentence and text level of the writing produced. The nature of the sample permitted comparisons to be made by age, achievement, gender, and text type. This analysis permitted an exploration of whether boys and girls were

differently literate, as some of the literature has suggested, in terms of the linguistic patterns evident in their writing.

GENDER COMPARISONS OF LINGUISTIC CHARACTERISTICS AT TEXT LEVEL

The analysis of text-level linguistic characteristics investigated the nature and quality of paragraphing, moving beyond mere identification of the presence of paragraphing to a more detailed look at how paragraphs were organised topically, and how cohesive connections were made between paragraphs. The variables for analysis were derived from a preliminary analysis of a sample of writing from 13 and 15 year old boys and girls that elicited the range of text-level characteristics present at this stage of writing development. The analysis also considered the quality of the ending of the piece of writing, and analysed some of the closure devices used. Using the Readability Statistics facility on Microsoft Word, data were also collated regarding text outputs in terms of word, sentence, and paragraph length. The 35 variables coded are outlined in Table 2.

A slightly different picture emerged when the writing samples were coded at text level than at sentence level; at text level there was evidence of more gender difference. Of the 35 variables coded, 18 items showed a statistically significant gender difference. However, text-level analysis also showed a greater number of variables noting a statistical difference for achievement groups: here all but two of the variables reveal a significant difference for achievement. This result suggests that differences in the writing produced by these students are more apparent when considering features of paragraphing, text length and organization, and linking devices than when considering sentence-level features. For both levels of analysis, however, considerably more differences occurred between achievement groups than between gender groups.

Table 2: The Variables Coded for Text-level Analysis

Paragraphing competenceNo paragraphs;

- No paragraphs;
 Inconsistent/inappropriate paragraphs; Short/one sentence per paragraph;
 Partially paragraphed;
 Generally appropriate paragraphs; Appropriate paragraphs
- Use of dialogue or quotation (yes/no)
- Linking devices
- Number of temporal adverbials
- Number of ordinal adverbials
- Number of place adverbials
- Number of manner adverbials
- Number of additive adverbials
- Number of adversative adverbials
- Number of causal adverbials
- Number of times a word or phrase is repeated
- Number of times a proper noun is repeated
- Number of synonyms
- Number of Hypo/hypernyms
- Number of anaphoric

Topical organisation

- Number of paragraphs organised by topic
- Number of paragraphs commencing with a topic sentence
- Number of paragraphs drifting off topic
- Number of paragraphs needing subdivision
- Logical order to paragraphs (yes/no)
- Endings
- Thematic link with previous paragraph (yes/no)
- Thematic link with opening (yes/no)
- Verbal repetition or synonyms of opening (yes/no)
- Repetition of proper noun in opening (yes/no)
- Summary, conclusion or resolution (yes/no)
- Deliberate ambiguity (yes/no)
- Coda or comment on theme (yes/no)
- Quality of ending (weak/satisfactory/strong)

pronouns
 Number of determiners
 Text output counts
 Number of words
 Number of sentences
 Number of paragraphs
 Number of sentences per
paragraph
 Number of words per
sentence
 Number of characters per
word
 Number of passive
sentences

The gender differences identified for paragraphing and textual organisation indicate that, in general, boys' paragraphing was more competent than girls', as noted in Table 3. Boys' writing was more likely to be paragraphed appropriately, whereas girls' was more likely to use partial or inconsistent paragraphing or very short paragraphs. However, more boys than girls used no paragraphs at all. By forming an ordinal scale of increasingly competent paragraph usage from no paragraphing to appropriate paragraphing, and using a mean ranking system, it was possible to compare overall paragraphing competence, which confirmed the superior performance of boys in this respect. In terms of intra-paragraph organization, boys demonstrated greater confidence: their paragraphs were more likely to have good topical organization and to use a topic sentence than that of girls. favourably, boys were more likely than girls to have some paragraphs where the topical management lapsed, leading to paragraphs that either drifted off topic or required further subdivision. However, as with the tendency at sentence level for boys to have longer sentences and more coherence lapses, so with paragraphing, boys tended to write longer paragraphs. This difference may account for their greater tendency to drift off topic or need subdivision as they are managing topical control over a more extended sequence of sentences and ideas.

