Using physical objects as a portal to reveal academic subject identity and thought

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Abstract

We are lecturers who help students studying subjects that use word-based writing, non-word based writing such as Mathematics, and non-text based language such as visual semiotics. To access examples of such language with subject lecturers we have found traditional interviews or focus groups ineffective, and realised that in these, although lecturers could talk about key psychological elements of the language, they had no focus to produce any examples of it. However, we suspected that providing a physical object to describe and discuss would create a context for lecturers to produce the language. Thus, we gave a brightly coloured teapot to Nursing, Psychology, Design, and Engineering lecturers to describe and evaluate in their subjects. This gave us almost instantaneous access to the subject context. For example, Nursing lecturers described and evaluated the teapot for hygiene and patient safety, Engineering lecturers did so for material properties and calculations required. Unexpectedly, many lecturers related how an identity underpinned their language. Thus, the teapot operated as a portal to reveal academic subject identity and thought. We relate how this has helped us in our teaching and suggest ways others can use physical objects in qualitative research to access and research identity and thought.

Keywords: Identity, Interviews, Language, Physical objects, Portal, Thought

Introduction

Increasingly in qualitative research, physical objects are used with participants. They have been used in sensory engagement (Cox & Guillemin, 2018), to reveal thoughts about material culture (Woodward, 2001, 2016), and to show interaction with craft objects in museums (Davenport & Thompson, 2018). They have also been used to explore perceptions of identity as presented by individuals in a specific subject area (Simpson, 2018). Their potential as a material probe when chosen by participants has also been advocated to trigger responses and memories (De Leon & Cohn, 2005). In this article we relate how we used a specific object, a very gaudy and brightly coloured teapot (see Figure 1 below), as a material probe, in an

attempt to access examples of the language used in some of the different subject areas we help students with in workshops and tutorials. We took this teapot to Nursing, Design, Psychology and Engineering lecturers and asked them how they would describe and evaluate it from their subject perspective. Our reason for wanting to access such language was to see and understand its use in the specific subject contexts. This was both for our own knowledge and also so we were better informed to help students.

In our roles as lecturers, we work with students from a range of subjects including Tourism, Eco-Tourism, Semiotics, Advertising, Materials Engineering, Midwifery, Interactive Media Design, and Psychology. To produce their assignments, students are required to communicate academic ideas through the use of word-based written text as is commonly known as 'academic writing'. Yet, our previous research has shown us that there is much more to this 'written text' than its surface appearance, and that there are many other forms of language and expression that such written text is required to work with and through. Firstly, on the surface, the written text may appear familiar, for example in the use of words such as 'empathy' or 'safety', but underneath the surface of these words the meaning could be very different. With 'empathy' a Designer may see this as resolution with a client, whereas a Nurse sees this as caring for a patient (Pilcher & Richards, 2016). Further, an Engineering approach to 'Safety' would focus more on the material properties of structures than on a patient, as a Nursing approach would (Pilcher & Richards, 2018). Also, words such as 'report' and 'essay' are appropriated uniquely according to different subjects, thereby rendering any generic definitions of them inadequate (Richards & Pilcher, 2019). Secondly, other forms of written language could be required, such as mathematical language, which the words often wrap around or work with (Richards & Pilcher, 2016), and visual language also may work with the written word used (Richards & Pilcher, 2018). Crucially, we have found that lecturers are unable to produce examples of the words and phrases used in their subjects if they are asked about them outside their subject contexts. We know this because in one project we stubbornly tried to elicit examples of language used in the subjects throughout five focus groups. In these focus groups, we asked lecturers to provide us with examples of words and phrases that would illustrate the important elements of their subjects. After gathering a total of approximately 80,000 words of data, we were only able to elicit a sum total of 4 examples of words that students would use (Pilcher & Richards, 2016). In addition, our previous research showed us lecturers use words such as 'discuss' or 'analyse' in unique and very different ways in their subject areas (Richards & Pilcher, 2014), so it would not be possible to know what they meant unless we were in the subject context.

It was these experiences and our failure to gather examples of the language we wanted to see, that led us to experiment using a physical object so as to provide a context and focus for lecturers to produce examples of the language and thought required of students in their subjects. We found that they did indeed do this beyond our expectations, and that in

addition, to our surprise, we found that they also talked at some length about their identity in the context of the subject. By identity we mean what underpinning values and elements they approached the teapot with in their subject area. Having learned from this ourselves, we are now better able to suggest to our students the kinds of language and thought they are required to produce and demonstrate in their assignments. We are also able to use physical objects with our students to demonstrate the identity of the different subjects. In this article, we want to both communicate the effectiveness of this approach and its value, and also suggest ways that others could use physical objects similarly in qualitative research.

The remainder of our article is structured as follows. We first review some of the ways others have used physical objects in qualitative research. Then, we explain how we moved towards using a physical object in terms of the development of our understanding of language and how to access examples of it. Next, we explain and describe our rationale for using the type of qualitative inquiry we chose, our reasons for using the teapot, and also give some details about our participants. Then, we describe the procedure and steps we took when using the teapot in interviews. Following this we present the results of our analysis in three sections entitled: Contextualising the teapot to their subjects; Describing and Evaluating the teapot in the subject and; Relating language to subject identity. Finally, we discuss the significance of these findings, their limitations, issues of generalizability, and how others could use the procedure. We also suggest ways others could apply the process, either as a standalone approach, or as part of a broader data collection.

