Accounting for taste: conversation, categorisation and classification in sensory judging.

Introduction

My PhD is in “technology enhanced learning” (TEL) and these three words frame and shape my research: what are ‘the technologies’ at work? How do they influence, interact with and mediate communication, learning and assessment?

So what is this paper? It is an engagement, a start, a first experiment at writing and seeking to present my writing in a way which does a dialogue between the evidence (the background and description of my data here in columns at the top of the page) and ideas (‘the literature’ at the bottom of the following pages). I don’t want to smooth this out too much so I use juxtaposition. I’m using this paper to pose some questions and set out some issues I am currently engaging, and often struggling, with. How you approach that as a reader is your choice and perhaps your struggle too. Each segment is self-contained one can be read then the other but you may prefer to switch and explore juxtapositions. How you engage is your choice.

Here I set out the background and historic development of the classification system I am looking at. I then introduce the three aspects of my fieldwork through the methods I have used in data generation, and briefly introduce first engagements with some of the data I have generated.

Background

“Never ask for ‘a beer’… no one goes into a restaurant and requests ‘a plate of food’ ” was the late Michael Jackson’s (1993, p. 6) provocative introduction to one of his guides to world beers. His work included a ground-breaking book published in 1977 which grouped beers by country as well as classifying them into families, types and styles. In other work he asserts that “there is a classic style of beer for every mood and moment. Each can be judged only according to the characteristics of its style” (1988, p. 12).

Jackson’s written work was and remains more transportable, durable and widely distributed than many of the beers he writes about. It was also hugely influential. Since the 1977 book the landscape of beer production, consumption, and that elusive category of ‘taste’ have changed. ‘Craft Brewing’ has seen an almost...
exponential growth as a class of beer styles and production methods with the non-commercial resurgence of home brewing as a part of this.

In 2012 home brewing suddenly made international headlines when the Whitehouse responded (Kass, 2012) to a petition with 12,240 signatures to release the recipe for their homebrewed beers (We The People, 2012). President Obama was photographed toasting a medal of honor recipient in the White House Garden (see figure 1). The two recipes were expressed in terms of the ingredient creating a variations on a style: “honey ale” and “honey porter”. Homebrewing was described as “a growing movement” noting that the American Homebrewers Association (AHA) had a membership of 28,835 (Telegraph, 2012).

Entangled with this upsurge in homebrewing has been the development and use of classifications of beer styles. Drawing on Jackson’s work Fred Eckhardt (1989) developed those taxonomies to include quantitative measures as well as indicative ingredients for home and micro-brewers. These then served as the basis for the development of a comprehensive guide for judging ‘world beer styles’ by the Beer Judge Certification Programme (BJCP). The BJCP style guide is used to judge competitions for the AHA and has recently been transported to the UK.

Theoretical Entanglements and ‘Engaging with the literature’

And so here I begin my other engagement. It is one that looks ahead—probing and posing questions rather than accounting for what has come before. As such it is less developed; these are the ideas I am starting to work with and try out as I seek to consider where I am and begin to relate my evidence and initial ideas to the work that has come before by others in ‘the literature’.

