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Reciprocity between narrative, questioning and imagination in the early and primary years: examining the role of narrative in possibility thinking

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Abstract

The concept of Possibility Thinking (PT) as a driving force of creativity has been investigated both conceptually and empirically for over a decade in early years settings and primary classrooms in England. In the first wave of qualitative empirical studies, play formed part of the enabling context. Criteria for episode selection for PT analysis were that episodes exhibited children immersed in sustained focused playful activity. During the second wave of PT studies, the research team's attention was drawn to children's imaginative storying in such playful contexts and it emerged that consideration of narrative in PT might prove fruitful. The current paper revisits key published work, and drawing on data previously analysed for features of PT, seeks to explore how narrative might relate to the current theorised framework. Fourteen published PT episodes are re-analysed in order to consider the role and construction of narrative in PT. The new analysis reveals that narrative plays a foundational role in PT, and that reciprocal relationships exist between questioning, imagination and narrative, layered between children and adults. Consequences for nurturing children's creativity and for future PT research are explored.

Key words: possibility thinking, narrative, play, imagination, questioning, creativity.

Introduction

Internationally increased attention has been paid to creativity in recent years, both in early years and primary education. Scholars have examined its conceptualisation (e.g. Banajii, Burn and Buckingham, 2010; Craft, 2011; Kaufman and Beghetto, 2009; Sawyer,2004) and its instantiation in the

pedagogic practices both of teachers (e.g. Cremin, Barnes and Scoffham, 2009; Jeffrey and Woods, 2009), and of artists (e.g. Bancroft, Fawcett and Hay, 2008; Galton, 2008). The interrelated concepts of creative learning (Jeffrey, 2006; Sefton-Green *et al.*, 2011) and 'possibility thinking' (PT) (e.g. Burnard, Craft and Grainger, 2006; Craft, McConnon and Matthews, 2012a) have also been explored. In the case of the latter, conceptual and empirical studies in England have developed the notion that children's creativity is driven by PT, exploratory transitions from 'what is' to 'what might be', encapsulated as the posing of the question 'what if?' in different ways and contexts, together with perspective-taking, or 'as if' thinking.

Initially conceptualised by Craft (2001), and set within broader conceptualisations of creativity as everyday, two phases of empirical work have investigated the nature of children's PT and how it is nurtured by teacher pedagogy (Burnard *et al*, 2006; Chappell, Craft, Burnard and Cremin, 2008; Cremin, Craft and Burnard, 2006; Craft *et al.*, 2012a; Craft, Cremin, Chappell, Burnard and Dragovic,2012b). Undertaken in settings with children aged 3-11 years, the research team and co-participant teachers noted the contextual role of play in these studies. Criteria for episode selection for PT analysis were evidence of children's immersed playful activity. However, the research foregrounded PT characteristics and enabling pedagogy. Whilst the playful context was acknowledged in all presentations and papers, it was arguably also somewhat 'taken for granted'. On discussing the role of imaginative storying evident in the context of the most recent PT studies (Craft *et al.* 2012a, b), and cognisant of research highlighting the power of narrative in education (Bruner, 1986; Egan, 1997), the team decided to re-visit the second phase dataset. These studies, with children aged 3-11years, focused primarily on categorising, interrogating and enhancing the PT framework developed in the first phase work.

A new analysis of these published studies was thus undertaken with a view to considering narrative in PT, seeking to investigate two questions:
1. What is narrative in PT and how is it constructed?
2. What is the role of narrative in PT?

In the next section consideration is given to the studies of creativity as PT, noting in particular the role of the enabling context within these, this is followed by discussion of narrative in education.

Creativity as possibility thinking

Since 2004, two substantive phases of qualitative research have identified and documented PT characteristics in creative learning for children aged 3-11 in England.

The initial empirical work developed Craft's original conceptualisation and through adopting a deductive-inductive analytic approach created a framework for identifying PT (Burnard *et al.*, 2006). The key features of PT with 4-7 year olds were found to include: question-posing, play, immersion, innovation, risk-taking, being imaginative, self-determination and intentionality (Burnard *et al.* 2006). These features were fostered by teacher-child interactions in an enabling context in which teachers offered children time and space to develop ideas, prioritised learner agency and 'stood back' in order to observe children's engagement and select when to intervene (Cremin *et al.,*2006). This pair of studies established an empirically grounded conceptual basis for later work and like the subsequent research were naturalistic enquiries involving teachers as co-participative researchers. They utilised observation, interviews and video stimulated review to prompt reflection on learning.

In the next substantive phase of the work, the team sought to interrogate the framework established in the first phase. Three studies were undertaken, the first focused on the potency of children's questions, yielding a taxonomy of questioning in PT episodes (Chappell *et al,* 2008). As shown in Figure 1, question-posing and question-responding were seen occurring in a context of play and immersion in which children engaged in self-determined activity enabling and generating intentional action. At this stage of the work then, play and immersion were re-positioned as contextual features of PT. This study

highlighted the importance of the inherent breadth of possibility in any classroom activity, as well as complex relationships between question-posing and question-responding. It delineated different kinds of questioning from leading questions framing creative endeavour to service questions enabling enquiries to proceed, and follow-through questions often used at a practical level. Questions were expressed verbally and more frequently non-verbally through enacted expression.
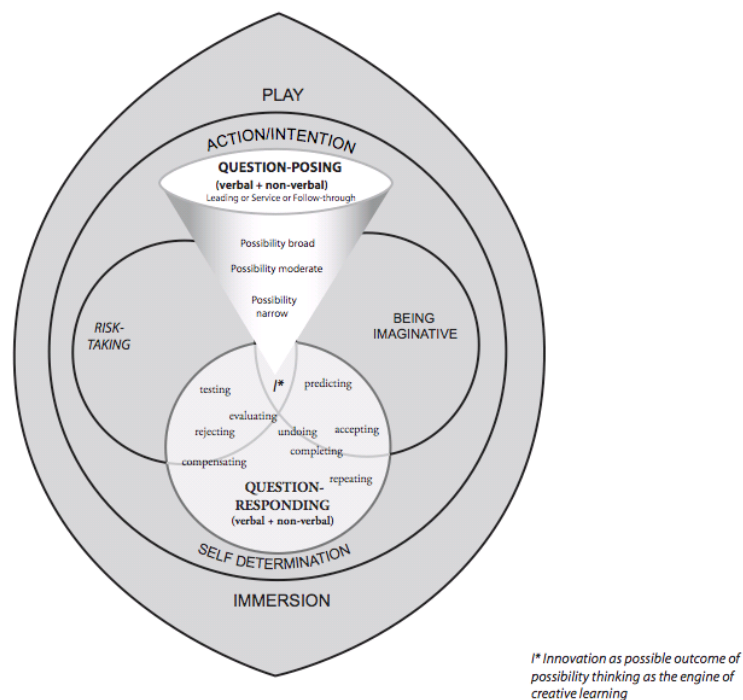
Figure 1. Question-posing, question-responding and context
(Chappell *et al.,* 2008:19).

The second study in this phase explored the activity of children aged 9-11 in two primary schools (Craft *et al*., 2012b). The episodes selected for analysis were again drawn from playful immersive contexts, this time from within science, art, and mathematics. The study further confirmed most features of PT, but found risk-taking to be absent and noted a lack of non-verbal questioning in the mathematics activity. Significantly, it identified peer collaboration as an emergent PT feature and documented an overlap between imaginative and playful behaviour, which was particularly striking given the older age group.

