Shaping Spaces: Teachers' Orchestration of Metatalk about Written Text

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Abstract

This paper reports on the qualitative strand of a Randomised Control Trial (RCT) study which involved the implementation of a pedagogical intervention emphasising the relationship between linguistic choice and effect in written text. The intervention was delivered to all year 6 students (aged 10-11) in 55 English schools. Drawing on observational data of 17 lessons, each taught by a different teacher, the analysis presented here focuses on how metatalk – talk about writing - was utilised by teachers during the intervention to foster metalinguistic discussion about written text. The findings draw particular attention to: the way that metatalk about written text manifests in different forms and for different purposes; the particular complexities of metatalk about written text; and how metatalk about can be orchestrated in a way which supports the cumulative development of metalinguistic understanding about written text. This paper argues that students' learning may hinge particularly on how teachers *orchestrate* metatalk repertoires to make connections between ideas and develop understandings in lessons.

1. Introduction: Writing as Choice and Control

Writing is a social and contextual practice (Jesson, Fontich & Myhill, 2016) which involves making meaningful linguistic choices according to purpose and effect, and which anticipate the reader response. Writing is also, therefore, a cognitive process which requires the 'deliberate structuring of the web of meaning' (Vygotksy, 1986, p. 182); writing is not a simple transfer of words-in-the-head to words on paper, but a deliberate and conscious process of *choice* and *control* which draws on metalinguistic understanding (Myhill & Newman, 2016). In the context of writing, 'metalinguistic understanding' involves both *recognising* how written text is crafted for meaning and effect, and consciously *controlling* one's own writing choices. Recent research suggests that in order to give students greater autonomy and ownership of their writing and the choices they make, teaching needs to support students' metalinguistic understanding about writing: 'both in terms of *thinking* about writing and using *language about writing*' (Myhill & Newman, 2019). Crucially, by drawing explicit attention to the linguistic choices available to students, and exemplifying these choices in text models, we enable them access to 'that repertoire of infinite possibilities which is at the heart of creative, critical shaping of text' (Myhill, Lines & Watson, 2011, p. 10).

Very little is known about how children develop metalinguistic understanding about writing, but research points to the particular potential of high quality metatalk in writing instruction, and its capacity to open up students' thinking about linguistic choice and effect (Myhill et al, 2016; Myhill & Newman, 2016). However, this research also suggests that the quality of metatalk experienced by students is variable and influenced by teachers' subject knowledge confidence; it also draws attention to the particular complexities of this type of talk, and the need

for teachers to 'orchestrate' different forms of metatalk in order to develop understandings cumulatively in lessons (Myhill, Newman & Watson, 2019; Myhill, Jones & Lines, 2018). Recognising that the word 'orchestrating', used here and in the title of this paper, may imply 'a degree of deliberate intention which may not always be conscious' (Parr & Wilkinson, 2016, p. 219), this paper explores how teachers utilise metatalk about text models, and the extent to which teachers control and interconnect different forms of metatalk to make deliberate and explicit connections between ideas and to develop understandings across lesson episodes.

This paper draws on data collected within the context of a wider RCT study investigating the efficacy of making explicit connections between grammatical choices and effects in writing (Tracey et al, 2019). The study found no overall effect on students' writing attainment, but the evaluator found that 'discussion used to tease out thinking and choice-making' was compromised in the implementation of the intervention (Tracey et al, 2019, p. 4). This paper offers a more nuanced interpretation of the result by providing an insight into metatalk as it was observed during the intervention. It draws particular attention to certain aspects of the pedagogical intervention (outlined in more detail in Section 2) - metatalk about *text models* in particular - and focuses on the understandings *verbalised* by teachers and students. It does not, therefore, claim or establish the direct impact of metatalk on students' writing, but raises the possibility that it is learning about text models – developing understanding of how *written text* is crafted - which bridges students' writing. Such investigations of metatalk may also contribute to understandings of the directionality of 'transfer' in metalinguistic learning, perhaps providing an alternative conceptualisation of 'transfer' as a dialogic *interplay* between model texts and students' writing, with metatalk the mediating mechanism. Given the potential of metatalk for developing metalinguistic thinking, understanding more about how metatalk is *shaped* in the classroom is certainly an important discussion point (Parr & Wilkinson, 2016, p. 219).

2. Theoretical Framework

2.1 Metatalk and Metalinguistic Understanding

The term 'metatalk', derived from second language learning (L2), is used to describe metalinguistic reflection on language use, and specifically on language as a *system* (Swain, 1995). Metatalk, therefore, is the 'surfacing of language used in problem solving; that is, language used for cognitive purposes' (Swain, 1998, p. 69). In educational linguistics, Schleppegrell (2013) argues that this explicit talk about language is 'consciousness-raising' (2013, p. 155) because it draws a deeper level of attention to language use and supports understanding of the relationship between meaning, form and function (Storch, 2008, p. 96). In the L1 context, we are particularly concerned with utilising metatalk which fosters students' understanding of linguistic choice in writing as *functionally-oriented* (Halliday, 2004). This metatalk about writing is 'not about directing writers to 'correct' choices or formulaic patterns of writing; it is about enabling the kind of thinking that will help writers to become creative decision-makers in their own right' (Cremin & Myhill, 2012, p. 111). In the writing classroom, therefore, talk is used as a 'mediational tool for learning about writing, and particularly for developing thinking about shaping meaning in writing' (Jesson, Fontich & Myhill, 2016, p. 155).

Metatalk then is considered the means by which metalinguistic understanding may be verbalised, shared and examined. For example, a child reveals metalinguistic understanding if they: *explain* how and why a writer delays the introduction of a character; or, *explain* how they have used modal verbs in their own writing to express different levels of certainty. Metatalk, therefore, creates opportunities for children to verbalise, explain and justify their linguistic decision-making as writers which supports growing awareness of how linguistic choices subtly alter the way a text conveys meaning (Myhill & Newman, 2016). Part of this 'metatalk', metalanguage, or 'language about language' (Jesson, Fontich & Myhill, 2016, p. 157) includes the use of grammatical terminology but also the use of everyday language to describe linguistic choices. The use of metalanguage may enable teachers and students to be more precise about the features and effects under discussion; and this shared metalanguage enables a shared language for talking about writing choices (Myhill & Newman, 2016).

2.2 Dialogic Metatalk about Written Text

Metatalk may be a key pedagogical tool in the teaching of writing because it enables the development of metalinguistic understanding through dialogues which involve sharing, exploring and questioning different ideas to extend thinking. A substantive body of research, which includes studies of talk termed *exploratory* (Barnes, 2010; Mercer, 2002; Gillies, 2016); *dialogic* (Michaels & O'Connor, 2007; Alexander, 2008; Wegerif, 2011; Reznitskaya et al, 2009); and *accountable* (Resnick et al, 2015), have revealed the educational value of productive dialogues (Mercer & Littleton, 2007; Wegerif, 2013; Jay et al, 2017). Making a link with Mercer's *exploratory* talk (2000), Camps (2015) highlights the particular value of talk to develop metalinguistic understanding, describing metalinguistic talk as 'collaborative reasoning… that enables knowledge to be constructed jointly' (Camps, 2015, p. 11). Emphasising students' active construction of knowledge through talk, dialogic teaching makes use of classroom talk to 'teach students to think – to make knowledge' (Resnick et al, 2018). Because knowledge generation may arise from the 'opening' of 'dialogic spaces' (Wegerif, 2013, p. 62), dialogic *metatalk* may, therefore, support young writers' capacity to think metalinguistically about writing, by opening up a space for the *exploration* of writing choices (Myhill & Newman, 2019).