“How to do this? How to relate to the literature”? is a question posed by Annemarie Mol (2003, p. 3). The presentation of this work will, I’m sure, have already visually established a strong link with Mol’s work as I echo the layout of parallel and juxtaposed texts Mol used in “The Body Multiple”. This is intentional, not merely (and perhaps even foolishly or presumptuously) to evoke her book but because I find the presentation of that work works as it enacts juxtaposition and dialogue and breaking with traditional form. So I experiment with it here wondering: does it work? Or is such imitation the sincerest display of a lack of originality rather than being experimental? Whichever way I use it—as form, content or departure point her work is a key point of reference and relating as so much of her contemporary work concerns eating, drinking and tasting (Harbers, Mol, & Stollmeyer, 2002; Mann et al., 2011; Mol, 2008, 2011a, 2011b, forthcoming).
In order to become a judge at a competition there is a programme of certification and examination. This changed from a written exam involving tasting beers and multiple-choice and long-answer questions on styles and the style guides to a 2-part exam in 2012. Part one became an online multiple-choice exam with part two an expanded written tasting exam. In preparation for these exams courses are run by homebrewing clubs with materials – both official and recommended third party – made available by the BJCP through their website. Recently these informal learning programmes have been joined by entrepreneurial online training providers such as the “Craft Beer University”, an “online school” who define their mission as to “promote beer literacy, the appreciation of real beer, improve home brewing skills, and to prepare students to pass the craft beer certification examinations.” (Craft Beer University, 2012). Their main offering is an online course as preparation for the BJCP exam. The style guides do more than just providing a framework for judging competitions. They also frame the design and publication of recipe and methods books for brewing different beers with series titles such as “brewing classic styles” (figure 2) or “designing great beers” (Daniels, 1996). The style guides themselves have proved highly transportable – being made available in a variety of formats including smartphone apps and in an XML standard for defining beer recipes to enable interoperability between software packages and websites. They have also been incorporated into brewing software used for recipe formulation and which then maps a recipe against the quantitative style parameters originating with Eckhardt. Other closely allied variants of the styles are used to frame online beer review ‘community’ sites such as “RateBeer” and “Beer Advocate” and are topics of discussion and debate in blogs and forums.

Looking at Taste

And I too am looking at taste - yet even using the term ‘taste’ carries an inherent complexity referring as it does to both the sensory practice of ‘tasting’ and also to aesthetic appreciation and cultural value as ‘good taste’. When considering taste, education and classification one name entangles all three: Pierre Bourdieu. In his bestselling book “Distinction: a social critique of the judgement of taste” (1984) he proposes that:

Taste classifies, and it classifies the classifier. Social subjects, classified by their classifications, distinguish themselves by the distinctions they make (Bourdieu, 1984, p. 6)

However Bourdieu is centrally concerned with the cultural understanding, articulation and reproduction of ‘good taste’ or ‘vulgar taste’ rather than my concern with tasting as a sensory experience. I am interested in sensory assessment among amateurs engaged in non-formal education which brings me to the work of STS scholar Antoine Hennion. Echoing Garfinkel’s (1967) critique of Parsons she asserts that Bourdieu is likewise guilty of adopting a position wherein:

...at worst, the amateur is a "cultural dope" who is wrong about the nature of what she/he does; at best, she/he is the passive subject of an attachment, the real determinants of which are unknown to her/him. (Hennion, 2004, p. 131)

She suggests that “sociology should take the amateur more seriously, even treat her/him more respectfully” (2004, p. 131) and goes on to consider how taste “mobilizes various elements in one
Context: Fieldwork and Data Generation

Having introduced the broad background of this research I now turn to my specific research fieldwork. My research approach was participant observation as a learner in the second-ever BJCP course and exam to be run in the UK. There were three distinct and interlinked stages for this which I now detail: the course from November 2011-September 2012, the online and tasting examinations in July and October 2012 respectively and the practice of beer judging at the national Homebrew Competition in September 2012.

Learning on the tasting course: distance and face-to-face

The organiser indicated an intention to open the course for distance learning and I contacted him both as an interested course participant but also to offer to assist in the distance learning (DL) aspects. We used the Adobe Connect system as a virtual class-room for the live sessions. A screen shot is included below. This enabled communication through multiple video feeds with open audio channels, text chat and sharing files or presentations as well as quizzes.

In Bristol the group of around 18 people met in a community centre. The course leader used his laptop with a Wi-Fi connection to connect to the Adobe Connect virtual classroom. The distance learners logged in and could hear and see the course leader with little audio from the others in the room. The 5-6 online learners could then communicate with each other and with the course leader using the audio or using text chat; however communication and audio from others in the room in Bristol was generally limited and involved interlocution by the course leader. The screenshot in Figure 3 shows a DL session through the Adobe Connect environment.