Another second-phase study was of four year olds in an early years setting (Craft *et al.*, 2012a). This explored PT manifest in child-initiated play and adults' roles in this. It revealed blending of individual, collaborative and communal creativity and an imaginative dynamic between practitioner and child; pedagogues 'stepped forward' as well as 'stood back' as children transformed what is to what might be. This study also noted the role of provocations and the presence of children's imaginative storying. Revisiting this alongside the other two second-phase studies, the research team began to recognise a role played by narrative, prompting the current systematic re-analysis.

In the first phase studies, play formed a core element of the enabling context to PT, however it was not until the second-phase studies that narrative was really noticed. The identification of playful immersion as a context to PT, rather than forming a focus of analysis, had perhaps fostered an unconscious acceptance of the role of narrative as contextual, and diverted attention from the conscious mining of it. The emergence of narrative in the 2012 studies led the team to re-examine the data analysed in the previously published studies.

Narrative: a review of related literature

The nature of narrative

Narrative as an area of study is wide-ranging and substantial. In investigating it in relation to PT and guided by early exploratory re-viewings of the published PT episodes, we draw upon selected, pertinent literature from narratology, philosophy in education, literary theory and educational research. In examining the literatures on narrative simultaneously with our early stage re-viewing and new analysis of the published PT episodes, we considered literature in conversation with the data.   In so doing we found the recurring definition of narrative as a *representation of an event or sequence of events* useful, this was evidenced in seven out of nine definitions which the narratologist Rudrum (2005) considers. In viewing PT episodes alongside reading the literature, we also recognised within those episodes some of the

criteria considered by philosopher Kvernbekk (2003), including: *events, characters and plots, causal sequences,* a unity through the *beginning, middle and end* and *significance.* The significance criterion, arguably links to Labov's (1972) concept of evaluation. In analysing the naturalistic stories of inner-city adolescents, (rather than discussing narrative conceptually like Rudrum and Kvernbekk), this sociolinguist positions evaluation at the heart of narrative structure and highlights the narrator's affective stance towards events.

The centrality of narrative has been noted by psychologists: it is seen as a major 'organising device' Langer (1953:261) enabling us to order experience, and a fundamental mode of thought (Bruner, 1986) through which we construct our world/s. Wells too, researching early learning suggests that making sense and constructing stories is 'an essential part of being human' (1986:222) and Levinson (2008: 134), considering the relationship between arts, sciences and education also argues narrative is 'an organiser for…experiences by structuring and sequencing events'. Taking this further Barthes (1977) the literary theorist claims that narrative is 'international, transhistorical and transcultural', though research reveals that different traditions and structures exist (Heath, 1983).

Approaching narrative from another angle, Chappell (2008a) considers what 'embodied narratives' might be and do, suggesting that they may not appear logical. In order to comprehend the felt and embodied nature of narrative in the dance narratives documented, Chappell argues that both aesthetic qualities and affective awareness need to be recognised. This connects to Priddis and Howieson's (2010) work on emotional, felt and aesthetic elements at play in narrative and Labov's (1972) affective stance.

The role of narrative in education
Educational research suggests early narrative competence proffers a secure foundation for emergent literacy and long-term success in schooling (McCabe & Bliss, 2003). Additionally, analyses of children's storytelling in pre-school and beyond highlight the significance of narrative for social, cognitive and

identity work (Engel, 2005; Maybin, 2005; Nelson, 1989). Fox (1993), studying the oral narratives of 4-5 year-olds revealed the generative nature of narrative and intricate ways in which children drew on their experience of stories, combining these with their life stories to produce complex narrative structures that stimulated exploration of the physical and social world. Engel (2005) too showed that when pre-schoolers use language to weave symbolic play into a narrative, this enables exploration in an alternative symbolic world, stimulating experimentation and speculation.

It was apparent from revisiting the published PT episodes that there was a strong connection between narrative and play. Drawing on Vygotsky (1967), Nicolopoulou (2005) observes that both are forms of socially situated symbolic action, and that children's pretend play often involves enactment of narrative scenarios, as Paley(1990) has also shown. There are multiple possible relationships between play and narrative, most relevant to the current argument is that the experience of narrative helps children to understand 'the symbolic potential of language: its power to create possible and imaginary worlds through words' (cf. Bruner, 1986; Wells, 1986:156). We previously argued that possibility thinking is the engine of creativity (Chappell *et al.*, 2008) and find through examining the literature on play and narrative, studies which demonstrate that children use symbolic resources creatively to construct possible worlds, using precisely the imaginative capacities expressed in and supported by their pretend play (Baumer, Ferholt and Lecusay, 2005; Dyson, 1997; Rowe, 1998).

Imagination inherent in narrative?
The transition from 'what is' to 'what might be' which lies at the heart of PT, implies *imagining* as both a process and outcome (Craft, 2001). In conceptualising imagination in PT, Craft (2001) connects to the tripartite distinction made by educational philosopher Passmore (1980): imaging, imagining and being imaginative. *Imaging*, Passmore contends is usually a private process and may involve conjuring images of different kinds, for example visual, auditory, olfactory, gustatory. Yet Wright (2011) documents

children's somatic 'imaging' through the interplay of physical, spatial and visual often accompanied by what she calls 'vocalisms' (2011:166). For Wright (2010), children's represented imaging through drawing reflects narrative elements (e.g. characters, settings, plot) and aesthetic decision making. Passmore's second distinction, *imagining*, involves supposing, or entertaining a hypothesis. Unlike 'imaging', imagining may be shared, it includes intentional conjuring of a situation (real or fictional) though the intention may be highly intuitive and/or tacit such as in children's pretend play. For the philosopher Scruton (1974) both imaging and imagining are mental acts, whereas *being imaginative*, Passmore's third kind of imagination, may also involve doing and yet cannot, according to Scruton, be conjured at will. Being imaginative, Passmore suggests means going beyond the obvious, offering unexpected and unusual interpretations or responses, envisaging novel potential. It is this aspect of imagination which seems particularly pertinent to PT.

The educational philosopher Egan (1986, 2005), arguing that imagination is vital in teaching and learning to motivate learners, suggests imaginative development occurs through narrative which enables meaning-making. For Egan (1986) and Bruner (1986), children's pretend play offers an imaginative space in which story enables thinking. It is notable that in children's play, all three kinds of imagination may be present: imaging, imagining and being imaginative; though Craft (2001) argues it is *being imaginative* that is vital to creativity.

Methodology

This study drew on the three second-phase published studies of PT (Chappell *et al.*, 2008; Craft *et al.*, 2012a, b) that were developed by the core team[1] following the first-phase work which established the broad PT framework. These studies were selected as each focused on *categorising* PT, not primarily the pedagogy fostering it (the focus of Cremin *et al.*, 2006). Each

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[1] Several PT doctoral studies have been undertaken; however since many of these have focused on applications of the core theory, and few have published in peer reviewed journals as yet, the re-analysis presented here focuses solely on published work undertaken by the core team to develop the original PT theory.

also interrogated and developed the framework and was undertaken with children of different ages spanning 3-11.

The present study re-analysed all episodes previously researched in these three studies. In the vein of these studies, the present research used a qualitative methodology acknowledging reality as socially constructed and investigating meaning within that paradigm (Marshall and Rossman, 1995) using a case study (Stenhouse, 1985) approach detailed further below. Each of the papers provides full details of their methodologies, but in summary the studies were naturalistic (Lincoln and Guba, 1985) and involved collaborative enquiry (Chappell and Craft, 2011).

Ethically this new analysis also continued in the same vein as the three previous studies, guided by British Educational Research Association Ethical Guidelines (2011). The re-analysis honoured all consent, privacy and disclosure arrangements established for the previous studies.

