Beyond a Unitary Conception of Pedagogic Pace: Quantitative Measurement and

Ethnographic Experience

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Abstract

English education policy-makers have targeted classroom time as a key area for regulation and intervention, with "brisk pace" widely accepted as a feature of good teaching practice. We problematize this conventional wisdom through an exploration of objective and subjective dimensions of lesson pace in a corpus of 30 Key Stage 2 literacy lessons from three classrooms in one London school. Systematic discourse analysis produced an anomaly: the lessons we experienced as fast-paced were rated objectively as slowest, and vice-versa. We contrasted the fastest and slowest episodes in the corpus, demonstrating that for these episodes the accepted measure of pace primarily reflected differences in utterance length. Linguistic ethnographic micro-analysis of the episodes highlighted predictability, stakes, meaning and dramatic performance as key factors contributing to pace as experienced. We argue, among other claims, that sometimes accelerating pupils' experience – and learning – necessitates slowing down the pace of teaching, and that government calls for urgency may perversely make lessons slower.

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Some lessons press on relentlessly and even exhilaratingly

while others seem to be suspended in time or crawl painfully

towards their eventual conclusion. (Alexander, 2001: 418)

Time is a critical dimension of classroom life, yet it has received surprisingly little attention in English educational research. Policy-makers, on the other hand, have targeted time and its management as a key area for intervention on teaching practice. In particular, accelerating pedagogic pace has become a recurrent theme in attempts to improve primary school teaching in England, to the point where "brisk pace" is widely accepted as an aspect of good teaching – in official prescriptions, in Ofsted reports and in teacher discourse.

Some empirical support for this idea has been provided by Smith and colleagues' (2004) study of a national sample of Key Stage 2 numeracy and literacy lessons, which found that the only statistically significant difference between discourse in average and highly effective teachers' classrooms is pace: highly effective teaching is faster. We employed Smith and colleagues' system for analysing discourse (including calculations of pace) in our own study of literacy lessons in one East London school and were surprised to find that the "objective" measures of pace contradicted our own subjective experiences as ethnographers observing the lessons. The lessons that we had experienced as relatively slow were found to have the fastest pace according to Smith and colleagues' measures, and vice-versa. The current article emerged from our exploration of this anomaly. By revisiting video-recordings and analysing in depth lesson episodes that were

scored as particularly fast or slow, we construct an account of the factors shaping the way pedagogic pace is experienced in the classroom. In this article we report on our findings from this investigation, critique attempts to measure pace without reference to content or context, and explore the ideological underpinnings of government calls for fast pace. We argue, among other claims, that sometimes accelerating pupils' experience – and learning – necessitates slowing down teaching.

Time and Pace in English Literacy Policy

How teachers organise and manage time in their classrooms was until recently not an area of English government regulation. However, with the National Literacy Strategy (NLS) of 1998, time became a key area of scrutiny and intervention. First, the NLS stipulated a daily, dedicated "Literacy Hour", divided into four 10-20 minute segments, each with distinct content and activity. Second, and more importantly for the purposes of this paper, the NLS *Framework* (DfEE, 1998) posits, among the five characteristics of "the most successful teaching", that lessons should be "well-paced - there is a sense of urgency, driven by the need to make progress and succeed" (p. 8).

These general principles have been reinforced in countless government documents and reports. For example, the report, *Building on Improvement* (DfES, 2002), included as the first two of 14 "Key messages from the first phase of the National Literacy Strategy and the National Numeracy Strategy" (p. 13):

- Structured lessons help teachers maintain the focus on learning throughout the lesson and have led to an increase in the amount of time teachers spend teaching the class.
- Keeping the whole class working together for much of the lesson is effective in maintaining pace and the focus for learning.

The issue of pace, in particular, has been championed by Ofsted. It appears in their review of lessons learned from the first four years of the National Strategies (Literacy and Numeracy) (Ofsted, 2002; ten mentions of pace), in their summary of key aspects of outstanding secondary schools (Ofsted, 2009; three mentions of pace), and in countless inspection reports.[1] The 2001 Ofsted report for Abbeyford Primary, the school in which we conducted the research reported here, favourably mentions "good pace" or "brisk pace" seven times. Regarding the teaching of English, for example, the inspectors write, "Lessons are usually brisk in pace and pupils are kept busy throughout. Occasionally, introductions are too long and, in such circumstances, a minority of pupils begin to lose interest." Likewise the school's 2010 report mentions pace five times, and "ensuring that the pace is suitably brisk" is highlighted as one of the three ways in which the school can improve the quality of teaching before the next inspection.[2]

Where did this focus on timing and unwavering belief in brisk pace come from? We trace the origins of this approach to the convergence of three influences: school effectiveness research; concerns with pupil engagement and boredom; and anxieties about perceived teacher complacency. We review these three factors in turn.

First, and most importantly, the emphasis on the efficient use of time – a daily literacy hour, with the majority of time devoted to whole class teaching – has its roots in School Effectiveness research, which gained in policy influence following New Labour's rise to power in 1997.[3] School effectiveness research compares more and less successful schools and educational systems in order to identify the organisational characteristics and pedagogical practices associated with

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[1] See, for example, Schagen and Weston's (1998) factor analysis of issues in a data-base of Inspection Reports, which includes, under the "Teaching and Lessons" category, the following topics: "lesson content and activities; challenge, pace and motivation; objectives for lessons; progress of pupils' learning".
[2] Pace is not mentioned in the 2007 report.
[3] Reynolds and colleagues (1996) boasted that "the Labour Party will fight the next General Election on a policy platform explicitly based upon the insights of effectiveness knowledge". Reynolds was personally involved in policy design as member and Chair, respectively, of the Literacy and Numeracy Task Forces; one of the other authors of that article, Michael Barber, was the Chair of the Literacy Task Force and first Head of the Standards and Effectiveness Unit in the Department for Education and Skills.