Each session lasted 2 hours with a format of an opening lecture and class notes introducing a topic of brewing practice or

way or another”. She proposes that four elements are mobilized: “the community of amateurs, the devices and conditions of tasting, the body that experiences, and the tasted object” (2004, p.136 – my emphasis). It is looking at the way that these elements are assembled, mobilized and co-ordinated that are of interest to me.

Relating to Technology, Learning and their relationship

Looking at how community, devices and conditions, the body and the tasted object are assembled and co-ordinated must however be done in reference to those three obligatory points of passage: technology, learning and their relationship. (I intentionally eschew describing this relationship as ‘enhancement’ as this pre-judges it in the positive, somewhat deterministic and certainly simplistic light of improvement or benefit.)

Thus some of the literature comes from educational research, computer supported co-operative learning (CSCL), and networked learning (NL). In much of this research ‘technology’ is unproblematically introduced: it is whatever is ‘the latest thing’ with enhancement frequently asserted in terms ranging from ‘exciting new possibilities’ to deterministic. Thus “smartphones give you wings” (Cochrane & Bateman, 2010) or gaming promises a ‘learning revolution’ (Prensky, 2002). Technology is black boxes of high tech gadgetry seamlessly linked together. Within the area known as “networked learning” research the technology under consideration is explicitly introduced and bracketed: it is networked ICT (Hodgson, McConnell, & Dirckinck-Holmfeld, 2012;
A focus on technology and what it can do should be subservient to a focus on pedagogy and the learning we are aiming to foster. (Beaty, Cousin, & Hodgson, 2010, p. 590)

This is understandable from one viewpoint – with a focus clearly on the role of learning and then theorisation and research directed to that aspect this field engages with that rather than with technologies. However there is perhaps a downside in that an unproblematic and often limited engagement with ‘technology’ as being necessarily digital and networked sidesteps a more thorough and, I would argue, both enlightening and important engagement with the definition, role and philosophy of technology.

Unpacking ‘technology’: entangling STS

Science, technology and society (STS) scholarship introduces very different notions of technologies. For example Shapin (1984) considers how the early scientist/natural philosopher Robert Boyle used not only the ‘material technology’ of the vacuum pump in his experiments but also the ‘literary technology’ of virtual witnessing in his reports which has shaped scientific research and writing practices to this day. Grint and Woolgar (1997) also broaden the idea of what a technology is from narrow definitions such as “networked ICT” in asserting that:

Figure 3—the virtual classroom used for synchronous communication. A poll is displayed for different example beers being tasted by different learners. The video feeds from Bristol and my kitchen are visible top-right. The chat window is bottom center with discussions ongoing.
process. These included theory of brewing procedures such as water chemistry, malting processes, recipe formulation, ingredients and practices, recognising ‘common flaws’ and steps for prevention.

The latter half of each class was beer tasting. Each class took a set of related categories from the BJCP style guides and then tasted ‘archetypical’ exemplars for a designated style. For example the ‘Stouts and Porters’ class had Guinness as the exemplar for “Dry Stout”, with Dragon Stout from Jamaica as an example of a “Foreign Extra Stout (Tropical)” while the 11% abv Brooklyn Black Chocolate Stout was an example of the strong “Russian Imperial Stout” class.

For those at a distance there was sometimes variation in the example beers being tried with discussion and comparison. Even when beers were the same brand differences were sometimes evident.

There were also incidences where the system failed – the connection from Bristol being lost leaving the distance learners to continue and improvise with the group returning intermittently. The multi-way audio was often problematic and after a few classes and discussion with the

...‘technology’ comprises much more than just machines. The sociology of technology thus has a focus much wider than just hardware. ‘Technology’ can include social arrangements as diverse as the postal system, transportation, refuse collection, voting mechanisms, education and so on” (p.13)

In this way the field of STS can bring a sophisticated body of scholarship, theorisation and sustained engagement with and resistance to the simplistic discourses of ‘technical solutions’ and consider in detail the mediating effects of technologies on communication, work, interaction and learning. I first came into contact with an area of STS scholarship – actor-network theory, through the TEL research work of Steve Fox (2000, 2001), and then through the overview of its “sporadic rather than sustained” uptake in educational research by Fenwick and Edwards (2010). This led to engaging with and drawing on this field more thoroughly in my small-scale research projects and subsequent publications from those (Wright & Parchoma, 2011, 2012, forthcoming). In my thesis I continue to draw on this STS scholarship in order to place it in dialogue with the ideas and evidence from networked learning and broader educational research.