Physical Objects in Qualitative Research

Physical objects have been used in qualitative research in a variety of ways. Woodward (2016, p.359) notes that the "material properties of things are central to understanding the sensual, tactile, material and embodied ways in which social lives are lived and experienced." Here, objects build upon a quite lengthy history of their use to illustrate aesthetic tastes and approaches to material culture (e.g. Woodward, 2001) and to how people understand and engage with material culture, for example in the sense of textiles and clothing (Woodward, 2016). In addition, the way in which people interact with craft objects has been studied, and how this in turn relates to their understandings of these objects (Davenport & Thompson, 2018). Specifically, Davenport and Thompson analysed the exact properties of the objects that participants spoke about and how they manipulated the objects. Furthermore, they analysed how the individuals involved in their study interacted with each other, given they were in pairs.

Others have explored the how sensorial engagement with material objects can generate meaning, and shown this approach to have immense potential (Cox & Guillemin, 2018). Cox and Guillemin (2018, p.2755) found that the use of material objects opened up "a different kind of engagement, a sensory engagement that can add richness and complexity to the kinds of research knowledge that can be generated." Here, the focus has been on the role of senses such as touch and smell in interaction with the object and the rich data generated from this interaction.

Identity has also been explored in the specific context of individuals working in STEM (Science, Technology, Engineering and Mathematics) careers (Simpson, 2018). Here, Simpson showed how individuals perceived their own identity as individuals in STEM by choosing and arranging different sized rings to represent the salience of one element of STEM compared to

another, and how these rings interrelated (or didn't) with each other to show "one's identity in STEM through a kaleidoscopic view of identity" (Simpson, 2018, p. 2983).

In this article, our use of the teapot in the project described here builds on the above related successful use of physical objects in qualitative research. Our aspiration with using the teapot was in the spirit of the use of physical objects in research that others have commented on. For example, that creative material methods can reveal new insights (Woodward, 2016) and that only through the process of doing the research would we be able to discover its potential.

The development of our approaches to accessing language.

For many, language is defined as being written text which can be accessed and illuminated through methods such as compiling texts into a corpus and looking for frequencies of particular items (McEnery & Hardie, 2012). Alternatively, methods such as genre analysis look at written text or transcripts of spoken texts and identify 'moves' made by writers (Swales, 1990). It is claimed that written word texts contain certain subject conventions that can be revealed through the study and analysis of written word texts produced for a specific subject (Hyland, 2002). Implicitly, all such methods are founded on the conviction that written word texts can be taken away and studied anywhere. All such approaches are based on a linguistic view of language that sees language both as being concrete and removable from context for analysis. To cite the father, or "founder of modern linguistics" (Harris, 2013: xiv): "language... is something that we can study separately... language, as defined, is homogenous....language is concrete (De Saussure, 1959, p.76).

Such a view of language has, for many years, been labelled as being Abstract Objectivist (e.g. Voloshinov, 1929; Richards & Pilcher, 2018) and as such, not representative of the true nature of language. According to Voloshinov, a more accurate way to view language is to see it as an Individual Subjectivist entity. Here, in this view of language, language is seen as being creative, artistic, and linked very much to the individual using it. Importantly, key to language are aspects that cannot be captured in the written form such as intonation (Voloshinov, in Morris, 1974). What is more, for Voloshinov (1929), there is a fundamentally important role in this view of language played by the specific context of language use. Others underline the importance of context ¹ (Bakhtin, 1981, 1986; Glantzberg, 2002), and also how the meanings of words are understood through dialogue (Bakhtin, 1986) rather than being neutral and removed from context such as in a dictionary definition (Bakhtin, 1986). As researchers, we have found 'empathy' and 'safety' may be interpreted according to different subject contexts, and now adhere to the view that language is very much something which is Individual and Subjectivist. We have on a number of occasions argued this, and presented what we hope to be evidence for this (e.g. Pilcher & Richards 2016, 2018; Richards & Pilcher 2016, 2018, 2019). Further, as we noted above, when we conducted five focus groups with subject lecturers in Nursing, Design, Computing, and Business, we were

¹Interestingly, and illustrative of the different underpinning meanings of words, 'context' is understood differently in different subjects. For example, for Voloshinov and Bakhtin, taking language away from its context means it cannot be seen. However, in corpus linguistics for example, taking the language away for analysis is understood to mean its use in 'context' can be seen (McEnery, 2016).

unable to successfully elicit from them hardly any examples of the language required by students in their subjects. We found the lecturers would agree with our conclusions that their subjects had key underpinning elements such as empathy for Nursing, or profit generating for Business, but to actually elicit examples of language in practical application from them we did not find to be possible.

Indeed, as alluded to above, we also knew that we could not access the underlying meanings of the words through written word texts as these would have been written from people in a context other than our own. Therefore, we knew that their understandings of the words may well differ from our own but, from the written word text alone, we would be unable to access them. What is more, written word text alone would not reveal to us the key role of language elements such as mathematical or visual aspects. Notably, Saussure created the boundaries of his study of language for the field of linguistics to the phonetic system of word based writing in use at the time, with his "survey... restricted to the phonetic system of writing... of which the prototype is the Greek alphabet" (De Saussure, 1959, p.30). Here then, language is seen as a system of written word forms based on the Greek alphabet. Yet, seeing and understanding language as being this would ignore any mathematical language or visual language required by the students. Thus, in summary, the quandary we were faced with was twofold: firstly, that an analysis of written word text could be redundant for us if we were unable to operate in the context of its use, or to see it from the perspective of the users, and secondly; it would not give us access to the importance of the role of written based language such as mathematics, or non-written based visual language.

