Applying Bourdieu to socio-technical systems: The importance of affordances for social translucence in building 'capital' and status to eBay's success

TaSC Working Paper (TASC-WP): 2008-03

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Abstract

This paper introduces the work of Sociologist Pierre Bourdieu and his concepts of 'the field' and 'capital' in relation to eBay. This paper considers eBay to be a socio-technical system with its own set of social norms, rules and competition over 'capital'. eBay is used as a case study of the importance of using a Bourdieuean approach to create successful socio-technical systems. Using a two-year qualitative study of eBay users as empirical illustration, this paper argues that a large part of eBay's success is in the social and cultural affordances for social translucence and navigation of eBay's website - in supporting the Bourdieuean competition over capital and status. This exploration has implications for wider socio-technical systems design which this paper will discuss - in particular, the importance of creating socially translucent and navigable systems, informed by Bourdieu's theoretical insights, which support competition for 'capital' and status.

This chapter (in shortened version) is currently accepted for publication for Whitworth, B. and de Moor, A. (in press) *Handbook of Research on Socio-Technical Design and Social Networking Systems* (IGI Global; Hershey Pennsylvania).

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1 Introduction

eBay, the 'world's largest personal online trading community', was initially set up in 1995 with collectors in mind. It enabled easier access to collectibles (*vid*. Bunnel & Luecke, 2000) – where the traditional inefficiencies of person-to-person trading such as geographical fragmentation and imperfect knowledge (*ibid*.) could be offset through computer mediated communication (CMC). eBay initially aimed to improve the market liquidity for collectables, which are more problematic to exchange than mass-produced consumer items (Chircu & Kauffman, 2001). But the Internet auction site developed into the way for users to generally establish prices for goods with uncertain values (*cf*. Smith, 1989), including second-hand mainstream items, and later even diversified into selling new and old goods at fixed prices (Zukin, 2004). eBay's success, however, did not alone hinge on making the market more efficient, or creating a platform where items, formerly hidden in limited geographic markets, were made public to the world. Using a two-year qualitative study of eBay users, this chapter argues that a large part of eBay's success is the affordances eBay's website offers in terms of supporting various social and cultural actions and practices. It is both a system affording social translucence (Erickson *et al*., 1999) and social navigation (Chalmers *et al*., 2004) in relation to 'capital' and status, which contributes to its success. eBay is used as a case study of the importance of using a Bourdieuean approach to create successful socio-technical systems. This Bourdieuean approach implications for wider socio-technical systems and e-commerce design which this chapter will discuss.

'Socially translucent systems' are described as those digitally-based systems which provide social cues which afford accountability, awareness and visibility (Erickson *et al*., 1999). These social cues in turn allow people to draw upon their expertise and social experience in structuring their interactions with others (Erickson and Kellogg, 2000). Erickson *et al*. (1999) describe certain actions which are possible in socially translucent systems – such as noticing, creating and conforming to social conventions; engaging in peer pressure and imitations of others' actions through observation (*op. cit*.). In terms of particular relevance for this chapter, Erickson and Kellogg (2000) also describe elements of making status socially translucent in terms of knowledge management systems – where systems which make knowledge work visible and reveal skill allow credit to be given to those responsible. Social translucence as a design approach is also articulated in Erickson *et al*. (2002). The 'social' in social translucence refers to providing socially salient cues. Translucence is a term used in preference to 'transparence' – it is not an intention to make all socially salient cues visible, just some of them. Erickson and Kellogg (2000) note a tension between visibility and privacy in such systems. One system of social translucence involves the notion of a social proxy, a minimalist form of visualisation of people or their activities (Erickson and Kellogg, 2002). Social navigation, in terms of the online world, involves your decisions being informed and guided by information about what other people have been doing online (Dieberger *et al*., 2000). In relation to eBay, this is particularly important in terms of reputation (*op. cit*.) – other people have been shown to have successful transactions with particular eBay users, and this guides future activity. Wexelblat and Maes (1999) examine navigation in complex information spaces, and highlight the importance of interaction history or traces to guide our actions. In online spaces, problem-solving work carried out by users is said to leave traces which should be accessible to users in the future to make solving problems easier (*op. cit*.). Wexelblat and Maes suggest that, following Norman (2002), objects that are rich in the history of use acquire new affordances which we can use for new ways of interaction (*op. cit*.). They describe different sorts of interaction history – knowing what was done, knowing who did it, knowing why it was done and knowing how it was done. These are all important for different reasons in future actions and problem solving – for example the 'who' may be important as the views of domain experts have greater legitimacy as a 'trace' than that of an amateur (*cf*. Dieberger *et al*., 2000).

Internet strategists have already formed a consensus that supporting the social component is the best method to make websites 'sticky' (Cohen, 2002). This chapter aims to explore and deconstruct some of the social and cultural affordances of eBay that make it so 'sticky'. The notion of 'stickiness' is shorthand for attracting visitors and keeping them there (*op. cit*.). Haywood (2006) relates 'stickiness' to Miller's use of Gell's notion of the 'aesthetic trap' (Miller, 2000). Miller characterised websites as creating 'aesthetic traps' - where website visuals are also used to align the website's audience with its creators (Haywood, 2006; Ellis & Haywood, 2006). eBay has been regarded by the likes of Nielsen/ Netratings as "the standard-bearer in web site stickiness" as far back as 2001 (Mancey, 2001). In the UK, eBay is the number one e-commerce site with eBay visitors spending an average of two hours there, viewing 266 pages a month (Nielsen/ Netratings, March 2007 cited eBay.co.uk, N.D. a).

In using the terms 'affordances', this chapter seeks to present eBay as a socio-technical system and an adaptable one. The social system that emerges from the technical system is in part dependent on what that technical system can offer in terms of such things as tools, features and capabilities. However, the resultant social system is also a product of how the technical system is appropriated, which may be different from that intended by the website designers. Norman (2002) has written on the notion of affordances, and notes the origin of the term in Psychology, "the perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used" (Norman, 2002, p. 9). The term 'affordances' is contentious, and Norman notes that designers often confuse the notion of 'affordances' with conventions (Norman, 1999). This chapter aims to be sensitive to Norman's definition of affordances. However, it uses the term affordances in the sense of its earlier origins – what is possible given the properties of the thing, in this case a website. This sense of 'affordance' is used to understand the social system that eBay as a technical system supports and makes possible, the social construction of the technical. Indeed eBay, as a case study, illustrates the highly complex interrelationships between technical and social systems, and that the arrow does not neatly flow from a technical to a social system in such an iterative system. eBay's technical system was created as more than an e-commerce website which treated people as "wallets and eyeballs" (Cohen, 2002: 7) – instead eBay's founder built eBay as a community, intertwining commerce and civilisation (*op. cit*.). In addition, eBay has been very active in user research (Ellis & Haywood, 2006), leading to the site going through many iterations of change. This chapter argues, therefore, and seeks to illustrate that there is no simple separation of the technical and social systems in relation to eBay – both are mutually constitutive.

In exploring the mutually constitutive nature of the technical and social system, and deconstructing and specifying the nature of eBay's social and cultural affordances leading to its 'stickiness', this chapter draws in particular on the work of the Sociologist Pierre Bourdieu. This chapter argues that applying the insights into 'stickiness' generated by a Bourdieuean approach can inform successful socio-technical systems design. Sterne (2003) suggests that Bourdieu's terms 'the field' and 'capital' are important in thinking through how "a technology becomes a technology through social practice" (2003, p. 375). Bourdieu developed the concept of the 'field' to denote the fact that agents act in social situations which are governed by objective social relations between people (Bourdieu, 1993). According to Sterne (2003), we might consider a field as being where technological production and consumption come together – as with our mutually constitutive technical and social system. Social formations are structured by a series of fields, with each being a structured space with its own rules or laws (Bourdieu, 1993). As we have seen, these are actions which are regarded as possible to represent in 'socially translucent' systems, such as creating and conforming to social conventions (Erickson *et al*., 1999). In any given field, there is social struggle where agents vie for control of 'capital' (Bourdieu, 1993). 'Capital', for Bourdieu, concerns "the set of actually usable resources and powers" (Bourdieu, 1984, p. 114), and there are various sorts of capital: economic, social, cultural and symbolic. Economic capital refers to money and assets; whereas social, cultural and symbolic capital involve resources which are not material (*cf*. Bourdieu, 1993). Important here is a notion of distinction, where social differences are expressed through systems of power and competition, which happen in areas of cultural practice and symbolic exchange (Bourdieu, 1993). This chapter argues that it is useful in terms of website

design to think of such socio-technical systems as 'fields' in which there is competition for 'capital' of various sorts. It is also important for website designers to create socially translucent systems which have the affordances to support the competition over 'capital' and status as an important form of social interaction. It is an inherent part of social processes for this sort of 'struggle' to occur, and people will use websites to compete for capital. eBay is considered in this chapter to be a 'field' in its own right and a 'socially translucent system' (Erickson *et al.*, 1999) – a space of technical production and consumption (Sterne, 2003) with its own set of values, social norms, rules and competition over the possession of capital (*cf.* Erickson *et al.*, 1999) supported by the technical system.