With this broader possibility of defining ‘technologies’ we can begin to consider those at play in my fieldwork and how to engage with them meaningfully. The most immediately evident technologies are those which fall within the definitions from networked learning research. So I have a distance learning course mediated by a ‘virtual classroom’ with synchronous video, audio and chat. There are complex processes of co-ordination, sequencing, overlap and repair in the communication across these different media within the ostensibly singular environment which in them-
course leader was turned off leaving it 'broadcast only' from the Bristol classroom with text chat to ask questions or interact with the group there.

Each session was recorded with a video file of the activity on screen, audio and text chat. I also made fieldnotes of the experience drawing on conceptualisations of sensory ethnography (Pink, 2009, 2010) in making these notes. For some classes I was away and organised other participants to set up recording – yielding some interesting conversations and interactions without my presence as an observer at the time. I also attended one class in person in Bristol taking photos, video segments and making fieldnotes.

Additional online communication occurred through a course members-only section of the Bristol Brewer’s discussion forum, via twitter and documents shared via Google Docs. 26 people in total signed up for the course including 6 exclusively via distance learning with two others doing some classes in Bristol and others online. There was also extensive activity on twitter before, during and after classes and between participants. Some of these resulted in interesting glimpses of “life beyond the screen” such as the image in Figure 4 which juxtaposes the objects of interest in this ethnography: networked ICT, communication between learners and categorised beers for sensory evaluation.

This generated a huge amount of data and sampling from this to select for detailed consideration is a critical next step for me.

**Taking the online and tasting exams**

In order to qualify as a ‘recognised’ or ‘certified’ judge with the BJCP you must pass the exam. Until 2012 this was a 3 hour paper-based exam with multiple choice, essay and tasting/judging elements. The format changed from March 2012 to an online multiple choice entrance exam with 200 questions to be answered in one hour.

selves challenge notions of seamless integration. Then there is the online exam with multiple choice questions delivered over the web which is unproblematically "technologized assessment" – however which other technologies are at play?

**The technology of classification**

What about the organisation of the information, the structure of classifications, the infrastructure of the BJCP style guide? Without this could an online examination be used to assess and certify sensory judges though a multiple-choice online exam? Isn’t that the ‘technology’ I could be productively looking at? My argument for adopting such a view is that by using this sort of broader definition of technology from STS the ways that networked ICT mediates learning can be significantly enhanced.

With a classification system as my focus the work of Bowker and Star (1999) becomes central through their sustained consideration of “classification and its consequences”, along with the setting out of an “ethnography of infrastructure” by Star (1999). A concern with classification, categorisation and their assembly into information infrastructures informs both my research methods and current considerations of how to approach analysis and description in a meaningful way.
Passing this is a pre-requisite for taking the beer judging exam which was increased from 4 to 6 beers to be blind judged. These included a ‘classic’ example of a style, flawed examples, and at least one not-to-style beer.

I took the online test in May 2012, recording my onscreen activity along with a “think aloud” voice-over as I answered questions. I also captured accounts posted by other course participants to forums or in classes about their experiences. The questions were very variable including some on aspects of BJCP organisation and a section on comparing two beer styles based on statistical data. While taking the exam I referred to a copy of the style guides on a split screen whilst another participant referred to it as “a test of how fast you could turn pages”.

In October I took the tasting exam along with other course members. I video recorded this (despite it being mostly silent) and took photos of each of my completed judging sheets which recorded detailed sensory notes of each beer judged – conveniently combining making detailed descriptions of sensory experience as both ‘sensory ethnographic fieldnotes’ and ‘judging exam text’. See figure 5 for an example.