high standards of pupil achievement. An indicative and indeed important document in this regard

is Reynolds and Farrell's (1996) Ofsted-commissioned "Worlds Apart?" review of international

surveys of educational achievement. The report presents evidence about the poor performance of

English education relative to other industrialised nations, and seeks to draw conclusions about

what England can learn from her most successful competitors.   The authors frame their discussion

of international educational competition with anxieties about England's poor economic

performance. In this regard, much ado is made about the "Asian Economic Miracle", which is

partially attributed to the superiority of Asian educational systems and practices. Though the

authors warn that not all educational practices "travel" well cross-culturally, the report concludes

with the recommendation that "English educationists now need to look beyond their own

geographical boundaries to see why it is that other countries, in particular those of the Pacific Rim

and successful European countries such as Switzerland, may be doing better than we are" (p. 58).

Time and pace feature prominently among the practices identified as critical to other

countries' success. Superior performance in the Pacific Rim is partially due to "high quantities of

school time... longer and more school days" and "a well ordered rhythm to the school day...

combined with well-managed lesson transitions that do not 'leak' time" (p. 55). Likewise, in

Switzerland "high proportions of lesson time (50-70%) [are] used for whole-class teaching" (p.

56). Finally, key to success in Hungary are "high expectations of what children can achieve, with

greater lesson 'pace' (itself aided by teacher control) and national guidelines that expect teachers

to move to advanced topics quickly" (p. 57).

Building on these and other school effectiveness studies, the Literacy Task Force (1997),

which designed the National Literacy Project (precursor to the National Literacy Strategy),

included "good management of time, involving maximising learning time and pupils' levels of

'time on task' in classrooms, and minimising the time spent on administration or control" as the

second of four "factors which characterise effective teaching in general".[4] Note that the logic here

is primarily economic or managerial – a neo-Taylorist calculation of how to maximise pupil time

on task and exposure to teacher and curriculum, without reference to educational aims or learning

theory. And, all things being equal, this makes sense. Except, as we will show below, not all

things are equal, nor should we want them to be.

A second factor focusing attention on time management and lesson pace is the concern with

pupil engagement and boredom. This concern underlies the Inspector's judgment in the

Abbeyford Ofsted report quoted above, regarding how overly long lesson introductions cause

pupils to lose interest. It also underlies the fast pace of instruction in the *Success for All*

programme, which Beard (1999) cites as a key influence on the NLS focus on pace.[5] Finally,

when we asked teachers at Abbeyford and elsewhere what they think Ofsted means by "fast pace",

their explanations invariably revolve around issues of pupil boredom and engagement.

Finally, the government's focus on pace can be seen in part as a response to the popular

perception that teachers were complacent, that when left to their own devices they squandered

available time. This suspicion was perhaps most dramatically articulated in and promoted by the

Ofsted (1996) report, *The Teaching of Reading in 45 Inner London Primary Schools*, which

received wide publicity in the national press. The report painted a picture of teachers and pupils

aimlessly passing time, with little to no direct teaching of reading at all:

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[4] Beard (2003) specifically cites Scheerens (1992) as having informed the work of the National Literacy Project. Also relevant here, though only marginally discussed in School Effectiveness work, is U.S. research on instructional time, engaged time and academic learning time (see Berliner, 1990, for a review).

[5] Note that the Beard review of the NLS evidence base was composed after publication of the NLS *Framework*. *Success for All* justified fast pace as important vis-a-vis efficiency (time is limited, every minute counts), motivation (avoiding boredom), and opportunities for varying the modes of learning (thereby responding to different learning needs and styles). It is worth noting that *Success for All* emphasises fast pace primarily vis-a-vis early reading; the NLS adopted the emphasis for all aspects of literacy teaching. (Based on personal communication with Don Peurach. For an in-depth study of *Success for All* see Peurach, in press.)

The long stretches of time allocated to reading, moreover, were poorly used and at times detracted from the value of the work because the pace was too slow and progress minimal. Most classes had a daily session of individual silent reading. In some of these sessions, relatively little progress was made. Children were seen changing their books too frequently and without purpose. Their behaviour in these aimless lessons often deteriorated so that by the end few would be reading anything at all. (p. 22)

The NLS sought to combat such complacency by concentrating the teaching of literacy into one hour, mandating that 40 minutes of that hour be devoted to whole class teaching, and picking up the pace of teaching in order to instil a "sense of urgency". Again, the fundamental concern is managerial – to control teachers' work, for government to appear to be *in control* – and in this regard the Literacy Hour clock face is an expedient regulatory device, making "what teachers do in the class both visible and instantly accountable to even the most casual of observers" (Moss, 2003).

The need to maintain fast pace would seem to run counter to other pedagogical concerns and traditions. Most famously, Row (1974) demonstrated that by slowing down the pace of teaching – specifically, by increasing wait time after posing questions from an average of one second to between three and five seconds – teachers received more confident and thoughtful pupil responses. This apparent relationship between lesson pace and the quality of pupil discourse is contradicted by the NLS *Framework*, which calls for "high quality oral work" and "interactive teaching [in which] pupils' contributions are encouraged, expected and extended" alongside *brisk* pace (English et al, 2002). Similarly, Moss (2004) notes how the fast pace and short time frames of the literacy hour restrict opportunities for teaching more complex, text-level literacy competencies, which involve greater pupil autonomy. "There is a danger," she writes, "that tasks

shrink to fit the time slots available, whilst the time slots available are determined by the need to cover the curriculum" (p. 129).

These criticisms highlight some of the tensions internal to teaching – e.g. between urgency and thoughtfulness, between breadth and depth of curriculum. Pedagogy involves the management and balance of these and other goals and concerns; and different aims, issues, tasks, and people are best served by different paces of teaching. Faster is not always better.