Table 3: Statistically Gender Differences in Paragraphing Competence and Length

Feature	Level of		
	significance		
Appropriate paragraphing	0.047		
Paragraphing competence	0.021		
% paragraphs organized by topic	0.008		
Use of topic sentences	0.004		
Drifting off topic	0.002		
Further sub-division needed	0.000		
Text output counts			
Number of paragraphs	0.000 (girls)		
Number of sentences per	0.019		
paragraph			

The analysis also considered cohesion and coherence in terms of inter-paragraph linkage and the effectiveness of the ending. (See Table 4.) Differences also occurred in linking strategies between paragraphs, with boys making greater use of manner adverbials, and links through verbal repetition, synonyms, or hyponyms, while girls used more proper nouns as a linking device. Overall, the endings in boys' writing were judged higher quality than those of girls, although they also had more endings judged as weak. Girls' endings were more likely to be deemed satisfactory in quality. This positive judgment of closure in boys' writing may be attributable to the apparent greater range of cohesive and coherence features present in their endings. The analysis indicates that boys made greater use of thematic links with the opening, and with previous paragraphs, of verbal repetition of words in the opening, and were more likely to include a coda or comment on the theme.

Of the 18 variables that show a significant gender difference in writing at paragraphing and text level, 16 of them reveal boys mirroring the pattern for good writers not weak writers, as was the case at sentence level. Taken together, the linguistic analyses at sentence and text level suggest that where gender differences exist in the writing produced, it is

boys, not girls, who might be viewed as making more mature choices concerning the crafting and creating of text. Although this evidence gives limited weight to the notion of gender difference in the writing that students produce, it generally goes counter to the perception of boys as weak writers.

Table 4: Statistically Significant Gender Differences in Paragraph Linkage and Text Endings

Paragraph Linkage	
Manner adverbials	0.000
Repetition of words or phrases	0.0017
Repetition of a proper noun	0.013 (girls)
Synonym	0.000
Hypernym/hyponym	0.000
Ending	
Thematic link with previous	0.000
paragraphs	
Thematic link with opening	0.000
Verbal repetition of opening	0.009
Coda or comment on theme	0.000
Ending quality	0.000

GENDER COMPARISONS OF LINGUISTIC CHARACTERISTICS AT SENTENCE LEVEL

The sentence level analysis of 100 words investigated 24 variables, as detailed in Table 5. Amendments were made to the coding frame used in a previous study (QCA, 1998) to provide more detailed data, in particular, about sentence openings and sentence length because they had emerged as potentially significant in the QCA study but the coding frame had not provided sufficient detail.

Table 5: The Variables Coded for Sentence Level Analysis of the 100 Word Sample

Sentence length	Clauses		
 Number of sentences 	 Number of finite verbs 		
 Number of words in shortest 	 Number of finite subordinate 		
sentence	clause		
 Number of words in longest 	 Number of coordinate clauses 		
sentence	 Number of infinitive clauses 		
 Number of confused longest 	 Number of present participle 		
sentences	clauses		
 Number of minor sentences 	 Number of past participle 		
 Number of confused minor 	clauses		
sentences			
Sentence openings	Syntactical structures		
 Number of subject openings 	 Number of subject-verb 		
 Number of adverbial 	inversions (discounting		
openings	questions)		
Number of non-finite clause	 Number of subject clauses 		
openings	 Number of noun phrases 		
Number of finite subordinate	 Length of longest noun phrase 		
clause openings	 Number of coherence lapses 		
 Number of fronted openings 			
 Number of and, but, so 			
openings			
 Number of cleft sentences 	ı		

Of the 24 variables coded, only six variables revealed statistically significant gender differences. Three of these variables concern sentence length and are inter-related. The most apparent outcome, therefore, of comparing sentence-level linguistic features by gender is the comparative absence of any difference, suggesting that gender is not a strong factor in determining variations in writing at sentence level. Similar comparison of the data by achievement revealed considerably greater differences, with statistically significant differences on 13 of the 24 variables.