This chapter draws on qualitative fieldwork on eBay carried out over a two-year period from 2004-2006.[1] The fieldwork took a multi-strand approach in order to get a wide variety of data - including questionnaires when the researchers acted as buyers and sellers themselves, seven focus groups, 30 in-depth telephone interviews held with vintage radio and stamp and cover collectors, 10 in-depth telephone interviews with eBay sellers and 11 diaries with 'key' eBay buyers and sellers. Extensive observation of the eBay site across a wide range of categories and community pages was also carried out. Finally, an online discussion forum used by the vintage radio collectors to talk about eBay items was also observed and participated in by the researchers.

This chapter begins by discussing the qualitative evidence for eBay being 'a field' and a 'socially translucent' system (Erickson *et al.*, 1999). It then examines in detail the affordances of the eBay site used in terms of performing and acquiring, firstly, cultural and symbolic capital, and secondly social capital - which contributes to its 'stickiness'. Economic capital tends to have a complex and variable interrelationship with cultural, symbolic and social capital on eBay and is therefore considered within these sections.

2 eBay as a Social and Technical Field and Socially Translucent System

> "I think there's the two, there's the two expressions. There's 'going to eBay it,' …or being an eBayer. And an eBayer is somebody, I suppose it's a bit like you being given the knowledge, isn't it? […] So you're part of this, what to a lot of people is a bit of an unknown quantity, a bit of a secret society, so us lot who have been using it for a time, we're serious eBayers [laughter]. […] So I suppose in the end you're part of this whole, massive, community - aren't you?" (Peter, vintage radio collector)

The research showed eBay buyers and sellers describe a sense of a shared experience of eBay as like being part of an attractive and exclusive "secret society" – part of a strong 'community of practice' (Wenger, 1998). As seen from Norman (1999), online conventions require a 'community of practice' for their widespread adoption. The above quotation gives a flavour of what constitutes eBay as a social and technical field with various social norms and values, and the role of various types of capital there. The evidence of these social norms in eBay use collected from fieldwork data shows eBay to be a socially translucent system. eBay is recognised as having its own in-group language, such as the term 'going to eBay it' and 'eBayer' – terms which most effectively distinguish people in offline environments as belonging to this community. Being an eBayer, as we see from the quotation, is about being "given the knowledge". eBay 'knowledge' and cultural capital is complex and multi-faceted, it is both social and technical in nature - about having a sense of eBay's rules, appropriate actions, etiquette and language; as well as how to do and perform things 'technically' within the site. There is a shared domain of interest, knowledge exchange, and a shared repertoire of resources including vocabulary (*ibid*.) – which invokes other notions of 'discursive community' (Hutcheon, 1995) and 'speech community' (Golder & Donath, 2004). eBay is shown through

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qualitative fieldwork to have its own cultural knowledges, yet the affordances and conventions of the eBay site also allow the expression of more traditional forms of cultural capital that we see in other fields such as collecting and art. This chapter now explores eBay and cultural and symbolic capital in more detail.

3 eBay And Cultural And Symbolic Capital: Creating 'Stickiness'

In the cultural sphere, competition often involves symbolic power or capital (Bourdieu, 1993), where the legitimacy of cultural forms are contested (Savage, Barlow, Dickens and Fielding, 1992). Cultural capital is seen to be based on cultural knowledge, dispositions and competences, and acquiring cultural capital builds authority and power (Bourdieu, 1993). Cultural capital is inculcated and acquired through education, the family and social institutions – which allows social agents to decipher cultural artefacts and understand their internalised codes. Cultural capital is unequally distributed, often differentially amongst different class fractions (Bourdieu, 1993). Malaby (2006) sees the cultural competencies of synthetic worlds as in greater flux than in the 'offline', and are part of a process of 'becoming', rather than reproducing existing socioeconomic differences. The research also shows eBay's cultural capital and competencies, as distinct from wider cultural capital, are acquired in slightly different ways from those proposed by Bourdieu - but that the same mechanisms apply and that family and social networks are shown as very important in eBay usage. Social institutions such as the workplace are also shown as instrumental in acquiring eBay cultural capital through the casual social interactions that occur there. However, the research suggests that eBay cultural capital is also importantly built through critical observation of the site itself.

Symbolic capital, also important in the cultural sphere, is said to refer to a: "degree of accumulated prestige, celebrity or honour and is founded on a dialectic of knowledge (*connaissance*) and recognition (*reconnaissance*)" (Bourdieu, 1993, p. 7). Symbolic capital on eBay works in similar ways to society in general, but tends to be more public and tangible on eBay due to the particular affordances and conventions of the site as a 'socially translucent' system (Erickson *et al*. 1999). This section begins by examining one of the most renowned aspects of eBay's website design – the feedback system – before looking at the other affordances of the eBay site that support the signalling and performance of cultural and symbolic capital.

4 eBay's Own Cultural and Symbolic Capital and Conventions

4.1 The Distinctions of eBay's Feedback System: Symbolic Capital

'Feedback is each user's reputation on eBay. It fosters trust between people by acting as both an incentive to do the right thing and as a mark of distinction for those who conduct transactions with respect, honesty and fairness' (eBay.co.uk, n.d., b).

As we have already seen, 'eBayers' believe that eBay has its own appropriate practices and behaviours, and is therefore a 'field' in its own right and a 'socially translucent' system (Erickson *et al.*, 1999). eBay use has its own markers of symbolic capital within the eBay 'field', as seen from the quote on the eBay feedback system above. These are 'designed' into the system. As eBayers buy and sell, they gain star ratings next to their user IDs for a number of positive reports (see Figure 1), and a number corresponding to the number of positive feedbacks they have with unique eBay members.
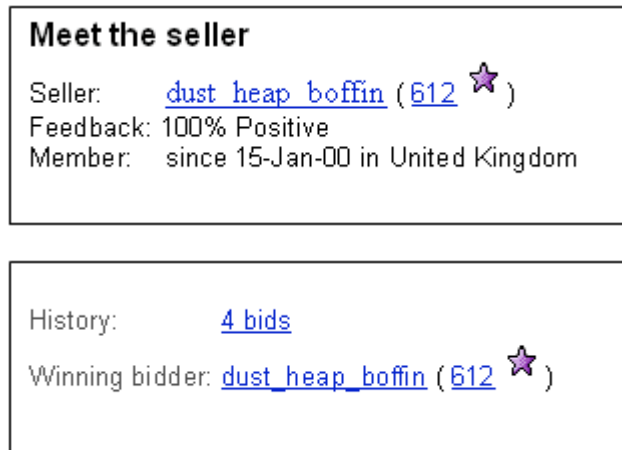
Figure 1: How eBay 'stars', denoting symbolic capital, are represented in selling (top) and buying pages (bottom)

As they gain more positive reports, their stars change colour. Shooting starts are introduced at 10,000 positive feedbacks. According to Cohen (2002), this system was developed to allow the website itself to spot its most outstanding buyers and sellers, and so that users could identify others with good reputations on the site. Carruthers & Uzzi (2000) argue that the eBay stars system is part of how markets develop – a: "legitimated ranking system – to filter volumes of objectified but *unstratified* information" (Carruthers & Uzzi, 2000, p. 488). However Boyd (2002) pushes the argument into a more social domain, suggesting stars are valued as part of a user's identity, while Vishwanath (2004) sees them as an 'incentive'. In Erickson and Kellogg's (2002) terms, they are a 'social proxy' of people and their activities.

The changing of star colours, and from simple to shooting star, is the eBay website design's symbolic and highly visual way of representing the level of symbolic capital in eBay use garnered through the number of unique positive feedbacks (*cf.* Haywood, 2006). eBayers are therefore encouraged to keep buying and selling on eBay by the kudos they get from being a visibly experienced eBayer, as a symbolic form of distinction in relation to other eBayers (*cf*. Bourdieu, 1984). This encourages continued participation with buying and selling on eBay, contributing to its 'stickiness'. Having stars of certain colours which denote having positively completed many eBay transactions are highly prized within the eBay 'community of practice' (Wenger, 1998) – since it requires considerable buying and selling efforts to get them. It also denotes how experienced you are as an eBayer, which is regarded as a proxy for the amount of eBay cultural capital you have. In Erickson and Kellogg's (2000) terms, they are visibly being given credit for their skill as a future incentive for use and 'good' behaviour. Having this form of symbolic capital on eBay can also help eBayers build economic capital through getting higher prices for the items they sell compared to new eBayers with no feedback (*cf*. Resnick *et al*., 2002). Negative feedbacks, on the other hand, quickly destroy an eBayer's symbolic capital and the amount of economic capital gained per item. Standifird (2001) comments that three or more negative feedback ratings affected the closing bid price in his study by 3.6%. eBay feedback scores are therefore a form of social navigation system in which decisions of eBay users can be informed by the earlier decisions and experiences of other eBay users (*cf*. Dieberger *et al.*, 2000). High feedback scores are the result of accumulated good experiences and interactions with an eBay user, fostering trust that good experiences are a "shadow of the future" (Axelrod cited Resnick, Zeckhauser, Friedman and Kuwabara, 2000) and encouraging future eBay use.