Moreover, pace is not unitary. Part of the problem with official approaches to pace is that they collapse multiple dimensions into this one term. To unpack the concept, Alexander (2001), helpfully distinguishes between five types of pace in his comparative study of pedagogy in five different cultural contexts[6]:

- *Organisational pace*. The speed at which lesson preparations, introductions, transitions and conclusions are handled.

- *Task pace*. The speed at which learning tasks and their contingent activities are undertaken.

- *Interactive pace*. The pace of teacher-pupil and pupil-pupil exchanges, and contingent factors such as maintaining focus, and the handling of cues and turns.

- *Cognitive* or *semantic pace*. The speed at which conceptual ground is covered in classroom interaction, or the ratio of new material to old and of task demand to task outcome.

- *Learning pace*. How fast pupils actually learn. (p. 424)

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[6] It is not coincidence that we are drawn to Alexander's categories in seeking to problematise the official, unitary approach to pace. Alexander's comparative study of pedagogy and culture includes a critique of the comparative methodology of the international school effectiveness research that informed the NLS and related policies (see above), and his framework for re-thinking the notion of pace responds directly to the one-dimensional approach taken by the NLS and Ofsted during that period (Alexander 2001, 418-426). By situating pedagogy within its cultural and historical contexts, Alexander highlights the danger of selective "borrowing" of distinct and decontextualised pedagogic practices.

These distinctions point to an inferential leap at the heart of calls for brisk pace: there is no reason to assume that interactive pace correlates with or is even a good indicator of cognitive or learning pace. Moreover, different types of pace are at the focus of different motivations for speeding up (or slowing down) lessons. For example, critics who call for greater urgency in the face of alleged teacher complacency are primarily concerned with organisational and/or task pace, while concern with pupil boredom is mostly focused on interactive and/or cognitive pace.

In this article, we focus in particular on the relationship between interactive pace (and other factors) and pupil engagement and/or boredom. We add to Alexander's differentiation between types of pace a further distinction, between *objectively measured* and *subjectively experienced* pace. Time's passing can be objectively measured; for example, the duration of time from 11:00 to 11:10 is ten minutes. But, subjectively, those ten minutes will likely be experienced as much longer when waiting for the delayed 11:00 train than when engaged in a meaningful activity.[7] Likewise, three seconds of thinking time while the class ponder a genuinely challenging problem will be experienced differently than three seconds of waiting – again! – for everyone to train their attention on the teacher. The experience of pace is a function of content, task, context, and concomitant expectations about appropriate timing. The remainder of this article is devoted to exemplification and elaboration of these and related factors.

Research Site, Design and Methods

The issues and data discussed here are taken from a larger project, the ESRC-funded *Towards Dialogue: A Linguistic Ethnographic Study of Classroom Interaction and Change* study (RES-061-25-0363). That study involved observation and videotaping of 73 literacy lessons in

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[7] The example of waiting for a train is taken from Heidegger (1995), to which this discussion of time and boredom is indebted more generally. See also Erickson (2004) on *chronos* and *kairos*, and Breidenstein (2007) on the ubiquity of boredom in classrooms, and why it is such an under-researched phenomenon.

seven upper primary classrooms and a professional development intervention designed to encourage and support dialogic pedagogy. Data analysis integrated linguistic ethnographic tools (Rampton, 2007) and computer-assisted discourse analysis (Smith & Hardman, 2003). In what follows we review the study site, design and methods, detailing in particular those parts of the study directly relevant to this article.[8]

Research Site: Abbeyford Primary School

Abbeyford (a pseudonym, as are all the proper names in this article) is a relatively large community primary school in East London. We chose to work in this area because the Local Authority has a long-standing interest in dialogic pedagogy and a history of developing and implementing pedagogical innovations. A senior Local Authority advisor recommended Abbeyford Primary on account of its highly regarded, stable and experienced teaching staff and leadership team. Furthermore, the staff had positive experiences in a previous intervention and were keen to experiment with their practice.

Abbeyford Primary is located in a borough marked by significant socio-economic deprivation, though the school is on a relatively more affluent edge of the borough, and is attended also by pupils from a neighbouring authority. The majority of the pupils in the school come from white working class backgrounds.   While the school has until recently been among the higher achieving schools in the Local Authority, as reflected in standardised test scores, its position has slipped in the past few years. For example, Abbeyford was ranked 5th out of 35 schools in the "league tables" comparing local schools in 2006, but "fell" to 29th in 2009. School management and teachers were under considerable pressure to reverse this downward trend, and success in the

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[8] Further elaboration on the study and its methods may be found in Lefstein & Snell (2011a, 2011b, 2011c).

standardised assessments task (SAT) tests and the upcoming governmental inspection were a

major concern for all.

Data Collection

From November 2008 to July 2009 we observed and audio and/or video-recorded 73 literacy

lessons in a total of seven Year 5 and 6 classrooms. For each lesson we wrote detailed fieldnotes,

which, together with the video data, formed the basis for discussion at weekly research team

meetings. We conducted 15 interviews with 8 teachers; collected examples of lesson plans, pupil

work and other artefacts; and administered pupil classroom learning environment surveys. Finally,

we facilitated and recorded 19 professional development workshops with the participating

teachers, roughly half of which were devoted to planning units of work and half to collective

reflection on recordings from the participants' classrooms. Preparation of extracts for these

workshops required constant reviewing of recordings and fieldnotes to select focal issues and

events, and transcription and micro-analysis of select episodes. Through this intense process of

immersion in the classrooms and recordings we developed a good sense of the different cultures

and teaching practices in each of the classrooms studied, including how we and other participants

reacted to them. We developed expectations for each classroom, about which lessons were likely

to "press on relentlessly and even exhilaratingly" and which were likely to proceed more slowly

"towards their eventual conclusion" (see epigraph).

