

Ways of Knowing: Writing with Grammar in Mind

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ABSTRACT: In the international context of concerns about standards in writing, this article addresses the role of grammar in the teaching of writing. It considers both current and historical perspectives on the teaching of grammar and offers a critique of research which attempts to determine the impact of grammar teaching on writing, but which does not investigate how the grammar teaching was pedagogically linked to teaching writing. The article argues that there has never been a critical theorisation of how grammar might support the development of writing, and thus there has been very limited research which has explored this relationship. Drawing on the findings of a current research enquiry, the article offers a possible theorisation for a pedagogically robust role for grammar in the teaching of writing.

KEYWORDS: Grammar, writing, pedagogy, linguistics, contextual understanding.

Children's success or failure in writing, and effective pedagogies for the teaching of writing, are both issues of concern at present in many English-speaking countries. In England, the introduction of the National Literacy Strategy (NLS) into the primary sector in 1998 (DfEE, 1998) and its subsequent extension into early secondary (DfES, 2001) are direct, government-led initiatives to raise standards in literacy, paralleled both in Australia and the US. In Australia, following the 1996 National School English Literacy Survey, the Minister for Schools noted that "a disturbingly high number of Australian school children are failing to meet a minimum acceptable standard in literacy", (Masters & Forster, 1997, p. 4) prior to announcing initiatives to counter the shortcomings. National test results in England persistently reveal that achievement in writing is lower than achievement in reading; findings which are replicated in the US, and have led to a call for a writing revolution (National Commission on Writing, 2003) to address the awareness that "most students are producing relatively immature and unsophisticated writing" and "cannot write with the skill expected of them today" (NCW, 2003, p. 16). However, our understanding of the cognitive and social processes involved in learning to write and its rootedness in a secure research base is still developing. Unlike learning to read, which is well-supported by a considerable body of well-respected research, writing is a relatively new area of empirical enquiry. Psychological models of the writing process, for example, only began to be developed in the 1980s (Hayes & Flower, 1980; Bereiter & Scardamalia, 1987; Kellogg, 1994). We need to extend our ways of knowing about how best to teach writing, and to extend children's understanding of how to write.

WAYS OF KNOWING

Ways of knowing inevitably reflect our subjectivities as teachers or as researchers. The focus of this issue of this journal on debates surrounding the topic of knowledge about language invites reflection upon these different ways of knowing. I position

myself differently as an English specialist if I talk about knowledge about *language*, rather than knowledge of *grammar*. This is not simply because grammatical knowledge is a subset of a broader set of understandings about language, but rather that the choice, “knowledge about language”, implies a more liberal, learner-centred perspective than that suggested by the traditional, neo-conservative associations of the word “grammar”. The term “knowledge about language” tends to carry positive associations, perhaps implying insider-knowledge, a professional view of what is valuable and important to children learning to be literate; in contrast, the word “grammar” has negative connotations, often implying an outsider view of English teaching, and carrying associations of control and blame. The choice we make signals our identity and the community of practice with which we want to be identified. But, in this article, I would like to explore specifically a theorized interpretation of how knowledge about grammar might inform both learners’ and teachers’ understanding of writing, rather than looking more broadly and generally at knowledge about language. In doing so, I hope to position grammar constructively within the frame of reference encompassed by knowledge about language and to avoid being trapped by “the particular values and standards the idea of grammar” has been made to symbolise (Cameron, 1995, p. 82). This might be a risky enterprise!

One difficulty in considering how grammatical knowledge might support an effective pedagogy for the teaching of writing is that one persistent conceptualisation of how grammar relates to writing centres upon error: the deficit model of grammar teaching. This was a position identified and criticised by the Bullock Report (DES 1975). Bullock reported that “the traditional view of language teaching was, and indeed in many schools still is, prescriptive. It identified a set of correct forms and prescribed that these should be taught” (p. 170). Indeed, one strong impetus behind the UK Conservative Government’s introduction of the National Curriculum in 1988 was “to eliminate ‘bad grammar’ – the only interpretation of grammar that they recognised” (Hudson and Walmsley, 2005, p. 18), an ideological stance not far removed from Newbolt’s desire to rid children of the “evil habits of speech contracted in home and street” (Board of Education, 1921). This discourse frequently manifests itself in textbooks for schools or parents and perpetrates ideas such as that knowing the terminology of grammar helps us to “understand our mistakes” (Schiach 1995, p. 4), or that without “good understanding” of grammar “our writing would be difficult to read and understand” (Blackman, 1997, p. 5).

This is not an exclusively English phenomenon. Following the publication of *No Child Left Behind* (US Department of Education, 2002), a US policy document outlining how schools should ensure that all children achieve acceptable standards, an article appeared in the *Baltimore Sun* in November 2004, headlined “Grammar is Imperative”. It heralded the return of back-to-basics grammar teaching noting that “if students have poor grammatical skills on resumés or applications, people will judge them as lacking intelligence” (Anon, 2004). The article reports that, “The Board of Education recognizes that grammatically correct writing is essential to student success in school.” And thus is grammar coupled with notions of error, accuracy, correctness, and judgements about individuals and their intelligence.