Some eBayers, however, have been known to sell their user ids to others who wish to acquire the symbolic and cultural capital signalled by a particular feedback profile, often in order for the acquirer to reap economic capital. Theft of eBay identities often occurs for similar reasons, and thus eBay feedback profiles take on a life of their own, independent of the user – what we might call 'feedback capital'. In a similar way, Castronova (2005) talks of 'avatar capital' – the

skills, experiences and powers of an avatar. Avatars may be sold to gain economic capital, through the handing over of user name and password. Malaby (2006) suggests the avatar itself is an object of cultural capital, and a similar argument could be proposed for eBay feedback profiles and user names. The technical system is thus inculcated with social values which are stored and accumulated there for future use, with the potential to be independent of the user's cultural capital. Strong policing of such activities is therefore necessary by eBay to maintain eBay as a 'socially translucent' system (Erickson *et al.*, 1999) where social navigation is not based on misinformation.

4.2 eBay Etiquette and Language in eBay's Feedback System

eBay's feedback system plays a vital role in fostering trust and ultimately eBay's success in what Ba and Pavlou (2002) describe as the 'lean' nature of electronic commerce environment. There is an extensive literature on the eBay feedback system (see Calkins, 2001; Houser & Wooders, 2006; Miller *et al.*, 2002; Resnick & Zeckhauser, 2001; Resnick *et al.*, 2002), considering questions such as the effect of feedback on trust and fraud. However, this chapter wishes to further consider eBay buyers' and sellers' use of the eBay feedback system to denote and signal the presence or absence of eBay cultural capital, through exploring eBay's affordances and potential for cultural conventions in terms of allowing users to have their own eBay etiquette and language through feedback. The research shows that the affordances of the eBay site in allowing differences and distinctions in *how* you give feedback with the feedback system, means that certain ways of giving feedback denote having the 'appropriate' eBay knowledge and competencies of the experienced eBayer – as possessing eBay cultural capital. However, as with many such subtle signifiers, their meaning eventually becomes contested. However, it is eBay's affordances to support such subtle and changeable signifiers as part of a 'socially translucent' system (Erickson *et al.*, 1999) which maintains it as an engaging social space.

The content of comments left as part of the eBay feedback system is important in signalling eBay cultural capital and an eBay user's level of experience. The eBay system allows users to type a comment up to 80 characters long. eBay users quickly realise that there is an etiquette and standard feedback responses for this limited space such as 'A+++++' and 'Good eBayer', and using these signals an entry level engagement with eBay and a certain amount of reflection on eBay's social norms and conventions: "But look at the feedback - all this kind of like A+++++…. It takes a little while to realise that there's, sort of, standard responses to things and standard ways of expressing things." (Rea, Focus group 2E) (see Figure 2).

🟢	received today great thanks a+++	lazyxxxx (761 ⭐)	03-Apr-07 17:59
	-- (#120099501xxx)		
🟢	.•:*¨¨*:•.Thank you.•:*¨¨*:•. •.Great.•:*¨¨*:•..Ebayer.•:*¨¨*:•.A+++++++++.•:*¨¨*:•.	michaelxxxx (327 ⭐)	15-Mar-07 06:46
	-- (#120093943xxx)		
🟢	good ebayer, good communication regarding collection, very helpful A*********	beardyxxxx (53 ⭐)	21-Nov-06 21:31
	-- (#120052419xxx)		

Figure 2: Standard feedback responses signalling entry level eBay cultural capital (anonymised)

However, some eBay users in the study soon became frustrated with these standard feedback responses as their eBay experience increased. eBayers quickly came to realise that the eBay environment tended to be overly-enthusiastically nice in both feedback and other interactions between buyer and seller as a form of defence mechanism against negative feedbacks: "…I think everyone's scared about getting bad feedback. I'm always *extra nice*" (Crystal, Essex focus group 1E). Resnick and Zeckhauser (2001) talk of the so-called 'pollyanna effect', where the eBay feedback system is biased against the negative. However, the research shows both eBay buyers and sellers tend to move away from bland standard feedback responses towards more 'informative' feedbacks which are less about signalling a basic level of eBay cultural capital and

more a concern with giving buyers and sellers the feedback they 'deserve'. This often involves buyers giving 'neutrals', but not negatives, because of fears of retaliatory 'negs'. Giving these 'informative' feedbacks and neutrals is a way to signal more advanced eBay cultural capitals (see Figure 3).

⊙	Although full refund given,the Bvlgari was fake and most inconvenient.	bornxxxx (1493 ⭐)	22-Apr-08 13:07
	-- (#4959019xxx)		
⊙	not happy re condition of ring needs cleaning and stone loose within setting	catgirlxxx(78 ⭐)	Aug-08-02 20:57
	-- (#4947739xxx)		
⊙	not real opal. $150 of $600 was refunded. nominally acceptable outcome. thanks	gardengrnxx(1519 ⭐)	Feb-24-03 20:03
	-- (#2609565xxx)		

Figure 3: Showing more sophisticated eBay cultural capital – neutral feedback (anonymised)

5 eBay and Cultural and Symbolic Capital in Consumption

5.1 eBay, 'Social Translucence' and Dispelling the *Cult of the Amateur*

Andrew Keen in *The Cult of the Amateur* (2007), talks about the 'consumer as creator' in auctioning and bidding for goods on eBay. Keen's argument is that in a world of Web 2.0, our traditional cultural gatekeepers and experts are being disintermediated by 'amateurs' who are now "running the show" (Keen, 2007, p. 34). This blurs the line between the audience and the author, and makes it difficult to recognise the good from the bad. If we apply Bourdieu's ideas to Keen's argument, there is no need for buyers or sellers to have a certain amount of cultural capital to participate on eBay, and as there are no barriers to entry based on cultural capital and competence. To some extent this is true – eBay sellers need have relatively limited knowledge about how to use eBay or about what they are selling in order to participate there. However, this chapter argues that far from the role of 'the expert' being marginalised by 'amateur' listings with the amateurs running the show, the cultural capital of 'the experts' comes to the fore on eBay, and there is very much the ability to evaluate the good from the bad. This chapter argues that the affordances of eBay's website design allows both sellers' and buyers' consumption-related cultural capital to become 'translucent' through eBay's 'socially translucent' system (Erickson *et al.*, 1999), rather than there being a simple take over by the 'unknowing' amateur. This also allows for social navigation (Chalmers *et al*., 2004) through revealing information about the 'who' behind the listing and their expertise (Dieberger *et al.*, 2000). The research shows these factors are important for eBay's 'stickiness'.

Websites such as eBay, which adopt the principles of collaborative peer sharing and production, are said to "… foster a cultural milieu where *consumers* together *pro*duce even the advertisement for the commodities which they bought" (Lamla, 2007, p. 21) – there is a trend towards the 'prosumer'. Laughley (in review) has also talked of eBay in terms of 'consumer authority' (Abercrombie, 1994) - with enthusiast consumers using and acquiring skill and knowledge to assert their authority against producers/ sellers. Amateurs are increasingly skilled, and on eBay users often move from being a buyer to a seller and back again. The affordances of the eBay site actually allow cultural knowledge and competences, or the lack of them, to become 'translucent'. In this process, contrary to Keen's assertions, it is possible for 'amateur' prosumers to recognise what is important and what isn't, and the good from the bad. This happens in two ways on eBay. At its simplest, the research has shown eBayers as browsers and buyers with cultural capital in terms of their consumption area, recognise eBay sellers that have similar cultural capitals and knowledges – purely through how the item has been listed. eBay is operating in the same way as the 'aesthetic traps' Miller (2000) refers to - aligning audience and content creator. eBay is composed of thousands of item descriptions which are entirely constructed by sellers themselves – and the affordances of the site means they can write as much as they like in a freeform text box and upload multiple images. Users assess the cultural capital in the listing of an 'amateur' through the failure to cite particular listing conventions for the type of item. Some eBayers in the study who are part of various 'communities of interest' such as vintage radios, cited and evaluated actual eBay listings on third party discussion forums. Part of eBay's success and 'stickiness' comes from the satisfaction 'expert' consumers derive in assessing eBay item descriptions through the lens of their own cultural capital in a 'socially translucent' system (Erickson *et al.*, 1999). They use particular markers and cues as a form of 'social navigation' (Chalmers *et al*., 2004) for themselves and others in deciding what to buy and what not to buy. The quote below from an old radio online discussion forum shows the 'stickiness' of eBay through the assessment of

cultural capital in practice – the quote comes from a thread commenting on the 'inappropriate' high starting price of a German transistor radio:

> Yes, there's one thing we can count on from eBay: amusement. What did we do in the days BE (before eBay?). Forget 'Big Brother' or 'I'm a Celebrity, Get Me Out Of Here'. The crazy on-line auction antics - and expectations - of the minority of buyers and sellers are surely far more entertaining (Regular poster, thread 'Overpriced?', old radio online forum, 2004).