'*Dialogicity*', a notion rooted in the work of Bakhtin (1986), is also salient in the context of a pedagogical approach to writing which emphasises linguistic choice and authorial intention. As Jesson, Fontich and Myhill note: 'written text is always a dialogic interplay between the writer and reader, not a monologic act…The dialogic space encompasses the intersection of the text, the writer and the context, both the immediate situational context of particular classroom communities and the broader cultural context' (2016, p. 155). From this perspective, texts and their meaning are not static or fixed: meanings arise in 'dialogue' between the author and the reader, and in different historical and contextual 'spaces'. Dialogic metatalk resists treating text and its meaning as static but recognises the 'multi-voicedness' of text by exploring the interplay between authorial intention and reader response. Dialogic metatalk, which also emphasises text as *dialogic*, may play an important role in fostering the development and expansion of metalinguistic understanding about writing.

2.4 Orchestrating Dialogic Metatalk about Written Text

As Alexander notes, discussion and dialogue are the 'most cognitively potent elements in the basic repertoire of classroom talk', yet also the 'rarest' (2008, p. 31). Research has drawn attention to the way in which high stakes educational contexts may constrain classroom talk (Galton et al, 2009; Lefstein, 2010), but also to the significant skill involved in managing classroom talk which enables learning (Mercer & Littleton, 2007; Alexander, 2018). As Alexander notes, 'it is largely through the teacher's talk that the student's talk is facilitated, mediated, probed and extended – or not, as the case may be' (2018, p. 3). Importantly, the influence of the teacher's talk extends to the breadth and quality of the talk *repertoire* which students might experience, including dialogues amongst peers (Newman, 2017a).

Our own research indicates the particular complexity of metatalk about written text and the challenge it poses for teachers: metatalk about writing involves facilitating dialogic discussion about text, but to explain and explore grammatical forms teachers also need to be able to draw on authoritative subject knowledge (Myhill, Jones & Watson, 2013; Myhill & Newman, 2016). In order to facilitate metatalk which probes and extends thinking, teachers' authoritative knowledge and their ability to notice and interpret linguistic choices in texts may be critical (Myhill et al, 2013). Authoritative explanation here then is viewed as part of the dialogic 'space' (Myhill & Newman, 2016), a position which poses some challenge to views of dialogic and monologic teaching as dichotomous (for example, Edwards & Westgate, 1994; Skidmore, 2002). Research has begun, however, to challenge how 'direct instruction or unidirectional transmission of knowledge is often pitted against open-ended, student-centred inquiry' (O'Connor & Michaels, 2007: 276), and acknowledges both the monologic and dialogic in classroom discourse (Scott, Mortimer & Aguiar, 2006; Wells, 2006).

Looking beyond interactional form, Boyd and Markarian argue that instead of defining dialogic teaching according to surface level interactional patterns, attention should be paid to how discourse *functions* to support cognitive activity and inquiry, to engage multiple perspectives, and 'inter-animate' ideas in streams of discourse (2015, p. 273). This also draws attention to the importance of looking at the 'whole' of the talk: at the way in which metatalk functions in different ways to develop understandings, and how these different forms of metatalk interconnect and *cohere* to shape teaching and learning. In the context of L1 writing instruction, the success of students' learning may hinge on the quality of teachers' metatalk, but also on teachers' 'orchestration' of this metatalk and how it functions to develop understandings about the relationship between linguistic choice and effect.

2.5 The Research

This paper presents the qualitative strand of an RCT study which involved the implementation of a pedagogical approach to the teaching of writing, underpinned by four key principles (Myhill, 2018; Myhill, Jones & Lines, 2018):

LINKS: make a link between the grammar being introduced and how it works in the writing being taught
EXAMPLES: explain the grammar through examples, not lengthy explanations

AUTHENTICITY: use examples from authentic texts to link writers to the broader community of writers

DISCUSSION: build in exploratory dialogic discussion about grammar and its effects

These principles emphasise the crucial importance of *metatalk* in the teaching of writing: for explaining grammatical concepts, and for exploring connections between linguistic choice and effects. They also place significant importance on grounding this metatalk in discussion of authentic text models. This paper explores how these principles manifest in metatalk, and focuses on 3 research questions:

- *In what ways does metatalk about written text manifest?*
- *In what ways does this metatalk 'open up' thinking about linguistic choice and effect?*
- *How do teachers 'orchestrate' metatalk across lesson episodes to develop understandings?*

3. Methodology

The intervention, involving two units of work, was delivered to all year 6 students (aged 10-11) in 55 schools: schools were clustered around four geographical areas (two in the North and two in the South) of England. The first unit of work focused on fictional narratives, and the second focused on persuasive argument, both emphasising attention to language as a meaning-making resource. Teachers attended 3 days of professional training, spread over 6 months, which focused on the four key pedagogical principles outlined above, and developed familiarity with the two teaching units, which all intervention teachers taught during the intervention.

3.1 Data Collection

This paper draws on qualitative data which was gathered during the first unit of work. 17 teachers/ 1 hour lessons were observed once across 13 schools. Lessons were audio-recorded and an observation schedule completed by the observing researcher. The audio-video data enabled a consideration of metalinguistic knowledge in terms of what teachers and students *say*, but not how this knowledge transferred to writing.

3.2 Data Analysis

The data was transcribed and coded in NVIVO by 2 researchers, using a layered process of open and axial coding, described in detail below. Episodes were selected first from the full lesson transcripts for coding in NVIVO. Any episode which featured teachers *explaining grammatical features* and *making connections between grammatical features and their effect* were selected, enabling an examination of key principles underpinning the intervention. 87 episodes from 17 lessons were selected for analysis. The number of selected episodes per 1 hour lesson was dependent on the frequency and focus of whole-class talk, which altered according to the planned lesson content. The episodes selected were of varying length so the frequency of episodes within a lesson is not necessarily an indicator of *more* or *less* talk (see table 3).

3.2.1 Talk Type

The 87 episodes were first coded inductively for talk type (table 1 below). Two codes captured interaction sequences but distinguished between 'exploratory' sequences, drawing on Alexander's characterisation of dialogic talk (2008), and 'question and answer' sequences which were characterised by more tightly-controlled

question and answer discourse patterns, such as the IRF (Sinclair & Coulthard, 1975, p. 2013). The third code, 'direct explanation', captured teachers' *authoritative* explanations of grammatical features and/ or their effect.