We need to know about this language as we are lecturers who have a specific role of helping students in a range of different subject disciplines by making suggestions on their assignments. By helping students produce assignments we mean to better inform the suggestions we give to students in our roles as lecturers who work with students in one to one sessions and in workshops where students bring work to us asking for our opinions and ideas on them. To do this, our suggestions are made from a perspective of being outside the subject they are studying. Yet, in order for us to feel some degree of confidence in the suggestions we give, we need to learn about how the language is used in their subjects, by their subject lecturers. We also have a remit in our job roles to conduct research, and so we have done this into language and in helping us to understand how it works when used by different lecturers in different subjects. As noted above, in the past we have used interviews and focus groups with lecturers to try and identify examples the language they use, but have found these ways to be ineffective, although they were adequate to reveal how different the understandings were. We now describe below how we arrived at the conclusion that we may be able to create a context and focus for the production of examples of this language in use by giving lecturers a physical object to describe and evaluate from their subject perspectives.

Methods: How the Physical Object was used in this study

Type of Qualitative Inquiry Used

The type of qualitative inquiry used here is the use of a physical object in the form of a brightly coloured teapot to explore the language practically applied through the context created. We believed this would work both for theoretical reasons which we outline here and for practical reasons which we outline in the next section. Theoretically, we understood from past failures to access language described above, that we needed to create something akin to what Wittgenstein called a 'language game' (Wittgenstein, 1953) to access the different

understandings and uses of the language. We felt we would then be able to learn from seeing this language as it was practically applied, and to convey what we learned to students. For example, in Wittgenstein's builder's game (Wittgenstein, 1953, PI, 2), the assistant and the builder understand the word 'block', 'pillar', 'slab' in a unique way, which we would not necessarily understand unless we were familiar with the builder's game (ibid). For Wittgenstein (1953, PI, 23), the purpose of the term 'language game' is meant to identify how language operates as part of an activity. As Blair (2006) notes, for Wittgenstein, key to this activity is the context and practices of language.

Indeed, Wittgenstein observes that with words, "what confuses us is the uniform appearance of words when we hear them spoken or meet them in script and print. For their application² is not presented to us so clearly" (Wittgenstein, 1953, PI, 11). For Wittgenstein, in order to study language, we should start from activities rather than words (Wittgenstein, 1972). Furthermore, the language itself contains the thinking rather than the words themselves (Wittgenstein, 1953, PI, 329). This is similar to Vygotsky's noting (1962) that words represent such a close combination of thinking and language that it is hard to identify whether they are language or thought.

Thus, to access the language we anticipated we would need to create the context or activity for its use, rather than ask for examples of the language out of this context. This we did through the use of the teapot as a material probe or portal to explore the language.

Rationale for the election of the brightly coloured teapot and identification of participants

The particular teapot we used (see Figure 1 below) was chosen based on a previous positive experience of seeing the language required in a subject discipline emerge through its use. Here, this was through one of us using the exact same teapot in a class with Design students; when asked to critically evaluate the teapot, all students and lecturers immediately stood up, passed the teapot to one another and began to describe and evaluate it until they were stopped. Example comments focused on Design features, such as it being from the art and craft movement, or on Designers, such as Alessi. Thus, the teapot created a specific subject context, it facilitated a practical activity whereby the subject-discipline language was used and it allowed for thinking akin to that in a simulation (cf. Gordon, 1992) using the subject-discipline language to operate. Based on this positive experience we both suspected that the teapot may well be able to help us understand the language in other subject disciplines, and function as an approach to widen and show how "language dramatically extends the possibility-space for interaction" (Tylén et al, 2010, p.3).

In terms of how we selected participants, we <u>chose to interview</u> lecturers in some of the subject-disciplines we help students in: Engineering (n = 6), Design (n = 5), Nursing (n = 5), and Psychology (n = 6). <u>One of us interviewed Engineering and Design lecturers, and the other interviewed the Nursing and Psychology lecturers. The reason we chose lecturers (as opposed to, for example, students) was because these were people delivering and highly knowledgeable about the subjects we ourselves helped students with. We also chose lecturers in very different subjects, with the hope that these differences would reveal themselves in how the teapot was described and evaluated. Ethical approval was gained in advance from the relevant university schools.</u>

We note here that many of the participants in the subjects of Engineering, Design and Nursing were known to us the researchers in our roles of helping their students over a number

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² [italics in original]

of years. In Psychology as well we knew some participants. On the one hand this could be argued to create bias, but given the exploratory nature of the method and approach we felt it would work most effectively if trust had previously been established between us and the participants and they felt confident that they were not being asked to do something too unusual. As one participant responded to one of the reflexive questions at the end of the interview: "[I – Were you relaxed?] P – yeah... because I'm doing it with you."



Figure 1: Teapot

Data generation and collection

Our approach to data generation and collection was through loosely structured interviews. To generate the data we took this teapot with us in a box, explained that we wanted lecturers to look at the object and 'describe' and 'evaluate' it from their own subject perspective, and then 'revealed' the teapot and placed it close to them. We then asked no further questions but allowed pauses to take place and the ensuing conversations to develop individually in each case. On occasion we would also say that we had no idea what we expected would happen, and emphasised that if indeed nothing at all happened that this would be no problem. Almost all participants however, to our fascination, immediately started to talk about the teapot. When asked about what they thought of our method and approach, most were highly positive. One lecturer commented that they felt the approach innovative and also relevant to help with students' assessments: "I think that (pause) [laughs] is a really innovative way to do research... I've never participated in anything like this... which is great... and I really really enjoy it... I also like... what you are trying to do and see the relevance of all this for assessment for our students." In terms of how the data was collected, we recorded the interviews using a voice recorder and when necessary made notes of where participants did things with the teapot such as look inside it or look underneath it or tap it. By data in our

case here we understand this to be the written transcripts from the interviews that was known to us the researchers in its context of use, and also any notes we made in regard to it.

Analysis of the data

In terms of analysing the data, we transcribed the interviews <u>each of us had done</u> (on average 20 minutes in length) ourselves (Bird, 2005) to start the analysis. This was both for reasons of ethics and also, we argue, for rigour and validity, as the participants were fully aware that the only people who would hear the interviews and transcribe them would be us the researchers.