The research shows the second way in which the prosumer and 'consumer authority' (Abercrombie, 1994) works on eBay, enabling the performance of cultural capital, is in terms of the affordance of the site in enabling buyers to ask questions of the sellers. eBay sellers may receive correspondence about an item through the 'ask seller a question' facility, particularly if they fail to appreciate the historical significance of the item, or propose what is seen by the audience as an 'inappropriate' fate for the item – such as being split up for parts. eBay browsers value this 'consumer authority' (Abercrombie, 1994) that the site enables – which at least allows them to comment using their cultural capital, even if their comments are ultimately ignored. This possibility of interaction involving differential cultural capital again contributes to eBay's 'stickiness'.

eBay's role in actually *acquiring* cultural capital should not be ignored. Many amateurs have started collections from scratch, including one eBay buyer who developed a good eye for jewellery through studying eBay pages – buying three pieces on eBay for £200 and having them valued independently at £4000. For those actively learning through eBay, they may therefore be able to turn their acquired cultural capital back into economic capital – which again contributes to 'stickiness'. However, eBay not only allows eBay users to acquire cultural capital for buying purposes, but also for selling. Slater describes how advertisers act as sociologists to define their products strategically for the market (Slater, 2002). Some second-hand retailing such as retro retailing is seen as using "eminently plagiarizable" (Crewe, Gregson & Brooks, 2003, p. 91) notions of taste, distinction and quality. This chapter would argue that with eBay these notions used to signal cultural capital are even more plagiarizable in a new media context. The research has shown eBay sellers are able to study how other retro and second-hand retailers 'spin' their items as a kind of reflexive practice due to the affordances of the site. They explore which retro or second-hand sellers get better prices for their items using eBay's completed item searches, and deconstruct item pages for reasons why. eBay allows sellers to cite certain elements of cultural knowledge in order to convince the audience that they have certain cultural capitals – again forming the kind of 'aesthetic trap' that Miller (2000) describes. eBay is therefore 'sticky' as the website has the affordances to allow sellers to quickly acquire a 'hollowed out' form of cultural capital that enables them to have enough legitimacy with buyers to build economic capital from sales.

6 eBay And Social Capital: Social Navigation For Problem Solving And Finding The 'Like-Minded'

Bourdieu's term 'social capital' is defined as "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition" (Bourdieu cited Portes, 1998: 3). Bourdieu's social capital focuses on the benefits accrued by individuals through participation in groups, including the purposive construction of sociability for social capital advantages (Portes, 1998). Actors, through social capital, can also gain access to economic capital and cultural capital. The notion of social capital in inextricably linked in the literature to building trust. However, this chapter, having touched on trust during discussions about feedback, instead wishes to explore more fully the affordances of the eBay site in building social capital through notions of 'networks' and 'communities'. Building eBay as a 'community' was seen as one way that it increased its 'stickiness' (*cf*. Cohen, 2002). The eBay site has certain affordances which aid the building of social capital (and therefore other forms of capital) and certain sorts of community, which this chapter explores below. However, it is important to note that those affordances are appropriated in very different ways by eBay users to build social capital, and the research reveals that some eBay users are not at all interested in building social capital on eBay - eBay is therefore variably 'sticky' in terms of notions of building communities. Some of eBay's site design and affordances also contribute to a disengagement with social interaction and building social capital.

The affordances and constraints of eBay's website design in terms of social capital is complex. eBay introduced a 'checkout' system which helped 'automate' some aspects of a transaction. Previously, buyers and sellers tended to write e-mails to each other. eBay's 'checkout' system is seen by users to limit the social interaction of the past, whilst sellers talk of "you don't make huge lasting relationships". This is a less successful part of eBay's iterative changes from a user perspective of building social capital. However, this chapter argues that eBay does still afford the building of social capital in particular ways, contributing to 'stickiness', which is explored in detail below. Evidence from our research suggests there are three meta-concepts of community being outworked by eBay users in their building of social capital on eBay: a community of commerce/ transaction; a community of practice and communities of interest. These eBay 'communities', in practice, tend to overlap – ultimately predicated on buying and selling practices. The eBay system affords the building of social capital in particular ways, and these are noted in detail below through the perspective of these meta-concepts of 'community'. eBay's socio-technical system fosters 'social navigation'(Chalmers *et al.*, 2004) towards people who can provide various sorts of social capital advantages, based on what others have previously been doing on eBay – from solving problems to being the 'like-minded'.

6.1 eBay, Social Capital and a 'Community of Practice'

eBay, themselves, recognise the business benefits of having a 'community of practice' (Wenger, 1998) - in having a self-sufficient community who can solve each others' difficulties (Cohen, 2002). 'Communities of practice' are defined as "…groups of people who share a concern or passion for something they do and learn how to do it better as they interact regularly" (Wenger, N.D.: 1). Interactions in such communities facilitate trust and other beneficial aspects of building social capital (Smith, 2003). The research shows it takes time to master eBay's cultural capital, and this may be learnt through interaction on the community boards. The technical system of eBay and its interrelationship with other aspects of e-commerce such as payment and postage is also complex enough to require a 'community of practice' to answer some of the questions that result. eBay users recognise that with eBay knowledge, the 'right' answers are often found through consulting people with actual experience of the problem.

The eBay community boards which eBay set up so that the eBay community could solve its own problems (*cf*. Cohen, 2002) were used directly very much by a minority of eBay users in the study, and much more often by those who invested greater time in eBay as both buyers or sellers. One of the affordances of the eBay site that sellers often took advantage of *vicariously* is the social capital benefits generated through indirect social interaction on the community boards. The boards allowed for the documentation of current eBay 'happenings', problems and issues so well through the use of discussion threads and a keyword search facility, that direct social interaction was unnecessary. The community boards are therefore another 'sticky' element of eBay, because cultural capital can be acquired passively through 'free riding' on other people's sociality. This is archetypal 'social navigation' (Chalmers *et al.*, 2004) in practice – with decisions and knowledge informed by what others have done before. In addition, some eBayers were using the affordances of the eBay community pages and chat boards to 'make friends', independent of the need to solve eBay problems. In particular, the study showed that one eBay seller, who had given up regular work in the banking sector to be a full-time eBay seller, was using the eBay community pages in order to seek out some 'virtual' work colleagues, which often made eBay more 'sticky' than television:

> Some girl was saying she had to take her dog to the vet to be put to sleep…, and how upset she was, and I started conversation with that one, because I was going through the same thing as her. […] You know when you do a day-to-day job, …you have a chat with …your work colleagues. Well, of course, working from home you haven't got that […] [M]y mum says to me: 'I don't know how you find the time to do that.' And I'm thinking: 'sometimes I spend more time looking at the community pages than I do say watching something on the television. (Valerie, eBay seller interview).

The full-time eBay seller later joined two of eBay's interest groups to gain the benefits of human interaction from building social capital there – in the form of the 'cat love' and 'book' group – 'communities of interest'. eBay's affordances allowed social navigation towards the 'like-minded' – a theme further developed below in relation to consumption interests.

6.2 eBay, Social Capital and 'Communities of Interest'

Within the 'community of commerce' and 'community of practice' are found to be numerous 'communities of interest' – lifestyle enclaves (Bellak cited Fernback, 1997) who share common interests. These are described by eBay users in geographic terms and often related to very specific collecting interests: "I suspect there's a set of smaller communities, a bit like mini-villages; so there's a mini-village for stamps… And I imagine there's a set of housing estates within the villages as well" (Gerard, stamp collector). Unique to eBay, and built on eBay's particular affordances and technical system, is social capital constructed around subsets of these communities of interest – 'bidding circles' or 'communities of bidding'. The eBay site afforded this at the time of the study's fieldwork by showing the user IDs of eBayers engaging in the bidding process, and eBayers frequently saw the same eBay user IDs crop up in bidding (see Figure 4 for how this looked on the eBay site). As well as eBay user IDs creating a recognisable identity, eBay user IDs enable other eBay users to go back through feedback profiles to see what people have bought and sold, and you can contact other eBayers using the 'contact member' facility of the eBay user's own page. The IDs also reveal the 'who' of social navigation and the 'what' of buying and selling (*cf*. Dieberger, 2000). 'Communities of bidding' may contain what are regarded as 'arch rivals', which mitigates against social interaction. However, the research also shows friendship is a possibility as bidders navigate towards like-minded people collecting the exact branch of material culture they do:

> Funnily enough, I made a very good friend in Brazil… Um, and he's been to my house a couple of times. […] We were bidding on the same thing, pushing the prices up. So in the end, I can't remember if I e-mailed him, or he e-mailed me, and it was just a case of: 'what do you collect?' And then we realised we collected exactly the same kind of thing… two people who wouldn't normally talk to each other from opposite sides of the world… (Frederick, stamp and cover collector interview)

As well as the social capital advantages of free accommodation in each country when visiting, there are also economic capital advantages - they have a protocol as to who bids for what item, creating a form of auction ring in order to keep prices down. These are all attractive

aspects of building eBay social capital, which helps eBay maintain its position as "the standard-bearer in web site stickiness" (Mancey, 2001). However, this policy of revealing bidders' user ids has now stopped on the eBay.co.uk site for expensive items – a policy eBay implemented to stop bidders being targeted by fraudulent second chance offers. Erickson and Kellogg (2000) note a tension between visibility and privacy in socially translucent systems, and eBay have now opted for an approach more reminiscent of the 'footprint' approach of anonymised use (Wexelblat and Maes, 1999). This does, however, lead to problems with trust, since shill bidding is undetectable by buyers in such a system through their own observation and sleuthing (although eBay have shill bidding detection systems). This approach of keeping user ids private represents a further change in the eBay site away from 'social translucence' (Erickson *et al*., 1999) and the capabilities of 'social navigation' (Chalmers *et al.*, 2004), towards privacy and security.