	CODE	DESCRIPTION	EXAMPLE
Interaction Sequences	*Exploratory*	*Sequences* of interaction which featured open, probing questions *intended* to prompt student explanation and elaboration	'…why do you think Michael Morpurgo reversed the position of the subject and put it after the verb? What effect does it have on the reader? …why did he start with 'a shining sword'?

Student: Because, sword, it just gives it away too quickly, you need to see it

Student: If you go straight to the shining sword, it would give away the subject, what it's talking about' |
| | *Question and Answer* | *Sequences* of interaction sometimes characterised by initiation-response-feedback (IRF) discourse patterns, featuring less probing and more closed questions | Teacher: Now I'm going to pose this question: 'clatter' is what?…

Student: Clatter is a noun. |
| | *Direct Explanation* | Teachers' *direct explanations* of grammatical features and/or their effects. | '…remember that a relative clause is something that you can take in and out. So it's part of a noun phrase, but it can be taken in and out so it doesn't count as a sentence.' |

Table 1: Talk type codes

To avoid obscuring the analysis, talk type codes were applied discretely and did not overlap: for example, if a direct explanation featured within an interaction sequence, the interaction sequence would be coded until the point of the direct explanation and again afterwards. Coded episodes, therefore, vary in length: a lengthy sequence of interaction, with no embedded direct explanation, may have been coded only once as 'question and answer' or 'exploratory'; or multiple times if direct explanations were embedded throughout. As noted in 1.1 above, the frequency of talk type does not denote the *amount* of talk, but the number of coded episodes or turns.

3.2.2 Talk Type and Learning Focus

This subsequent level of coding explored how talk type intersected with learning focus, to enable an investigation of how the metatalk observed functioned to develop understandings about linguistic choice and effect. Episodes were coded inductively for learning focus, resulting in 8 codes which were then categorised through axial coding as either 'generic' or 'specific' (table 2 below). 'Generic' refers to instances where grammatical features and effects were explored or explained in general terms, perhaps without consideration of choice and effect, or without reference to authentic textual examples; 'specific' refers to instances where grammatical features and effects were exemplified or explored within the context of authentic text examples, or students' writing.

	CODE	EXAMPLE
Generic	Checking or recalling grammatical knowledge	*'Ok, what's the difference between a phrase and a sentence?'*

	Eliciting general grammatical examples	'Teacher: 'So, 'the necklace'…I'm going to add in an adjective: so how could I describe this necklace? Student: Emerald necklace?'
	Explaining linguistic features in general terms	'Now we're going to…start writing down some noun phrases, so these are phrases which have a noun, and then some adjectives or other things that go with them to form a phrase. It's not full sentences, it doesn't have to be full sentences, it's a noun, a thing, and then words that modify or give a bigger impression about that thing'
	Explaining or exploring general effects of linguistic choices	'Ok. We've got the noun phrase with the noun followed by the adjective. That's a new technique. It sounds more mysterious'
Specific	Checking or recalling grammatical knowledge, using specific examples	'The first thing I want you to do is to underline the following words… I'm going to pose this question: the words you've underlined, are these words nouns, or are they adjectives? And I want to know why you think the way you think.'
	Generating writing and ideas	'Student: I've written two here: 'Merlin sat there unblinkingly at the old man, he was also staring intently at Merlin's stiff, rigid face'. And the second one is 'sunlight streamed through the moth-bitten curtains, and flooded the desk with almost unnatural light'.
	Explaining or exploring specific linguistic features	'…Usually the subject comes before the verb, so for example, 'the sword came out of the water', or if I was to give you another example, 'Arthur strode into the room'… Right, so this is called, the special fancy name for this is 'subject verb inversion'.
	Explaining or exploring the specific effects of linguistic choices	'Teacher: … So, let's look at this quote now: (reads) Mr Wormwood was a small, ratty looking man…What kind of person do you think Mr Wormwood is? From that description? Student: He's quite an untidy person'

Table 2: Learning focus codes and examples

4. Findings

4.1 Frequency Data

4.1.1 Talk Type

The frequency data indicates that lessons were not characterised *either* by direct explanations or interaction sequences but that lessons featured an interplay of the coded talk types.

Lesson	*No. of episodes selected for analysis*	**Direct Explanation**	**Total Interaction Sequences**	*Interaction Sequences*	
				Exploratory	*Question & Answer*
1	*3*	2	3	0	3
2	*1*	**0**	**5**	0	5
3	*6*	**5**	**9**	3	6
4	*6*	10	11	1	10
5	*8*	**7**	**2**	0	2
6	*4*	6	4	2	2
7	*9*	11	11	10	1
8	*4*	**4**	**0**	0	0

9	*7*	6	4	*2*	*2*
10	*6*	10	8	*4*	*4*
11	*4*	*2*	*2*	*0*	*2*
12	*8*	6	7	*3*	*4*
13	*3*	**1**	**4**	*2*	*2*
14	*5*	**4**	**1**	*0*	*1*
15	*7*	11	11	*9*	*2*
16	*2*	6	7	*3*	*4*
17	*4*	8	10	*6*	*4*

Table 3: Number of selected episodes; frequency of direct explanations and interaction sequences per lesson

Table 3 shows that the frequency of coded *direct explanations* and *interaction sequences* (taking *exploratory* and *question and answer* codes as a total) is fairly balanced in 11 out of 17 lessons (highlighted), and more imbalanced in the remaining 6 lessons. As noted in section 3, frequencies do not denote the *amount* of talk, but a balance of higher frequencies may indicate direct explanations embedded within interaction sequences.

Table 3 also shows that *interaction sequences* comprised *question and answer* and *exploratory* sequences; but, with a notable imbalance in some lessons: some featuring either more 'question & answer' (e.g. lesson 4) *or* 'exploratory' interaction sequences (e.g. lesson 7). The frequency data, therefore, indicates variation in the frequency of exploratory dialogues experienced by students.

4.1.2 The Intersection of Talk Type with Learning Focus

Learning Focus:			Interaction Sequences	
		Direct Explanation	*Exploratory*	*Question & Answer*
Generic	***Checking or recalling grammatical knowledge***	**0**	**2**	**18**
	Eliciting general examples	**0**	**2**	**10**
	General grammatical explanation	28	4	13
	General effect	16	0	4
Specific	***Checking or recalling grammatical knowledge with examples***	**0**	**14**	**13**
	Generating writing and ideas	**0**	**14**	**4**
	Grammatical exemplification	37	20	9
	Specific effect	18	15	1

Table 4: Learning focus as it intersects with talk type

Table 4 shows how the frequency of generic and specific codes intersect with talk type. Talk which focuses on **checking** or **recalling** grammatical knowledge and **eliciting** or **generating** ideas (in bold) involves *interactions* between teacher and students and does not therefore manifest as *direct explanation*. Talk which focuses on **grammatical explanation**, **exemplification** and **effect** is characterised by *direct explanation* and *interaction sequences*. There is no particular difference between the frequency of *direct explanations* as they relate to specific and generic learning focus. However, there is a notable difference between the frequency of *exploratory* interaction sequences as they relate to learning focus: *exploratory* interaction sequences arise largely when the talk is focused on *specific* grammatical exemplification and effect, and the generation of ideas.