Systematic Discourse Analysis of Whole Class Teaching in Three Classrooms

In order to investigate continuity and change in classroom interactional patterns we

subjected a sub-set of lessons to computer-assisted systematic discourse analysis. We sampled ten

lessons each from three teachers (i.e. 30 lessons in total). Two of the teachers, Ms Leigh and Mr

Robbins, were from Year 5 classrooms, and the third, Ms James, taught Year 6. All three had

between ten and eleven years teaching experience, and all three had also been involved in the

previous 'Teaching Through Dialogue' intervention.[9] In selecting the ten (out of 12 to 14) lessons

for systematic analysis we chose the first and last lesson in each classroom, and randomly selected

the remaining eight lessons from clusters distributed evenly across the period of observation.

Systematic discourse analysis focused only on the whole-class teaching element of the

literacy lessons (defined as a whole class activity lasting longer than 2 minutes). This accounted

for approximately 50 percent of the total duration of the lessons (i.e. 24 minutes of an average 48

minute lesson). For each whole-class segment we coded pedagogic activities and discourse moves

by means of the systematic observation software, Noldus *Observer XT*[10], using a coding system

adapted from that developed by Hardman and colleagues (Hardman et al., 2003a, 2003b; Smith et

al., 2004) (see Figure 1 for an overview of categories and codes).[11] We also used Hardman and

colleagues' formula to calculate *pace*: the rate per hour of discourse moves in any given segment

(i.e. total discourse moves divided by the total duration of the whole-class discussion).

Insert Figure 1 approximately here

The results of this systematic discourse analysis highlighted differences between the three

classrooms which were more or less in line with our experiences (in terms of preferred activity

type and discourse style), with one exception: lesson pace. The classroom with the slowest pace –

Ms. Leigh's – was the one we had experienced as most brisk and riveting. We should also note

that Ms. Leigh was recognised as an outstanding teacher by her colleagues, and stood out as highly

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[9] Selection of the teachers was based upon these issues, and by technical considerations regarding completeness of the data-set of other teachers' lessons.
[10] See Snell (2011) for a review of this software package and discussion of methodological issues arising.
[11] A detailed memo elaborating coding category definitions and main findings is available from the authors.

effective in the Headteacher's monitoring of pupil progress. This anomalous finding led to further, micro-analytic investigation of two contrastive cases drawn from the corpora of high paced and slow paced teaching.

Micro-analysis of Contrastive Episodes

In order to explore the qualitative differences between the two classrooms and their respective subjective paces, we identified two contrastive cases: the slowest episode from Ms Leigh's lesson corpus and the most rapid episode from the corpus of Ms. James' lessons (based on systematic discourse analysis). An episode is defined as a distinct activity within a given lesson, and for the purpose of this analysis we ignored episodes with a duration of less than two minutes. Fortuitously, the two episodes that emerged from this selection process were similar in terms of pedagogic activity (review of pupil writing) and lesson stage (conclusion).

Our analysis of these episodes was informed by linguistic ethnographic concepts and methods (see e.g. Rampton et. al 2007, Tusting & Maybin, 2007). We repeatedly viewed and listened to the episodes and the lessons from which they were drawn, transcribed the episodes in detail and subjected select segments to line-by-line micro-analysis (see, e.g. Rampton, 2006). Throughout the process we attended in particular to our own subjective experience of pace, and to other participants' embodied displays of involvement, attention and/or boredom. We also consulted fieldnotes and other recordings in checking the relevance of our analysis for the culture and practices in each teacher's classroom as captured in the rest of our data-set. Finally, we shared these episodes with numerous colleagues in order to explore their reactions, in particular with regard to questions of pace and engagement.

Findings

In the following section we summarise key findings from the systematic discourse analysis of the lesson corpora, and then from our micro-analysis of the contrastive episodes.

Lessons in Abbeyford Primary and in a National Sample: Systematic Discourse Analysis

In this section we compare the classrooms in our sample to one another and with a national sample of literacy lessons collected by researchers at the University of Newcastle in 2001 (Hardman et al. 2003). The aim of the Newcastle study was to investigate the impact of the National Literacy and Numeracy Strategies (and in particular their focus on 'interactive whole class teaching') on the interaction and discourse styles of primary teachers working across a range of settings within England (Smith et al., 2004). The national sample included 72 lessons divided equally between Reception, KS1 and KS2, of which 35 were literacy and 37 numeracy. 60 percent of these lessons were taught by teachers categorised as 'highly effective'; the remaining 40 percent by 'average teachers'.[12]

Insert Table 1 approximately here

Findings regarding frequencies and rates of discourse moves (including overall pace) are summarised in Table 1. The numbers in the top half of the table show the 'rate' (i.e. number per hour) for teacher and pupil discourse moves. Rate is calculated as frequency per hour to make this data comparable to other studies (including the national sample). If, for example, a teacher posed 5 open questions in 20 minutes of whole-class teaching, this would be reported as a rate per hour of

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[12] This measure of 'effectiveness' was calculated using Performance Indicators in Primary Schools (PIPS) data provided by the Curriculum, Evaluation and Management (CEM) Centre at Durham University.

15. Rate is recorded for each individual teacher and for the school as a whole (i.e. the average for all 3 teachers), and this is compared with the averages reported by Hardman and colleagues for the 35 literacy lessons included in their national sample (Hardman et al. 2003; Smith et al. 2004).[13] The percentages to the left of 'rate' show each question type as a percentage of total questions posed.