⊘ dust_heap_boffin, you're the winner.

Bidder	Bid Amount	Bid Time
dust_heap_boffin (612 ⭐)	£56.50	04-May-08 15:15:47 BST
bornxxxx (1493 ⭐)	£55.50	04-May-08 15:15:36 BST
gardengrnx (1519 ⭐)	£35.01	04-May-08 09:33:10 BST
catgirlxxx (78 ⭐)	£35.00	29-Apr-08 13:03:11 BST
lazyxxxx (761 ⭐)	£33.01	04-May-08 09:32:37 BST
michaelxxxx (327 ⭐)	£31.01	04-May-08 09:32:07 BST
beardyxxxx (53 ⭐)	£29.01	04-May-08 09:31:09 BST
gardengrnx (1519 ⭐)	£25.00	28-Apr-08 11:21:34 BST
lazyxxxx (761 ⭐)	£20.00	27-Apr-08 08:40:04 BST
Starting Price	£19.99	24-Apr-08 15:15:54 BST

Figure 4: eBay's affordances allowed the building of social capital around 'bidding circles' – where the same user IDs kept cropping up in relation to specific collectable items. eBay members can 'click through' from user ids to both contact the member and see other items bought and sold

7 The Implications of A Bourdieuean Approach For Socio-Technical Systems And Website Design

This chapter has introduced the concepts of the 'field' and 'capital', as part of a Bourdieuean approach to understanding the 'stickiness' of websites in terms of their social and cultural affordances and conventions. It has argued, using the results of qualitative fieldwork, that a large part of eBay's stickiness is in its social and cultural affordances for social translucence and navigation in supporting the building, control of, and competition over, various sorts of 'capital'. So what are the implications of this approach for socio-technical systems and more specifically for website design – in particular for designing socially translucent systems which support social navigation? Chalmers *et al*., (2004) suggest that a major research question involves how social texture can be accumulated to help users socially navigate and use space. A reflection on the empirical insights of this chapter would suggest much of this texture is related to building or competing for 'capital'. It could therefore be argued that taking a Bourdieuean approach is vitally important in creating successful socially translucent and socially navigable systems. A Bourdieuean approach enables us to better design websites to be 'sticky' through the incorporation of particular affordances, features and tools which support competition over capital. Secondly, a Bourdieuean approach also allows us to predict how certain affordances, features and tools may be appropriated by users as part of their control over building social capital – often in ways unintended by website designers as technology evolves in use. In terms of more specific advice for the creation of socio-technical systems and in particular website design, the eBay case study, seen through a Bourdieuean perspective, suggests that certain social and cultural practices and processes should be supported in order to create 'stickiness' and ultimately success.

The starting point for stickiness is to develop your website into a 'community of practice', and a 'field' in its own right. For this to happen, the technical system or website, its conventions, and the practices that go on there, must be sufficiently complex and different to generate its own set of knowledges. This knowledge often concerns etiquette, language, a sense of 'appropriate behaviour' and technical competency in knowing how to do certain things on the site. The community of practice is a 'field' because there are hierarchies of knowledge involved – some people know more and some people know less. There must be numerous ways for this to be expressed, signalled and read in a socially translucent system – the cultural and symbolic capital related to the technical system. eBay has both its community boards and feedback system to do this. The community boards allow users to perform their knowledge and cultural capital about the technical system in interactions with others. Other websites would also benefit in terms of stickiness in having boards or discussion forums where its own set of knowledges could be exchanged and to enable social navigation towards those with similar problems or the like-minded. Social proxies (Erickson and Kellogg, 2002) are also important in website design. Feedback stars are a form of distinction and a display of symbolic capital which are prized to the extent that there is 'feedback capital'. They are also a proxy for cultural capital. Websites should find ways of making cultural capital translucent through using visual social proxies (Erickson and Kellogg, 2002) for expertise, related to feedback on behaviour and the amount of interaction carried out on the site.

Another important aspect of eBay's stickiness is the flexibility of social interaction possible there - dependent on what aspect of users' identity or interests is uppermost for them at that time. In terms of social capital, the affordances of the eBay site mean that it has a number of filtering and sorting mechanisms for social navigation that make interaction relevant and 'attractive'. eBay members can go to the community boards and seek out other eBayers with similar or greater eBay cultural capital than themselves, which may be denoted by having a certain colour of star. They can find virtual work colleagues through particular interest groups on the community boards. They can join or construct groups related to particular collecting interests, and also make social contacts through interacting in certain eBay item categories or as part of bidding circles. The eBay experience suggests websites should have or enable a number of filtering and sorting mechanisms that can make user interactions meaningful for

any one of a number of aspects of their personality or identity - that the site should have affordances which reveal the 'who' and 'what' of social navigation (*cf*. Dieberger, 2000) to enable a path towards those with similar problems or the 'like-minded'.

Overall, eBay's social and cultural affordances and conventions are important to eBay success because they offer many things to many people – a range of attractive engagements, interactions and performances for people with different subjectivities and backgrounds, in both buying and selling. Much of the eBay system is open to user appropriation, and when users appropriate the eBay technical system, such as through constructing their own item pages or interacting on the community boards, competition and control of capital often comes to the fore. Even where the eBay system has greater technical constraints or conventions, such as the 80 character feedback comments box, it is still used to perform and signal capital. In addition, the eBay feedback star system is specifically designed to be a form of symbolic capital, out of recognition of the importance of these processes in iterative design. Where eBay had reduced opportunities for gaining social capital for commercial reasons or security, it has arguably not been well-received by some users. This suggests that the Bourdieuean approach is a valuable perspective for successful website design, and that technical systems should be designed to support the building, control and competition over capital. The 'struggle' over capital is an inherent part of social processes, and people will ultimately use websites to compete for capital in ways both intended and unintended by the designed affordances and conventions of technical systems. However, it is also necessary to be vigilant that the pursuit of 'capital' does not go too far as technology evolves in use. The selling and stealing of eBay user IDs and inherently their feedback profiles, capitalising on 'feedback capital', shows a potential contradiction in designing for success through a Bourdieuean approach and that of social translucence and social navigation. The importance of displaying and acquiring capital at any cost may lead to social proxies bearing no correlation to the user behind them or their future actions. Successful website design therefore involves the alignment of all three approaches, but still requires a greater acknowledgement than at present of the importance of a Bourdieuean approach for understanding social texture, in ultimately helping users constructively and enjoyably use online spaces.

8 Acknowledgements

9 References

Abercrombie, N. (1994) Authority and Consumer Society. In R. Keat, N. Whiteley & N. Abercrombie (Eds.) *The Authority of the consumer* (pp. 43-57). London: Routledge.

Ba, S., & Pavlou, P. A. (2002) Evidence of the effect of trust building technology in electronic markets: Price premiums and buyer behaviour. *MIS Quarterly*, 26(3), 243-268 [Electronic version].

Bourdieu, P. (1984) *Distinction – A social critique of the judgement of taste.* London: Routledge.

Bourdieu, P. (1993) *The field of cultural production*. Cambridge, Polity Press.

Boyd, J. (2002) In Community We Trust: Online Security Communication at eBay. *Journal of Computer-Mediated Communication*, 7. Retrieved December 15, 2005, from http://jcmc.indiana.edu/vol7/issue3/boyd.html

Bunnel, D., & Luecke, R. (2000) *The eBay Phenomenon: Business Secrets Behind the World's Hottest Internet Company* (New York; Chichester: John Wiley and Sons).

Calkins, M. (2001) My Reputation Always Had More Fun Than Me: The Failure of eBay's Feedback Model to Effectively Prevent Online Auction Fraud. *Journal of Law and Technology*, 33. Retrieved January 17, 2006, from http://www.richmond.edu/jolt/v7i4/note1.html

Castronova, E. (2005) *Synthetic worlds: The business and culture of online games.* Chicago: University of Chicago Press.