The frequency data indicates that teachers use talk 'types' differently to shift learning focus: for example, 'opening up' exploratory dialogues to explore linguistic choice and effect, tightening control of interactions to

check grammatical understanding, *and* interjecting direct, authoritative explanations of grammatical features. However, the data does suggest variation in the breadth and focus of the talk experienced by students: in particular, it indicates that students who experience exploratory dialogues are more likely to be engaged in discussions which explore authorial intention, linguistic choice and effect in authentic texts, and which feature the generation of writing and ideas for writing.

4.2 Qualitative data

The frequency data above, while useful in highlighting patterns for further investigation, is limited in its capacity to provide insight into the nature, quality, context and temporal interplay of the coded episodes and turns. This section, therefore, positions the talk type codes alongside a series of episodes taken from 3 lessons. These 3 lessons were observed in 3 different, state-funded primary schools, located in Southern England: Spring Lane School and Hilltop School in London, and Kings Road School in Devon, in the South West of England (school names are pseudonyms); all 3 schools are larger than average, and have a larger than average proportion of students eligible free school meals (a broad indicator of relative deprivation in the school and local area). Informed by the frequency data, these episodes were selected deliberately to illustrate the *range* of ways that teachers use metatalk, and particularly the variation in the way that teachers 'open up' or perhaps limit students' exploration of linguistic choice and effect in text. Crucially, these episodes also illustrate how different forms of metatalk used by teachers can *cohere* to build learning about writing across lessons.

4.2.1 School 1: Spring Lane School

Immediately before this first short excerpt, students read, out loud with expression, an extract from the book *Arthur High King of Britain,* written by Michael Morpurgo; the extract features one of the main characters, Merlin, a wizard and trusted advisor to the legendary King Arthur. Here, the teacher asks students how Merlin's words should be spoken.

Anna: With a deep voice… *Teacher: With a deep voice. So, what Anna thinks might be different from someone else thinks – that's author's choice… So for Anna he's going to have a deep, long voice. Whereas for some people, might have him as a very soft tone, and that is your choice – you need to make that choice. So it would be the characters speaking, and what else would tell us if it's going to be a loud or a soft voice?* *Sarah: Punctuation* *Teacher: Possibly the punctuation again. So an exclamation mark?* *Laura: The verb choice* *Teacher: Good, the verb choice. So then the verb becomes very important as well.*	*Question & Answer*

Excerpt 1.1.

Anna suggests that Merlin would speak '*with a deep voice'*. In response, the teacher notes that the way Merlin

speaks is open to interpretation; it appears, however, that the teacher has confused the notion of author's choice with reader interpretation. In the short **question and answer** sequence which follows, the teacher prompts students to think about how the tone of a character's voice might be conveyed in writing. Sarah suggests '*punctuation*'; the teacher accepts this response - '*possibly the punctuation*' - and follows with a question, but which serves as a statement to close the exchange - '*so an exclamation mark*?' Laura suggests '*verb choice*'; again, the teacher accepts this response and closes the exchange - '*good, the verb choice*'.

Excerpt 1.1 shows how teachers can restrict interactions and miss opportunities to advance understandings through exploratory questioning. Furthermore, by narrowing '*punctuation*' to the use of an exclamation mark, the teacher misses an opportunity to draw out and explore other grammatical possibilities. The effect of punctuation and verb choice is, therefore, considered in a **general** way: the teacher does not elicit specific examples of punctuation or verb choice or their particular effect, and does not discriminate between devices which might convey either a '*loud or soft voice*'. This sequence shows how teachers' questioning may limit students' consideration of linguistic choice and effect and lead students to superficial understandings.

Later in the lesson, students are asked to generate noun phrases to describe a magical object.

Teacher: Yesterday you looked at your character and you looked at noun phrases. So, if I have a noun phrase, should it contain a verb? Should my noun phrase contain a verb? Thumbs up or thumbs down? (unsure) Ok, what's the difference between a phrase and a sentence? K? *James: A phrase doesn't have a verb?*	Question & Answer
Teacher: Good. So which one has a verb, a phrase or a sentence? So a sentence doesn't have a verb ok; if it doesn't have a verb it cannot be a sentence, it is a phrase. You need to remember that, ok. So, we're going to create noun phrases. There is a trick to it because if you have a relative clause, that does then bring in a verb, ok. But remember that a relative clause is something that you can take in and out. So it's part of a noun phrase, but it can be taken in and out so it doesn't count as a sentence. So, I've got the necklace. I'm going to start with a determiner. So, 'the necklace'. But before I'm going to say necklace, I'm going to add in an adjective: so how could I describe this necklace? K?	Direct Explanation
Liz: Emerald necklace? *Teacher: Emerald necklace. What else could you tell me about it?* *Louise: Jewelled?* *Teacher: Yeah, jewelled? D?* *Ben: Pearl* *Mark: Embroidered*	Exploratory
Teacher: Embroidered. Now, going back to what Ben said, is pearl an adjective? What is pearl? It's a noun. So you've actually modified it with another noun instead of an adjective, which is fine. This is just an example of a structure you can use.	Direct Explanation

Excerpt 1.2

In the opening **question and answer** sequence, the teacher reminds students of their previous work on character and noun phrases and then poses questions intended to elicit general grammatical principles: the difference between a phrase and a sentence. Perhaps deducing an answer from the teachers' reformulated questions, James tentatively responds, '*a phrase doesn't have a verb*'. This is followed by a **direct explanation** of the noun phrase, although the teacher gets a little entangled in his attempt to explain that a noun phrase might (in fact) include a verb. A very brief exchange follows, coded as **exploratory** because the open question, '*how could I describe this necklace?*' elicits example adjectives from students. The example is **general** however: the purpose of the necklace, and what words used to describe it might imply, is unexplored; nevertheless, the exchange does serve to exemplify a grammatical feature. This exchange is only 1 of 2 coded exploratory episodes which intersected with a focus on generating **general** examples (see table 6), but which illustrate less exploratory 'depth' than others: while there are surface level characteristics of exploratory talk here, the teacher may have achieved more exploratory depth had he encouraged elaboration or explanation.

It is also interesting to note that there is disconnect between the focus on the relative clause in the first **direct explanation** and the subsequent **exploratory** sequence, which generates only adjectives: the explanation of the relative clause becomes rather redundant when the feature is not also exemplified. However, in the second **direct explanation**, the teacher notes the suggested word '*pearl*' and explains that this could be used as a pre-modifying noun: this explanation, therefore, connects the metalanguage used to an example generated by a student.

Excerpt 1.2 illustrates that the way teachers switch between talk types, and shift the focus of that talk, shapes the way that ideas are drawn together and developed over a lesson. The sequence illustrates how insecure subject knowledge can affect the clarity of direct explanations and may limit teachers' capacity to open up dialogues which explore and connect grammatical explanations and examples. Here, the focus and 'orchestration' of the talk does not always serve to synthesise or clarify the ideas presented.