Hudson and Walmsley (2005) rightly observe that in England there has been a significant discourse shift at policy level and in curriculum documentation. References to grammar emphasise making comparisons between standard and non-

standard forms, and supporting children in becoming bidialectal in speech and writing, able to make informed choices about the forms which are most appropriate. There is little significant reference to accuracy. The ultimate goal for any teacher of writing is not accuracy, but effectiveness. As the NCW report insists, “basic writing is not the issue” because most student can write, “what most students cannot do is write well” (NCW, 2003, p. 16).

The following extract from a 16-year-old’s General Certificate of Secondary Education (GCSE) English examination script was part of a large sample of GCSE examination scripts analysed in a study of children’s writing (QCA, 1999; Myhill, 1999). It exemplifies well how weak writing cannot be crudely correlated with inaccuracy. Apart from the absence of some initial capitalisation, the extract is grammatically accurate. However, correcting these “errors” makes little significant difference to the effectiveness of the piece. There is a story here waiting to get out, and from a pedagogical perspective there might be many things one could recommend to breathe life into it, but improving the accuracy would not be one of them.

we started to throw bricks in the canal where he had gone in and he still never came back. so I and 2 other chaps went for help and left where he fell in. We went to the factory just up the canal and they helped us. 2 workmen jumped in the canal looking for him. they got him but he wasn’t breathing so we called an ambulance. they took him to the hospital and they couldn’t get him to breathe. the doctor asked how long he had been under the water for and I said only for a few minutes...

Thus it is encouraging that the educational thrust of attention to grammar in England in the statutory National Curriculum for English (DfEE, 2000), the NLS (DfEE, 1998) and the Key Stage 3 Framework for English (DfES, 2001) is on improving and developing writing, not upon error. And yet, precisely *how* grammar can improve children’s writing is neither clearly conceptualised nor clearly articulated.

A THEORETICAL FRAMEWORK FOR TEACHING GRAMMAR TO SUPPORT WRITING?

Perhaps the absence of a cogent rationale for advocating teaching grammar to improve children’s writing is because, as yet, there is no theoretical framework within which to locate the discussion. The rejection of grammar teaching by the English profession was largely because there was no conviction that it served any useful purpose “because explicit grammatical knowledge was no longer considered a necessary precondition for pupils’ ability to communicate” (QCA, 1998, p. 12). Instead, the past forty years or so have been characterised by rather polarised, ideologically-driven debates about whether teaching grammar improves writing, debates which have tended to reveal more about the proponent’s stance than about the issue itself. Tracing the story indicates patterns of claim, counter-claim, and criticism of current practice. The Bullock report (DES, 1975) condemned grammar teaching which was “prescriptive” and which, in terms of writing, “identified a set of correct forms” (p. 170) and no more. The research of Harris (1962) and Robinson (1959), which had partly provided the impetus for whole-scale rejection of grammar teaching in the 1970s, was subsequently rebutted by Tomlinson (1994) on the grounds that

both studies were methodologically flawed and do not stand up to “critical examination” (p. 20). More recently, two reviews of the empirical evidence (Hudson, 2001; Wyse, 2004), focusing specifically on the impact of grammar teaching on writing, arrive at opposite conclusions.

In the light of this continuing uncertainty, the commissioning of an Evidence for Policy and Practice Information and Co-ordinating Centre (EPPI-Centre) study into the impact of grammar teaching upon children’s writing was a promising endeavour. The final EPPI report (Andrews et al, 2004) concluded that there was no evidence to counter the belief that teaching syntax “has virtually no influence on the writing quality or accuracy of 5-16 year olds” (p. 24). But the EPPI research, though apparently thorough and extensive, drew its conclusions on the basis of just three studies deemed of high or medium-high significance, none of which were conducted in the UK, and two of which are thirty and forty years old respectively (Elley, Barham, Lamb & Wylie, 1975, 1979; Bateman & Zidonis, 1966). The Elley studies, like Harris and Robinson before them, compared classes given “reading and creative writing” lessons with those given grammar lessons. The Bateman and Zidonis study looked at the effect of teaching generative grammar, focusing on sentence construction, on children’s writing and did find, in fact, limited evidence of a positive impact. The third study, by Fogel and Ehri, published in 2000, looked at the impact of practising transforming sentences from Black Vernacular dialect to Standard English – and the children in this study also showed some improvement.

In the end, the EPPI report is disappointing, because it does not engage with key pedagogical and empirical questions, although it touches on these areas tentatively in the Background section. In the framing of the research question, it does not conceptualise why anyone might believe that teaching grammar would improve children’s writing. In its conduct of the systematic literature review, it does not consider how the grammar was taught, particularly whether the grammar teaching made connections between grammar and writing. Equally, it does not engage with the pedagogical confidence of the teacher, not just in command of linguistic understanding, but also in how that linguistic understanding might be applicable or relevant to the development of writing ability. Its conclusion, that there was no evidence of any impact of grammar teaching upon written composition, was reported in the media as evidence of the redundancy of grammar teaching to the development of writing – a sign perhaps that, as Tomlinson argued in the nineties, this was “what many in the educational establishment wanted to hear” (Tomlinson, 1994, p. 26). What would be so much more interesting, and valuable, would be to explore in more subtly nuanced detail what research can tell us about which aspects of grammar and knowledge about language are most relevant to writing, whether direct teaching of these features can help children improve their writing, and what teaching strategies are most successful in enabling this to happen.