Carruthers, B. G., & Uzzi, B. (2000) Economic Sociology in the New Millennium. *Contemporary Sociology*, 29(3), 486-494.

Chalmers, M.; Dieberger, A.; Höök, K. and Rudström, Å. (2004) Social Navigation and Seamful Design. Cognitive Studies, 11(3), 1-11. Retrieved April 9, 2008, from http://www.sics.se/~kia/papers/Japan2004.pdf

Chircu, A. M., & Kauffman, R. J. (2001) Digital intermediation in electronic commerce - the eBay model. In S. J. Barnes & B. Hunt (Eds.) *E-commerce and V-Business: Business Models for Global Success* (pp. 45-64). London: Butterworth-Heinemann.

Cohen, A. (2002) *The perfect store - Inside eBay*. London: Piatkus.

Crewe, L.; Gregson, N. & Brooks, K. (2003) Alternative retail spaces. In A. Leyshon, R. Lee, & C. C. Williams (Eds.) *Alternative Economic Spaces* (pp. 74-106). London: Sage.

Dieberger, A.; Dourish, P.; Höök, P.; Resnick, P. and Wexelblat, A. (2000) Social navigation: techniques for building more usable systems. *interactions*, 7(6), 36-45.

eBay.co.uk (n.d., a) eBay Fast Facts - eBay.co.uk. Retrieved January 3, 2008, from http://pages.ebay.co.uk/community/aboutebay/news/pressreleases/fastfacts/04_2005.html

eBay.co.uk (n.d., b) Trust & Safety – eBay Feedback. Retrieved January 3, 2008, from http://pages.ebay.co.uk/aboutebay/trustandsafety.html

Ellis, R. M., & Haywood, A. (2006) Full Report of Research Activities and Results for the ESRC - Virtually second-hand: Internet auction sites as spaces of knowledge performance. Award no: RES: 000-23-0433.

Erickson, T. and Kellogg, W. A. (2000) Social Translucence: An Approach to Designing Systems that Support Social Processes. Retrieved April 9, 2008, from http://www.pliant.org/personal/Tom_Erickson/st_TOCHI.html

Erickson, T. and Kellogg, W. A. (2002) Social Translucence: Using Minimalist Visualizations of Social Activity to Support Collective Interaction. In K. Höök, D. Benyon, & A. J. Munro (Eds.) *Designing Information Spaces: The Social Navigation Approach* (pp. 17-42). London: Springer-Verlag. Retrieved April 9, 2008, from http://www.research.ibm.com/SocialComputing/Papers/SocialNav.pdf

Erickson, T.; Smith, D. N.; Kellogg, W. A; Laff, M.; Richards, J. T.; Bradner, E. (1999) Socially Translucent Systems: Social Proxies, Persistent Conversation, and the Design of "Babble". Conference on Human Factors in Computing Systems, *Proceedings of the SIGCHI conference on Human factors in computing systems: the CHI is the limit*, 72-79.

Erickson, T.; Halverson, C.; Kellogg, W. A.; Laff, M. and Wolf, T. (2002) Social Translucence: Designing Social Infrastructures That Make Collective Activity Visible, *Communications of the ACM*, 45, 40-44.

Fernback, J. (1997) The Individual Within the Collective: Virtual Ideology and the Realization of Collective Principles. In S. Jones (Ed.) *Virtual culture – Identity and communication in cybersociety* (pp. 36-54). London: Sage Publications.

Golder, S. A., & Donath, J. (2004) Social Roles in Electronic Communities. Paper for the Association of Internet Researchers (AOIR) conference, Internet Research 5.0, September 19-22, Brighton, UK.

Haywood, A. J. (2006) Online Auctions: User Experience Insights from eBay. Chimera Working Paper 2006-10. Ipswich: University of Essex.

Houser, D., & Wooders, J. (2006) Reputation in Auctions: Theory, and Evidence from eBay. *Journal of Economics & Management Strategy*, 15(2), 353-369.

Hutcheon, L. (1995) *Irony's edge: The theory and politics of irony*. London and New York: Routledge.

Keen, A. (2007) *The cult of the amateur – How today's internet is killing our culture and assaulting our economy*. London: Nicholas Brearley.

Lamla, J. (2007) Building a Market-Community - Paradoxes of Culturalization and Merchandization in the Internet. Retrieved January 14, 2008. from: http://www.mpifg.de/maerkte-0702/papers/Lamla_Maerkte2007.pdf

Laughley, D. (in review) User Authority through Mediated Interaction: A Case of eBay-in-use. In submission to *Journal of Consumer Culture*.

Malaby, T. (2006) Parlaying Value: Capital in and Beyond Virtual Worlds. *Games and Culture*, 1(2), 141-162.

Mancey, J. (2001) The online universe. *Information Age*. Retrieved January 7, 2008, from http://www.information-age.com/article/2001/may/the_online_universe

Miller, D. (2000) The Fame of Trinis: Websites as Aesthetic Traps. *Journal of Material Culture*, 5 (1), 5-24.

Miller, N., Resnick, P., & Zeckhauser, R. (2002) Eliciting Honest Feedback in Electronic Markets. Retrieved January 7, 2008, from http://ksgnotes1.harvard.edu/Research/wpaper.nsf/d745629e080d1fe88525698900714934/d997a59b1cb907cb85256c39004c241c/$FILE/elicit.pdf

Norman, D. A. (1999) Affordance, conventions, and design. *Interactions,* 6(3), 38– 43.

Norman, D. A., (2002) *The design of everyday things*. New York: Basic Books.

Portes, A. (1998) Social capital: origins and applications. *Annual Review of Sociology*, 24, 1-24.

Resnick, P., & Zeckhauser (2001) Trust among Strangers in Internet Transactions: Empirical Analysis of eBay's Reputation System. Paper presented at E-Commerce Conference, Bodega Bay, Calif., January 2001. Retrieved February 12, 2006, from http://www.si.umich.edu/~presnick/papers/ebayNBER/RZNBERBodegaBay.pdf

Resnick, P.; Zeckhauser, R.; Friedman, E. and Kuwabara, K. (2000) Reputation Systems. *Communications of the ACM*, 43(12), 45-48.

Resnick, P., Zeckhauser, R.; Swanson, J. & Lockwood, K. (2002) The Value of Reputation on eBay: A Controlled Experiment. Forthcoming in *Experimental Economics*. Retrieved December 5, 2005, from http://www.si.umich.edu/presnick/papers/postcards/

Savage, M., Barlow, J., Dickens, P., & Fielding, T. (Eds.)(1992) *Property, bureaucracy and culture*. London: Routledge.

Smith, C. W. (1989) *Auctions: The social construction of value*. Berkeley: University of California Press.

Smith, M. K. (2003) Communities of practice. *The encyclopedia of informal education*. Retrieved April 7, 2006, from http://www.infed.org/biblio/communities_of_practice.htm

Standifird, S. S. (2001) Reputation and e-commerce: eBay auctions and the asymmetrical impact of positive and negative ratings. *Journal of Management* 27, 279–295.

Sterne, J. (2003) Bourdieu, Technique and Technology. *Cultural Studies*, 17(3), 367-389.

Vishwanath, A. (2004) Manifestations of interpersonal trust in online interaction: A cross-cultural study comparing the differential utilization of seller ratings by eBay participants in Canada, France, and Germany. *New Media & Society*, 6(2), 219-234.

Wenger, E. (N.D.) Communities of practice: a brief introduction. Retrieved April 7, 2006, from http://www.ewenger.com/theory/

Wexelblat, A. and Maes, P. (1999) Footprints: History-Rich Tools for Information Foraging. Conference on Human Factors in Computing Systems, *Proceedings of the SIGCHI conference on Human factors in computing systems: the CHI is the limit*, 270–277.

Wenger, E. (1998) *Communities of practice: learning, meaning and identity.* Cambridge: Cambridge University Press.

Zukin, S. (2004) *Point of purchase: How shopping changed American culture.* London: Routledge.