Our approach to analysing the transcribed data was similar to Braun and Clarke's (2006) thematic analysis and used a combination of 'top down' deductive type analysis to look for themes we assumed would arise and also 'bottom up' inductive type analysis to look for emerging themes. We analysed the data together in a room where we could project the computer screen and both see it at the same time. We coded the data according to whether it concerned identity, evaluation of the teapot, or whether it related to participants familiarising themselves with the teapot, then we subjectively selected examples of data that clearly illustrated these areas. We did not use CAQDAS or software such as Nvivvo as we wanted to have the flexibility to completely change emerging themes and to move data around freely. For example, the theme of identity was not one we had anticipated and emerged only through continual reading and rereading of the data. We recognise that this would have been possible with CAQDAS software but in this case we worked effectively through continual joint reading of the data on a projected screen.

Organization of the Results

The interviews tended to unfold in a similar way. First, participants generally began by contextualising the teapot in their subject area, often physically handling it (e.g., pick it up, turn it around, feel it and examine it). What we understand by the process of 'contextualising' is that lecturers would first look at the teapot, react by saying something about it (often an observational comment on whether they liked it or not), and then start to consider it (either through description or evaluation) from their subject perspective. Secondly, once this process of 'contextualising' had functioned in a way to 'orientate' the teapot within their subject, they would then undertake the practical activity of describing and evaluating the teapot. Through

this second activity they would allow us to see examples of the language as it was used in the subject, and how they would expect students to use language in their subjects. Thirdly, and finally, there would often be a discussion of how they would, from their perspective, naturally be thinking about the teapot in a particular way, or identity, and this identity contained underpinning values and core elements that informed how they used language. We now present these results in a similar chronological way under the headings of: Contextualising the teapot to their subjects; Describing and Evaluating the teapot in the subject and; Relating language to subject identity.

Results

Contextualising the teapot to their subjects

Commonly, to contextualise the teapot and orientate it into their subject, participants picked it up, handled it, started to talk about it observationally, and then started to describe or evaluate it from their subject perspective. For example, one of the Nursing lecturers started handling the teapot, saying it had a, "very quirky shape, very attractive to the eye, beautiful colours, lovely knobbly bits, a really interesting lid that makes you just want to pick it up, very tactile, so I'd definitely want to pick it up." This led into evaluation of the teapot from a Child Nursing perspective:

particularly from a child perspective what's not good about it... the safety aspect is number one... the lid could be one thing that falls off, the handle isn't safe... the spout looks too big as if there's hot water going to come out... the spout looks very grabbable... this handle... all of those are highly attractive given a small child's age and level of understanding.

Here, the lecturer used the teapot to quickly contextualise how Nurses would evaluate and describe the object.

In Psychology, one lecturer initially handled the teapot saying, "Nice, nice [handles teapot] it's warm as well." This then lead into evaluation in a Psychology context, with considerations of how it would make people feel:

so it's got emotional connotations as well for example it's warm, maybe it gives the idea of warmth because tea is usually warm you know there is a set of other things... maybe it reminds you of when you had tea with your Mum and Dad so maybe it reminds you of your Grandma that always made you tea, or there would be that as well involved, so an emotional component... but you know, there is also the other side maybe, maybe actually they're very negative because you lived in a household that was very violent and everything, the boiler[sic. kettle] was going, it you know, it brings about an argument.

Here again the language used contextualised the teapot to Psychology.

In Design, the language used related to visual appeal and to function. For example, when handling the teapot, one lecturer described it as playful, before moving to its situation in particular Design schools:

I would say it was playful, I would say it had [opens lid, handles teapot and looks inside] I can see there is a degree of functionality about it, there are perforations in there... but it is interesting and it has a level of finish which is skilful, the colours are applied with some skill and care, there is a variety of form and shape... it sort of echoes... something art deco like about it for me and also something quite post-modern and... from the Memphis style... Eltore Sottsass, he was the Italian Designer, but that would probably be more angular. It is the polkadot patterning and the colours that give me that sort of feel.

In Engineering, when handling the teapot, one lecturer immediately used language whereby the context was usability and manufacturing:

From an Engineering point of view I suppose my immediate reaction is not to look at it from Engineering, but from a user point of view. Clearly the handle is difficult to use. It is usable, but it's not ideal. Actually, as I do pick it up I begin to see that is perhaps more usable than I thought... It's kind of signed on the bottom so one imagines some form of craft manufacture. [Looking inside teapot] looking inside here I see the holes between the body and the spout, it's sufficiently crudely done that is clearly done by hand and therefore not intended for volume manufacture.

We found that it was the physical presence and handling of the teapot that was critical to this contextualisation stage. We found lecturers used language to almost orientate their view of the object. Once this orientation had been completed, this then afforded access (both for the lecturers and for ourselves) to describing and evaluating the teapot within their subject disciplines. Here then, the teapot operated as a portal through which cognitive processes in the subject could be accessed and practical application of the language seen.

Describing and evaluating the teapot in the subject

For Nursing lecturers, hygiene and safety were integral to description and evaluation. In terms of hygiene, one lecturer was worried about the level of cleanliness of the teapot, saying they were "a bit concerned because... it's very dusty so... we'd want it cleaned up a bit before we're using it." Regarding safety, another lecturer felt the teapot may be quite dangerous, saying, "I'm not quite sure about the handle... it's not really very safe", and another commented that for children, "it'd be too heavy for them to lift as well and it might be if they dropped it and broke it, then it would probably be quite a sort of health and safety thing." How it could, or could not, be used in a Nursing context, was often also integral to the evaluation. One lecturer commented on how it could be used in Paediatric Nursing or in Nursing with older patients, for example, "we could use it in play with the children or in simulating tea party whatever with the elderly." As another lecturer commented, in Nursing for the elderly, this could be very much in the context of bringing back memories, or preparing for life back outside a care home. As one lecturer said:

It's looking at relating it back to their previous lives, it's looking at what this could add to their time in hospital... they might be in a care home or they might be in a respite home, it

could be something that they could utilise in the OT[Occupational Therapy] kitchen to practice making tea.