Methodologically rigorous and valid evidence concerning the impact of grammar teaching on writing is indeed extremely limited, but sensitive readings of available research does point to pedagogical issues which warrant both systematic research enquiry and professional critique and debate. Green, Johnson, O’Donovan and Sutton (2003) found, for example, that children’s sentence structure in writing had improved between 1995 and 2002, covering the period since the introduction of the NLS which explicitly teaches about sentence structure. This finding mirrors an earlier US study

(Hillocks & Mavrognes, 1986) suggesting that instruction in sentence combining has a positive impact on composition. The Fogel and Ehri study (2000), considered in the EPPI report, was one where the teaching of grammar was directly related to learners' needs and this seems to have borne fruit. Yet elsewhere, the consequence of direct instruction of linguistic forms needed in written composition is seen to have less beneficial impacts, including misuse of connectives (Perera, 1987), misunderstanding of the effect of the passive (Myhill, 2003), and the formulaic repetition of taught forms (Kress, 1994). Arguably, direct instruction in grammatical structures used in writing can lead, not to effective writing but to "the reproduction of dominant knowledge" (Doecke, Kostogriz & Charles, 2004, p. 30). The truth is that teaching grammar and knowledge about language in positive, contextualised ways which make clear links with writing is not yet an established way of teaching and it is, as yet, hugely under-researched. What is needed is more research which is genuinely open-minded and critical, and policy initiatives which encourage professional engagement with the pedagogic issues; our ways of knowing about how grammar might support writing development need to move beyond simplistic or ideological parameters of agreement or disagreement.

I would argue, therefore, that our understandings about grammar and writing would benefit from stronger theorisation and conceptualisation which move both theory and practice beyond the confines of proof and rebuttal. In particular, I would like to consider what is understood by the concept of "grammar taught in context"; the relationship between learning theory and a theorisation of how grammar might benefit writing instruction; and finally, the significance of teacher linguistic and pedagogical subject knowledge.

TEACHING GRAMMAR IN CONTEXT: THE ACCEPTABLE MANTRA

For many teachers of English, including myself, the principle of teaching grammar in context has been tantamount to a mantra, uttered whenever the issue of grammar teaching is raised. Teaching grammar in context avoids all the worst excesses of prescriptive grammar teaching, which operates within the deficit model of grammar teaching, focusing on error, or as the Bullock Report (DES, 1975, p. 170) puts it, teaching where the emphasis is "less on knowing what to say than on knowing what to avoid". Indeed, the three major reports into English teaching in the last fifty years, Bullock (DES, 1975), Kingman (DES, 1988) and Cox (DES, 1989), all rejected prescriptive grammar teaching in favour of contextualized grammar, based on a systemic-functionalist view of grammar as "a dynamic description of language in use" (DES, 1988, p. 3). The wholehearted espousal of the principle of grammar in context is reiterated in the National Association for the Teaching of English (NATE) position paper on grammar (NATE 1997); and in teacher resource books such as *Grammar in Context* by Geoff Barton (1999) and *The Grammar Book* by Richard and Elspeth Bain (1996). This stance represents a particular way of knowing about grammar teaching, and is one which is very much part of the mainstream professional identity of English teachers.

However, the danger of a mantra is repetition without reflection. The rejection of decontextualised, and with it by implication, prescriptive, grammar teaching was rooted in insightful critique of what was happening in English classrooms. In

contrast, the “grammar in context” principle is both less sharply critiqued and considerably less clearly conceptualised. There has been little genuine discussion or consideration of what “in context” means. Frequently, observations of classroom practice indicate that the notion of “in context” means little more than grammar teaching which is slotted into English lessons, where the focus is not grammar but some other feature of English learning. In other words, “in context” may simply mean “not decontextualised”.

From the learners’ perspective, there are several dangers in such a definition. Firstly, the context can be so interesting that the grammar learning is lost, what Keith describes as the learner losing sight of the wood “as each tree becomes more and more interesting” (Keith, 1994, p. 69). There is also a danger of pseudo-contextualisation, where separate, discrete grammar lessons are replaced by “mini” grammar lessons in the midst of something else. The latter may be of particular significance in England where for all children aged 5-14, there are yearly teaching objectives laid out in the National Literacy Strategy and the Key Stage 3 Framework for English, some of which have an explicit grammar focus. By way of exemplification, some of these objectives are set out below Figure 1:

NATIONAL LITERACY STRATEGY		KEY STAGE 3 FRAMEWORK	
YEAR 3	YEAR 5	YEAR 7	YEAR 9
Pupils should be taught: <ul style="list-style-type: none"> • The function of verbs in sentences • To experiment with the impact of different adjectives through shared writing • To substitute pronouns for common and proper nouns in own writing 	Pupils should be taught: <ul style="list-style-type: none"> • To investigate word order by examining how far the order of words in sentences can be changed • To understand... agreement between subject and verb • To search for, identify and classify a range of prepositions 	Pupils should be taught to: <ul style="list-style-type: none"> • Extend their use and control of complex sentences • Use the active or passive voice to suit purpose • Keep tense usage consistent, and manage changes of tense so that meaning is clear 	Pupils should be taught to: <ul style="list-style-type: none"> • Know and use the terms that are useful for analyzing language • Review and develop the meaning, clarity, organisation and impact of complex sentences in their own writing