Annex A Key terms

Annex A   Affordances

The term 'affordances' has its origins in Psychology, "the perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used" (Norman, 2002, p. 9). The term was coined by a perceptual Psychologist, J. J. Gibson (Norman, 1999). However, Norman pushed the notion of affordance beyond properties into experiences, noting affordances have a historical basis – users know what to do with things because they have used them before – they know to turn a knob or push on a door plate (Norman, 2002). Norman's contribution was in setting out perceived affordances. In product design, Norman notes that there are both real and perceived affordances, but these need not be the same (Norman, 1999). There is a perception of what is possible which is different from what is actually possible. In screen based interfaces, he notes interface designers primarily control only perceived affordances (*op. cit*.). The physical affordances of the computer, screen, keyboard and mouse are already built in. There are differences between real affordances and perceived affordances on the screen. Real affordances may not have a visual presence, and perceived affordances sometimes do not support real affordances. Norman (1999) also suggests that designers often confuse the notion of affordances with conventions or constraints. He contends that virtual worlds are often more about constraints and conventions, and the physical world more about affordance. He suggests there are three kinds of constraints on behaviour: physical, logical and cultural. Physical constraints are related to real affordances – you cannot move a cursor outside a screen. Logical constraints involve reasoning to determine alternatives. It is how users know to scroll down to see the rest of the page. Cultural constraints are conventions shared by a group. They are cultural and learned conventions, such as dragging the scroll bar down with a cursor which changes shape on the scroll bar, to see the bottom of the page. But the system does not have to be designed in this way. Conventions are constraints that prohibit some activities and encourage others, affordances concern the range of possible actions and relate to properties of the world. Physical constraints cannot be overcome, but logical and cultural constraints can be ignored. Conventions evolve and require a 'community of practice' to be adopted (*op. cit*.) and are artificial and learned, with learning them helping us to master everyday life.

References:

Norman, D. A. (1999) Affordance, conventions, and design. *Interactions,* 6(3), 38– 43.

Norman, D. A., (2002) *The design of everyday things*. New York: Basic Books.

Annex B   Capital

'Capital', for Bourdieu, concerns: "the set of actually usable resources and powers" (Bourdieu, 1984, p. 114), and there are various sorts of capital: economic, social, cultural and symbolic. Economic capital refers to money and assets; whereas social, cultural and symbolic capital involve interests and resources which are not material (*cf*. Bourdieu, 1993).

References:

Bourdieu, P. (1984) *Distinction – A social critique of the judgement of taste.* London: Routledge.

Bourdieu, P. (1993) *The field of cultural production*. Cambridge, Polity Press.

Annex C   A (social and technical) 'field'

Bourdieu developed the concept of the 'field' to denote the fact that agents act in social situations which are governed by objective social relations (Bourdieu, 1993) between people. McNay notes that modern society in increasingly differentiated into distinct fields (McNay, 1999). According to Sterne (2003), we might consider a field as being where technological production and consumption come together – as with a mutually constitutive technical and social system. Social formations are structured by a series of fields (such as the cultural, educational and political), with each being a structured space with its own rules or laws which require mastery (Bourdieu, 1993). In any given field, there is social struggle and competition, where agents vie for control of 'capital' (*op. cit*.).

References:

Bourdieu, P. (1993) *The field of cultural production*. Cambridge, Polity Press.

McNay, L. (1999) Gender, Habitus and the Field - Pierre Bourdieu and the Limits of Reflexivity. *Theory, Culture and Society*, 16(1), 95-117.

Sterne, J. (2003) Bourdieu, Technique and Technology. *Cultural Studies*, 17(3), 367-389.

Annex D   Cultural capital

Cultural capital is seen to be based on cultural knowledge, dispositions and competences, and acquiring cultural capital builds authority and power. One may need certain skills, powers or knowledges to enter particular fields and be seen as legitimate. In the field of cultural production, there are producers, and those who legitimate and consecrate cultural products as consumers (e.g. critics, galleries, the public) (Bourdieu, 1993). Cultural capital is inculcated and acquired through education, the family and social institutions – which allows social agents to decipher cultural artefacts and understand their internalised codes. Cultural capital is unequally distributed, often differentially amongst different class fractions (Bourdieu, 1993). Malaby applies Bourdieu's concept of cultural capital to online and synthetic worlds. He defines cultural capital as: "the resource that participants develop and acquire in the form of competencies and credentials and that they also invest in valued cultural objects, or artifacts" (Malaby, 2006, p. 146). Malaby sees the cultural competencies of synthetic worlds as in greater flux than in the 'offline', and are part of a process of 'becoming', rather than reproducing existing socioeconomic differences. Malaby suggests certain competencies may relate to technologically mediated environments, but are not essentially different to those developed in other technical domains – such as flying a plane. However, he argues that there is a need to research such 'synthetic world' competencies in more detail.

References:

Bourdieu, P. (1993) *The field of cultural production*. Cambridge, Polity Press.

Malaby, T. (2006) Parlaying Value: Capital in and Beyond Virtual Worlds. *Games and Culture*, 1(2), 141-162.

Annex E   Social Capital

Recent interest in the term social capital has its origins in the writings of Pierre Bourdieu (Schuller, Baron & Field, 2000). Bourdieu's term 'social capital' was best articulated in his chapter 'Forms of capital' in 1983 (*op. cit.*), having remained often elusive and marginal in other works (*op. cit*.). The concept was defined as: "the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition" (Bourdieu cited Portes, 1998, p. 3).

Bourdieu's social capital focuses on the benefits accrued by individuals through participation in groups, including the purposive construction of sociability for social capital advantages (Portes, 1998). Actors, through social capital, can also gain access to economic capital (loans, markets) and cultural capital (through experts or others with cultural capital). James Coleman is also associated with the concept of 'social capital', and is best known for using the term in educational contexts. He also defines it in terms of a set of resources which facilitate the actions of actors. The resources comprises entities which have as part of them some elements of social structures, but the resources facilitate acting within the structure. Coleman sees social relations as providing social capital resources through creating information channels, establishing obligations and social norms (Schuller, Baron & Field, 2000). Robert Putnam's work on social capital is currently the most cited across a range of disciplines and fields (*op. cit*). In *Bowling Alone*, a book that charted the decline in community organisations and civic engagement in the US, Putnam suggested that the core of social capital theory was that social networks have a value, with social contacts affecting group and individual productivity (Putnam, 2000). Putnam talks of norms of generalised reciprocity – that you do someone a favour and expect that someone else will do something for you later on. Schuller, Baron and Field (2000) also point out Putnam's definition of social capital as involving aspects of social life – trust, norms and networks – which help people pursue joint objectives and act more effectively together. Putnam (2000) suggests computer mediated communication (CMC) can support dense, large and fluid groups across the boundaries of geography and organisations, and allow for networks based on shared interests instead of just shared space. He talks of CMC increasing people's 'intellectual capital' as information is capable of being shared at virtually zero cost. But he also argues that a lack of social cues means that computer-based groups are generally worse at trust and reciprocity and may indulge in 'flaming' and disinhibited behaviour.

References:

Portes, A. (1998) Social capital: origins and applications. *Annual Review of Sociology*, 24, 1-24.

Putnam, R. D., (2000) *Bowling alone – The collapse and revival of American community.* New York: Simon and Schuster.

Schuller, T., Baron, S., & Field, J. (2000) Social Capital: A Review and Critique. In S. Baron, J. Field, & T. Schuller (Eds.) *Social Capital – Critical Perspectives* (pp. 1-38). Oxford: Oxford University Press.

Annex F   Social navigation

The term 'social navigation' was first used by Dourish and Chalmers in a short paper presented at the HCI conference in 1994 (Chalmers, Dieberger, Höök and Rudström, 2004). In terms of the online world, social navigation involves your decisions being informed and guided by information about what other people have been doing online (Dieberger, Dourish, Höök, Resnick and Wexelblat, 2000). Wexelblat and Maes (1999) examine navigation in complex information spaces, and highlight the importance of interaction history or traces to guide our actions. In online spaces, problem-solving work carried out by users is said to leave traces which should be accessible to users in the future to make solving problems easier (*op. cit*.). Wexelblat and Maes use analogies to the physical world to describe the benefits of creating online spaces which can support social navigation. They suggest that following Norman (see the definition of 'Affordances') - objects that are rich in the history of use acquire new affordances which we can use for new ways of interaction, for example a library book with annotated notes is interacted with differently than a new book (op. cit.). They describe different sorts of interaction history – knowing **what** was done, knowing **who** did it, knowing **why** it was done and knowing **how** it was done. These are all important for different reasons in future actions and problem solving – for example the 'who' may be important as the views of domain experts have greater legitimacy as a 'trace' than that of an amateur (*cf*. Dieberger,

Dourish, Höök, Resnick and Wexelblat, 2000). Dieberger, Dourish, Höök, Resnick and Wexelblat (2000) suggest that systems software is only slowly adopting social navigation. Social navigation systems exploit social behaviour and practices in order to help users explore and navigate (Chalmers, Dieberger, Höök and Rudström, 2004). People are said to transform space from their use and behaviour. However, the traces which are left behind can be sedimented and alter social practices – space is transformative and impacts on society (*cf*. Dieberger, Dourish, Höök, Resnick and Wexelblat, 2000), as well as society impacting on space.

References:

Chalmers, M.; Dieberger, A.; Höök, K. and Rudström, Å. (2004) Social Navigation and Seamful Design. Cognitive Studies, 11(3), 1-11. Retrieved April 9, 2008, from
http://www.sics.se/~kia/papers/Japan2004.pdf

Dieberger, A.; Dourish, P.; Höök, P.; Resnick, P. and Wexelblat, A. (2000) Social navigation: techniques for building more usable systems. *interactions*, 7(6), 36-45.