In a Learning Disability Nursing context, the care involved with actually making a similar teapot itself could be beneficial to stimulating engagement. As one lecturer said:

It would engage somebody with learning disabilities... physical... tactile stuff to do, gives something to have a conversation... it can be a social thing it can be a reassuring thing... you can comfort someone over a cup of tea you can, construct relationships... comradeship, think it could be any teapot it... is just a conduit to enable that to happen.

In a Midwifery context, one lecturer felt that on the general birthing ward this teapot would be too small, but that in the birthing unit, for an individual patient, it might be ideal. This very much reflected the idea that was often mentioned about the need for Nursing to be centred on individual patient care, in that it was continually, "working on the understanding that compassion is very different for different people." Here then, the practical activity of using language in this way clearly allowed us to see examples of the language of different types of Nursing. This gave us a unique insight into the expectations of lecturers regarding the work of students completing assessments in this subject-discipline and sub-disciplines.

In Psychology, description and evaluation was underpinned by considering people's motivations and reactions to the teapot, either those of people who had made the teapot, or of others. For example, from an autism perspective, the teapot could be highly attractive: "I think from my experience in autism, children would be attracted to it because of its colours... it's unusual... it looks like it could have a game-like or a cartoon resemblance." Yet, the teapot could also be very alienating as well, as,

the handle here is not very functional so... somebody'll probably burn themselves if they try to pour it from here, so that's another thing when we talk about autism, if they will get burned for example, that will be enough for them to forget about all the positive connotations and say I never touch this pot again I hate this pot.

From a Social Psychology perspective, the evaluation may consider how the teapot could alter the outcome of a business meeting:

How does that impact on decision making for example... what would this object do in terms of the outcome of the business meeting, would it have an effect in the room, would it have no effect?... and next door we have the same meeting going on without the pot.

In more therapy-focused Psychology, evaluation was very much linked to the person who made the teapot: "I... can't get past the person it's just so screaming for expression attention that I cannot get past that, and the colour contrast and all that it just stands out." Yet, any evaluation here would also involve considering the possible bias from the evaluator: "Or am I just putting on and off... my own projections.... my own beliefs and histories and stuff that I put on this simple object?" Another therapy-focused lecturer noted how evaluation was

focused on theories, and, notably, how theory was connected with viewpoint. Then, in turn how such a viewpoint, or context, was critically important:

Theory's a viewpoint OK, so for a period of time you just, you wear this viewpoint, you adjust your lenses... and you look into the object through your lenses only through a perspective, context, everything makes sense through context, you need to keep context and the theory provides the context.

Such changing of viewpoint and theory was critical to the success of therapy and,

one of the things that we're doing in therapy exactly...[is] to help someone... consider different options change perspectives give them a different kind of perspective and that helps them process the information or accept the information in a different kind of way.

This lecturer underlined that, "everything exists within context, nothing exists outwith context and we define what the context is and we change the viewpoint according to the context." Here again, the practical activity of using language in this way clearly allowed us to see examples of the language in different types of Psychology. This again gave us a unique insight into the expectations of lecturers regarding the work of students completing assessments in this subject-discipline and sub-disciplines.

For Design lecturers, description and evaluation of the teapot was highly visual, and often linked with decisions regarding why the teapot had been designed in a particular way. One lecturer described the teapot in line with the possible Design school it was from, and justified this through the use of colours on the teapot. This lecturer said the teapot was:

Maybe... post-modern because the Memphis group for example use very bright colours. As opposed to what had been before which was very minimalistic. It sort of smacks of the Memphis group with its very colours but because it's a handcrafted object, because it doesn't have a lot of quality I think is just been somebody's personal choice to use these colours.

This lecturer said they would evaluate the teapot semiotically:

I would probably get the students to do some semiotic analysis of that. What do the colours mean to them? What do they think the colours mean contextually? What does the form mean? The way that is handmade, shiny, unpick it semiotically.... When exactly was [it] made and then contextualise that historically with what else was going on in society or where this would fit in or not fit in.

Such research, "could be...ethnographic research around it. You could put it in a place and observe people interacting with that." For Product Design lecturers, the focus could be on the process of designing and producing the teapot:

I would be asking them to critically reflect on the process of making the teapot... and so that what they end up with is in knowing for themselves about the process of making... they might sketch they might look at other teapots, they might try to pour with them, try to critically evaluate and figure out what works and what doesn't.

The underpinning visual aspect rather than written text was often key:

We would probably encourage them to do the least amount of written work that they could do. We would be looking for sketchbooks that show the kind of scrapbook stuff – cut out and put in... rather than an essay or a bunch of written work with the physical things that they hand in... because that is how Designers present their work.

It could even be the case that the visual media of film would be used for evaluation here, and that:

Probably the last thing I would do with the type [of] students that I've got is initially to do a piece of critical writing... If I was to ask a cohort of Chinese students, English students and Lithuanian say to talk about this they would be much more empowered and much more enriched through showing a thirty second film than writing on it.

Nevertheless, despite the importance of the visual, one lecturer noted how writing remained important, and that, "with Designers we have to be careful that we don't start wearing the visual learners thing overly much. The writing thing is fantastic and I love to be able to write."