4.2.2 School 2: Hilltop School

In this excerpt, the teacher and students are discussing the words used to describe Mr Wormwood, a character in Roald Dahl's *Matilda*.

> *Teacher: … So, let's look at this quote now: (reads) Mr Wormwood was a small, ratty looking man…What kind of person do you think Mr Wormwood is? From that description?*
>
> *Sam: He's quite an untidy person*
>
> *Teacher: He looks quite untidy. You've taken something physical, but what kind of person is he?*
>
> *Suzie: He's small*
>
> *Teacher: He's small, again, you've taken from the description. Read between the lines.*
>
> *Brooke: I think Mr Wormwood is a bit of a dirty man.*
>
> *Teacher: Ok, why do you think that?*
>
> *Brooke: In the text it says that he has a ratty moustache*
>
> *Teacher: And what do you think of when you think of 'ratty'?*
>
> *Brooke: Like he's really dirty…has a lot of food in it when he's been eating*
>
> *Teacher: Now, Brooke's starting to make inference. It doesn't say Mr Wormwood is a dirty man, it says that he has a thin, ratty moustache, and that has given the idea that all is not quite as it seems with this man.*

Exploratory

Excerpt 2.1

At the beginning of this exchange, the teacher focuses students' attention on the words *'small, ratty-looking man'* and asks what the description suggests about Mr Wormwood's character. This open question elicits various responses from students, which the teacher develops through **exploratory** questioning – *'but what kind of person is he?' 'Why do you think that?'* This interaction sequence, which focuses on the **specific** effect of an authentic textual example, supports students to recognise the relationship between word choice and effect.

This excerpt shows how the teacher, using an authentic text, fosters purposeful exploratory dialogue about linguistic choice and effect. Interestingly, purposeful discussion is achieved without interjecting any explicit mention of the noun phrase; however, this may represent a missed opportunity: no explicit connection is made here or elsewhere in the lesson between the focus of this exploratory discussion and episodes later in the lesson (excerpts 2.2 and 2.3 below) which do explore features of the noun phrase explicitly. This again illustrates how teachers may miss opportunities to connect ideas across talk episodes, and highlights the importance of examining the temporal interconnection of different talk types and their learning foci.

> *Teacher: …we're looking at those noun phrases that help us to understand the character of the green knight. The first thing I want you to do is to underline the following words, I want*

Direct Exp.

you to underline the word 'clatter', which is in the first sentence; I want you to underline the word 'giant', in the third sentence; I want you to underline the word 'war horse' in the third sentence; and I want you to underline the word 'eyes' that follows the word 'wolfish'; clatter, giant, wolfish eyes. Well done this table, fantastic. Now the reason I want you to underline those words, is because, honestly, they trick me out when I think about what kind of words they are, and I want to see if you guys can work out what they might be. I'm going to pose this question: the words you've underlined, are these words nouns, or are they adjectives? And I want to know why you think the way you think.	
(Pair talk)	
Sam: Nouns. They are nouns, because 'clatter', 'clatter of horses' hooves'. That's like the sound, it tells you it's a thing.	
Kelly: Adjective, it's describing…	*Exploratory*
Sam: But war horse, it's a thing	
Kelly: Giant is definitely a noun. 'Clattering' is describing the horses' movement…hooves clattering, that's describing the horses' hooves, so it would be an adjective.	
Sam: (inaudible)	
Kelly: But that wouldn't work. A giant man…that means, actually those two are both describing it as an adjective	
Sam: And the war horse, it's saying like, a horse – that's a horse that's supposed to be in the war.	
Kelly: 'Towering'? Yeah, that's describing.	
Sam: Yeah, that's describing the horse. But 'eyes'…that can't be describing. Wolfish eyes. If it was 'wolfish'	
Kwelly: Actually it is kind of because…because it could say just wolfish	

Excerpt 2.2

In this excerpt, after **explaining** that noun phrases help the reader understand character, the teacher asks students to identify words in an authentic passage as either nouns or adjectives. Interestingly, this activity was not in the lesson plan, suggesting that the teacher prepared in advance to draw particular attention to the way that word class can alter according to function and syntactic context. The teacher shares her own subject knowledge insecurity with the students – *'those words….trick me out'* – and poses a *problem* to be *explored*; in doing so, she prompts a (rarely captured) episode of peer-to-peer **exploratory** talk which reveals students' ability to engage in grammatical reasoning (discussed further in authors forthcoming). Although the teacher may lack subject knowledge confidence, she sets up an exploratory task which encourages students to problem-solve, reason, and to consider the function of these words in a **specific** textual context.

Teacher: Now I'm going to pose this question: 'clatter' is what?... *Jordan: Clatter is a noun.* *Ari: Because a noise is an abstract noun* *Teacher: Ok, so clatter is a noun. And what else helps us to decide that it was a noun. What's in front of that word? The? The clatter. What's it got?* *Sam: A determiner*	*Question & Answer*
Teacher: It's got a determiner. It's introducing the noun. Now, let's move on the 'giant', and there was some debate about this one. A 'giant of a man'. And still in my mind this one's quite unclear but can you help me validate it? *Oscar: Some people might say the 'giant' is describing the man, but 'A giant'…it's saying that the man is a giant. so it would be a noun.*	*Exploratory*
Teacher: Ok, I'm impressed that you're thinking about this because you can have giant in a different way, can't you. You can have a physical giant, like Jack in the Beanstalk. Or, you could have the giant boy as an adjective, but in this case, they are using it as a noun. They're being very sneaky, that's Michael Morpurgo for you. And what about 'war horse', noun or adjective? *Students (several): Noun*	*Direct Explanation*

Excerpt 2.3

Following the peer discussion, the teacher elicits feedback in a short **question and answer** sequence: Jordan identifies '*clatter*' as a noun, while Ari suggests that '*noise is an abstract noun'*; the teacher doesn't respond to the former but perseveres in eliciting the word 'determiner' to make the point that a determiner can signal a noun. Then, posing a more **exploratory** question the teacher elicits an explanation which suggests that Oscar has recognised how '*giant*' might function as a noun or as an adjective. In the final turn, the teacher's reformulation and elaboration **explains** and reinforces the student's response.

The **exploratory** question - '*this one's quite unclear…can you help me validate it?*' - again suggests the teacher's own uncertainty, but prompts a reasoned student response. In contrast, while the **question and answer** sequence, resonant of interactions in school 1 excerpts, is more restricted and perhaps a little awkward in its attempt to present a concrete, **generalised** strategy for identifying nouns.

In this lesson (excerpts 2.1-2.3) exploratory talk about authentic text supports careful consideration of linguistic choice and effect; and, through grammatical reasoning, students' understanding of grammatical form and function is extended. Excerpt 2.3 in particular shows how the teacher can switch purposefully between talk type: 'opening up' dialogues, then tightening control of interactions in order to elicit feedback and consolidate learning. The excerpts also reveal (as in school 1) how subject knowledge confidence may challenge teachers' capacity to make connections between grammatical definition and example, and limit their ability to address

misconceptions. However, by posing grammatical problems and sharing subject knowledge insecurity, this teacher may in fact enable egalitarian dialogues which foster purposeful and authentic investigation of text.