Wexelblat, A. and Maes, P. (1999) Footprints: History-Rich Tools for Information Foraging. Conference on Human Factors in Computing Systems, *Proceedings of the SIGCHI conference on Human factors in computing systems: the CHI is the limit*, 270–277.

Annex G   Social translucence

The term 'social translucence' was developed in by Erickson, Smith, Kellogg, Laff, Richards and Bradner (1999). 'Socially translucent systems' are described as those digitally-based systems which provide social cues which afford accountability, awareness and visibility (*op. cit*.). These social cues in turn allow people to draw upon their expertise and social experience in structuring their interactions with others (Erickson and Kellogg, 2000). Erickson, Smith, Kellogg, Laff, Richards and Bradner (1999) describe certain actions which are possible in socially translucent systems – such as noticing, creating and conforming to social conventions; engaging in peer pressure and imitating others' actions through observation (*op. cit*.). Social translucence as a design approach is also articulated in Erickson, Halverson, Kellogg, Laff and Wolf (2002). The 'social' in social translucence refers to providing socially salient cues. Translucence is a term used in preference to 'transparence' – it is not an intention to make all socially salient cues visible, just some of them. Erickson and Kellogg (2000) note a tension between visibility and privacy in such systems, which also impacts on systems employing a social navigation approach – where there is a trade-off between allowing users to see the paths of others versus seeing the footprints of anonymised and merged use (Wexelblat and Maes, 1999). Cues are differentially available through space and are made use of in interactions (Erickson, Halverson, Kellogg, Laff and Wolf, 2002). One system of social translucence involves the notion of a social proxy, a minimalist form of visualisation of people or their activities (Erickson and Kellogg, 2002). These are part of bringing social cues into digital systems through an abstract approach of simple text and graphics (Erickson and Kellogg, 2002).

References:

Erickson, T. and Kellogg, W. A. (2000) Social Translucence: An Approach to Designing Systems that Support Social Processes. Retrieved April 9, 2008, from
http://www.pliant.org/personal/Tom_Erickson/st_TOCHI.html Erickson, T. and Kellogg, W. A. (2002) Social Translucence: Using Minimalist Visualizations of Social Activity to Support Collective Interaction. In K. Höök, D. Benyon, & A. J. Munro (Eds.) *Designing Information Spaces: The Social Navigation Approach* (pp. 17-42). London: Springer-Verlag. Retrieved April 9, 2008, from
http://www.research.ibm.com/SocialComputing/Papers/SocialNav.pdf

Erickson, T.; Smith, D. N.; Kellogg, W. A; Laff, M.; Richards, J. T.; Bradner, E. (1999) Socially Translucent Systems: Social Proxies, Persistent Conversation, and the Design of

"Babble". Conference on Human Factors in Computing Systems, *Proceedings of the SIGCHI conference on Human factors in computing systems: the CHI is the limit*, 72-79.

Erickson, T.; Halverson, C.; Kellogg, W. A.; Laff, M. and Wolf, T. (2002) Social Translucence: Designing Social Infrastructures That Make Collective Activity Visible, *Communications of the ACM*, 45, 40-44.

Wexelblat, A. and Maes, P. (1999) Footprints: History-Rich Tools for Information Foraging. Conference on Human Factors in Computing Systems, *Proceedings of the SIGCHI conference on Human factors in computing systems: the CHI is the limit*, 270–277.

Annex H   Symbolic capital

Symbolic capital is said to refer to a: "degree of accumulated prestige, celebrity or honour and is founded on a dialectic of knowledge (*connaissance*) and recognition (*reconnaissance*)" (Bourdieu, 1993, p. 7). In *Distinction* (1984), Bourdieu refers to symbolic capital as: "the acquisition of a reputation for competence and an image of respectability and honourability…" (1984, p. 291). Bird and Smith (2005) note the convergence between Bourdieu and consumption theorist Veblen (1994) in that a seeming lack of interest in building economic capital in the form of conspicuous consumption or generosity attain the highest profits in terms of symbolic capital. There is a cost to building symbolic capital in terms of time, wealth or energy.

References:

Bird, R. B., & Smith, E. A. (2005) Signaling Theory, Strategic Interaction, and Symbolic Capital. *Current Anthropology*, 46(2), 221-248.

Bourdieu, P. (1984) *Distinction – A social critique of the judgement of taste.* London: Routledge.

Bourdieu, P. (1993) *The field of cultural production*. Cambridge, Polity Press.

Veblen, T. (1994) *The theory of the leisure class*. New York: Dover. (Original work published 1899).

Annex I   Communities of practice

'Communities of practice' as defined by Wenger, involve: "…groups of people who share a concern or passion for something they do and learn how to do it better as they interact regularly" (Wenger, N.D.: 1). Hildreth, Kimble and Wright (1998) note that definitions of 'communities of practice' are wide ranging. Wenger (1998) sees the concept as a new term for a familiar experience, and relates it to a social theory of learning. The origin of the term is in Lave and Wenger's (1991) book *Situated Learning* (Stamps, 1998). They propose a theory of situated learning where learning: "is an integral part of a generative social practice in the lived-in world" (Lave and Wenger, 1991, p. 35) and: "the mastery of knowledge and skill requires newcomers to move toward full participation in the sociocultural practices of a community" (Lave and Wenger, 1991, p. 29). In essence, this concerns the process by which newcomers or 'apprentices' engage with and become a part of a community of practice which consists of other apprentices, 'young masters' and masters. In looking at gender and language as community-based practice, Eckert and McConnell-Ginet (1992) take Lave and Wenger's notion of community of practice to mean: "an aggregate of people who come together around mutual engagement in an endeavor. Ways of doing things, ways of talking, beliefs, values, power relations - in short, practices - emerge in the course of this mutual endeavor. As a social construct, a community of practice is different from the traditional community, primarily because it is defined simultaneously by its membership and by the practice in which that membership engages" (Eckert and McConnell-Ginet, 1992, p. 464).

References:

Eckert, P. and McConnell-Ginet, S. (1992) Think Practically and Look Locally: Language and Gender as Community-Based Practice. *Annual Review of Anthropology*, 21, 461-490.

Hildreth, P.; Kimble, C. and Wright, P. (1998) Computer Mediated Communications and Communities of Practice. *Proceedings of Ethicomp'98*: The Netherlands Erasmus University, pp 275 - 286.

Lave, J. and Wenger, E. (1991) *Situated Learning – Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.

Stamps, D. (1998) Communities of practice: Learning is social. Training is irrelevant? In E. Lesser, M. A. Fontaine & J. A. Slusher (Eds.) *Knowledge and Communities* (pp*.* 53-64). Boston, Butterworth-Heinemann.

Wenger, E. (N.D.) Communities of practice: a brief introduction. Retrieved April 7, 2006, from http://www.ewenger.com/theory/

Wenger, E. (1998) *Communities of practice: learning, meaning and identity.* Cambridge: Cambridge University Press.

Annex J   Stickiness

The notion of 'stickiness' is shorthand for attracting visitors and keeping them there (Cohen, 2002). Fester (1999) notes NetRatings analyst Peggy O'Neill's definition of stickiness as: "a measure of how engaging you are." Sanchez (N.D.) similarly sees 'stickiness' as involving websites: "you want to go back to again and again". Sanchez argues there is a cycle of stickiness – the more people visit your site, the more they rely on it and trust you, and the more you generate revenue. For Sanchez, then: "Stickiness = relationships = loyalty = revenues". Haywood (2006) unpicks this notion of stickiness and relates it to Miller's use of Gell's notion of the 'aesthetic trap' (Miller, 2000). Miller examined the commercial and personal websites of Trinidadians, and noted the importance of the social in the design of the websites. Miller characterised the websites as creating 'aesthetic traps', where the notion of aesthetics refers broadly to the visual characteristics of websites: "as attempts to create aesthetic traps that express the social efficacy of their creators and attempt to draw others into social or commercial exchange with those who have objectified themselves through the internet" (Miller, 2000, p. 6). Miller also suggests that website visuals are also used to align the website's audience with its creators, as a signal for an 'appropriate' audience (Haywood, 2006; Ellis and Haywood, 2006).

References:

Ellis, R. M. and Haywood, A. (2006) Full Report of Research Activities and Results for the ESRC - Virtually second-hand: Internet auction sites as spaces of knowledge performance. Award no: RES: 000-23-0433.

Festa, P. (1999) Calendars key to portals' progress. Retrieved January, 25, 2006, from http://news.com.com/Calendars+key+to+portals+progress/2100-1023_3-225188.html

Haywood, A. J. (2006) Online Auctions: User Experience Insights from eBay. Chimera Working Paper 2006-10. Ipswich: University of Essex.

Miller, D. (2000) The Fame of Trinis: Websites as Aesthetic Traps. *Journal of Material Culture*, 5 (1), 5-24.

Sanchez, M. (n.d.) Eight Ways to Sticky Sites. Retrieved January, 10, 2006, from

http://www.efuse.com/Plan/sticky-sites.htm