Previous sampling

In all three previous studies sampling was purposive (Kuzel, 1992) in terms of sites selected, importantly they were deemed to be creative by agencies such as the Qualifications and Curriculum Agency (Chappell *et al*., 2008), through knowledge of the school's reputation as 'outstandingly creative and personal approach to teaching and learning' (Craft *et al*., 2012b:7) or 'known nationally for its work on developing children's creativity' (Craft *et al*., 2012a:51). Each paper details the other purposive sampling criteria used in that study. The common criterion for episode selection for PT analysis in the classrooms in all three studies, was that the episodes exhibited children immersed in sustained focused playful activity.

Chappell *et al*., (2008) worked in two school sites (one classroom each), an Infant school Reception class (4-5 year-olds) and a primary school Year 2 class (6-7 year-olds), both in middle England. The researchers selected eight key episodes across those classrooms. Craft *et al*., (2012a) worked in one Children's Centre (4 year olds) and focused on two slightly longer episodes

from that site. Craft *et al., (*2012b) worked in two primary school sites (two parallel classes of 9-10 year-olds) in the South West school and one (10-11 year-olds) in the East Anglia school. The researchers focused analysis on four episodes, two from the South West school (one from each class) and two from the East Anglia School (two from one class). In total this yielded fourteen episodes for re-analysis in the present study.

Previous data collection methods

The previous studies used visual data collection methods alongside verbally collected data (Banks, 2001). This involved video in Chappell, *et al.,* (2008) and Craft *et al.,* (2012b) and photographs supported by detailed field notes in Craft *et al* .,(2012a) alongside interviews and observations. In the case of the video data, line-by-line transcription of speech and to some extent gestures and accompanying action was carried out prior to creating a data log (Werner, 1992; Hall, 1992). For photographic data, details of action and some verbatim speech were provided by fieldnotes with photographs capturing specific moments of interaction in the data log. In each study these comparable logs were then analysed for PT features. This meant for each of the fourteen episodes there was a data log of the episode with an accompanying PT feature analysis available for the current study's narrative re-analysis.

Episodes and analysis for this study

Eight of the fourteen available episodes were selected for detailed analysis for this study. These eight were selected by judging each episode in terms of the strength of the evidence of PT within it, i.e. the strongest episode out of the fourteen was judged so because it manifested the most PT features within it. The strongest eight episodes which represented the six classrooms from the three original studies were then selected. Details of the eight episodes re-analysed in this study can be found in the first three columns of Table 1.

Table 1. The eight episodes re-analysed in this study

Name of episode	Age group	Previous PT study	Teacher/child-initiated	Fantasy/everyday historical narrative

Firecage	4 years (nursery)	Craft et al (2012a)	Child-initiated	Fantasy
Puppets	4 years (nursery)	Craft et al (2012a)	Child-initiated	Fantasy
Rodney & Rory	4 to 5 years (nursery)	Chappell et al (2008)	Child-initiated	Everyday
Vehicles	6 to 7 years (KS 1)	Chappell et al (2008)	Teacher-initiated	Historical everyday
Ice eggs	9 to 10 years(KS2)	Craft et al (2012b)	Teacher-initiated	Fantasy
Magnet Men	9 to 10 years (KS2)	Craft et al (2012b)	Child-initiated	Fantasy
Clayhouses	10 to 11years (KS2)	Craft et al (2012b)	Teacher-initiated	Everyday
Maths	10 to11years (KS2)	Craft et al (2012b)	-	-

As discussed in the literature review, this current study took a deductive-inductive approach. The deductive element comprised identifying within the selected PT episodes, features of narrative synthesised from the literature. A line-by-line analysis was carried out on each of the eight episode data logs, beginning by viewing the eight episodes concurrently with the review of relevant literature. In so doing we found the following recurring core features of narrative resonated in the data from the literature: *sequence of events* with *beginning, middle and end*, involving *character/s*, *plot* and *significance* for those taking part. These features were therefore analysed for deductively (see Table 3 in the Findings section). Following this analysis it became apparent that one of the eight episodes, a Maths lesson in the South East site (10-11 year olds) contained none of these narrative features. It was therefore not analysed in the following stages. The implications of this are discussed at the end of the paper.

The subsequent inductive element of the remaining seven episodes comprised allowing the relationship between the previously identified PT features and newly analysed narrative features to emerge from the data. During this process, other analytic categories also emerged inductively.

These were the *narrative characteristics*, whether narrative was *constructed individually, collaboratively or communally* and whether or not participants had *emotional and/or aesthetic investment* in the narrative. This layer of analysis addressed the 1st research question: What is narrative in PT and how are they constructed?

A second layer of analysis was undertaken to address the 2nd research question: What is the role of narrative in PT? Whereas the first layer of analysis analysed the data log for each episode in terms of narrative, the second layer of analysis now put together the data log, the previous PT features analysis and the new narrative feature analysis. Again a line-by-line analysis was carried out for each episode seeking to make connections between PT and narrative features. Key relationships thus inductively emerged between narrative features and PT features of questioning and imagination.

Within each layer of analysis, triangulation, as per Lincoln and Guba's (1985) trustworthiness criteria, occurred as follows: one author took responsibility for analysing the eight and then seven episodes. Another of the authors then blind analysed three episodes from classrooms she was most familiar with. The third author read the whole of the first author's analysis to verify it and added further detailed analysis of particular PT features. The first two authors then compared original analysis, blind analysis, and comments from the verification and more detailed analysis to highlight and resolve differences where appropriate. This led to agreement on the final categories which can be seen in the Findings section in Tables 3 and 4.

For the purposes of this paper, four episodes were selected for detailed exampling in the Findings section (see Table 2): Firecage, Vehicles, Ice Eggs and Magnet Men. Table 2 shows the name, age and focus of the four episodes, each named according to the main activity on which the children were focused, e.g. 'Firecage' is so called because as the action in the episode develops it becomes evident the children are building an imaginary firecage.

Table 2. The four episodes selected for exemplification in this paper

Name of episode	Age Group	Focus
Firecage	4 year olds	Ensued from a provocation by staff. Children were provided with small tree branches and logs in the outdoor space under a cloth; these were close to plastic crates which the children chose to incorporate into their ensuing activity of building a firecage.
Vehicles	6 to 7 years	Exploring the life and work of Mary Seacole, the children were designing and building models of carts to transport injured soldiers from a Crimean battlefield to Mary Seacole's hospital on the Black Sea. They were offered a range of materials, including shaped cardboard and wooden dowelling to construct their emergency vehicles.
Ice Eggs	9 to 10 year	The teacher introduced the activity through a story of Sir Francis Drake, a dream and a living ice bird that cried tears which turned into ice-eggs. He then produced a large number of actual ice-eggs and invited the children to investigate how ice melted. The episode is from the beginning of the day when groups of children were beginning to think about what their melting experiment might involve.
Magnet Men	9 to 10 years	Within a science curriculum lesson, at one of five stations in the classroom, two boys invented the magnet men as part of an open exploration of magnets of different shaped magnets on the table-top.

These were selected from the eight analysed episodes using the following criteria: 2 child-initiated and 2 teacher-initiated episodes; coverage of fantasy, everyday and historical narrative characteristics; strength of evidence of narrative within the episode or within the wider narrative; inclusion of Nursery, Key Stage 1 and Key Stage 2 data. Other episodes are also briefly exampled at different points where they offer unique manifestations of particular analytic categories.

Contextual information for the episodes

The Firecage episode took place in an inner-city Children's Centre which provides care and education for learners aged 6 months to 5 years. Opportunities are provided through partnerships between staff, children's parents and carers from the community. Within the context of the co-

participative nature of this PT study as detailed above, the Firecage episode ensued from a provocation by the Centre staff to the 4 year olds. Large newly cut sections of tree branches and logs were gathered underneath a cloth in the outdoor space for children to discover; plastic crates nearby were also incorporated into the activity by the learners. This episode featured in Craft *et al.*, (2012a).