1.4.3 School 3: Kings Road School

In school 3, we see an interplay of more confident, authoritative subject knowledge and exploratory talk. Immediately before this episode, students have written sentences to describe an image projected on the whiteboard.

Teacher: Jo? *Jo: I've written two here: 'Merlin sat there unblinkingly at the old man, he was also staring intently at Merlin's stiff, rigid face'. And the second one is 'sunlight streamed through the moth-bitten curtains, and flooded the desk with almost unnatural light'.*	*Exploratory*
Teacher: Oh, I like that one, the moth-bitten curtains...and you've done what we were talking about this week haven't you – combining the noun and the verb to make an adjective.	*Direct Explanation*

Excerpt 3.1

In this short excerpt, the teacher asks Jo to read his example, and responds – '*I like that one*'; importantly, this, and the uptake and repetition of his phrase, '*moth-bitten curtain*', enables the teacher to show her appreciation of Jo's writing choices. Recalling prior learning, the teacher draws explicit attention to the way that Jo has combined '*the noun and the verb to make an adjective*'. This elaboration functions as a grammatical **explanation** which embeds and models grammatical metalanguage. This 'handling' of the grammar is somewhat different from examples seen above (schools 1 and 2): metalanguage is embedded confidently in dialogue to elaborate on an example generated by a student; and, this extension of the student's response functions to exemplify, instead of define and label grammatical features.

A little later in the lesson, students are given a sentence from *Arthur High King of Britain* broken up in to chunks. Students have been asked to rearrange the chunks in to different sentences.

Teacher: Can you take those chunks and can you arrange them into another order. So, make those sentences and arrange them in another order. What did you find? *Gareth: 'Out of the mist in flowing green, came a figure walking across the water.'* *Ok, what's the verb in your sentence?* *Gareth: walking* *That's one of your verbs, have you got another verb in your sentence?* *Gareth: came* *Came, ok. What's the subject in your sentence? What's it all about?* *Gareth: The figure*	*Question & Answer*

Excerpt 3.2

In the first **question and answer** sequence, the teacher elicits an example from Gareth – *'out of the mist in flowing green, came a figure walking across the water'* – and asks the student to identify the verb; he notes the verb '*walking*' and the teacher prompts him to find the second verb, '*came*'. The teacher doesn't explain the difference between the finite verb '*came*' and the non-finite verb '*walking*', but does ask the student to identify the subject and related verb, drawing attention to '*came*' as the main verb in the sentence. The second example elicited – '*Out of the mist came a figure in flowing green*' – perhaps illustrates how the phrase, '*walking across the water*', could be omitted from the sentence. In the **exploratory** sequence which follows, the teacher asks students to consider how the different sentences alter in meaning and effect. John provides an elaborated response, describing how altering the order of the sentence chunks can change what the reader 'sees'.

The question and answer sequence functions to exemplify grammatical forms – the verb and subject. But this is also the beginning of a scaffolded sequence, extending over subsequent excerpts, which support students to identify subjects and verbs in sentences, before (in excerpt 3.4) the teacher introduces the term 'subject-verb inversion'– the main focus of this particular lesson. The exploratory sequence builds on this to open up more in-depth consideration of the effects of different syntactical choices. In excerpt 3.2 we see how the teacher can switch from talk which elicits grammatical knowledge to talk which opens up consideration of effect, while modelling a metalanguage for talk about writing.

Teacher: Someone else read me yours, now that you've made them – Meg?

Meg: 'To my amazement…(inaudible)'

Teacher: What's the subject in your sentence?

Meg: The sword

Teacher: And what's your verb?

Meg: came

Teacher: So however it is, that's your subject and that's your verb. So I'm going to read this extract that we looked at yesterday…(reads). How would you feel, if you were there? C?

Cat: I would feel really kind of amazed, and I wouldn't know what would happen next, like look at Merlin and ask him what happened.

Teacher: So, maybe curious and perhaps a little unnerved?

Cat: Yes.

Jill: I would feel a little bit confused because of all the stuff that's happened, you're trying to take it all in at once.

Teacher: Exactly, so maybe a bit overwhelmed. Jo?

Jo: I'd feel incredulous, like I wouldn't be believing myself.

Teacher: Ok, so thinking that it's not really happening? Ok, Oscar?

Oscar It's just something to say about this. It doesn't really say, yes, it says it comes out of the, she comes out of the mist, and it probably seems to be quite quiet, but there's not much about the setting, where are they? They're definitely by a lake and it's definitely misty, but are there ancient trees towering over it, is it blocked or is it…

Teacher: Ok, so when Michael Morpurgo wrote this, do you think that he's done that on purpose or has he thought, oh no, I forgot to talk about the trees?

Oscar: I think he's done it on purpose because he just wants the reader to have entire focus on what's happening

Labels (right margin, top to bottom): Question & Answer | Direct Exp | Exploratory

Excerpt 3.3

Working with a different sentence, in a **question and answer** sequence, the teacher asks Meg to identify the subject and the verb in her sentence and **explains** briefly that the subject and verb remain the same regardless of their position in the sentence. Afterwards, the teacher reads an extract, which includes the sentence *'To my amazement, a shining sword, a hand holding it, and an arm in a white silk sleeve, came up out of the lake',* and asks students to consider its effect. The teacher's uptake and reformulation chains students' responses together

in the **exploratory** sequence which follows. A student asks a question about why the author has not described the setting more explicitly; the teacher responds with an open question, prompting him to consider the author's intention.

In this excerpt, the initial question and answer sequence, similar to that seen in excerpt 3.2, draws explicit attention to the verb and subject in Meg's sentence. As seen above (excerpt 3.2), this sequence anticipates and builds up to a later teacher explanation of subject-verb inversion (in excerpt 3.4). The subsequent exploratory sequence shows how posing questions about the effect of **specific** writerly choices can give rise to in-depth exploratory talk which supports students' thinking about authorial intention.