Despite being essentially silent and with minimal movement I find some of the video images are interesting as showing sequences of silent action and reactions to particular

So, how should I engage with the work of categorisation? Especially when

Many scholars have seen categories as coming from an abstract sense of “mind”, little anchored in the exigencies of work or politics. The work of attaching things to categories, and the ways in which those categories are ordered into systems, is often overlooked (except by theorists of Language like Harvey Sacks 1975, 1992). (Bowker & Star, 1999, p. 286)

Harvey Sacks: Conversation and Categorisation

Harvey Sacks is best known for his work on sequential analysis of conversation, now referred to as conversation analysis (CA). However he also lectured and wrote on how categorisation was done in conversation in his work on membership category analysis (MCA). Plunkett notes that these “two branches” of Sacks’s work have developed largely in isolation from one another (2009, p. 24). While Silverman (2012) extends this by observing that in the work on CA by Emmanuel Schegloff, one of Sacks’ collaborators, “this isolation has taken on a normative dimension.” (p.329). For example Schegloff (2007, p. 463) asserts that Sacks moved away from an interest in categories in conversation and towards sequential analysis, and that the case for bringing category analysis back is “by no means clear” (p.464). However Silverman has argued strongly against such a view suggesting that these two aspects of Sacks’ work can and should be seen as “two sides of the same coin” (1998, p. 152).
beers. The sequence in Figure 6 shows my reaction to a beer adulterated with a large amount of lactic acid making it incredibly sour — though a sourness like that of yoghurt (lactic acid) rather than vinegar (acetic acid).

Judging as a practice at the National Homebrew Competition

A third element of the fieldwork for this project was participant observation as a judge at the National Homebrew Competition in Bristol in September 2012. Over 400 beers were entered into 21 categories. They were judged by a mixture of BJCP qualified judges from the UK who had been part of the first course and exam in the UK, and BJCP judges who came over for the event from the USA. There were also unqualified judges including the participants in the course and ‘professionals’ from the brewing industry including beer writers and commercial brewers. The judges were supported by stewards who brought beers to the table, collected in judging sheets and helped to organise the ordering and evaluation of beers.

The results were recorded by the competition organiser – the same person who ran the BJCP course — on an internet connected laptop with an online database used for entries in advance, collecting payments,

MCA is concerned with how members (in the ethnmethodological sense) use categories in interaction. It is based on early work by Sacks, the best known example being "The Baby Cried, The Mommy Picked it Up" (Sacks, 1972; Lectures 1 and 2 Spring 1966 in Sacks & Jefferson, 1992, pp. 236-266). Other lectures included considerations of categories such as "hotrodders".

From Sacks' work with transcripts of conversations to a suicide prevention line he developed concepts such as a "Membership Category Device" (MCD) and rules, such as the consistency rule and economy rule for how these devices are applied. He set out a lexicon of specific terminology including types of categories, category bound activities (CBA) and standard-relational pairs (SRP). As such his work is a serious engagement with how categorisation of people is done. However how categories are understood is problematic – far less amenable to such CA notions as next-turn proof procedures where the analyst uses empirical evidence of how parties in a conversation orient to a sequential turn rather than their own understanding. As Schegloff puts it

If we want to characterize the parties to some interaction with some category terms, we need in principle to show that the parties were oriented to that categorization device in producing and understanding – moment-by-moment – the conduct that composed its progressive realization. In doing so, we will need to be alert to the ways in which the parties make accessible to one another these orientations, because that is the most serious and compelling evidence (Schegloff, 2007, p. 475)
printing labels to anonymise entries and then release the results on the web (at www.bristolhomebrewcompetition.org.uk)

Judging was done in ‘flights’ with pairs of judges evaluating a series of anonymised homebrewed beers against the style guides for that category and scoring each aspect. A tick-box sheet was included (see appendix 1)

I used video (with some challenges) as well as giving recording LiveScribe pens to judges to complete score sheets printed on special paper with an audio recording synchronised with the capture of their handwriting. Rather than requiring complex equipment, cameras or intrusive video equipment this was simply a pen. However by capturing not only the handwriting but the sequential information of written data and its co-ordination and relationship to the spoken conversation afterwards I have some interesting data. I will be focussing my presentation on this and other aspects of data capture and generation.