One aspect of difference emerged related to sentence length. Girls tended to have shorter sentences than boys: their average sentence length was shorter, and their longest sentence was shorter than those of the boys. The analysis at text level of the mean number of words per sentence in the whole piece of writing confirmed that boys wrote longer sentences than girls. Boys were, however, more likely to suffer from a lapse in coherence at sentence level (p = 0.019), possibly because of the demands of managing coherence over longer sentences than those created by girls. The only other gender difference to emerge from comparisons within the whole sample was that girls tended to make greater use of finite verbs than boys. Curiously, given the concern for boys' under-achievement in writing, the few differences identified here that are attributable to gender point to boys' strengths in writing, and not the reverse. The pattern of differences for girls mirrors the pattern identified in comparisons of the data by achievement as typical of weak writers rather than good writers. In other words, weak writers produced shorter sentences overall, shorter longest sentences and used more finite verbs than their more accomplished peers. (See Table 6.)

In light of the limited differences found when comparing boys' and girls' writing in the whole sample, and given the common view (albeit more anecdotal than empirical) that boys may be better at writing nonfiction texts than girls, a further set of statistical analyses was undertaken for gender by text type. This analysis ensured that any gender differences in linguistic performance governed by text type could be detected. However, the clearest finding was that the text type made almost no difference to the linguistic performance of boys and girls: the same features were statistically significant by text type as is indicated above for the whole sample. Only two further statistically significant features of difference were found according to the type of text written: boys' greater tendency to have a confused longest sentence in personal narrative (p = 0.041), and their greater use of past participle clauses in persuasive writing (p = 0.025).

Table 6: Gender Differences in Sentence Length and Finite Verb Frequency

	Mean Male	Mean Female	Mean Rank Male	Mean Rank Female	Mann Whitney Asymptotic Significance
Number of sentences per 100 words	5.6	5.9	342.54	376.37	0.027
Number of words in longest sentence	28.6	26.8	380.59	338.53	0.07
Number of words per sentence in whole text	18.2	17.2	381.87	337.25	0.004
Number of finite verbs per 100 words	12.7	13.5	332.77	386.08	0.001

DISCUSSION

The most apparent conclusion to be drawn from these data is that only limited evidence supports the argument that, in terms of the linguistic characteristics of the written outcomes, boys and girls are differently literate. The statistically significant differences at sentence level were small, and at text level, though more differences emerged, these were considerably fewer than those identified by achievement level. Particularly noteworthy is the fact that text type had no impact on the

level of difference, contrary to expectations that boys prefer non-fiction and therefore write better in this genre. A recent report in the UK (Massey, Elliott, & Johnson, 2005), looking at standards of writing in public examinations over time, investigated some of the sentence-level features addressed in this study. In considering the impact of gender on their results, they point out that "with boys and girls matched for grade in our samples one might expect comparisons to prove even" but that "there are many ways to achieve a grade" (Massey, et al., 2005, p. 60). If boys and girls were differently literate in linguistic capabilities, one could reasonably expect to find differences in children achieving the same grade. However, the report repeatedly signals the inconsistency of their findings in this respect ("gender differences lack consistency" p. 23; "small and inconsistent" p. 23; "no very obvious gender pattern" p. 24; "no consistent gender variation" p. 38). Indeed, when they summarise the gender differences (Massey, 2005, p. 60), the picture depicted is one of variable patterns year on year, with many reversals of performance and considerable absence of difference. Although Massey's study corroborates our own, it also suggests the instability of statistically significant data in terms of gender and writing: those differences that have arisen in our study may not be replicable, and a further study in a different year with different writing tasks might furnish different results. Moreover, because this is the first study that has looked at text-level linguistic characteristics, (the Massey study only looked at sentence-level features), we are cautious about over-interpreting these data and we would recommend further confirmatory studies.

