Chapter 3 **Research Design and Methodology**

3.1 Introduction

This section outlines the methods and techniques used in this study. It builds on theoretical viewpoints and empirical research techniques from technology, communication and media studies, consumer research, psychology and cultural anthropology to assemble a set of research tools appropriate to investigate adoption, consumption and domestication of CME technologies across the life-worlds of individuals and natural groups.

Rist (1977) proposes that because research methodology is more than simply techniques for data gathering, selection of a methodology should be aimed at accessing the phenomena under observation, rather than the data itself. Methodology is a related set of assumptions that reflect how a researcher views reality. How this reality is articulated through research is dependant on choice of the method; choice of method is reflective of what the researcher wants to uncover. As established earlier, the reality this thesis attempts to uncover is the role of Computer Mediated Environment and simulations in mediating consumers' real life-worlds, and as such my selection of methodology is aimed at accessing the related phenomena.

My engineering background and previous experience of project management had exposed me to large scale qualitative and quantitative research before embarking on the quest of this thesis. An ardent believer in the fact that human conditions should be viewed, experienced and documented rather than counted, and that social and cultural behaviour is better studied through creation and observation of the 'experience-near', I chose ethnography as the mode of access to my field of interest.

One basic goal in selecting appropriate tools and techniques for this research was their ability to uncover the symbiotic relationships between technology and consumer, and to capture and highlight the dynamism which characterises the domestication and consumption processes. The variety of tools selected ensured that there was a capacity in the research methods to identify as well as link individual experimentation, social engagement and cultural adaptation.

3.2 Aims: Research questions

The various domains and dimensions of consumption in mediated environments, which form the basis for research questions, are drawn from an interdisciplinary debate on production/consumption of hyperreality/simulacra as presented in the literature review section. A number of specific research questions and issues emerge from this literature review, which are guided and refined by the general methodological aims as described above, and become the starting point of research. These are,

1. In terms of consumption, media technologies have evolved to a point where mediated experience is not mediated at all, where consumers have come to believe that they are encapsulated in a 'present' which is qualitatively and existentially different from the other 'here and now' (Lombard and Ditton 1997). This replacement of the real and tangible by the virtual has resulted in the evolution of a cohort of virtual products. Do consumers differentiate between real and the virtual in terms of consumption?
2. If and when simulations replace the real and tangible as objects of consumption, do these simulated consumables comport the potential of becoming objects of possession? And do these simulated possessions play a part in self extension?

3. Cyberspace, as a locus of existence, allows creation of countless life worlds in geographically un-grounded locations. How does this erosion of the *geographically local* affect social networks of both an individual and society? How do these macro-social processes impact on micro social units such as family?

4. Technological tools empower both consumers and marketers. Because of the ease of access and low infrastructure requirements, setting up a shop in cyberspace is perhaps easier than arranging a stall in a Sunday flea mart. How does this simultaneous consumer-marketer empowerment in cyberspace impact the market structures in general, and marketplace discourses in particular?

3.3 Cyberspace, Lifeworlds and Methodological considerations.

Debates on production /consumption of hyperreality / simulacra presented in the literature review form the basis for my research questions. Much of the post-modern commentary on consumption in cyberspace is non-empirical in nature. Although the existing literature contributes significantly to the epistemology of these unique consumption phenomena, it does not provide clear cut methodological guidelines. One of the intentions behind this chapter is to establish connections between philosophical orientations and research methods and techniques. It is evident from the literature review that conceptual distinctions between real / virtual, global / local and embodied / hyperreal would act as theoretical problems central to the selection of research methods and techniques.

First, there is no clear conceptualization of consumption in CME alongside consumption of the real. The significance of this void is especially highlighted by the

real / virtual dichotomy of simulations, and is complicated by the relationships and linkages that tie consumers and simulated consumables together, simultaneously to both traditional and new consumption spaces. Blurring of boundaries between real and virtual in a CME often makes concrete distinctions difficult. For instance, is email or cyber-chat a virtual form of communication? To contemporary consumers it has become the real thing, and in many cases the only form of long distance communication available. Such peculiarities make distinctions between 'virtual consumables', which have real consumption attached to them, and tangible artefacts difficult.