In Engineering, description and evaluation was linked to the materials used, their nature and properties, with mathematical elements, and with simplicity. In terms of the materials used, there was often an emphasis on the properties of them:

It's got the right thermal properties, it's a porous ceramic, probably manufactured by throwing... as an Engineer I would imagine, probably because of its porous structure and it's made of clay, it's been fired but it would be very brittle if you dropped it. The spout would probably break and wee ball on the top would probably fall off.

This could be due to its porous nature:

This [picks up teapot]... that's porous because it's very difficult to get a solid ceramic and that's why that's a commodity ceramic. Whereas Engineering ceramic would be less porous but then you could utilise the use of porous. For gas flow and surface area increase... if I'm trying to get them to assess something critically they have to have the knowledge to use that and then try and get them to use their thoughts. So is not just knowledge, it is their opinion.

Another lecturer described and evaluated the Engineering related aspects of the materials through describing how they would analyse them:

I could look at ductility and brittleness of the ceramic... we would look at heat transfer, fluid flow, we could look at material properties. We would perhaps in year four look to a certain extent at mass transfer. You've got a hot fluid sitting in the top of the spout it's a very small surface area but you would look at evaporation from that hot fluid. If you took the lid off as well you would be increasing the local relative humidity.

Evaluation in Engineering was also often focused on simplicity and functionality:

In Engineering terms, it's overcomplicated for the use of what it needs to be. There is a lot of finery and additional... I mean look at the lid here, there's this spring effect going around the lid which is purely decorative, the handle is overly complex for what it needs to be. The shape of the spout is like a finger and it seems unusual. I thought that would have been smooth from Engineering terms.

When safety was mentioned it was to do with whether the object itself would remain safe for its purpose: "I would expect them to evaluate [this] teapot and say right it's got to have tea in it. It's going to be 100°C, you might add a bit onto that for safety, and then they would have to reference the fact that the water is going to be that hot." The teapot could even be evaluated mathematically, through describing it using shapes and calculus:

I can in fact describe the teapot mathematically... purely mathematical... I suppose you would, you could describe it geometrically. You can have the set of shapes that make up the teapot I would think.... if you want to represent it using calculus you would need the equation of the shape of the curve, you would need some sort of cross-section through the teapot. Again you would have to do it in pieces I think.

This lecturer related how the students would be writing, but that the writing they were doing would be Mathematics: "they are writing Mathematics. Some people would say that is a language." Here again, the practical activity of using the words helped us see examples of the language of Engineering. This was related very much to Mathematics, to material properties, to manufacturing and to usability. Again, these examples differed immensely to examples of the language in the other subject disciplines.

Relating language to subject identity

Towards the ends of the interviews and after the description and evaluation had taken place, the talk often evolved into how a particular identity underpinned the language used that was informed by values and core elements. In a 'Nursing' identity these values and core elements related to safety, compassion, and care, and these were conjoined with the context in which the Nurses evaluated the object. For example, one lecturer commented: "I'm always looking at things from a safety aspect, from a caring aspect, from a health aspect, from a hygiene aspect I'm always relating it back to that." One Learning Disability lecturer even talked of identity in the form of a 'mind-set':

As soon as you said teapot I was already thinking cups of tea, making things... I think that's just a mind-set you know I wasn't thinking about circumference or the height you know... I was thinking 'Oh, we could make that!' And that'd be a really good thing to do... communication, warmth, empathy, teapot.

In Psychology, the identity, values and core elements that underpinned the language used was focused on people's perceptions. One lecturer said, "as Psychologists I suppose we'd be thinking more in terms of perception; what we see and how we make sense of it all." This perception would be both of the person looking at the object but also of the person who created it. For example, one lecturer commented:

I would think about the person who made it, and then I would think about the history of the pot obviously... because of the therapist in [me], I'm person centred obviously..., I'm interested in people, relationships, so instantly I go about what's the person behind it and what's his or her relationship with that object, and then obviously what impact this teapot has on me, on others.

In Design, the identity, values and core elements involved a very visual approach to language and evaluation, for example, "from a Designer's point of view... I would be questioning why they had done all the things with the form, surface, texture, colouring, patterning, decoration that they had done." Another Design lecturer talked of going into a 'Product Design kind of head': "From a Product Design space. I am looking at a product so I immediately go into a Product Design kind of head."

In contrast, the underpinning values and core elements to the identity in Engineering were efficiency and 'cleanness': "in Engineering terms I would expect things to be clean, neat and efficient." Similarly, in Engineering from an Architecture perspective, it could be highly minimal: "in the point of view of Architecture, we try and minimise the amount of material and have buildings as rational as possible. As sensible as possible. That kind of thing."

Subject identities were very different, and clearly predisposed how individuals evaluated and critiqued. To repeat what one of the Psychology lecturers noted: "everything exists within context, nothing exists outwith context and we define what the context is and we change the viewpoint according to the context." Critically, this same lecturer also noted that thinking is language: "Thought only exists within the language framework... if you change the language then the thought process will change." Here then, the teapot functioned as an object that helped the lecturers, and us, understand the language as it operated in the subject discipline. This was for us highly resonant of Wittgenstein noting that: "When I think in language, there aren't "meanings" going through my mind in addition to the verbal expressions: the language is itself the vehicle of thought" [Wittgenstein, 1953, PI, 329].

Discussion

We found that by using this physical object with subject lecturers it served as a portal and created a context for them to undertake language activity in their subject-disciplines. In turn,

this has helped us to understand and see examples of the language required of students. We saw these through how lecturers interacted with the teapot and how it created a portal for expressing language activity, identity and thinking. Critically, it was only in the practical activity of description and evaluation of a physical object that we were able to see the meanings of the words 'describe' and 'evaluate' in the subject disciplines we looked at, and it was thus the different contexts (Bakhtin, 1981, 1986; Glanzberg, 2002) that changed the language used. Only in these context could we see the language activity and examples of the language required. This, furthermore, gave us a feeling of resolving and explaining why it was that in the past when we had attempted to gather examples of language in a context *removed* from the subject and not involving a practical activity we had failed to do so.