The Vehicles episode occurred in a small middle England primary school serving a widespread suburban/rural community. The school places creativity at the core of the curriculum, with a specific commitment to fostering responsibility and independence. Teachers plan for creative teaching and learning in response to children's questions and interests about a particular focus. The episode occurred within a Year 2 class (6-7years) whose initial focus on Florence Nightingale had flowed into a dual focus, incorporating Mary Seacole[2]. Prior to converting their classroom into a hospital, the children were designing and building models of carts to transport injured soldiers from Crimean battlefields to Seacole's hospital on the Black Sea. They were offered diverse materials, including rectangles and circles of cardboard and wooden dowelling to construct their emergency vehicles. This episode featured in Chappell et al., (2008).

The Ice Egg episode took place in a primary school in South West England with Key Stage 2 children (9-10 years). The curriculum focus was science, the activity focused on investigating ice melting. The teacher introduced this through a story involving Sir Francis Drake[3], a dream and an ice bird crying tears which became ice-eggs. He then produced actual ice-eggs (about the size of large melons) and invited the children to work in groups for the day to design an experiment to investigate their ice-egg, with a focus on melting. The Ice Egg episode comes from the beginning of the day immediately after the

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[2] Mary Seacole (1805 – 1881) was a Jamaican nurse best known for her involvement in the Crimean War. She ran boarding houses in Panama and the Crimea to treat the sick, despite her application to be a British nurse being rejected by the War Office.

[3] Francis Drake (1540 – 1596) was an English Elizabethan sea captain, privateer, navigator, slaver, awarded a knighthood in 1581. He is famous for his role in defeating the Spanish Armada in 1588 and for circumnavigating the world.

storytelling, when each group received its ice-egg and was considering what their experiment might involve. This episode featured in Craft *et al.* (2012b).

The Magnet Men episode was from the same South West site as Ice Eggs (undertaken on the same day with children in the parallel class). Within a science lesson, the teacher set up five stations around the room, each of which invited children to explore the properties of magnets in different ways. Groups of five rotated around the stations for around ten minutes each. A teacher or teaching assistant was available to offer assistance with more complex tasks (object classification in relation to their magnetic nature and an iron filings task exploring polarity). The Magnet Men episode was part of an open exploration station and involved two boys exploring a box of different shaped magnets on the table-top. This episode featured in Craft *et al.,* (2012b).

Brief details of the remaining four episodes follow. The Rodney and Rory episode was from an Infant school in the South East, the 4-5 year olds and their teacher were the focus for the research. The episode was drawn from a morning's activity of planning and seeing through a birthday party for two large stuffed toys, Rory the tiger and Rodney the moose. This featured in Chappell *et al.*, (2008). The Puppets episode was from the same site as the Firecage episode, in this puppets were provided as a provocation. This featured in Craft *et al.* (2012a). The Clayhouses and Maths episodes were from a primary school in the South East. The teacher and children (aged 10-11 years) were the focus for the research. In these episodes the children independently explored an arts-based and a mathematics task, respectively. In the former, children created small-scale, layered clayhouses depicting a building in the local community, each became a tile in a mural. In the latter, the teacher shared some maths tasks and asked the children to solve more complex ones on a worksheet with their 'talking partner'. These episodes featured in Craft *et al.*, (2012b).

The findings to each of the research questions are now discussed consecutively: 'what is narrative in PT and how is it constructed?' followed by 'what is the role of narrative in PT?'

Findings

What is narrative within PT and how is it constructed?

The analytic process resulted in the identification of key features of the narratives as representations of an event or sequence of events in all PT episodes. These included character/s, plot, sequence of events, significance to children and emotional/aesthetic investment. Differences surfaced relating to who began them; narratives were child or teacher-initiated, and to whether they were fantasy, everyday, or everyday historical in nature. Analysis also highlighted that narratives were constructed individually, collaboratively or communally across the episodes. These characteristics are shown in Table 3. For ease of explanation, characteristics relating to narrative initiation, type and construction are considered first followed by the key narrative features.

Table 3. Narrative characteristics, construction and features alongside PT analysis from previously published episodes
Italics indicates PT features not evident in the episode

Episode (Evident PT features)	Narrative characteristics and construction		Narrative Features			
	Narrative characteristics	Individually, collaboratively, communally constructed narrative	Character	Plot	Sequence of events: Beg, Mid, End	Sign child
Firecage (QP, QR, AI, SD, lm, D, Inn, P, Imm, RT)	Child-initiated Fantasy	Individual narrative with some collaboration.	√ being themselves with representational objects (plastic crates etc for cage), no other characters	√	√	√
Puppets (QP, QR, AI, SD, lm, D, Inn, P, Imm, RT)	Child-initiated Fantasy	Individual narrative with some collab. Does not include teacher's collab contribution though.	√ being 'others' (e.g. crocodile puppet)	√	√	√
Rodney and Rory (QP, QR, AI, SD?, lm, *D, Inn,* P, Imm, *RT*)	Child-initiated Everyday	Individual + collab narrative within episode initiated betw children, framed by communal teacher-child initiated narrative of party	√ being themselves with other characters (Rodney + Rory)	√ in episode, √ in wider context	√	√

Episode (Evident PT features)	Narrative characteristics and construction		Narrative Features			
	Narrative characteristics	Individually, collaboratively, communally constructed narrative	Character	Plot	Sequence of events: Beg, Mid, End	Sign child
Vehicles (QP, QR, AI, SD, lm, *D, Inn,* P, Imm, *RT*)	Teacher initiated Historical everyday	Collaborative narrative within wider communal teacher-initiated narrative	√ being themselves with representational objects (dowling and cardboard for vehicles) + other characters (e.g. Mary Seacole) in background	? in episode, √ in wider context	√ part	?
Ice Eggs (QP, QR, AI, SD, lm, D, *Inn*, P, Imm, *RT*)	Teacher-initiated Fantasy	Collaborative narrative within wider communal teacher-initiated narrative	√ being themselves with representational object (ice egg) + other characters (e.g. Francis Drake, ice bird) in background	? in episode, √ in wider context	√	√
Magnet Men (QP, QR, AI, SD, lm, D, Inn, P, Imm, *RT*)	Child-initiated Fantasy	Individual and some collaborative narrative	√ being themselves with representational /aesthetic objects/ characters (magnet men)	? in episode, x in wider context	√	√
Clayhouses (QP*,* QR, AI*,* SD, lm, D, *Inn*?, P, Imm, *RT?)*	Teacher-initiated Everyday	Individual narratives within wider communal teacher-initiated narrative	√ being themselves with aesthetic objects (clayhouse tiles)	? in episode, √ in wider context	√	√

Key to PT features:
QP: Question-posing;
QR: Question responding;
AI:Action/intention;
SD: Self-determination;
IM: Imagination;
D: Development;
Inn: Innovation;
P: Play; Imm: Immersion;
RT: Risk Taking

Narrative characteristics

Characteristic 1: Child-initiated/teacher-initiated narrative

Out of the seven PT episodes included in the detailed analysis, four were child-initiated and three were teacher-initiated narratives.

Child-initiated narratives were not generated by a child or children purely in isolation (unlikely in a classroom setting). The self-initiated narratives were in

each of the four contexts instigated by children in response to resources offered by teachers.

For example in the Firecage episode, practitioners had provided a provocation of wooden logs. One child in particular instigated, held onto and developed the Firecage narrative. As described by Craft *et al.* (2012a:54):

> Carl's idea for making a big fire cage which he announced at the start of the outdoor play episode: "we gonna make a big cage" is embellished as other children join and the plastic crates are combined with the wooden logs so that the task evolves, as Carl explains to the researcher: "we are making a big cage to keep the fire in". Later still, when other children who have not been involved in the making of the cage try to enter it, Carl shouts, "it's only for acrobats!" and when challenged by the practitioner that perhaps his friends are acrobats too, further elaborates the narrative arguing, "they haven't been to acrobat school".