However, considering the results from another angle highlights one aspect of difference worth further reflection. In almost all the occurrences of gender difference that emerged, the pattern of the boys' writing mirrored the pattern of better writers. Indeed, this finding was a remarkably consistent finding across both the sentence- and text-level data: of the 24 gender differences identified, only four did not parallel the pattern of better writers (coherence lapse in sentences; confused longest sentence in narrative; fewer paragraphs per text; less use of a proper noun for cohesion). Of these four differences, the two related to confusion and coherence lapse at sentence level may be linked to the fact that boys wrote longer sentences, itself a feature of better writing. If the

differences suggest that grade for grade, boys' writing is more like better than weak writing, then this raises the possibility that their writing may be being under-graded. This suggestion would confirm research suggesting a bias in favour of girls in teacher assessment practices (Bennett et al, 1993; Reeves et al, 2001; Shorrocks et al, 1993), and has particular resonance with Petersen and Kennedy's study (2006) that found teachers judged writing they believed to be written by a boy more harshly, and that "teachers' assessments of the quality of the writing were often influenced by their perceptions of the writer's gender" (Petersen & Kennedy, 2006, p. 42). A substantial body of research explores the biases that lead to boys' domination of oral activities (Davies, 1998; Younger, Warrington & Williams, 1999) and how teachers position girls less powerfully in oral interactions (Cheshire & Jenkins, 1990), but relatively little research investigates whether teachers' view of girls as better writers positions boys unfavourably. Baxter's (2002b) observation, in the context of English oracy tasks for examination, that "the extent to which particular students are routinely positioned within a range of discourses as powerful, is instrumental in determining the extent to which they will be adjudged 'able' or 'effective' by their teachers" (p. 6), may be equally applicable to boys as writers, and particularly to the discourse that positions boys as struggling writers.

Equally, the relative absence of major differences and the pattern of linguistic characteristics of boys' writing tending to parallel that of able writers suggest the gap in achievement in literacy, and the international panic about standards in writing (Masters & Forster, 1997; National Commission on Writing, 2003) reported across the Western world, are more likely to be attributable to social and cultural factors, rather than cognitive or linguistic differences. If, as Czerniewska (1992) claims, "when children learn to write, they learn more than the system of writing, they learn about the social practices of language" (p. 2), then the context and the community in which that learning occurs are a powerful influence on writing development. Every classroom is its own specific and particular community of practice, to use Lave and Wenger's (1991) term, with its own values, discourses, and enactments that shape how boys and girls variously respond to writing tasks. According to Wenger (1998), the characteristics of a community of practice are mutual

engagement, joint enterprise, and a shared repertoire with participants moving towards a common goal. However, the extent to which this mutuality and collaboration is genuinely shared by all participants equally may be questionable. Learning to write within a classroom community is frequently a process of learning what is expected, "an acquired response to the discourse conventions which arise from preferred ways of creating and communicating knowledge within particular communities" (Swales, 1990, p. 4). This sometimes involves tacit learning about what is and is not valued in writing: White (1996) suggests that English teachers value personal, affective writing more than transactional genres, private writing more than public writing. Succeeding as a writer in school, therefore, requires "student acculturation into institutional sites and the approaches to writing assessment privileged in those sites" (Wyatt-Smith & Murphy, 2001, p. 22), and gender may be one factor that differentially positions students' opportunities and engagement with writing.