Through this practical activity, we found that in the subject discipline of Nursing, description and evaluation was underpinned by language related to hygiene, patient safety, and compassion. In Psychology, the language was underpinned by considerations of the effect the object may have on people's thinking and by the motivations and thinking of the creator of the teapot and of those who encountered it. In Design, visual elements of colour, pattern were key, as were considerations of the process of how the teapot had been made and it would be possible to observe others interacting with it. In Engineering, the teapot was described and evaluated in terms of the properties of its materials, thermal capacities, material safety but also mathematically through the use of geometry and calculus. Critically, it was the physical interaction with the teapot itself that allowed us to access these contexts, and to gather examples of the thinking, language, and key elements lecturers would use. In other words, the teapot served as a portal to the subject thinking and identity. It was our original intention with this study to see whether the use of an object could give us access to the thinking and language of the subjects. We found that not only did it do this, but it also allowed us access to the underpinning values and core elements to the subject identity.

In our support workshops, which include students from a range of subjects, we now use physical objects to illustrate how the different subjects approach description and evaluation. Importantly, we ourselves are more aware of the underpinning identities and key language of the subjects and this helps us make suggestions and give advice.

In addition to using physical objects in student workshops, we have also later taken the teapot to staff training sessions in other institutions. Nursing lecturers elsewhere highlighted-similar aspects-of-safety-and-hygiene-to-lecturers-we-had-interviewed, and those from other subject areas described and evaluated the teapot in their own unique subject ways. For example, Criminologists talked of how the teapot could be used as an Improvised Explosive Device, or as a murder weapon, either to hit somebody or to give them tea laced with poison.

In terms of limitations, one is that the teapot was not something that everyone said they would use in their subject to evaluate and critique. One lecturer who was interviewed felt they would not be talking about teapots in Psychology, although they did then talk at length about how children's psychological development could be shown through drawings of the teapot, and about analysing experiments and other psychological areas. Thus, the limitation here may have been more to do with how the teapot was presented and perceived, so this has always to be explained initially in terms of what it is that is required of participants and perhaps also what is not required of them as well. Another limitation is the subject areas

themselves that were chosen. We do not know if we took the teapot to Music lecturers or to English Literature lecturers how they would react. This may well be something we could do in future research, although, as related immediately above, we do know that the teapot has worked with other subject areas through the staff training workshops.

Another limitation may be that the object itself is something in our possession and no one else has it, therefore no one else can repeat or see what happens. Yet, at other times we have taken different objects (for example a water bottle) to workshops and classes and used these with the same effect. What is more, it is actually arguable that other objects may prove more successful in revealing language activity than did the teapot we used. Another possible limitation which we see others may envision would work along the lines of the accusation of a certain amount of hypocrisy on our part to use the written word here to convey our findings, yet bemoan the written text and approaches to analysis as being unable to reveal the language activity we needed to know to help students. Here, what we hope is that this specific description can allow others to replicate what we have done, and we hope at least it encourages others to see these elements.

Connected to this is, we feel, the limitation that we did not video-record the interviews we carried out. In our defence, we could say that given this was an exploratory study we did not know the importance of individual's physical interaction with the teapot or that they would do this until we started the interviews. Nevertheless, we do feel that if we had video-recorded the interviews we would have been able to gather some extremely rich data regarding how people engaged with the object from a sensory perspective (cf. Cox & Guillemin, 2018) as part of their cognitive contextualisation of the object into their subject areas. We also note that others have used video recording very effectively (e.g. Davenport & Thompson, 2018).

Regarding how generalizable the results are, we hope that the method and our approach is generalizable to other contexts. We also hope that others working in similar roles to ours can use the results to help students, and also explore with lecturers in their own institutions what the key language activity is students are expected to undertake in their subjects. We serendipitously discovered the value and ability of the physical object we used here because one of us had the advantage of being a lecturer on a subject course and used it with Design course students. However, we would hope our chance discovery of this, and our extension of the technique with other subject lecturers, illustrates to others who may not have such access how they are themselves able to see language activity in the subject in this way. At the same time we would highlight that (as shown above) to a certain extent, each of these subject areas had key elements, but then again, they also had their own sub-disciplines, and each had their own key identity and way they used language. From this perspective, it is not possible, nor desirable, to generalise the results; yet as we say, we hope that the method of approach could be generalised to explore other subjects.

In terms of the implications of what we outline here for others, we would firstly suggest others could emulate what we have done. By taking a physical object to lecturers and asking them how they would approach it from their subject perspective, we hope others can better learn about the thinking underpinning the language; and pedagogically convey this to students. Yet, we also see significant potential for the use of other physical objects in the way we have used a specific physical object here. For example, we wonder if taking a Barbie doll

to a range of participants and asking them to evaluate it in terms of what it says about gender could reveal language and ideas about different thinking on gender and identity. Also, perhaps an object such as a credit card could be taken to a range of participants such as consumers or bank managers to ask them what they felt about it in relation to debt. Alternatively, a toy could be used as a focus to ask about childhood memories and of how games have changed over the years. In short, we hope others can use and extend how physical objects can help reveal insights about thinking to aid their studies in qualitative research.