Figure 1. KS3 English framework: Grammar-related objectives

One undoubted benefit of outlining teaching objectives, but not specifying content is that it gives teachers considerable freedom about the contexts and content within which they want to choose to teach these objectives. But there is also the tendency for the objective to become more important than applied understanding, and for mini-grammar lessons to occur within writing lessons. In one Early Years lesson observed as part of our “Talk to Text” project¹, we watched an able boy, Frankie, and an able girl, Lydia creating two pieces of writing. The lesson followed a recent visit by Val Biro, the author of the *Gumdrop* stories, and the children were moving towards writing their own Gumdrop story. This particular lesson was encouraging children to use adjectives and the teacher invited them to offer her adjectives to describe features

¹ “Talk to Text” is a funded research project investigating how oral activities support development in Early Years’ writing.

in a picture of New York. They were then asked to write their story using adjectives. The two pieces of writing produced are illuminating: Lydia obediently pursues the writing of adjectives, but does not create a story; Frankie is more interested in his story, and writes the beginning of a compelling narrative. Lydia's finished piece is approximately 50% adjectival; whereas Frankie's is approximately 10%. The final pieces are reproduced below (Figure 2), as they were spelled, punctuated and set out in the originals.

Lydia's writing.

The Big trantsparnt wendros.
The is a Big Blow Bus Stop.
A tec stony Bunpy pavmnt.
One wyd luyny Bisy rowod.
A Blow and red culfl Bus.

Frankie's writing.

This is the nisy amazing longleat. There are some very cheeky monkeys there. If you look closely you mite see some juicy fruit and a grey rhino. Because it has ascaped. I hope he dosent see gumdrop or mr old castele or Black Horace.

Figure 2. Early years' writing samples: "Using adjectives"

While Frankie is writing, his teacher reads his work and the following exchange takes place:

- Teacher: Really, "amazing Longleat. There are some very cheeky monkeys if you..."
- Frankie: "look closely".
- Teacher: "... look closely, you might see some fruit and a rhino." Just remind me, Frankie, the thing that's the most important about this piece of work, the thing we are looking at most...
- Frankie: Adjectives.
- Teacher: Do you think you might be able to see if you can pop in a few more? Fabulous.

After this intervention, Frankie inserts "juicy" and "grey" into the third sentence. The instructional sequence, with its listing of adjectives to describe New York, and its recommendation to use adjectives in their stories shifts the focus from writing to grammatical deployment, an emphasis confirmed by the teacher's exchange with Frankie. There is no discussion of what adjectives may contribute to writing or why description might enhance writing – the objective has simply become using adjectives, with the clear implication that more is better.

Arguably, this is just as decontextualised as grammar exercises in discrete grammar lessons, and can create a curious set of misconceptions about writing. Indeed, the

fourteen-year-old writers, interviewed as part of our ESRC study², frequently referred to adding description, or thinking about descriptive words as they write, but for some there was an apparent correlation between the existence of adjectives and good writing, with no parallel consideration of appropriacy or effect.

- Mitch: as long as I've got a good style of writing and I'm using good adjectives, I'm happy with what I've done... more positive
 Emma: I think it's good 'cause I've included lots of words that describe.

One can all too easily imagine Frankie and Lydia saying similar things in years to come.

So what might a more theorized understanding of grammar in context mean? I am interested in exploring how the teaching of grammar in the context of writing might be located within a clearly-articulated framework of how children learn. In this way, I would like to move the debate away from the binary oppositions of “should we/shouldn't we” teach grammar, to a more pedagogically helpful and theoretically robust conceptualisation of how writing might be improved by the teaching of grammar.

WRITING AS SOCIAL PRACTICE

A substantial body of thinking now argues that writing is not merely an act of transcribing and encoding thoughts into words on the page, but that writing is a social practice, determined and influenced by social, cultural and historical contexts (Lankshear 1997; Street, 1995). When children are learning to write, “they learn more than the *system* of writing. They learn about the *social practices* of language” (Czerniewska 1992, p. 2). In this way, writing is not a set of decontextualised skills to be mastered and deployed, but a meaning-making activity, rooted in social contexts, and reflecting power relations between different groups. In her work with high school students, Janks (2001) explicitly explored some of these relationships between language and power, and quotes the post-apartheid Truth and Reconciliation Commission's assertion that “Language, discourse and rhetoric does things: it constructs social categories, it gives orders, it persuades us, it justifies, explains, gives reasons, excuses. It constructs reality. It moves certain people against other people” (TRC, 1998, Vol. 5, Ch. 7, ¶124).

In our ESRC study, there was evidence that teenage writers understood that, in the case of writing which required a formal style (such as in arguments and letters of complaint addressed to adults, for example), their choice of formal language reflected a particular power relationship between writer and reader

- Jim: If this was meant to be like a letter or something, you know, to a higher authority or whatever, where it would be complicated, then I would write it and redraft it much more, you know, to change the words so that they were better words.

² This study has investigated the linguistic characteristics of pupils' writing, and explored their understanding of their own composing processes, and the linguistic choices they make during writing.