The second example of child-initiated narrative is stronger still in that it occurred in a Year 5 Science lesson, where arguably opportunities for child-initiated narratives are less commonplace. In the Magnet Men episode whilst exploring the properties of different magnets, Joel initiated a narrative about the two men and the sunshine he had made for them. As Craft *et al.,* (2012:11) state, the video sequence shows Joel and Kit

> accepting and rejecting one another's ideas of where the magnets should go – to make eyeballs, a 'mini me', and a sun – exploring as part of this how the magnets connect and hold together.

With Kit drawn into the narrative, Joel led on developing it until the teacher's announcement that time on the magnet activity station was over. This second example is considered to be stronger as there was no teacher expectation that the children should develop narratives, simply that they should explore the scientific properties of the magnets. In the Firecage example, the logs were set up with an expectation that children were likely to engage in some kind of pretend play, which they then did. Joel's initiation of a narrative in the

science curriculum setting was playful, spontaneous and unexpected as well as unrequested.

The three teacher-initiated narratives were seemingly framing devices. For example, before the Ice Egg episode, the teacher spent around twenty minutes telling the children an elaborate story, summarised here from the video:

> The teacher described how he had been awakened by a knocking noise at two that morning. He went downstairs and saw someone outside the kitchen door. Sir Francis Drake beckoned him into the garden which turned into the grounds of Buckland Abbey[4] [children had visited recently]. Drake led him through the different rooms in the Abbey to a big oak door. Through the door he showed him a bird that looked a bit like a stork but was made of ice. As the bird cried, ice tears dropped onto the floor, forming ice-eggs which Drake told him would hatch into ice birds. Then the teacher said his alarm clock went off and he woke up! It had been a dream! He showered and went downstairs, BUT there in his garden were a pile of ice-eggs…(at this point the teacher produced the ice-eggs and handed them out). The children responded excitedly.

The Ice Egg episode itself focuses on a group of three children collecting their egg immediately after the storytelling. The episode tracks them touching and thinking about the egg and beginning to design their experiment to investigate something about it, with a focus on melting. The teacher's narrative used the children's previous learning experiences (Francis Drake and Buckland Abbey), as well as their ensuing experience about melting ice, to frame their science experiment and connect current and previous experiences.

In the second example of teacher-initiated narratives, the Vehicles episode, the teacher, responding to children's questions, had told them the story of

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[4] Originally a monastery in the 13th century, Francis Drake and his descendants lived in the buildings as a residence until the mid 1940s. It is now a National Trust property open to the public.

Mary Seacole's involvement in the Crimean war. As detailed in Chappell *et al.,* (2008), building on this, the children had decided to undertake various project-based predominantly problem solving activities. In this episode their work was framed by a teacher-initiated narrative about the terrain, environmental conditions and resources available to transport injured soldiers to Seacole's hospital. They constructed models of rudimentary vehicles out of the resources (e.g. dowling and cardboard) provided. The teacher used the narrative, which drew on their previous web searches and use of non-fiction texts to frame the activity, also explaining that once the vehicles were made, they could construct the field hospital for the wounded soldiers. This afforded a future scenario which added additional context to the vehicle making.

Characteristic 2: Narrative type: Fantasy/everyday/historical
Four of the seven PT episodes were characterised as fantasy narratives, two as everyday and one as a historical narrative.

Fantasy narratives involved the children or teacher developing an invented story going beyond what is possible in reality. Characters could be human or perhaps magically non-human; objects might be personified; inexplicable weird and wonderful events might occur. For example, in the Firecage episode one child spontaneously led a fantasy narrative in which plastic crates became the firecage, where children sat within the cage containing the fire, requiring special "acrobat" skills to be allowed to enter the cage (Carl: "It's only for acrobats!"). In Magnet Men, a cluster of magnets were personified into a man and his "mini-me" (Joel: "he needs a mouth…he's got a big nose…this is gonna be…a mini-me"). In the teacher-initiated narrative in Ice Eggs, a magical ice bird, standing next to Sir Francis Drake cried tears which, although described as a dream, appeared as actual ice-eggs in the teacher's garden. He then took them to school.

Everyday narratives were more grounded in what is realistically possible. For example in the Rodney and Rory PT episode, the children were developing a birthday party for their stuffed friends. In the episode, Amy and Bella were getting Rodney into the playhouse to start the party (Amy: "How's he gonna

squeeze through the doorway?"). Here, although Rodney and Rory had been anthropomorphised, the onus was not on creating imaginary scenarios around them, but on having a birthday party for them simulating everyday life, including making hats, presents and a birthday cake; initiated by the children.

Everyday historical narratives appeared fully in only one episode: Vehicles. Although historical narrative was mentioned in the Ice Egg episode (Sir Francis Drake and Buckland Abbey). In the Vehicles episode, the narrative involved constructing working model vehicles to transport models of injured soldiers to hospital. The story sequence was driven by Seacole's life story and the fact that the vehicles needed to in some way represent those used at the time (Andrew picks up the dowling and looks at it: "what's that going to be then?" Billy: "the wheels"). For example, it was not a possibility in this narrative that the vehicles could grow wings and fly over the battlefield. This kind of magical event could have occurred in a fantasy narrative.

Narrative construction
Analysis revealed whether emerging narrative was owned most strongly by individuals, collaborating pairs, small groups, or the communal group (i.e. whole class including teacher). On-going generation and ownership was never just one of these; it was always a combination.

In child-initiated narratives there was always some level of individual ownership by one child, built on by at least one other as they constructed the narrative.   For example, in Magnet Men, Joel was leading the story of the growing Magnet Men (Kit then picks something else out of the container, sits down and smiles at Joel. Joel places the taken object onto the model…Joel takes more objects from the container, placing his body between Kit and the model and starting to arrange the other objects around the circular magnet: "…a mini me"). Joel leads gradually allowing Kit more collaborative involvement. There is no communal ownership of the narrative in this episode. The only child-initiated narrative in the set which arguably has some communal ownership is Rodney and Rory. Here the teacher has initiated the wider story of Rodney and Rory's birthday party, this is communally owned by

the whole class. Amy and Bella's journey with Rodney into the playhouse is what might be called a chapter within the wider communal narrative. Amy begins the narrative individually and draws Bella into co-constructing as they consider how to manoeuvre Rodney into the playhouse for the party.

In the teacher-initiated narratives, communal ownership and construction is, perhaps unsurprisingly, evident in all three episodes. For example, in Vehicles, Andrew and Billy's collaborative narrative around their developing vehicle is located within the wider communal teacher-initiated narrative of Mary Seacole's story. Their collaborative narrative derives directly from this and similar to Rodney and Rory, is a chapter within the wider narrative,

Similarly in the teacher-initiated Ice Egg episode, Carrie, Sarah and Mark's collaborative narrative around the qualities of the egg for their science experiment is constructed within, and derives directly from, the communal narrative of the ice-eggs.

Narrative features

Whatever the overall characteristics (teacher-child initiation and fantasy/everyday/historical nature) or construction (individual/ collaborative/ communal) of the narratives, all the PT episodes analysed possessed a similar set of core narrative features to one degree or another. Resulting from the analytic trail described earlier, five such features were articulated: character/s, plot, sequence of events, significance to children and emotional/aesthetic investment.