References

- Bakhtin, M.M. (1981). *The dialogic imagination: Four essays by M.M. Bakhtin* (M. Holquist, (Ed.); C. Emerson & M. Holquist, (Trans.)). Austin: University of Texas Press.
- Bakhtin, M.M. (1986). *Speech genres and other late essays* (V.W. McGee, (Ed.); C. Emerson & M. Holquist, (Trans.)). Austin: University of Texas Press.
- Bird, C. M. (2005). How I stopped dreading and learned to love transcription. *Qualitative Inquiry*, 11(2), 226-248. doi: 10.1177/1077800404273413
- Blair, D. (2006). Wittgenstein, Language and Information: 'Back to the Rough Ground!' The Netherlands: Springer.
- Braun, V. & Clarke, V (2006). Using thematic analysis in psychology, *Qualitative Research in Psychology*, 3(2), 77-101, Doi: 10.1191/1478088706qp063oa
- Cox, S., & Guillemin, M. (2018). Enhancing Meaning-Making in Research through Sensory Engagement with Material Objects. *The Qualitative Report*, *23*(11), 2754-2771. ISSN 1052-0147
- Davenport, B., & Thompson, N. J. (2018). Object Handling with Contemporary Craft Objects: An observational study of an embodied, social and cognitive process. *The Qualitative Report*, 23 (9), 2253-2278. ISSN 1052-0147
- De Leon, J. P., & Cohen, J. H. (2005). Object and walking probes in ethnographic interviewing. *Field Methods*, *17*(2), 200-204. doi: 10.1177/1525822X05274733
- De Saussure, F. (1959). Course in General Linguistics. New York: Philosophical Library.
- Fairclough, N. (2013). *Critical discourse analysis: The critical study of language*. Milton, UK: Routledge.
- Gordon, R. M. (1992). The simulation theory: Objections and misconceptions. *Mind & Language*, 7(1-2), 11-34. doi: 10.1111/j.1468-0017.1992.tb00195.x
- Glanzberg, M. (2002). Context and discourse. *Mind & language*, *17*(4), 333-375. doi: 10.1111/1468-0017.00204
- Harris R (2013) *Introduction* (pp xiv xxii). In: De Saussure. F. *Course in General Linguistics*. London: Bloomsbury.
- Hyland, K. (2002). Specificity revisited: how far should we go now? *English for specific purposes*, *21*(4), 385-395. doi: 10.1016/S0889-4906(01)00028-X
- McEnery, T., & Hardie, A. (2012). *Corpus linguistics: Method, theory and practice.* Cambridge, UK: Cambridge University Press.
- McEnery, T. (2016). What is corpus linguistics and how does it contribute to society? Available at https://blog.esrc.ac.uk/2016/10/24/what-is-corpus-linguistics-and-how-does-it-contribute-to-society/last accessed Feb 24th, 2017
- Morris, P. (1994). The Bakhtin Reader. London: Edward Arnold.
- Pilcher, N., & Richards, K. (2016). The paradigmatic hearts of subjects which their 'English' flows through. *Higher Education Research & Development*, *35*(5), 997-1010. doi: 10.1080/07294360.2016.1138455

- Pilcher, N. & Richards, K. (2018). What is the 'Academic Purpose' of 'English' in 'English for Academic Purposes'?' In L. Tuen Wong & W. Lam Wong (Eds.). *Teaching and Learning English for Academic Purposes: Current Research and Practices* (pp. 3 20). New York: Nova Science Publishers.
- Richards, K., & Pilcher, N. (2014). Contextualising higher education assessment task words with an 'anti-glossary' approach. *International Journal of Qualitative Studies in Education*, *27*(5), 604-625. doi:10.1080/09518398.2013.805443
- Richards, K., & Pilcher, N. (2016). An individual subjectivist critique of the use of corpus linguistics to inform pedagogical materials. *Dialogic Pedagogy: An International Online Journal*, 4. doi: 10.5195.2016.163
- Richards, K., & Pilcher, N. (2018). Academic literacies: the word is not enough. *Teaching in Higher Education*, *23*(2), 162-177. doi: 10.1080/13562517.2017.1360270
- Richards, K., & Pilcher, N. (2019). How a view of language underpins approaches to supporting higher education students that facilitate neo-liberalism, and how to resist this. *Power and Education*, 11(1), 51-68. doi: 10.1177/1757743818811801
- Simpson, A. (2018). Making the Invisible Visible: Affordances and Hindrances of Using Tangible Objects in Identity Research. *The Qualitative Report*, *23*(12), 2973-2988. ISSN 1052-0147
- Swales, J. (1990). *Genre analysis: English in academic and research settings*. Cambridge University Press. Cambridge, UK.
- Tylén, K., Weed, E., Wallentin, M., Roepstorff, A., & Frith, C. D. (2010). Language as a tool for interacting minds. *Mind & Language*, 25(1), 3-29. doi: 10.1111/j.1468-0017.2009.01379.x
- Vološinov, V. N., Matejka, L., &Titunik, I. R. (1973) [original 1929]. *Marxism and the philosophy of language*. Cambridge, Massachusetts: Harvard University Press
- Vygotsky, L. S. (1962). *Thought and language*. E. Hanfmann & G. Vakar (Trans.). Cambridge, Massachusetts: MIT Press.
- Woodward, I. (2001). Domestic objects and the taste epiphany: A resource for consumption methodology. *Journal of Material Culture*, *6*(2), 115-136. doi:10.1177/135918350100600201
- Woodward, S. (2016). Object interviews, material imaginings and 'unsettling' methods: interdisciplinary approaches to understanding materials and material culture. *Qualitative Research*, 16(4), 359-374. doi: 10.1177/1468794115589647
- Wittgenstein, L. (1953). Philosophical Investigations. New York: Macmillan.
- Wittgenstein, L. (1972). *Lectures and Conversations on Aesthetics, Psychology and Religious Belief.* C Barrett (Ed.). Berkeley: University of California Press.