In my fieldwork I adopted a praxiographic approach which “allows and requires one to take objects and events of all kinds into consideration when trying to understand the world. No phenomenon can be ignored on the grounds that it belongs to another discipline” (Mol, 2003, p. 158). In the complexity and with periods of intense participation during this event I needed a guiding principle, a narrative thread, to help focus observation. To do this I adopted a recommendation for novice ethnographers from Giampetro Gobo (2008) of “following an object… The researcher can choose an object with a certain importance in the organization under study and follow its trajectory” (p.166). In doing this I followed and documented the movements and interactions of a particular beer. The beer I chose was brewed by my brother-in-law (who originally introduced me to home brewing). I chose it as I had the opportunity to reconstruct, retrace and follow its trajectory from design to demise.

However this sort of explicit orientation is often not seen. For example Hester and Eglin (1997, p. 29) instead use the rhetorical move of the counter-factual argument to assert their understanding of a category in talk. Such counter-factual arguments are often endemic to early ANT writing, which Collins and Yearley (1992a, 1992b) use in their pointed critique of the paper by Latour (written as Johnson, 1988) on “mixing humans and non-humans together” where he uses just such a strategy. So, if categories are not clearly oriented to, how should one start or engage with this as a method for the detailed examination of categorisation work being done?

My sense is that MCA does have a lot to offer here if not used exclusively but through linking with other ethnomethodologically-inspired approaches. MCA draws stronger links to ethnomethodology than most contemporary sequential CA, and a similar linkage has become stronger from ANT (Latour, 2005). However ‘doing MCA’ and ‘doing ANT’ are both fairly arcane and limited in guidance for a novice approaching data analysis. While there are many books on “doing CA” (for example Have (2007); Hutchby and Wooffitt (2008); Sidnell (2010)) there is very little on how to “do” membership category analysis with only one text book (Lepper, 2000), and a few clues as to process in papers such as Baker (1997) and Stokoe (2012). So there is a challenge to getting started as well as other significant issues.
This has proved productive in opening up some interesting aspects of this object: that it had a ‘digital life’ in the formulation of the recipe and record of its brewing on an iPod. That this digital life was online with an account and images of its production posted to an online forum. It had a prior experience in competition and with problems of categorisation having been entered into the national competition in 2011 in the wrong class with judging feedback sheets and feedback form that. I tasted it prior to entry with my brother-in-law and then transported the bottle to the competition. In documenting its trajectory I took photos of the bottle and made fieldnotes as it was moved, unpacked, labelled and ordered with other beers in its class. I followed the judging and documented this intensely. By following this object (rather than the more conventional ethnographic practices of observing a space or following a person) I also encountered its movement outside of the judging room and into the category-free social bar area. There I photographed the second bottle being opened and drunk and captured some of the lay assessment. Finally its demise captured the process of cleaning up. By following this object I operationalised a narrative thread for the ethnography while also giving focus to observation. These images along with descriptions form part of the 20,000 words of fieldnotes and 125 photos from the event.

I recorded the judging of this beer in particular detail using a video camera and also the LiveScribe pen. This was then transcribed using Jeffersonian notation to indicate sequence, overlaps, pauses and prosodic features (excerpt included in appendix 3) but trying to maintain relative comprehensibility. In addition to the detailed transcript made primarily from the audio I also have the video of the judging participants and a sequential record of the writing and box ticking on the judging form for this beer which I am sequencing with the transcript. Together these give a far richer source of sequential and categorial data on interaction between the judges and the beer than just a transcription of the audio.