Finally, this study suggests that the discourse of difference is unhelpful as a lens through which to consider boys' and girls' writing. Cameron (2005) critiques non-specialists who persist in conceptualising research in language and gender as principally an enquiry into characteristic differences: this tendency to frame the debate in terms of characteristic differences remains a feature of much educational research into gender (Clark & Millard, 1998; Evans, 1999; Paechter, 1998; Warrington & Younger, 1999) and is certainly a feature of political and professional discourses about gender. The tendency to treat boys and girls as two separate, internally homogenous groups with stable, determined, and predictable gender identities underpins the differently literate discourse, and constructs all boys as similar and all girls as similar. Arguing for the advantage of feminist post-structuralist discourse analysis as a better way of understanding gender, Baxter (2002a) maintains that although it is necessary to recognise that gender may be a factor, it is important "to problematise that category in its deconstruction of the multiple but nonetheless limited range of subject positions available to both girls and boys" (p. 6). The post-structuralist rejection of the significance of global, universal influences such as gender or power and its acknowledgement of the significance of local influences

foregrounds the power in shaping identity of the interaction of individual characteristics and dispositions with local social and cultural settings. Moreover, it gives individuals and groups agency, with the ability to respond and to shape their own meanings, rather than simply being passive recipients of externally-shaping master forces. In the writing classroom, a post-structuralist stance would recognize and encourage multiple, diverse, and shifting practices in being a writer, and would eschew the deficiency discourse of difference that casts boys as failing, struggling writers. And, just as Baxter found that in the oracy classroom counterpointing the dominant group of boys there were "a significant number of less popular or confident boys" (Baxter, 2002b, p. 494), so a post-structuralist avoidance of the discourse of difference might draw a teacher's attention to girls who struggle with writing too.

REFERENCES

- Barrs, M., & Pidgeon, S. (Eds.) (1998). *Boys and reading*. Southwark: Centre for Language in Primary Education [CLPE].
- Barrs, M., & Pidgeon, S. (2002). *Boys and Writing*. London: Centre for Literacy in Primary Education [CLPE].
- Baxter, J. (2002a). A juggling act: A feminist post-structuralist analysis of girls' and boys' talk in the secondary classroom. *Gender and Education*, 16(1), 5-19.
- Baxter, J. (2002b). Jokers in the pack: Why boys are more adept than girls at speaking in public settings. *Language and Education*, 16(2), 81-96.
- Bennett, R. E, Gottesman, R. L., Rock, D. A., & Cerullo, F. (1993). Influence of behaviour perceptions and gender on teachers' judgements of students' academic skill. *Journal of Educational Psychology*, 85, 347-356.
- Browne, A. (1994). The content of writing in the early years: Issues of gender. *Reading*, 28(3), 2-8.
- Butler, J. (1990). Performative acts and gender constitution: An essay in phenomenology and feminist theory. In S. Case (Eds.), *Performing feminisms: Feminist critical theory and theatre* (pp. 270-282). Baltimore: Johns Hopkins University Press.
- Butler, J. (1993). *Bodies that matter: On the discursive limits of 'sex'*. New York: Routledge.

- Cameron. (2005). Language, gender and sexuality: Current issues and new directions. *Applied Linguistics*, 26(4), 482 -502.
- Cheshire, J., & Jenkins, N. (1990). Gender issues in the GCSE oral examination: Part 11, Language and Education, 5(1), 19-33
- Clark, A., & Millard, E. (Eds.). (1998). *Gender in the secondary curriculum*. London, UK: Routledge.
- Clarke, P. (1994). *Men and women's performance in Tripos examinations 1980-1993*. Cambridge, UK: Cambridge University Press.
- Cohen, M. (1998). 'A habit of healthy idleness': Boys' underachievement in historical perspective. In D. Epstein, J. Elwood, V. Hey, & J. Maw (Eds.), Failing boys? Issues in gender and achievement (pp. 19-34). Milton Keynes, UK: Open University Press.
- Collins, C. Kenway, J., & Mcleod, J. (2000). Factors influencing the educational performance of males and females in school and their initial destinations after leaving school. Department of Education, Training and Youth Affairs. Canberra, AGPS.
- Cook-Gumperz, J. (1986). *The social construction of literacy.* Cambridge, UK: Cambridge University Press.
- Czerniewska, P. (1992). Learning about writing. Oxford, UK: Blackwell
- Daly, C. (2002). *Literature search on improving boys' writing*. London, UK: Office for Standards in Education.
- Davies J. (1998). Boys' and girls' talk in the classroom. In E. Millard & J. Davies (Eds.), *Gender in the secondary curriculum* (pp. 11-26). London, UK: Routledge.
- Delamont S. (1999). Gender and the discourse of derision. *Research Papers in Education*, 14(1), 3-21.