- Interviewer: What does formal language mean?...if Mr Jackson says to you I want you to use formal language, what would you do?
- Jake: Well, when you're like speaking to someone more important than trying to, like, make it sound more sophisticated.
- Joe: 'Cause it's quite formal and we're writing to someone who's obviously higher up and that.
- Michael: [*about a written speech to the school governors*] ...if I see a bit that's too rude, I'd probably just try and make it, but a bit more discreetly or something like that and I'll just still put the point across and it will probably be a bit more discreet than what I had previously written so just to get the point across and they'd probably listen more, as well, taking it in, but with, like, if it was too rude, they probably wouldn't listen or, you'd probably get sent off the stage or something.

In terms of formality, these writers and others in the sample were able to articulate explicitly how formality could be achieved through choosing word items appropriately, a form of metalinguistic awareness that demonstrated their ability to make connections between a lexical item and its effect on an implied reader:

- Because “store” to me sounds more formal because a shop is something that you might say to your school mate;
- I have, you know, used some words like “purchased” instead of “bought”;
- Instead of using “happened”, I used “occurred”;
- Here it was just to use a more formal word. I used “aid” instead of “help”.

Developing metalinguistic awareness about linguistic choices made in the design of a piece of writing, at lexical, syntactic and textual levels, has a potential role within a socio-cultural view of writing as social practice. At the heart of such a theoretical perspective is the importance of making connections between grammar and meaning. In the sixties, Gurrey was arguing that one cause of scepticism about grammar teaching was in “the divorce of grammar and meaning” (Gurrey, 1962, p. 8) and Perera (1984), considering the primary school context, noted that, “a body of research has accumulated that indicates that grammatical instruction, unrelated to pupils’ other language work, does not lead into improvement in the quality of their own writing” (Perera, 1984, p. 12). Curiously, this is frequently cited as evidence against teaching grammar, yet her argument is that teaching which is “unrelated to pupils’ other language” work is ineffective.

This principle of making connections between grammar and meaning in writing is more than language awareness. It is perfectly reasonable to argue for the study of grammar to allow children to explore “the rich complexity of language”, as the NATE position paper (NATE, 1997, p. 2) does, but this is an argument for the intrinsic value of studying language and grammar. I would argue for a more direct connection to be made between grammar, writing, and children’s experiences of language as readers and speakers – more clearly-focused “guidance about how meanings can be shaped through language”, to give writers “freedom and power over language” (Czerniewska, 1992, p. 146). There is empirical evidence that such an integrated approach is beneficial. Wray’s study of effective teachers of literacy (Wray, Medwell, Fox & Poulson, 2000) looked at primary school teachers using the National

Literacy Strategy objectives and found that the most effective teachers were able to make meaningful connections between linguistic points at word and sentence level, and engagement with whole texts. Although these teachers did teach explicitly linguistic objectives, such as sentence structure, they were less likely to highlight it “as the overall aim of a lesson” (unlike the year 1 teacher teaching adjectives referred to earlier). In contrast, less effective teachers “tended to teach language features directly, without providing children with a clear context in which these features served a function” (Wray et al 2000, p. 81). Similarly, Nystrand, Gamoran and Carbonaro (1998) found a positive impact on writing achievement was evident where instruction integrated reading, writing and discussion in meaningful ways.

SCHEMA THEORY

Integrating and connecting knowledge about grammar with learning about writing can also be understood through the filter of cognitive psychology, and schema theory in particular. Whereas the idea of writing as social practice is a socio-cultural construct, schema theory is a cognitive construct. It was Bartlett (1932) who first developed the concept of the schema as a way of explaining how our memory organizes our experience. In particular, Bartlett argued that new learning and experiences are shaped by what we already know, and that new experiences develop and extend our existing understandings. The schema is the term he used to describe the “mental map” or set of mental connections we hold in our heads which relate to a particular set of experiences or ideas. Kellogg (1994), in his influential account of the psychology of writing, defines a schema as “a mental representation of a type of object or event that describes only the general characteristics of the type” (p. 18).

Schemata, then, are high-level, complex structures used to manage and interpret experience; they are flexible, dynamic, and evolving and form an important part of the way we organize our thinking. From the perspective of writing, however, the distinction between content and formal schemata for writing made by Carrell and Eisterhold (1988), and developed by Swales (1990), is a helpful one for conceptualising the role of grammar teaching in developing writing. *Content* schemata draw upon an individual’s life experiences and understandings and are central to the generation of ideas, the “what to write” component of composition. *Formal* schemata are complementary to content schemata and represent what an individual knows about “how to write”, the text structure patterns and the linguistic forms typical of a particular genre or text-type. Swales (1990, p. 42) argues that written genres are “goal directed communicative events” with particular “schematic structures”, operating at both the level of what to write and how to write it, and effective management of both of these sets is essential to writing competence.

This basic idea of schema theory applied to writing is evident in the work of many significant researchers into writing. In Hayes and Flower’s (1980) model of the writing process, the memory component is constructed out of topic knowledge, audience knowledge, and stored writing plans. In effect, they see writers as drawing on three complementary sets of schemata: content schemata (topic knowledge); formal schemata (stored writing plans); and audience schemata (audience knowledge). Bereiter and Scardamalia (1987), in using the terms content knowledge and rhetorical knowledge effectively adopt Carrell and Eisterhold’s (1988)

distinction; and Alexander, Schallert and Hare (1991) sub-divide the content and formal schemata into more detailed subsets of conceptual knowledge. For them, the content schema includes domain knowledge and discipline knowledge, and the formal schema, or discourse knowledge as they call it, includes knowledge of text, syntax and rhetoric.