First thoughts on categorising non-humans

Of course I am not looking at how people are categorised but how beers are. To date this has not really been addressed by MCA work however there is the suggestion it would be possible in the assertion by Ester and Heglin that

> “the scope of MCD inquiry may extend beyond the traditional sociological domains. Is there any scholarly activity, indeed any human activity earned out in language, that does not entail describing, judging, and inferring, to which membership categorization (extended to things other than persons) is not applicable? (1992, pp. 263-264)

I am sure that when the idea of CA being used to study conversation with a photocopier (Suchman, 1987, 2007) was first considered it seemed an unlikely a proposition. However by adopting a viewpoint which did exactly that the problems of communication between humans and machines was radically recast through a focus on sequential detail to underpin its analysis. When looking at categorisation of objects that are sensed then terms such as "activities" become challenged – would “category bound agencies” work, drawing on ANTs symmetrical consideration of agency? And what would happen to ideas such as “standard relational pairs” where the relationships seem less pair-like, could the ANT metaphor of networks intervene here?
The excerpt below gives an indication of some of the talk and the amount of categorisation work going on within the interactions:

Here we see taste being described, but not as an innate property of the object. Instead taste is accounted for as an accomplishment by Graeme: “I got” is a repeated phrase hearably accounting for the work of sensing through “getting” an aroma. Swazi ascribes these as properties of the object of judging after this, properties which are occasioned and now in the past using the past tense “was” rather than “is”. Categorial work is done in describing similarities “fake banana” is equated to “pear drops”, both descriptions of sweets and this broader category is invoked by describing these different objects as ‘the same thing’.

And that is the stage I have reached: my fieldwork is complete, the latter stages of data generation are coming to a close as I finish writing up expanded fieldnotes from my jottings. I have started the first steps into looking at and sorting out my data (all 862 files of it). So it is now, as I seek ways to get a purchase on this rich, varied data set, that I need to find productive methods to support explication and interpretation. These need to align with the theoretical, ontological and epistemological stance already adopted in the field that has shaped my methods for generating this data. Thus I am now posing questions rather than “drawing to a conclusion”: what next and how? How to stay close to the richness of this data rather than ‘running away’ from it and abstracting it into codes yet avoiding being overwhelmed? How to select segments for further analysis in a rigorous manner? And how to relate this evidence and place it into a meaningful and productive dialogue with my ideas and ideas from ‘the literature’?

| Graeme | =yeah and it ha, and I got the pear, I got a little bit of pear and then I got the citrus and a little bit [of "banana"] too |
| Swazi | [yes] there was a little bit of citrus and a bit of honey and a little bit of that banana some people would say pear because they’re used to pear [drops] whereas I am used to |
| Graeme | [yeah ] |
| Swazi | fake bana:na= |
| Graeme | =fake bana; he ha ha ha; |
| Swazi | so, err but th its the [same thing] |

So to draw this together: my aim is that as I develop this dialogue of theoretical ideas and empirical evidence, inspired by how Suchman used sequential CA to unpack the challenges to human-machine interaction, I will be able to find similar possibilities for engaging with categorisation. I hope to develop a serious treatment drawing on (but not beholden to) Sacks’ ideas of membership categorisation to look at how categorisation of heterogenous actants is done in the conversations among them.
References


Jackson, M. (1977). The world guide to beer: the brewing styles, the brands, the countries. Lane Cove Australia: A.P. Publishing.


Appendix 1 – Example Tasting Exam Score Sheet

# BEER SCORESHEET
**Examination Version**

| Beer Judge.org | HOREBRESERSASSOCIATION.ORG |

**Participant ID:** 1210-UKBR:__________

**Exam Beer Number:** 1 2 3 4 5 6 (circle one)

**Exam City:** Bristol, UK

**Exam Date:** October 6, 2012

**Descriptor Definitions (Mark all that apply):**
- Acetaldehyde
- Alcoholic
- Astringent
- Diacetyl
- DMS (dimethyl sulfide)
- Estery
- Gassy
- Light-Struck
- Metallic
- Musty
- Oxidized
- Phenolic Solvent
- Sour/Acidic
- Sulfur
- Vegetal
- Yeasty