Character/s inhabited each narrative and were variously manifested as shown in Table 3. Most often children were themselves as 'characters' or players within the narrative, they took part alongside representational objects and other characters. For example, in Ice Eggs, Carrie, Mark and Sarah interacted as themselves with the ice-egg. The egg was actually a water-filled balloon which had been put in the teacher's freezer and then the balloon peeled away. Yet it became an 'ice-egg' as a result of the storytelling. More than this, within the context of the teacher-initiated fantasy narrative, the egg

became some kind of being for the children. For example: Sarah leans in closely and addressing a possible creature inside says: "Hey, how you doing?" to the egg. Later she waves at it and makes a squeaking noise.   This is perhaps intensified by the framing narrative in which the ice-eggs are made from the tears of an ice bird, mesmerisingly described by the teacher. The narrative also included the character Francis Drake (who had been brought to life through drama previously) and the teacher.

Plot was evident to different extents in each PT episode. The plot was in part the narrative action; the unity of the events within the narrative as a whole. In some cases the plot resides most strongly in the wider narrative, the episodes represent chapters within that wider plot, they do not stand-alone. This was particularly the case in the teacher-initiated narrative episodes, Ice Eggs and Vehicles. In both cases, as discussed above, the children's collaborative narrative derives directly from the teacher-initiated narrative. Nuances of the full plot are held within the wider communally constructed teacher-initiated narrative. Within these episodes, which were selected previously for the strength of children's PT, elements of plot rather than the full narrative scenario are played out.

By contrast, in three of the four child-initiated narratives the plot was in evidence within the episode, making these stand-alone narratives. For example, the children turned the plastic crates into a firecage, climbed into the cage and created entry criteria: only those with acrobatic skills were allowed to enter. In Magnet Men, some elements of plot were present though it was not as fully fledged as in the Firecage. It is possible that a fuller plot might have developed had their time at the magnetic exploration station not been cut short with the teacher's command: "Everything back in the box".

Sequence of events: beginning, middle and end was present to some extent in all episodes regardless of the narrative's characteristics. As a strong example of a stand-alone narrative, Firecage had a clear sequence of events: the beginning was the plastic crates turning into a firecage, the middle saw children climbing into the cage, and the end saw acrobatic skills defining

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entry. The Vehicles episode potentially provides the least evidence of a full beginning, middle and end sequence; the full plot was held in the wider teacher-initiated, communally constructed narrative. What we see in the three minute episode could be said to represent the beginning and middle of the sequence. Andrew and Billy begin with dowling, cardboard circles and blocks, then work on these with scissors, sellotape and glue. Afterwards, having made their vehicle, they test its mobility and sturdiness, prior to constructing the hospital and designating a 'garage' to mend vehicles.

Significance to children was most evident in child-initiated narratives. However it was evident to some degree across all the PT episodes as shown in Table 3. The best example of strong narrative significance for the children was in Firecage. For Carl, who initiates and leads the construction of the narrative, the cage is very significant. For him the cage is for a particular type of person i.e. him and his friends who are acrobats - "it's only for acrobats!" As Craft *et al.,* (2012:56) state:

> Carl's fire cage, its conceptualisation and enactment, and who could be part of it: ("we can only get in here" he repeats, over and over again), was controlled by him, despite attempts by the practitioner to have other children join: "can Neil have one of the sticks please he would like one," and "maybe your friends are acrobats too" when Carl makes this a condition of entry – even contradicting him when he says they are not qualified: "your friends have been to acrobat school". . . and later, "your friends would like to come in". Yet Carl continues to control the narrative until so many children try to squeeze in that cage falls apart – and even after this, the practitioner supports the narrative he has created by suggesting he teach other children his acrobat skills.

The episode shows strong significance for Carl and the other children who take part. The logs and crates have been transformed by them into something else, the logic of which makes complete sense to them and as such is significant for them in a very particular way.

Emotional/aesthetic investment meant there was evidence of children's emotional and/or aesthetic investedness in the activity and the narrative. Emotional investment was easier to evidence; it was affirmed in the children's physical engagement and passionate verbal responses to their narratives being changed or taken over by others. This is exemplified in Carl's utterance "it's only for acrobats!" and Joel and Kit's determination not to destroy their Magnet Men at the close of the activity.

Aesthetic investment meant the children had *felt* responses to their narratives which were not the same as their emotional responses. Like (or for some narratives, e.g. the clayhouses, even as) potential art works, the children's narratives contained aesthetic qualities. The narratives had feelings embodied within them. In experiencing the narrative, the children and other people who experience the narrative receive an experience of the feeling it embodies. For example, in the Magnet Men episode, Joel and Kit (Joel in particular) were making a Magnet Man and his "mini-me". Joel clearly associated with the Man and perhaps saw and felt a particular character or person (possibly even himself) within the Magnet Man and his sidekick. Both boys were clear that the magnets should be arranged in a particular way to represent the Men.

> Joel: "he needs a mouth"…
> Joel takes 2 objects (paper clips?) out of a plastic container and places them on the table at the top of the model (could be seen as model's eyes).
> He moves two magnetic balls to the end of what could be seen as the arms. He moves another part of the model's head, takes his hands away, looks up and laughs out loud.
> Joel: "he's got a big nose"…
> Kit: "He needs three eyeballs?"
> Joel leans in: "actually he needs two, that'll be the sun".

The video and transcription show that the Magnet Men are crude, nonetheless they are simultaneously well-judged, made speedily but with care. Feeling

was inherent within the models with their accompanying sun. Whilst the boys were exploring the magnets they imaginatively created a sunny world containing two characters which had the potential to make those who saw them smile. In this instance, the researchers and readers of this article are the only other people who additionally 'experience' the Magnet Men and these embedded feelings. Joel and Kit did not destroy them at the end of their rotation; they offered them to the next group.   This kind of aesthetic investment was evident in five of the eight episodes. The discussion section considers the challenges and implications inherent in this category's evidence.

What is the role of narrative within possibility thinking?

In considering the role of narrative within PT, analysis focused on looking for relationships between PT features, as analysed previously within episodes, and narrative characteristics, construction and features, as analysed here. Two PT features were highlighted by this analysis as interwoven with narrative. These were imagination and questioning. In various ways, these both played a central part in previous PT analyses and discussions (Chappell *et al.,* 2008; Craft *et al,* 2012 a, b). Table 4 shows relevant elements from Table 1 positioned alongside the relationships between narrative and questioning/imagination.

Table 4. Relevant narrative characteristics, construction and features alongside Possibility Thinking analysis and narrative/possibility thinking relationships

Italics indicates PT features not evident in the episode

Episode (Evident PT features)	Kind of narrative	Individually, collaboratively or communally constructed narrative	Relationship between questioning + narrative	Relatio imagin narrativ
Firecage (QP, QR, AI, SD, Im, D, Inn, P, Imm, RT)	Child-initiated Fantasy	Individual narrative with some collaboration.	Child's lead question provides space for the narrative from the beginning, and ongoing questioning drives the	Childrer imagina imaginir Introduc