Teacher: Ok, what we've been looking at today, depending on where you put your subject and where you put your verb in your sentence, changes the effect that it has on the reader which is what you touched on earlier, J. Usually the subject comes before the verb, so for example, 'the sword came out of the water', or if I was to give you another example, 'Arthur strode into the room'…it's about Arthur so I might say that first. When it comes after the verb, it changes how we read it, so why do you think Michael Morpurgo reversed the position of the subject and put it after the verb? What effect does it have on the reader? How did you read the sentence aloud? And that's sort of what we talked about before. So I just want you to decide here why did he start with 'a shining sword'? (students talking)	Direct Explanation
Dean: Because, sword, it just gives it away too quickly, you need to see it *Sofia: If you go straight to the shining sword, it would give away the subject, what it's talking about* *Dan: And also if you have the shining sword then you get to the shining sword, and it says the setting and you have to picture it again*	Exploratory
Teacher: Right, so this is called, the special fancy name for this is 'subject verb inversion'. Just like when we have the inverse being the opposite when we do maths, inversion being the opposite with your subject and your verb, switching them around happen.	Direct Explanation

Excerpt 3.4

At the start of this excerpt, the teacher draws together and consolidates prior discussion (excerpts 3.2 and 3.3) with an extended **explanation** of how the position of the subject and verb can be changed in a sentence in order to alter the effect on the reader. Building on this, the teacher prompts an **exploratory** exchange which considers the effect of positioning the subject – *'the shining sword'* - at the beginning of the sentence. It is only then, after developing students' understanding of subject/verb order and effect (here and in excerpts 3.2 and 3.3) that the teacher reveals the term used to describe the feature explored - *'subject verb inversion'.*

Over the duration of this lesson (excerpts 3.1-3.4), the teacher interweaves a repertoire of talk to gradually develop students' understanding of subject-verb inversion and its effect in authentic text. During several episodes in the lesson, the teacher uses question and answer sequences to first check that students can identify subject and verb - these sequences in particular serve to exemplify grammatical features, drawn from authentic and student-generated text, and model metalanguage - the teacher then draws attention to subject-verb order

in text, and opens up more extended and in depth exploratory dialogue about effect. Excerpts 3.2 and 3.3 in particular build up to a more extended explanation of subject-verb inversion in excerpt 3.4 – a term only used once students have developed understanding of its features and effects. These excerpts illustrate how subject knowledge confidence and the deliberate orchestration of metatalk about writing can develop students' understanding of the relationship between linguistic choice and effect.

5. Dicussion

The analysis reveals how, during the pedagogical intervention, metatalk manifested in different interactional forms and was utilised for different purposes. The discussion which follows explores the different ways that this metatalk may support metalinguistic thinking: in particular, how teachers open up dialogic 'spaces' for the exploration of linguistic choice and effect; and how, to support and expand these spaces, teachers draw on authoritative knowledge to interject explanations, problematize grammar, and exemplify linguistic features. It will then be argued that while extending teachers' command of these metatalk 'repertoires' may be important for fostering metalinguistic thinking, students' learning may hinge particularly on how teachers *orchestrate* these repertoires to make connections between ideas and develop understandings cumulatively in lessons.

5.1 'Opening up' thinking about linguistic choice and effect

The analysis reveals how the metatalk observed varies in its capacity to 'open up' students' thinking about linguistic choice and effect, with implications for the understandings students develop about linguistic choice as functionally-oriented (Halliday, 2004). For example, the metatalk observed in school 1 (section 4.2.1; excerpts 1.1-1.2) reveals how a teacher can facilitate metatalk in a way which may diminish students' thinking about linguistic choice. Although the school 1 teacher poses 'exploratory' questions – asking *how* a writer might convey tone and voice in writing; *how* a necklace could be described – the teacher responds to students' subsequent suggestions in a way which closes the dialogue. The 'exploratory' questions, in this instance, do not function to open up thinking about linguistic choice and effect because in the 'third-turn move' – after the student responds to the teacher's question – the teacher accepts responses without probing, extending or 'inter-animating' ideas (Boyd & Markarian, 2015).

In this case, subject knowledge confidence may have hindered attempts to open up a 'space' for the exploration of linguistic choice and effect. As observed here, subject knowledge confidence might limit teachers' capacity to be responsive in the 'third-turn move' (Boyd & Markarian, 2015), when teachers may need to activate knowledge in response to what they encounter in the moment (Scardamalia & Bereiter, 2006). This response to, and uptake of students' contributions, is crucial in the construction of dialogic spaces. In this instance, the closing of the 'space', and the handling of students' responses restricts learning about linguistic choice as functionally oriented: 'punctuation' and 'verb choice' is accepted broadly as the means through which a writer conveys tone and voice, and adjectives are accepted without consideration of their meaning and effect. The teacher's subsequent suggestion that the way we 'read' a text is a matter of 'choice' (excerpt 1.1), may also, inadvertently, lead students to interpretations of text which are not justified by the linguistic choices made by the author. Here, subject knowledge confidence appears to limit the exploratory potential of the metatalk, resulting in a 'non-

dialogic' treatment of text which risks detaching or reifying linguistic choice and effect, diminishing students' thinking about linguistic *possibilities* and the way meaning is shaped in writing.

In contrast, in school 2 (section 4.2.2; excerpts 2.1-2.3) and school 3 (section 4.2.3; excerpts 3.1-3.4) we see how teachers utilise exploratory dialogues which open up 'spaces' between author and reader - between intention and response. In school 2 (excerpt 2.1), for example, the teacher encourages students to think about and explain how a writer's specific linguistic choices create a particular impression of a character. The wider findings also suggest that genuinely exploratory dialogues occurred alongside this dialogic 'treatment' of authentic text – perhaps arising from, or giving rise to, dialogic talk. Either way, the exploratory dialogues invite teachers and students to respond to text, to interpret meaning, and to consider authorial intention in a way that recognises that 'written text is always a dialogic interplay between the writer and the reader, not a monologic act' (Jesson, Fontich & Myhill, 2016, p. 155). The pedagogical principles underpinning the intervention imply a dialogic treatment of text, with the text a contributing voice in dialogic 'spaces' which foster thinking about 'the intersection of text, the writer and the context' (Jesson, Fontich & Myhill, 2016, p. 155).

The data illustrates how teachers can enable metalinguistic thinking through metatalk which 'opens up' dialogic spaces in which reflection on linguistic choices in writing can be verbalised and explored (Myhill & Newman, 2016), but also how subject knowledge confidence influences the exploratory scope of these spaces. This analysis highlights the particular complexity of negotiating metatalk within these 'spaces', within the parameters of freedom and compliance within which writing is situated (Myhill, Newman & Watson, 2019): how teachers need to 'open up' thinking about the possibilities of linguistic choice and effect, while simultaneously guiding students to recognise and talk about linguistic features, and draw reasoned conclusions about the effects and meanings created.

5.2 Authoritative knowledge: direct explanation, problematizing grammar, and linguistic exemplification

The extent to which metatalk 'opens up' metalinguistic thinking may depend on teachers' capacity to draw on authoritative knowledge to support and expand the dialogue: authoritative linguistic knowledge *and* knowledge of how linguistic choices create effects in text, what Bernstein (1999) might call, respectively, vertical and horizontal knowledge systems. The data analysis draws particular attention to direct authoritative explanations, and how these manifest in and support interaction sequences; however, the data analysis also reveals how explicit authoritative knowledge 'punctuates' other interactional forms, illustrating how teachers negotiate vertical and horizontal systems of knowledge about language in dialogic spaces.