- Department for Education and Skills. (2006). GCSE and equivalent results and associated value added measures in England (rev. ed.). Retrieved on June 18, 2007, from http://www.dfes.gov.uk/rsgateway/DB/SFR/s000631/tab010.xls
- Evans, H. (1999). Gender and achievement in secondary education in Jamaica. Kingston, Jamaica: Planning Institute of Jamaica Policy Development Unit.
- Fabian Commission on Life Chances and Child Poverty. (2006). *Narrowing the gap.* London, UK: Fabian Society.
- Francis, B., Read, B., & Melling, L. (2003). University lecturers' perceptions of gender and undergraduate writing. *British Journal of Sociology of Education*, 24(3), 357–373.
- Gillborn D., & Mirza H. (2000). Educational inequality: Mapping race, class and gender. London, UK: OfSTED.
- Hall, C. J., & Coles, M. J. (1999). *Children's reading choices*. London, UK: Routledge.
- Jackson, C. (2006). 'Wild'girls? An exploration of 'ladette' cultures in secondary schools, *Gender and Education*, 18(4), 339-360.
- Janks, H. (2000). Domination, access, diversity and design: A synthesis for critical literacy education. *Educational Review*, 52(2), 175-186.
- Jones, S. (2005). The invisibility of the underachieving girl international. *Journal of Inclusive Education*, 9(3), 269-286.
- Jones, S., & Myhill, D.A. (2004). Troublesome boys and compliant girls. *British Journal of Sociology of Education*, 25(5), 557-571.
- Kanaris, A. (1999). Gendered journeys: Children's writing and the construction of gender. *Language and Education*, 13(4), 254-268.
- Kress, G. (1994). Learning to write. London, UK: Routledge.
- Lankshear, C. (1997). Changing literacies. Buckingham, UK: Open University Press
- Lave, J., & Wenger, E. (1991). *Situated learning. Legitimate peripheral participation*. Cambridge, UK: University of Cambridge Press.
- Mac an Ghaill, M. (1994). *The making of men: Masculinities, sexualities and schooling*. Buckingham, UK: Open University Press

- Martino, W. (1999). 'Cool boys', 'party animals', 'squids' and 'poofters': Interrogating the dynamics and politics of adolescent masculinities in school. *British Journal of the Sociology of Education*, 20(2), 239-264.
- Massey A. J., Elliott G. L., & Johnson, N. K. (2005). Variations in aspects of writing in 16+ English examinations between 1980 and 2004: Vocabulary, spelling, punctuation, sentence structure, non-standard English. *Research Matters: Special Issue 1*. Cambridge, UK: University of Cambridge Local Examinations Syndicate.
- Masters, G., & Forster, M. (1997). *Literacy standards in Australia*. Australian Council for Educational Research 1996 National School English Literacy Survey Canberra, Australia.
- Maynard, T. (2002). Boys and literacy: Exploring the issues. London, UK: Routledge Falmer.
- McGuinn, N. (2000). Electronic communication and under-achieving boys: Some issues. *English in Education*, 34(1), 50.
- Millard, E. (1997). Differently literate: Boys, girls and the schooling of literacy. London, UK: Falmer.
- Moss, G. (1999). Boys and non-fiction: Cause or effect. Literacy Today, 21, 19-4.
- Myhill, D. A. (2001). Writing: Creating and crafting. *English in Education*, 35(3), 13-20.
- Myhill, D. (2001). Better writers. Westley, Suffolk UK: Courseware Publications.
- Myhill, D. A., & Jones, S. (2005). Patterns and processes. Technical Report for the Economic and Social Research Council [ESRC] RES-000-23-0208 www.esrc.ac.uk/ESRCInfoCentre)
- National Commission on Writing in America's Schools and Colleges. (2003). *The neglected "R": The need for a writing revolution.* New York: College Board.
- Office for Standards in Education [OfSTED]. (1996). The gender divide: Performance differences between boys and girls at school. London, UK: Her Majesty's Stationery Office (HMSO).
- OfSTED. (1998). *Recent research on gender and educational performance*. London, UK: Her Majesty's Stationery Office (HMSO).