Many of the teenage writers interviewed in our ESRC study demonstrated that they knew about the need to be attentive not only to the content of their writing, but also to how they wrote it. Many of them explicitly linked the “what” and “how” to an awareness of audience, perhaps suggesting that Hayes and Flowers’ triple formulation of content, formal and audience schemata is the most relevant framework for a pedagogy of writing. Below are some of the children’s comments which arose from questions about how they began the process of writing; from questions about how they would advise another writer to approach this particular writing task; or from questions about what effects they were trying to achieve in the piece they had just written:

- Jack: [about a narrative] I’d probably say this was a story about how, like, a family had lost all their money...well not all their money, but something that was extremely special to them and they’ve lost it and they’re extremely upset about that and I’d also try and bring in points like the weather and say, “can you remember this from when we did this in Year 8 or something?” about how bleak weather normally builds up tension and you know something’s going to happen. And I’d also say you’ve got to try and use various different techniques like speech or something just to get the attention again...don’t over complicate things as well, just try and use a couple of people who’ve got big characters.
- Luke: [about a film script] Well, I’d just say, start off by saying when and where the scene is set and then open up with, you know, a speech, a small speech from someone, or you could, ...let the reader know what the scene’s about, so, an opening paragraph on setting the scene and...
- Sally: [about a horror story] it’s supposed to be like a spooky story, so you’re building up suspense and then you’re letting the reader down gently again...it’s only a spider creeping across the floor.
- Lucy: [about beginning a writing task] I just think about what we have to do and how we’ve got to do it.
- Joe: [about a detective story] Well, last year in Year 8, I remembered about...we wrote about doing descriptive writing about a detective or something like that and I was just trying to remember all the points that come from people, like Inspector Morse has all his kind of features and things and, kind of like, sneaky. I was trying to think of, like, funny things at the same time as being quite serious, as well. And I was also trying to just to write the old fashioned style, the way they dressed with, like, a pipe and magnifying glasses and things

Explaining that linguistic choices can affect how meaning is shaped through form supports the development of writers’ formal schemata or discourse knowledge – another way of knowing about writing.

EXPLICIT AND TACIT KNOWLEDGE

Viewing schemata for writing from a second language perspective, Hedge (1988) notes how some writers, “who may not necessarily have had any formal instruction in discourse types, start writing with the appropriate ‘schema’ in their heads” (p. 94). This appropriately raises the issue of tacit and explicit knowledge, of considerable significance in any attempt to establish a theoretical framework for teaching grammar in the context of writing. Kellogg (1994) notes that schemata can be either tacit or explicit, and it is only through language that tacit knowledge “becomes explicit or conscious knowledge” (p. 19). Given that at an early age, all children “have mentally internalised an immensely complex system of grammatical rules” (Leith, 1983, p. 88), writers, whether in the Early Years’ classroom or in secondary school, have considerable tacit grammar knowledge to draw upon. Furthermore, children’s reading encounters with texts and previous experience as writers furnishes them with tacit knowledge which is specifically concerned with writing.

If tacit knowledge acts as an influence upon the composition of successful writing, what is to be gained from making that tacit knowledge explicit? One boy in our ESRC study was able to articulate clearly how exercising grammatical or linguistic decision-making processes during writing is an automatic process for him, drawing on tacit knowledge about effectiveness, rather than making explicit, conscious choices:

- Oliver: my brain sort of...automatically frames how the sentence is going to work and, you know, where to put dashes and colons and everything.
- Interviewer: Is that in terms of punctuation?
- Oliver: Yeah, but also how I use the words, which way round the sentence goes.
- Interviewer: So having your clauses, I mean, do you actually consciously think about them?
- Oliver: No, not really, that’s the point, I don’t really consciously think about...this should go here or this should go here, ’cause I just subconsciously know that if you put the verb here then it makes it seem more angry or more colloquial or whatever than if you put it in the normal place.

But it is important to be aware of the various nuances of tacit and explicit knowledge and to avoid simply counterpointing them as opposites. There are many gradations between tacit and explicit knowledge. As well as explicit knowledge which can be both articulated orally and enacted in their writing, writers may have explicit knowledge which they have temporarily forgotten; or explicit knowledge which they can articulate orally but do not transfer into their writing; or tacit knowledge which is not articulated but can be deployed in their writing. Linked to this is the distinction in cognitive psychology between “declarative knowledge” (knowing that) and “procedural knowledge” (knowing how); knowledge about grammar is not the same as knowing how to make effective and appropriate grammatical choices. Moreover, the assumption that the continuum moves from tacit knowledge to implicit knowledge is not always true, particularly with learners of English as an additional language or weaker writers. For these writers, instruction about linguistic features may generate explicit knowledge where there is no corresponding tacit knowledge. This may be particularly salient when considering stylistic choices in writing, where meaningful

teaching can draw attention to patterns or characteristics which have not previously been noticed.

As one would anticipate, our analysis of children's writing highlighted greater effectiveness and variety in linguistic features in high-ability writers than in weaker writers, but this was matched by greater ability to articulate explicit choices in interview in relation to specific pieces of writing. All of the comments below, except the final one, come from high-ability writers. It is also evident that the features they choose to mention – rhetorical questions, sentence variety, sentence length – are frequently explicitly taught as part of the Key Stage 3 Framework for English.