In school 1 (section 4.2.1), we see how subject knowledge confidence affects the clarity of a direct explanation and, crucially, limits the teacher's capacity to go beyond general explanations to exemplification, and this restricts the whole of the metatalk. In school 2 (section 4.2.2), it is possible to identify opportunities where the teacher might have interjected authoritative knowledge in order to make connections for students between metalanguage and examples: for example, there is no explicit mention of the 'noun phrase', although this was the focus of exploratory discussion. However, later, the same teacher asks students to underline words and discuss their function in a text: this problematizing of the grammar prompts peer-to-peer exploratory discussion,

which the teacher consolidates with direct explanation. In school 3, we see more confident *integration* of authoritative subject knowledge in the metatalk: it is here that authoritative knowledge 'punctuates' the dialogue. For example, this teacher connects metalanguage to a piece of text written by a student – not explaining the grammatical feature but exemplifying it by embedding, and therefore modelling, the metalanguage in her feedback. In subsequent excerpts, we also see how this teacher *switches* between metatalk which elicits grammatical subject knowledge, to metatalk which opens up consideration of effect. These excerpts illustrate how teachers, with varying degrees of confidence, negotiate and *connect* vertical and horizontal systems of knowledge about language, switching between general grammatical explanations, to exemplification and consideration of effect in text. Crucially, these excerpts illustrate how confident authoritative knowledge enables teachers to deliberately and continuously shift the shape of the dialogic space in response to students' contributions.

In dialogic talk, the authoritative voice has been seen as 'external' (Bakhtin, 1981) to the discourse, and the 'imposing' of preformed ideas seen as suppressing the construction of meaning within dialogic spaces. We would argue, however, that authoritative knowledge, and the authoritative voice, plays a key role in the construction of metalinguistic knowledge about writing. As discussed elsewhere (Myhill & Newman, 2016; Myhill, Newman & Watson, 2019), dialogic metatalk about writing requires teachers to manage metalinguistic discussion in a way which draws on both teacher-as-facilitator and teacher-as-expert. This drawing together of Vygotskian and Bakhtinian perspectives enables a consideration of the 'particular role of the teacher in enabling and managing these dialogic spaces, generating rich opportunities for talk and writing, and mediating the multiple discourses of both the classroom and the wider curriculum, and assessment, context' (Jesson, Fontich & Myhill, 2016, pp. 155-156).

And, as suggested above, teachers' role-as-expert may ensure students access to the dialogic *exploration* of linguistic choice and effect. Dialogic metatalk about writing resists imposing preformed or preordained ideas about linguistic choice and effect, but utilises authoritative knowledge to enable young writers to recognise the choices available to them. In this sense, metatalk about writing, as it is conceptualised here, is by definition dialogic: it enables students' participation in a community of writers, in which they are able to construct, and contribute to the construction, of meaning.

5.3 Orchestrating Metatalk Repertoires

While the analysis reveals teachers using a 'repertoire' of talk types (Alexander, 2010), the success of students' learning may depend on how these talk types are managed and how they function to foster metalinguistic thinking. The analysis here illustrates a need to look beyond talk types, to the function that discourse plays in developing understandings (Boyd & Markarian, 2015). The particular complexity of metatalk about writing requires a different conceptualisation of metatalk 'repertoires' which takes account of interactional patterns but also *function* in fostering and developing metalinguistic thinking. This paper draws particular attention to exploratory discussion about linguistic choice and effect, the exploratory potential of problematizing grammar, and the interjection or embedding of authoritative knowledge in direct explanations and linguistic

exemplification as part of this metatalk 'repertoire'. As Jesson and Rosedale note, we need a range of approaches in writing instruction which 'balance the development of individual student voice as author with the need to build knowledge about effective ways of constructing text' (2016, p. 165). However, while breadth of repertoire may be important, the analysis here would suggest that it is the *orchestration* of these repertoires which is crucial for advancing learning.

The vertical and horizontal nature of knowledge about language, the need to make continous connections between linguistic choice and effect, means that the way teachers connect and synthesise ideas across lessons is crucial. We see in school 1 how there is a disconnect between the explanation of the relative clause and the subsequent exploratory sequence; and, how there may be missed opportunities to make explicit connections between metalanguage and textual examples in school 2. Where teachers have difficulty connecting explanations to examples, the overall coherence and synthesis of the talk as it develops across lesson episodes may be hampered. Yet, it is this forging of a connection between linguistic form and function in text that is crucial for students' metalinguistic understanding.

In school 3, however, we see how the teacher is able to switch swiftly and smoothly between talk types to make different connections for students, while maintaining a focus on the endgoal – students' understanding of subject-verb inversion. Here, the coherent interconnection of metatalk repertoires enables the cumulative development and synthesis of ideas and understandings. Alexander (2017a) argues that cumulative talk is particularly challenging because it 'attends to its meaning and, therefore, simultaneously tests teachers' mastery of the epistemological terrain being explored, their insight into students' understandings within that terrain, and their interactive skill in taking those understandings forward' (pp. 49–53). It is perhaps this *cumulative* metatalk which suggests teachers' deliberate and conscious 'orchestration' of metatalk about writing (Parr & Wilkinson, 2016).

6. Conclusion

It is important to stress that the data collected provides only a snapshot of the participating teachers' interactional practices, and that the metatalk observed was inevitably influenced by the constraints or opportunities of the particular lesson taught, as well as by teachers' subject knowledge confidence. Additionally, it is also important to note that, as year 6 teachers, the participants implemented the intervention in a high stakes assessment year: in England, students will sit Key Stage 2 tests, including a test of SPaG (Spelling, Punctuation and Grammar), which involves identifying grammatical features in textual examples contrived for the purposes of the test. The test does not require students to make explicit connections between grammatical features and their function in text and may foster a pedagogical approach which is somewhat at odds with an approach advocating an emphasis on the form-function relationship in authentic texts. These factors likely account for some of the variation in the metatalk observed during the intervention.

This paper has drawn particular attention to metatalk about text models as a feature of a pedagogical approach which emphasises the relationship between choice and effect in writing. Although this study does not establish

the direct impact of metatalk on students' writing, it illustrates the value of dialogic metatalk for developing metalinguistic thinking which may have an impact on students' own writing. Additionally, the data indicates that metalinguistic understanding about writing may come about through dialogic *interplay* between model texts and students' writing, with metatalk the mediating mechanism. As discussed elsewhere (Myhill & Newman, 2016; Myhill, Newman & Watson, 2019), this paper contributes to thinking about how dialogic pedagogy might be 'recontextualised', particularly in authentic classrooms where there are curriculum and assessment restraints (Bernstein; Jesson, Fontich & Myhill, 2016, p. 162). As illustrated above, in the context of metalinguistic discussion about written text, authoritative talk is not separate from dialogic talk, but an integral part of cumulative episodes of the dialogic exploration of ideas (Myhill & Newman, 2016). This analysis has shown that, in a writing instruction context, which places particular demands on teachers' subject knowledge and capacity to foster exploratory dialogues, teachers' appropriate and responsive orchestration of a repertoire of talk which enables the exploration of linguistic choice and effect may be particularly crucial for student learning. Mirroring how the pedagogical intervention encourages students' *choice and control* of language, authoritative subject knowledge perhaps enables a more conscious and deliberate orchestration of metatalk about writing.

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