- OfSTED. (2002). The key stage 3 strategy: Evaluation of the first phase of the pilot. London, UK: The author.
- OfSTED. (1993). Boys and English. London, UK: Her Majesty's Stationary Office (HMSO).
- Osler, A., Street, C., Lall, M., & Vincent, K. (2002). *Not a problem? Girls and school exclusion*. London, UK: Joseph Rowntree Foundation.
- Paechter, C. (1998). Educating the other: Gender, power and schooling. London, UK: Falmer.
- Peterson S. (2002). Gender meanings in grade eight student's talk about classroom writing. *Gender and Education*, 14(4), 351-366.
- Peterson S., & Kennedy, K. (2006). Sixth grade teachers' written comments on student writing: Genre and gender influences. *Written Communication*, 23(1), 36-62.
- Qualifications and Curriculum Authority (QCA). (1998). *Can do better*. London, UK: Department for Education and Science [DES].
- Reeves, D. J., Boyle, W. F., & Christie, T. (2001). The relationship between teacher assessment and pupil attainments in standard test/tasks at Key Stage 2, 1996-8. *British Educational Research Journal*, 27, 141-160.
- Shorrocks, D., Daniels, S., Staintone, R., & Ring, K. (1993). *Testing and assessing 6 and seven year-olds. The Evaluation of the 1992 Key Stage 1 National Curriculum Assessment*. UK: National Union of Teachers and Leeds University School of Education.
- Smith, E. (2003). Understanding underachievement: an investigation into the differential attainment of secondary school pupils, *British Journal of Sociology of Education*, 24(5), 575–586.
- Street, B. V. (2003). What's 'new' in New Literacy Studies? Critical approaches to literacy in theory and practice. *Current Issues in Comparative Education*, 5(2), 1-14.
- Swales, J. (1990). Genre analysis. Cambridge, UK: Cambridge University Press
- Warrington, M., & Younger, M. (1999). Perspectives on the gender gap in English secondary schools. *Research Papers in Education*, 14(1), 51-78.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press.

- White, J. (1987). *Pupils' attitudes to writing*. London, UK: (Department for Education and Science [DES] Assessment of Performance Unit [APU])
- White, J. (1996). Research on English and the teaching of English. In P. Murphy & C. Gipps (Eds.), *Equity in the classroom: Towards an effective pedagogy for boys and girls* (pp.97-110). London, UK: Falmer
- Whitelaw, S., Milosevic, L., & Daniels, S. (2000). Gender, behaviour and achievement: A preliminary study of pupil perceptions and attitudes. Gender *and Education*, 12(1), 87-113.
- Wyatt-Smith, C., & Murphy, J. (2001). What English counts as writing assessment? *English in Education*, 35(1).
- Younger, M., Warrington, M., & Williams, J. (1999). The gender gap and classroom interactions: Reality and rhetoric? *British Journal of Sociology of Education*, 20(3), 325-344.

Susan Jones is a lecturer in education at the University of Exeter, United Kingdom. Her research interests include gender and achievement, and classroom interaction and the developing writer. She is the co-author of *Talking*, *Listening*, *Learning*: *Effective Talk in the Primary Classroom* (Open University Press).

Debra Myhill is Professor of Education at the University of Exeter, and is Head of the School of Education. Her research interests focus principally on aspects of language and literacy teaching, including underachievement, gender issues, children's writing, and talk in the classroom. She is the author of Better Writers (Courseware Publications), Talking, Listening, Learning: Effective Talk in the Primary Classroom (Open University Press), and the Handbook of Writing Development (forthcoming).