- Jane: Other ones [*crossing-out decisions*] were connecting ones. Once I had put them quite a few times, I thought it might sound a bit like “and, and, and” sort of thing, so I tried to change those.
- Sarah: I made it into a short sentence so it had some effect.
- Charlotte: I wanted some one-word sentences, some long sentences and I can't actually think of any one-word sentences at the moment, but I suppose when you see the monster, it could be the monster and it could be, like, scared and the character's scared.
- Ruth: I quite, a lot of the time, use a question at the end, a rhetorical question, but I don't know if this is really a rhetorical question.
- Luke: Here as well where it says, “*He crunched the pebbles together on his beautiful polished leather shoes,*” and I was trying to also link polished leather shoes with the inspector “cause they always like to look right...they kind of want to look posh and make a good appearance.
- Will: Sometimes, you know, the sentences, they all seem to follow the same pattern so I need to change it around to make it more interesting.
- Interviewer: You say you repeated yourself...was that deliberate or was it only after you'd written it you realised what you've done?
- Joe: Yeah, I sort of wrote the “*slide the key into the hole, I slowly turned it*” and then I thought I could like, I paused and I thought I could put something in ... and then I put “*so slowly you couldn't hear.*”

Explicit teaching of grammatical features in writing is a key part of the National Literacy Strategy and the Key Stage 3 Framework in England, and the ability to understand and deploy that knowledge in writing is conceived of as part of the writer's toolkit, a repertoire of choices available to the writer as he or she writes. This does not, however, engage with the place of tacit knowledge. Hudson (2004) observes that writers without explicit linguistic knowledge “may even be able to internalise the features of the text to the extent that they can imitate its style” and he argues that these writers “must be analysing these features implicitly ; but they cannot make the analysis explicit” (2004, p. 113). There is a strong argument that if internalization occurs successfully and writing is effective, then there is no need to make the analysis explicit. However, explicit knowledge is, by definition, more cognitively accessible for reflection and decision-making, and may therefore be a powerful enabling tool for writers tackling the cognitively complex task of writing. Carter expresses this forcefully in critiquing the demise of grammar teaching, arguing that it “disempowered them [children] from exercising the kind of conscious control and conscious choice over language which enables both to **see through** language in a

systematic way and to use language more discriminatingly” (Carter, 1990, p. 119). Of the three studies rated of high or medium-high significance in the EPPI review of grammar teaching, it may be particularly significant that the two which recorded positive effects after the teaching intervention (Bateman & Zidonis, 1966; Fogel & Ehri, 2000) both involved explicit teaching of a particular linguistic feature (sentence structure and standard dialect).

THE SIGNIFICANCE OF TEACHER LINGUISTIC AND PEDAGOGIC SUBJECT KNOWLEDGE

The teaching of writing with language in mind, as I have attempted to describe above, makes particular demands of English teachers in terms of substantive subject knowledge and pedagogic knowledge. It is axiomatic that meaningful, focused and relevant attention to grammar in the context of teaching writing requires teachers who are confident both about what they are teaching and how to teach it. Yet for many teachers of English in England, their career pathway into teaching has not prepared them for this.

Cajkler and Hislam (2002) record the difficulties trainee teachers of English experience in trying to demonstrate sufficient linguistic subject knowledge to meet the standards required to qualify as a teacher of English (DfES, 2000). Faced with an English curriculum, especially in primary, with a strong emphasis on grammar at word, sentence and text level, these novice teachers struggle to simultaneously understand the linguistic terminology themselves and to teach it effectively. But this is not a problem reserved for new teachers to the profession. For most of the past 100 years, graduates of English have been predominantly graduates from university departments of English Literature, and applicants for teacher training in English have also drawn principally from English literature degree routes. As a result, as Hudson (200) notes, not only do we have “far too few teachers of English with an adequate grounding in the linguistics of English” but also limited engagement of linguistics research with pedagogic issues (p. 15). Perhaps equally relevant is the fact that teachers who come to English teaching through a degree in Literature route may have very little interest in linguistics, and their own identity as an English teacher may be heavily shaped by their values and beliefs about what literature can offer learners. It is not surprising that many English teachers eschew grammar or reject its value in English teaching, if their intellectual and pedagogical confidence with literature is counterpointed by frustration in attempting to understand clause structures.

Lack of confidence in subject knowledge is nearly always paralleled by a similar lack of confidence in how to teach that element effectively. Research from an earlier study (Myhill, 2003) illuminated how weak subject knowledge of the passive led one teacher to generate misconceptions in her class both about the structure of the passive itself and its effect in texts. Teachers often become dependent upon commercial teaching materials or support materials provided by curriculum authorities, which are often suspect themselves as Cajkler (2004) has demonstrated. But this kind of dependence means it is difficult for teachers to respond to children’s misunderstandings or questions or “to react sensitively to any grammatical issue that may arise unexpectedly” (Hudson & Walmsley, 2005, p. 21). Moreover, grammar teaching which focuses on the terminology or fulfilling a particular curriculum

objective can establish strange ways of thinking about writing. In England, the emphasis on grammatical constructions without the corresponding understanding of effect and meaning-making is leading many children to believe that some grammatical features have intrinsic merit. The tendency to think of adding adjectives as a device for improving writing has been described earlier in this article and the belief that complex sentences are inherently good is another prevailing trend. In our ESRC study, several children referred to personal targets to use more complex sentences, or when evaluating their writing recalled the teacher's emphasis on complex sentences, but without purposeful insight, as the following exchange demonstrates:

- Interviewer: Why might that make it better?
 Sean: It's 'cause that's, like, one of my targets this year...to use complex sentences...
 Interviewer: Do you understand why complex sentences might be better?
 Sean: I know, like, that you get a better grade, but I don't actually know, like, why they're better.