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Episode (Evident PT features)	Kind of narrative	Individually, collaboratively or communally constructed narrative	Relationship between questioning + narrative	Relatio imagin narrativ
			development of the narrative	which s the narr
Puppets (QP, QR, AI, SD, Im, D, Inn, P, Imm, RT)	Child-initiated Fantasy	Individual narrative with some collaboration. Does not include teacher's collaborative contribution though.	Child's lead question provides space for and drives the narrative (nearly de-railed by teacher)	Childrer imagina imaginir Introduc which s the narr
Rodney & Rory (QP, QR, AI, SD, Im, D, Inn, P, Imm, RT)	Child-initiated Everyday	Individual and collaborative narrative within episode initiated between children, framed by the communal teacher-child initiated narrative of the birthday party	Teacher's and children's lead question provides space for and drives narrative	Childrer imagina imaginir Identifie elemen the narr
Vehicles (QP, QR, AI, SD, Im, D, Inn, P, Imm, RT)	Teacher initiated Historical	Collaborative narrative within wider communal teacher-initiated narrative	Teacher's lead question provides space for and drives narrative	(Imagin Imagini connect
Ice eggs (QP, QR, AI, SD, Im, D, Inn, P, Imm, RT)	Teacher-initiated Fantasy	Collaborative narrative within wider communal teacher-initiated narrative	Narrative provides space for children's service and follow through questions	Childrer imagina imaginir Extendi offered shaping
Magnet men (QP, QR, AI, SD, Im, D, Inn, P, Imm, RT)	Child-initiated Fantasy	Individual and a little collaborative narrative	Children's follow through question provides space for and drives narrative	Childrer imagina imaginir Introduc which s narrativ
Clayhouses (QP, QR, AI, SD, Im, D, Inn?, P, Imm, RT?)	Teacher-initiated Everyday	Individual narratives within wider communal teacher-initiated narrative	Teacher's lead question provides space for and drives narrative	Childrer imagina imaginir Introduc idea wh

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Episode (Evident PT features)	Kind of narrative	Individually, collaboratively or communally constructed narrative	Relationship between questioning + narrative	Relatio imagin narrativ
				narrativ

Reciprocal relationships between questioning, imagination and narrative

Questioning and imagination shaping narrative

In six of the seven episodes analysed in this study, questioning provided space for narrative development and imagination was woven into the question-responding that ensued from the question-posing. Together these drove the narrative across the episode.

For example in the child-initiated Magnet Men episode, a series of imaginative follow through questions shaped how the narrative around the magnet men was developed. Kit asks whether "he needs three eye-balls?". Joel's question responding and imagination then shape the narrative when he replies "actually he needs two, that'll be the sun". This question has a moderate amount of possibility or space inherent within it. The children use this possibility space, imaginatively responding to their questions, introducing new elements and shaping the narrative; they engage individually and collaboratively to construct it. Arguably, Joel's imagination is closely integrated in the leading question of what to do with the magnets. He has imaginatively responded to the teacher's instruction to explore properties of magnets not only by seeing which ends of magnets attract each other, but also by going beyond the task to create a fantasy narrative around the magnet men in their sunny world. Here PT questioning, responding and imagination shape the narrative's development as part of children's learning.

This kind of narrative-shaping by questioning and imagination is also well exampled in the child-initiated Firecage episode. Here the leading question posed by the children, particularly Carl: "how are we going to make our cage?" provides space for the Firecage narrative to develop and be shaped.

Their ensuing question-responding and imaginative narrative development is evidenced:

> Carl has found some plastic bread crates and stands them on end around the long branch which is on the floor; he then balances a crate over the top of the two on end….Carl says: "'we are making a big cage to keep the fire in"…Sian and Steven start to help Carl build the cage by moving more bread crates....Material gets placed across the top and more and more branches get added to the fire inside.

The leading question here has moderate levels of possibility within it as Carl has already alighted on the crates as material for cage-building. The idea of the fire in the cage is then imaginatively developed as branches get added. The possibility space available to build the firecage and shape the narrative is therefore defined by children's imaginations working with available resources. The children engage in the space provided by the leading question to individually and collaboratively imaginatively shape and construct the narrative.

Narrative shaping questioning and imagination
In one of the seven episodes, the narrative-questioning/imagination relationship was different and the narrative provided space for and inspired the children's questioning and imagination rather than vice-versa: the teacher-initiated Ice Egg episode. Here the narrative of where the ice-eggs had come from provided an inspirational framework within which the children conducted their science experiment. For example Carrie asks: "So what do we have to do for our experiment?" and immediately Sarah replies: "Do we get to keep the thing inside?" (referring to the possible ice bird that the teacher's story indicated might be inside). Carrie then states: "Let's see. Ooh look it's making that" – she points to water pooling in the container. The narrative of the melting ice-egg possibly containing an ice bird inspired the children's imaginative activity around the ice bird and their questioning about their science experiment. It acted as an imaginative inspiration and backdrop for their continued questioning, responding and ensuing learning about the ice egg melting.

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The reciprocal relationships between questioning, imagination and narrative, indicate that child-initiated questioning and imagination shaped narratives, and that adult narrative to a lesser degree shaped children's questions and imagination.

Discussion

This re-examination of the body of work documenting PT in the early and primary years explored the presence, nature and role of narrative in PT and the ways in which any narratives that existed in the published PT episodes had been constructed or co-constructed. It constitutes an important step beyond what had been previously identified as regards PT in the classroom, bringing into focus narrative as a central dimension previously undocumented in this team's PT studies.

It was evident that narratives were at play in seven of the eight published PT episodes selected for re-analysis. The single episode in which narrative was absent was from a mathematics lesson (Craft *et al.*, 2012b). In this episode, the 10-11 year olds working in pairs were asked to solve maths problems on a worksheet. The lack of narrative in this episode raises several questions: was the context as playful and immersive as the other PT contexts examined, was the task more limited/limiting, and to what extent is mathematics as taught in the primary phase able to afford playful spaces for children's learning? A recent study of PT and mathematics undertaken with children of the same age, revealed its evidence in mathematics only in contexts where teacher control was temporarily diminished (Clack, 2011), this suggests that it may not be the domain, but the pedagogy that may hinder creativity. Further work is needed to interrogate the role of narrative and its relationship to PT in such tightly framed learning contexts.

In the seven episodes in which narrative was present, the main defining characteristics were whether the narrative was fantasy, everyday, or historical in nature and whether the narrative was child or teacher-initiated. The

analysis also noted that the narratives were individually, collaboratively or communally constructed and had a common set of narrative features. In acknowledging Rudrum's (2005) critique that the educational literature tends to focus on the purpose of narrative, not its 'defining' features, we turn to these first. The study identified core features: character/s, plot, sequence of events, significance to the children and emotional/aesthetic investment. Across all seven episodes, the presence and manifestation of characters, (often with representational objects), and the significance of the narrative to the children was clear. Though the extent to which the plot and narrative structure/sequence was evident varied. In the child-initiated stand-alone narratives such as Firecage the essence of plot in Gudmundsdottir's (1990) terms was captured through a central unifying idea. In contrast, in the teacher-initiated narrative episodes, the plot resided more strongly in the wider narrative within which the episodes such as Ice Eggs and Vehicles arguably represented chapters. The extent to which the emotional/aesthetic investment was evident also varied; the four fantasy narratives (Firecage, Puppets, Ice Eggs, Magnet Men) and the everyday narrative of Rodney and Rory demonstrated the strongest evidence of both the children's emotional engagement *and* their aesthetic, felt response to the narrative. Whilst the video and transcribed audio material enabled this to be investigated, the affordances of print limit our ability to convey this. In the future, alternative presentations of the interplay between these affective, intuited features of narrative will be needed to enhance understanding of the potentially embodied nature of children's narrative.

Our characterisation of the narratives as fantasy, everyday or everyday/historical in nature is largely in alignment with Engel's (2005) argument that children use narrative play and stories to construct two different kinds of fictional worlds: the 'what is' world of make believe that reflects everyday realities and the 'what if ' world which reflects fantastic alternatives to such reality. Fantasy narratives were evident in four of the PT episodes, whilst three were everyday in nature, and one (Vehicles) was framed by a reality-focused historical narrative and was thus classed as everyday/historical. Engel's (1995, 2005) work, alongside that of Nicolopoulou

(2002) and Paley (1990) shows that for young children play and narrative are often closely intertwined. Engel further asserts that in both play and narrative 'children oscillate between the *what is* and the *what if* domains of experience' (2005:516). Such oscillation is not possible to discern in the brief PT episodes, although in the Ice Eggs episode the learners do move in and out of their 'what if' fantasy narrative as they respond to the task to design an science experiment and make connections to the imagined ice creature inside. It is likely that curriculum requirements and time pressures, particularly with older children, impact upon the playful evocation of such fictional worlds and constrain their creativity.