The table shows a number of important differences among the Abbeyford teachers' lessons, and between them and the teachers in the national sample.[14] Teachers at Abbeyford Primary asked fewer closed questions than the teachers in the national sample (34% vs. 50%), instead posing more open questions (i.e. questions for which there is no single, predefined correct answer) and probe questions (where the teacher stays with the same pupil to extend their initial response).[15] Pupil discourse accounted for a greater percentage of whole-class teaching time in Abbeyford lessons (32% compared to 25% in the national sample), and on average lasted longer (6 vs. 5 seconds). Finally, the average pace of lessons in Abbeyford Primary was over 30% faster than in the national sample, 623 discourse moves per hour compared to 469 for highly effective' teachers (the measure for 'average' teachers was 414 moves per hour). At least part of this difference may be attributable to differences in methodology. In the Newcastle study, researchers coded discourse on a hand-held device while observing the lesson, in real time. In our study, discourse was coded retrospectively, based on video-recordings of the lessons, which facilitates greater thoroughness in

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[13] Hardman and colleagues do not distinguish between Reception, KS1 and KS2 or between 'effective' versus 'average' teachers for the sub-sample of literacy lessons. This distinction is made only for the corpus as a whole (i.e. all 72 lessons).

[14] Note that there is not a one-to-one correlation between the categories adopted in our analysis and those used in the Newcastle study. For example, we added to the Newcastle categories differentiations between elaborated and non-elaborated feedback and between various forms of pupil spontaneous contribution. Further, we introduced a new category, 'response to pupil', that was used to code teacher responses to pupil questions and other discourse moves that did not neatly fit into other categories (e.g. statements which were neither 'explain' nor 'feedback'), and which tended to fall outside of the canonical *Initiation-Response-Evaluation* (IRE) cycle.

[15] The proportion of open questions in both sets of data represents a considerable increase on the findings of the earlier ORACLE 1976 study, where open questions formed only 5% of all questioning (Galton et al. 1980: 87), and of the follow-up study in which 12.8% of questions asked in English lessons were open (Galton et al. 1999: 74).

capturing discourse moves (in fact, we often paused and replayed the video to double-check our coding).

More important for our purposes here are the differences among the Abbeyford Primary teachers, in particular the differences between Ms. Leigh and Ms. James' lessons. There are substantial differences across just about every area measured: Ms. James tends to pose more closed questions (35%), while Ms. Leigh favours probe questions (38%); Ms. James provides overwhelmingly non-elaborated feedback (94%), while Ms. Leigh balances non-elaborated (58%) with elaborated (42%) feedback; and, pupils' contributions in Ms. James' lessons are on average half as long as those in Ms. Leigh's lessons (3 vs. 6 seconds). With regard to overall pace, Ms. James' lessons were considerably more brisk than those of Ms. Leigh: a rate of 772 vs. 498 discourse moves per hour, or 55% faster. Interestingly, the two classrooms also differed with regards to the relative consistency of pace: in nine out of ten of Ms. James' lessons average pace ranged between 710 and 920 moves per hour; in Ms. Leigh's lessons, average pace fluctuated greatly, between 170 and 620 moves per hour.[16]

As noted, we were surprised by the findings with regard to relative pace, so we began to look more closely at recordings of the two teachers' lessons in order to understand what might make an "objectively" fast-paced lesson *feel* slow, and vice-versa.

Analysis of Contrastive Episodes

In order to delve more deeply into the different paces of Ms. James and Ms. Leigh's classrooms, and especially to explore the subjective experience of pace in them, we selected for

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[16] One of Ms. James' lessons was an outlier, with an average pace of 500 moves per hour. In our fieldnotes from this lesson we note: "Ms James tries some of the ideas we discussed in the planning meeting – notably, the discussion of whether the sample text provided by the Borough is a good piece of writing – but the pupils are generally unwilling to cooperate with this line of questioning, though they are more forthcoming vis-à-vis more traditional questions and tasks (e.g. to highlight the generic features in a text). Afterwards Ms James is very frustrated by the lesson and the pupils' participation in it."

close examination an episode from each (as explained above). In this section we first contrast these two episodes through a summary of rates and frequencies of discourse moves, then describe each episode in turn, analysing the factors that appear to influence the way pace is experienced in these two classrooms.

We should say at the outset that neither episode particularly grabbed our attention, nor did either particularly bore us. Both offer glimpses of routine classroom experience. They do not allow us to pinpoint *the* factors that determine the subjective experience of pace. Rather, we use these episodes to reflect on phenomena that were common in each of the classrooms' cultures and pedagogic practices, and which are relevant to the different experiences of pace in them.

Contrasting episode rates and frequencies. Table 2 summarises the rates and frequencies of discourse moves in the two episodes, contrasting them with the averages for each teacher's lessons. Neither episode should be considered typical: there are no closed questions in either segment (as opposed to averages of between 30-35%), and both include a greater proportion of elaborated feedback (20% instead of an average of 6% for Ms. James, and 60% instead of an average of 42% for Ms. Leigh). Ms. Leigh's lesson is characterised by a much higher than average rate of pupil participation (53% instead of 32%), and by pupil utterances that are over three times longer than average for her lessons. But of course the point of our sampling was not to find typical episodes, but rather to identify contrastive cases. To this end, we chose segments for which the differences in pace were most pronounced; the episode from Ms. James' lesson corpus is over three times faster than the episode from Ms. Leigh's lesson, and slightly more than double the average rate of the highly effective teachers in Hardman and colleagues' study.