**Category #** Subcategory (a-f)

**Subcategory** (spell out)

**Special Ingredients:**

**Bottle Inspection:**
- Appropriate size, cap, fill level, label removal, etc.

**Comments:**

**Aroma** (as appropriate for style)
- Comment on malt, hop, citrus, and other aromatics

**Appearance** (as appropriate for style)
- Comment on color, clarity, and head retention, color, and texture

**Flavor** (as appropriate for style)
- Comment on malt, hops, fermentation characteristics, balance, finish, aftertaste, and other flavor characteristics

**Mouthfeel** (as appropriate for style)
- Comment on body, carbonation, warmth, creaminess, astringency, and other palate sensations

**Overall Impression**
- Comment on overall drinking pleasure associated with entry, give suggestions for improvement

**RATING GUIDE**

<table>
<thead>
<tr>
<th>Quality</th>
<th>Description</th>
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<tbody>
<tr>
<td>Outstanding</td>
<td>(45 - 50)</td>
</tr>
<tr>
<td>Excellent</td>
<td>(40 - 44)</td>
</tr>
<tr>
<td>Very Good</td>
<td>(35 - 39)</td>
</tr>
<tr>
<td>Good</td>
<td>(21 - 29)</td>
</tr>
<tr>
<td>Fair</td>
<td>(14 - 20)</td>
</tr>
<tr>
<td>Problematic</td>
<td>(0 - 13)</td>
</tr>
</tbody>
</table>

**TYPICAL ACCURACY**

<table>
<thead>
<tr>
<th>Example</th>
<th>Not to Style</th>
<th>Flawless</th>
<th>Intangibles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classic</td>
<td>Not to Style</td>
<td>Flawless</td>
<td>Significant Flaws</td>
</tr>
<tr>
<td>Wonderful</td>
<td>Not to Style</td>
<td>Intangibles</td>
<td>Lifeless</td>
</tr>
</tbody>
</table>

**Total:** 50

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Dept: Educational Research | Supervisor: Mary Hamilton
Year: 3 of 4: end of 1st of 2 years on thesis
Rapporteurs: Lucy Suchman | Claire Waterton
Presenting: Friday 11th January, 15:55
## Appendix 2—BJCP Judging Checklist (used in NHC2012)

![BEER SCORESHEET](https://www.bjcp.org/scoresheet.png)

### AROMA

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Appendix 3—Selected Transcript from Judging Discussion at NHC2012

Swazi &gt;I thought it was a good beer&lt;

Graeme yeah, I thought it was nice=

Swazi &gt;I thought it was [fantastic↑]

Graeme [yeh ih th ] that was the first [one=

Swazi [and out of a:ll that had the proper ferme

Graeme [yeah]

Swazi [yes][00:10:20-9# there was a little bit of citrus and a bit of honey and a little bit of that banana some people would say pear because theyre used to pear [drops] whereas I am used to

Graeme [yeah ]

Swazi fake bana:na=

Graeme =fake bana↑ he ha ha ha↓

Swazi so, err but th its the [same thing]

Graeme [its the ri]ght it's the right progra- and it had the phenolics, they were restrained but they were the:re↓=

Swazi =exactly

Graeme and it was almost in balance, the malt was ni:ce &gt;good beer&lt;=

Swazi =its all good (. ) err [only thi

Graeme [yeah yeah only spoiled by a lack of head=

Swazi =lack of carbonation and the cla↑rity

Graeme I, I thought the carbonation was just really good, I think it just all came out at once
Swazi and, yeah↓ [yeah err ok ]

Graeme [and you know ]=

Aleman =and all over the floor=

Graeme =and its all over the f its all the carbonations all↑ over the floor

Brett which which [err

Graeme [eh its actually quite spritzy, when you get it in the mouth]* its got nice lit]te tingle from it so I think its OK umm

Swazi [yea:::aah? ok ]

* Graeme places his hand in front of his mouth and wriggles his fingers