The narrative characteristic of child and teacher-initiation connect in various ways to narrative construction. In four of the episodes, the individual and collaborative narratives developed within a wider communal teacher-initiated narrative (Rodney and Rory, Vehicles, Ice Eggs, Clayhouses). Though in the Rodney and Rory episode, the communal narrative was initiated by the teacher *and* the children, highlighting the fluidity involved. The over-arching communal narratives provided a framing context in which the children's individual or collaborative chapters in the narrative emerged. These wider narratives appeared to be seamlessly harnessed and extended through play, reflecting the category of adult-initiated and child-extended play identified by Siraj-Blatchford *et al.,* (2002) in their early years work. The current study adds to this research with examples drawn from across both early *and* primary years. It indicates that in the context of subject study in the later primary years, adult-initiated communal narratives may be extended through children's individual and collaborative narrative play. However this may remain unrecognised or unnoticed in the classroom.

None of the child-initiated narratives, whilst seen as stand-alone narratives (Firecage, Puppets and Magnet Men), were solely constructed by individuals, all involved some collaboration. The distinctions drawn between individual, collaborative and communal creativity, originally articulated by Chappell (2008b) on the basis of empirical studies of dance, have been applied here to narrative construction and co-construction. They link to other studies which

reveal the contribution of peer collaboration as a context for creativity: in adult artistic partnerships (John-Steiner, 2000), in primary phase writing (Vass, 2007) and in children's multi-media stories (Rojas-Drummond, Albarrán and Littleton, 2008). Whilst the interconnectedness of these three kinds of creativity was noted in Craft *et al.,* (2012a), in which adults and children played together, it had not been examined in the earlier PT studies. However in this new analysis of the previous PT episodes, evidence was found of communal, individual and collaborative creativity through the process of narrative construction. The new analysis underscores the fluidity involved; at different moments across the episodes the narratives were constructed and co-constructed in unique and emergent combinations by children and teachers. Reminiscent of Boden's (2001) conception of combinatorial creativity, this work has implications for practitioners who wish to foster creativity in the classroom.

In terms of the role of narrative in PT, Figure 2 shows how new analysis extends the previous studies in this area: narrative is seen to be working in complex combination with the two core PT features of questioning and imagination. In six of the seven episodes featuring narratives, (fuelled by self-determination, play and immersion), question-posing played a key role in providing a 'possibility space' for the narrative to develop. Imagination was woven into the question-responding that ensued from the question-posing, so together these two PT features shaped and drove the narratives across these episodes. Thus questioning and imagination moulded the 'what is' and 'what if' worlds (Engel, 2005) individually and collaboratively constructed by the children. The lead question, whether the teachers (Rodney and Rory, Vehicles, Clayhouses) or the children's (Firecage, Puppets) appeared to open up this possibility space for further questioning and imagination which shaped the narrative throughout. In the Magnet Men episode a series of imaginative follow-through questions served to shape and drive the development of the narrative. In this way the new analysis strengthens the claim, based on earlier research that question-posing and responding are at the heart of PT (Chappell *et al.,* 2008), and to some extent accords with the assertion that 'carefully framed leading questions provide the overarching intent for a

classroom sequence of possibility thinking' (Chappell, *et al.,* 2008:283). Additionally it reveals that leading questions create a possibility space in which children's imaginations and on-going questioning contribute to the development of what is now recognised as a *narratively framed* 'sequence' of PT.

Figure 2: The role of narrative in possibility thinking

In the episode of the Ice Eggs however, the relationship between questioning, imagination and narrative was reversed, in that the narrative provided the possibility space for the children's questioning and imaginative engagement. The fictional world created by the teacher's story opened up multiple possibilities for the children and drove their questioning and imagination as they explored the frozen eggs. The dynamic interplay between questioning, imagination and narrative in and through such possibility spaces suggests that their conception and affordances deserve further exploration. Spaces for imagination and co-creation appear to be opened up by questioning or inspired by narratives and in turn triggered the deployment of further questioning, imagination and narrative. The extent to which these spaces are constrained by the degree of possibility inherent in the questions posed needs closer examination, as does the relationship of these spaces with the available resources.

Materials provided by teachers played a part in all the narratives constructed. In Firecage and Puppets for instance ambiguous materials were made available as stimulus provocations (Bancroft *et al.,* 2008), whereas Rodney and Rory were regular classroom playmates, positioned on this occasion as part of a teacher-initiated narrative about their birthdays. In the Magnet Men episode, magnets were provided in order to explore their properties, however the boys went beyond this, asking imaginative follow-through questions and engaging in symbolic pretend play to create a 'what if' world. In the Ice Eggs episode, though the activity had a scientific focus, the eggs were set within the teacher's fictional narrative which inspired the children's imaginative engagement and questioning. These examples raise the issue of professional

intentions and expectations, particularly with older learners in cross-curricular contexts, and the extent to which teachers recognise and/or seek to foster children's narrative engagement and for what purpose. Whilst the role of narrative in early learning is widely recognised; since as Moffett (1968:121) argues at this age 'narrative must do for all', in the later primary years, its planned production within the curriculum is perhaps more confined. It may be limited to writing framed as an individual activity, or to drama and storytelling framed within functionalist drives towards raising literacy attainment (Cremin and Maybin, in press). Yet as the PT episodes indicate, in playful contexts, the presence of narrative pervades.

Conclusion

This research represents a breakthrough in the study of possibility thinking, revealing the foundational nature of narrative in PT as present in published episodes from the empirical studies 2007-2012. Previously narrative had remained hidden within playful immersive contexts in which children's PT was fostered. The new analysis supplements the earlier focus on PT characteristics and pedagogy (Burnard *et al.*, 2006; Cremin *et al.,* 2006), and substantially expands understanding of the enabling context by foregrounding the dynamic of narrative in relation to questioning and imagination involved in play, layered between children and adults.

It reveals that narrative play is more central to the aim of fostering PT and creativity in classrooms than had been formerly realised. It shows that PT is framed by narrative contexts that involve both pretend play and fictional world creation (Engel, 2005). The re-analysis demonstrates narratives are shaped and driven by two of the previously evidenced characteristics of possibility thinking: questioning and imagination. There is also evidence of the reverse, with narrative providing the possibility space that inspired children's questions and imagination, thus acting to drive and sustain their PT. Furthermore, it identifies the core features of the fantasy, everyday and everyday/historical narratives: character/s, plot, sequence of events, significance to the children and emotional/aesthetic investment. And finally, it reveals that narratives are

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both teacher and child-initiated and that they are individually, collaboratively and communally constructed in a highly fluid and interconnected manner. Accordingly, the theoretical framework of PT has been altered to reflect the vital role of the playful narrative context working in complex combination with questioning and imagination.

In terms of future work, more nuanced understandings of the distinctive contributions of play and narrative and their relationship in PT are needed. In order to achieve this, forthcoming research designs will need to encompass analyses of longer extracts of children's immersive playful engagement across and within learning spaces and timetabled curriculum sessions. This may help to reveal the extent to which older children move in and out of fictional world creation within the curriculum and the ways in which teachers use narratives, consciously or otherwise, to foster creativity. Additionally, empirical work teasing out the embodied nature of narrative and the emotional/aesthetic aspects through combined digital film capture and experiential accounts of the PT process would be advantageous. If the constraints and affordances of possibility spaces can be better understood, then the profession will be in a better position to harness these spaces redolent with questioning, imagination and narrative in order to foster children's creativity.

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