Insert Table 2 approximately here

What precisely does it mean that one episode was three times faster than the other? To what factors can this difference in "pace" be attributed? One possibility is that participants spoke three times more rapidly in Episode 1. We checked this hypothesis by measuring the rate of words spoken, which was virtually identical in the two segments: 2.78 words per second in Episode 1 vs. 2.80 words per second in Episode 2. Another possibility is that there were longer and more frequent lulls in the conversation in Episode 2. But this hypotheses must also be rejected: while there was one relatively long 8-second pause in Episode 2, overall pauses were only 1.6 seconds longer in the Episode (adjusting for differences in segment length). Rather, it appears that the difference in pace is almost entirely attributable to utterance length, especially pupil utterances: in Episode 1 pupils' turns lasted 3 seconds on average, compared to 20 seconds in Episode 2. Which duration is optimal? That primarily depends, of course, on content and context, which we explore in the next sections.

Episode 1 (Ms. James' lesson). Episode 1 is taken from a lesson on persuasive writing in Ms. James' Year 6 (i.e. age 10 to 11 years) class in June 2009. In a previous lesson, the pupils had written a letter to the local council, with the purpose of persuading the council to pick up the school's recycling, a service which had recently been terminated. In the first half of *this* lesson Ms. James guided the pupils through a checklist of generic features characteristic of good persuasive writing (e.g. points backed up with evidence, good sentence openers, present tense). She then distributed a photocopy of a letter written by one member of the class, Sam, as an example of a good persuasive letter. The pupils analysed Sam's letter regarding these generic features, initially in pairs and then in whole-class discussion, following which the pupils evaluated their own and/or their partner's letter.

Episode 1 begins at the end of this lesson. Ms James stops the group work and calls upon several individuals to comment on their own or their partner's letter, and in particular state what the pupil-writer might do to improve their work. Paul mentions that his partner Greta needs to add more connectives to her letter, Harley says that his partner Julie needs to put more evidence in her letter, and Vanessa says that Tilly needs to use more persuasive words. In each case, Ms. James probes the pupils' criticisms, explicitly drawing comparisons with Sam's letter and elaborating on what connectives, evidence and persuasive words entail. Ms. James concludes the episode (and lesson) by asking, "who feels that looking at Sam's letter has really helped them to decide whether or not their letter is good or bad?" She then gives the pupils another minute to work on their letters before packing up (see Appendix for full episode transcript).

The Episode is marked by a series of rapid exchanges of brief questions and responses. At one level the pace is brisk and business-like: focused on getting through the task at hand in a direct manner. However, it is precisely this business-like manner that slows down our experience of the episode. The pattern of questions is repetitive and predictable: "Whose text did you look at?" "What do you want to say about it?" "How was Sam's text different?". Likewise, the pupils offer stock answers, referring in each instance to previously identified generic features, which have been rehearsed throughout the lesson. One result of the focus on generic features, combined with the brevity of pupil responses, is that we (and other observers) receive practically no information about the texts under discussion. In effect, the original texts – pupils' letters to the municipality – are replaced in conversation by labels such as "persuasive words", "connectives" and "evidence". Since the importance of these generic features has already been established, there is no issue to engage our attention, no controversy, tension or puzzle to occupy our mind.

Ms. James' rapid and snappy questioning exhibits a sense of urgency. However, one paradoxical effect of this urgency is that in her urgency to push the lesson forward Ms. James ends

up doing the bulk of the work. So, for example, after Vanessa offers her criticism of Tilly's letter
(more persuasive words), Ms. James asks the class, "Does anyone here feel that the person [whose
text] they're looking at has used some good persuasive words?" Following a two-second pause,
during which time no pupils volunteer, Ms. James reminds the class of which words Sam used,
and explains why persuasive words are important. A similar dynamic of pupils outwaiting their
teacher develops in Extract 1, with Ms. James' probing of Harley's criticism of Julie's letter.

Extract 1. Putting evidence in

```
46    Ms James:   anybody else like to make any comments
47                ((Harley raises his hand))
48    Ms James:   Harley
49                who's are you looking at
50    Harley:     Julie's
51    Ms James:   okay what do you want to say about Julie's
52    Harley      erm she didn't really put any evidence in
53    Ms James:   whereas Sam has put quite a bit of evidence in
54                Julie::
55                (.)
56                didn't bother to use much of that
57                so where's she getting all her points from then
58                (4)
59    Harley:     er
60    Ms James:   she's made some points
61                [but has she backed any of it up with evidence
62                [((Julie reaches across to point something out to
63                                                        Harley))
64    Harley:     erm (only one)
65    Ms James:   what's she said then
66    Harley      (xxxxxxxxxxxxxx)
67    Ms James:   so soon there'll be no space in landfills left
68                okay
69                but Sam has been mo::re (.)
70                specific
71                by saying- giving a time
72                hasn't he
73                from the facts that we sa:w on the board
74                there was only about 14 years left
75                Julie's not been specific enough
76                would you agree that that's
77                something you need to [improve
78    Julie:                            [((nods))
```

Harley's criticism of Julie's letter is that "she didn't really put any evidence in" (line 52).
Ms. James explicitly compares this feature of Julie's letter with Sam's letter, which was analysed

in class (lines 53-56), and then asks Harley how Julie supported her argument in the absence of evidence, "so where's she getting all her points from then?" Following this question there is an uncharacteristically long four second pause (line 58), after which Ms. James revises her line of questioning. "She's made some points", Ms. James says, "but has she backed any of it up with evidence?" (lines 60-61). By summarising Julie's argument by saying, "she's made some points", Ms. James in effect retracts her previous question about what these points were based upon. Her new question, "Has she backed any of it up with evidence?" is an invitation to Harley to repeat his original criticism (cf. line 52). At this point, however, Julie directs Harley's attention to evidence she did include in her letter (lines 62-3), which Harley then repeats (line 66).[17] Finally, Ms. James takes it upon herself to elaborate the differences between the quality of the evidence in Sam and Julie's letter, and why the former is superior.