However, there has been considerable professional development for teachers in this field in the past five years, and in secondary schools, the existence of teachers who teach A-level English Language and are both enthusiastic and comfortable with pragmatic linguistics has meant that some teachers are indeed helping children to make meaningful connections between grammar and writing. The following set of comments about sentence structure show these children beginning to develop understandings which inter-relate form and meaning, even if they are, as yet, struggling to articulate this clearly:

- Vicky: I think if it's short, not drags on and it's making a small point that it will make you think about it a bit more because it's like...I could have just said "the drawer was left open" something like that, and it makes you focus on that because it was quite short.
- Interviewer: What is it about complex sentences...?
 Matt: I wouldn't say they're necessarily good, it depends what you find good in the content, but complex sentences often make it more adult. You can get through stuff a lot quicker, I find as well, otherwise, full stop, new sentence, stop and you're thinking how...how far have I got? OK, next sentence. A couple of sentences you get it all going...
- Luke: Sometimes I, sort of, got into a sentence that was a bit too long and had too many, like, dashes and brackets and things in so I had to find what I was actually trying to write
- Tom: I probably would introduce more short sentences actually.
 Interviewer: Why would you do that?
 Tom: Um, it kind of makes it more exciting and long sentences can get quite boring if you have lots of them.

Finally, in terms of pedagogic subject knowledge, we need to consider the "difference between what teachers need to know about language and what they need to teach" (Perera, 1987, p. 3). Understanding the difficulties children face in learning how to create and shape meaning in written form is supportive knowledge for informing

decision-making about teaching strategies and content. Equally, being able to recognize the way different linguistic characteristics in writing contribute to their success, as did the QCA Improving Writing Study (QCA, 1999) can inform formative assessment in precise and purposeful ways, which can move beyond impressionistic judgements to explicit articulation of writers' development needs. Collins and Gentner (1980) have argued for "a linguistic theory of good structures for sentences, paragraphs, and texts" which would have "direct implications for the teaching of writing" (p. 53). But this does not necessarily mean that knowing that good writers use more short sentences than weaker writers should be paralleled by lessons on the virtues of the short sentence. It may mean, however, making the most of opportunities to notice the way short sentences are used and the effects they have in texts being shared in class; or it may mean talking to an individual writer with a tendency to write in sentences of similar length about possibilities in a given piece of writing to shorten sentences to emphasise a particular point. It also means that teachers need to consider whether the grammatical terminology is important, or whether the teaching point can be addressed through different strategies.

CONCLUSION

It is wholly unsurprising that there is no substantial, empirical evidence base demonstrating the beneficial impact of grammar on writing, as there has never been any theoretical or operationalised framework for teaching writing with grammar in mind. It is hard to imagine why teaching children about nouns or subordinate clauses *per se* might be matched by a corresponding improvement in their writing. In England, however, as Hudson and Walmsley (2005) observe, there has been a discourse shift in how grammar is discussed at policy level, and this has been matched at the pedagogical level by clear attempts to teach grammar in a more meaningful way. The evidence of constructivist approaches to teaching, making use of careful scaffolding of children's learning, and the teaching strategies of demonstration and modeling, has been encouraging and is consonant with the findings of the characteristics of effectiveness in literacy teaching in Wray et al's (2000) research, which was conducted prior to the introduction of these national initiatives.

There are, nonetheless, weaknesses in these national initiatives: the variable quality and accuracy of teaching materials (though some are excellent); the insufficient attention to teachers' subject and pedagogic knowledge at the outset; the way teaching objectives relating to grammar and writing have sometimes been addressed as decontextualised teaching within the teaching of writing; and the reluctance to open up debate about the efficacy of teaching approaches. I would argue that these weaknesses stem, in part, from the lack of a theoretical conceptualisation of how grammar might support the teaching of writing, and this article is an attempt to articulate such a theory.

At the heart of this theory are three principles. Firstly, that *writing as a communicative act* should be the principal pedagogic focus, and any attention to grammar should be informed by this, rather than using writing as a useful context to deliver grammatical learning objectives. Secondly, writers should be encouraged to see the various linguistic choices available to them as *meaning-making resources*, ways of creating relationships with their reader, and shaping and flexing language for

particular effects. And finally, the principle of *connectivity*: children should be supported in making connections between their various language experiences as readers, writers and speakers, and in making connections between what they write and how they write it.

This article raises as many questions as it answers. With the developments that have taken place in England in the past five years, now is a ripe time for robust, balanced and critical research which investigates the complex web of inter-relationships which surrounds teaching writing with grammar in mind. Perhaps for the first time, randomized controlled trials could compare classrooms where teachers are helping children to recognize and reflect upon the linguistic choices they make in their writing with classrooms where this is not the case. If this is complemented by qualitative research with rich, in-depth contextual interpretations of these settings, we may be in a position to supply salient and purposeful answers to the questions raised here.

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