In our discussions with her, Ms. James frequently complained about her class's lack of cooperation in whole class discussions, which she attributed to low ability and/or reticence to speak up in front of the group. In light of these comments and our analysis of Episode 1 (and similar episodes), we suggest that the culture of Ms. James' classroom involves a positive feedback loop in which pupils' hesitation to respond encourages Ms. James to both lower the cognitive demands of her questions and also do the bulk of the work of answering and elaborating herself. This dynamic is represented graphically in figure 2. Important implications of this dynamic are low stakes for participating pupils (i.e. it doesn't really matter if you answer Ms. James' questions or not), a low level of tension in classroom discussions, and limited meaningful content for observers to engage with.

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[17] We cannot know for certain what Julie pointed out to Harley, and what Harley said in line 66; our interpretation here is based on how Harley responded to Julie, and on Ms. James' response to Harley.

Insert Figure 2 approximately here

Episode 2 (Ms. Leigh's lesson). Episode 2 is taken from a lesson on story writing filmed in Ms. Leigh's Year 5 (i.e. age 9 to 10 years) class in January 2009. Earlier in the week of this lesson, pupils wrote a first draft of a "timed story" (written under conditions of limited time to simulate the national tests), which Ms. Leigh assessed, providing pupils with their assessment levels and targets for improvement. The pupils then rewrote their stories. In this lesson, the pupils are tasked with working together with a partner to highlight the changes between their first and second draft, and discuss in what way these changes improved their story. Ms Leigh tells the pupils that at the end of this task she will call on five pairs to report back to the class, and thus everyone should be prepared to say something. Episode 2 takes place after this task, and involves Ms. Leigh's elicitation and probing of pupils' reports on how they have improved their stories.

The Episode includes four exchanges. First, Gina describes the plot of her story at length (1 minute, 16 seconds). Ms. Leigh asks her how she improved her story, and Gina explains that she didn't actually make it up to the section relevant to her target of starting a new line when a new person speaks. Second, Carl tells how "instead of using 'and' all the time to link [his] ideas, [he] used loads of different connectives" and made his story "a lot more interesting". Ms. Leigh probes Carl at length (1 minute, 29 seconds), asking how he achieved this improvement, and requesting concrete examples. She follows up Carl's example of how he described the intensification of a snow storm with a dramatic retelling of a similar example from a book she read the previous night (see extract 2 below). Third, Gavin comments on how he "kind of lost track" when reading the first version of Carl's story, but "really got into it" in the second version. Again, Ms. Leigh probes this comment, asking what was different in the second story. Finally, Ms. Leigh returns to Carl

and asks, "So what are you going to do for your next story that's going to make Gavin go, 'I'm well into your story'?"

We were struck by a number of key differences between the two Episodes. First, Ms. Leigh's elicitations were minimally restrictive – e.g. "Your story, tell me about it", "How?" and "Give us an example" (compare these with questions in Episode 1, such as "Where's she getting all her points from then?" "What's she said then?" "Has she backed any of it up with evidence?"). And, indeed, the less restrictive elicitations were often followed by extended pupil responses. Second, the stakes for pupils in this episode were higher: answers counted, and no answer went unchallenged. Third, while Ms. James projected urgency, Ms. Leigh projected patience: she tolerated long answers, lengthy pauses (e.g. waiting 11 seconds for Carl to answer one of her challenges, see lines 105-7 in Extract 2 below), and going "off-script" (e.g. her own recounting of a scene she read the previous evening). Fourth, discourse in the Episode was much more coherent: utterances responded to and built upon the previous ideas (e.g. Gavin's comment regarding Carl's story). Finally, in addition to eliciting and probing pupils' answers, Ms. Leigh also told them a story – more precisely, she performed the story dramatically for them. This performance is transcribed in Extract 2.

Extract 2. "That's what keeps the interest in the story"

```
118   Ms Leigh:   excellent
119               well done
120               so you could see it building up
121               and that helps when you're a reader
122               because it means it builds up the tension
123               last night I was reading a book
124               and there was a man who was trying to find his wife who'd
125               been kidnapped
126               and his child was with him as well
127               and he had to go into this cellar
128               and he could have just said
129               ((acts out the actions as she says them))
130               that he went down into the cellar
131               opened the door
```

```
132            walked along
133            and found them in the corner
134            but the book-
135            I couldn't sleep last night
136            and my heart was pounding so hard
137            I was terrified
138            ((acts out the actions as she says them))
139            he opened the door (.)
140            it was dark (.)
141            he took his first step down (.)
142            and there was a drip drip drip
143            [he couldn't hear any humans breathing
144  William:   [(xxxxxxxxxxxxxxxx)
145  Ms Leigh:  he took another step down
146            and a scuttling in the corner
147            bravely he stepped further into the inky darkness
148  Anon:     ahhhh
149  Ms Leigh:  he could see a shadow scuttling around in the corner
150            was it a human
151            was it-
152  Anon:     (xx[xxx)
153  Ms Leigh:     [(xxxx)
154            as he stepped down and suddenly
155            behind him
156            he could hear
157            ((whispered)) steps (.)
158            and what happened in this story was that he got trapped
159            inside the cellar
160            with his wife and his child
161            but- the way it was described yesterday was so: exciting
162            my heart was going so quickly
163            because it slowed down the action
164            it gives you that atmosphere
165            the pace to your writing
166            so you doing that
167            and saying
168            slowing the storm built
169            the sky darkened
170            the (air) felt heavier
171            everyone began to worry
172            it builds up the action
173            it makes the reader think
174            what's going to happen next
175            and that's what keeps the interest in the story
176            Gavin we're going to make you the last one
177            sorry I haven't had chance to speak to everyone
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The transcript cannot do justice to Ms. Leigh's use of movement and voice to enliven her

retelling, and the positive effect of her dramatic performance on pupil engagement. Ms. Leigh's

"breakthrough to performance" (cf. Hymes, 1975) occurs in lines 134-138. First, she comments

on her own response to the story – "couldn't sleep... heart was pounding... I was terrified" –

thereby offering to her classroom audience a frame for listening to the story. Next, she slows

down her delivery, lowers her voice, and acts out the actions as she performs them. Many of the

pupils respond enthusiastically. Pupil engagement peaks during this performance, though Ms.

Leigh has "slowed" down the lesson -- literally, by talking more slowly and at length, and also by

deviating from the announced lesson plan.

Discussion and Conclusion

We opened this article with the observation that English education policy-makers have

targeted classroom time as a key area for regulation and intervention, and that "brisk pace" has

become widely accepted as an element of good teaching practice. We noted that accelerating

pedagogic pace has been justified primarily on the grounds of efficiency (maximising pupil time

on task and exposure to curriculum) and pupil interest (faster lessons are presumed to be more

engaging), and suggested that underlying calls for faster pace are concerns about alleged teacher

complacency. We cited Smith and colleagues' (2004) study that showed that highly effective

teachers maintain a faster pace than average teachers, and also noted research and pedagogical

traditions that problematise the equation of fast pace and good pedagogy. Finally, we critiqued a

unitary conception of pace that conflates interactive, cognitive and learning pace, and argued that

objectively measured pace may not coincide with pace as subjectively experienced.

We explored and elaborated these ideas through empirical investigation of pace in a study of

classroom discourse in Key Stage 2 literacy lessons in an East London school. Systematic

discourse analysis of a sample of 30 lessons from three teachers' classrooms produced an

incongruous finding: the lessons we had experienced as fast-paced were rated objectively as

slowest, and vice-versa. In order to better understand this anomaly, we selected for contrastive

micro-analysis the fastest and slowest episodes in the corpus. Examination of the systematic

discourse data showed that the measure of "pace" for these episodes primarily reflected differences in utterance length (rather than, for example, rate of speech). Key issues that emerged in the contrastive analysis of subjective experience of pace in the two episodes include the following:

- *Predictability*: the predictable pattern of questioning and prevalence of stock answers were a key factor in slowing down our experience of Episode 1. In contrast, in Episode 2, Ms. Leigh posed less restrictive questions and deviated from her previously announced lesson script.

- *Stakes*: In Episode 1 the stakes for pupils were relatively low: answers were rarely challenged, and in the one case in which Ms. James did probe a pupil response, she rescinded her question when a response was slow to arrive. Pupil responses in Episode 2 were more consequential: Ms. Leigh challenged most answers, and gave ample time for pupils to formulate and express their ideas.

- *Meaning*: The brevity of pupil responses and the emphasis on generic features in Episode 1 led to a disappearance of the texts being discussed, and as such very little content to engage participants' attention. Episode 2 exhibited greater coherence, with contributions building on one another to construct a meaningful and coherent line of enquiry.

- *Dramatic performance*: In Episode 2 Ms. Leigh told a story, engaging pupils' attention through dramatic performance.

Such were the key factors contributing to subjective experience of pace in these two episodes. These factors will not necessarily be salient in other classroom cultures: there are clearly many more ways to speed up or slow down subjective lesson pace. The key point that emerges from this contrast is that the experience of pace is rooted in the meaningful content of the

conversation, including the extent to which this content is new and/or surprising to participants, if and how the conversation matters, and how participants treat one another's contributions. At their extremes, objective and subjective pace may be inversely related: meaningful and important content requires us to slow down in order to attend and think; less consequential ideas require that we speed up, to get through the material as quickly as possible.

This hypothesis may help explain Smith and colleagues' (2004) finding that "highly effective" teachers display a faster pace than average teachers. Recall that this difference in pace was the only significant difference between the two groups of teachers, both of whom "spent the majority of their time either explaining or using highly structured question and answer sequences. Far from encouraging and extending pupil contributions to promote higher levels of interaction and cognitive engagement, most of the questions asked were of a low cognitive level designed to funnel pupils' response towards a required answer" (p. 408). Given such pedagogy, a brisk pace makes sense – no reason to slow down to ponder questions that are designed to funnel responses toward a required answer. Moreover, perhaps the faster pace leads to greater curricular coverage (all other factors remaining equal). But it makes little sense to advocate faster pace across the board, a la Ofsted or the NLS, or to indirectly promote the sort of pedagogical practices that are aligned with such a fast pace. There is an important lesson here not only about pace, but about the conservative nature of designs for researching the effectiveness of teaching strategies that treat dominant pedagogic contexts as given. Teaching strategies are always embedded in pedagogic cultures, upon which their success depends. By testing the effectiveness of such strategies, without reference to their broader contexts, researchers limit the potential scope of their findings, and bias their studies in favour of innovations that work within status quo classroom cultures and pedagogic frameworks.

Finally, it is worth emphasising the perverse effects of government calls for urgency and fast pace on the classrooms studied. Ms. James internalised these pressures, which were amplified by SATs tests that her Year 6 class had just sat, and they were at the root of the problematic dynamic speeding up her teaching in a way that slowed down our experience of it. Ms. Leigh, on the other hand, who taught in a non-externally tested year group and enjoyed a relatively privileged position in the school, was to a certain extent less exposed to these pressures.

This article arose from an attempt to make sense of counter-intuitive findings about pace in our classroom interaction data. The more we delved into the topic, the more uneasy we became with how pedagogical pace has been conceptualised, measured and regulated. Hence, the thrust of the article has been to critique current, problematic approaches to pace. In concluding the article, we would like to emphasise that we remain convinced that time is a critical dimension of classroom life, and that pace is consequential for engagement, curriculum and learning. It is precisely because of pace's importance that we need more sophisticated ways of talking about, studying and supporting it.

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