The second problem is tying an existential 'local' to a phenomenological 'global'. Ethnography is an obvious choice for the study of both local and global, but it has lately been bound up with application issues in increasingly globalizing societies and cultures, sparking debates within anthropology about its role in representing the fluidity in contemporary cultures of consumption (Kuper 1994). One contemporary trend in anthropology has been to adapt the long-standing concepts and practices of 'the local' to account for what Arjun Appadurai has termed 'global cultural flows' (1996, p.33). Appadurai also argues that 'natives' are people incarcerated in place and modes of thought, and are fictions of anthropological imagination. He views contemporary cultural complexity as a liquefier of longstanding normativity and argues that such cultural flows, which instil imaginaries in people's lives, make traditional ethnography's claim of viewing the human condition from the inside irrelevant.

There have also been recent calls for ethnographic attention to consumption of fluid objects (Marcus 1995). Concurrent with these calls, anthropologists such as Daniel Miller have also argued for attention to the particularities and diversity of meaning and practice, contributing a localizing and grounding voice to the interdisciplinary debates on consumption in mediated environments. Where Marcus and Appadurai propose to

study the nature of locality as a lived experience in a globalized, deterritorialized world, Miller suggests an inverse conundrum: What is the nature of the global as lived experience in a localized community?

Ethnographies connecting cyberspace to the local have often aimed at highlighting the hierarchically interconnected nature of cyber-communities and discrete localities. In a similar vein, this work also aims to uncover the emergent consumption practices of technologically and spatially distributed anthropological subjects and objects, which are tied to a dominant cultural environment, but are part of a larger discourse on the global/local dichotomy.

The third problem is embodiment of media technologies. In a tangible sense, far from being disembodied and free flowing, media content is embedded in particular technologies (personal computers, CD-ROMs, networks), and networking and distribution infrastructures, which are ruled, governed and administered by political, regulatory and commercial agents. Tangible embodiment of technology also dictates its contents and applications. However, recent works in cultural studies of media have aimed to decentre the embodiment of media by focusing on the agency of consumers.

When media technology is decentred from its role as a political / commercial force designed to have an impact on culture and society, then it can be viewed as an embodiment of social, cultural and material relations, rather than a separate entity constructing, or constructed by, the social and cultural. This view of technology has emerged from various social constructivist, symbolic interactionist, ethno-methodological and actor-network approaches to science and technology. These approaches see technological orders emerging from the structuring and stabilization of socio-cultural relations, a contingent result of political struggle and negotiations between people, objects, and institutions.

To navigate around these problems, this study conceptualizes cyberspace as a consumption space within geographically local CMEs, and as a site of implosion of virtual consumables and lived realities. This approach works across the divides of technology and culture, material and semiotic, tying together cultural, social, and material analysis. This approach sees simulated consumables, as well as material objects, not just as results of, or contextualized by, socio-cultural processes, but as actual materializations of the social and cultural.

3.4 Initial concept of research methods.

Geertz outlines the role of the ethnographer thus:

> *our double task is to uncover the conceptual structures that inform our subjects' acts, the "said" of social discourse, and to construct a system of analysis in whose terms what is generic to those structures …… will stand out against the other determinants of human behaviour*. (1973, p.27)

Ethnography is the disciplined and deliberate witness-cum-recording of human events and is variously defined as a family of methods involving direct and sustained social contact with agents, and of richly writing up the encounter, respecting, recording, and representing at least partly in its own terms, the irreducibility of human experience. Willis and Trondman (2000) describe it as *'the presentation of located aspects of the human condition from the inside'*.

Brown (2003) suggests that current trends in methodological and representational experimentation in research have their origins in researchers' effort to understand exponentially and dynamically emergent consumption phenomena, many of which call for modifications to existing modes of research. Marcus (1995) holds that contemporary ethnography has *'moved from its conventional single site location, contextualized by macro-constructions of a larger social order* (sic) *to multiple sites of observation and participation that cross-cut dichotomies such as the local and the global, the life-world and the system'* and that *'For ethnographers interested in*

contemporary local changes in culture and society, single-sited research can no longer be easily located in a world system perspective' (p.95- 96)

Naturally, there have been debates about redefining many ethnographic practices, not least the length and level of ethnographic immersion needed to 'uncover the located aspects of human condition from the inside'. Practices of going native have been questioned, and arguments have been made that ethnography should now move beyond Malinowski's Argonauts. For instance Douglas Brownlie (1997) questions the need for an ethnographic year and comments '*two weeks of sex, sun and sangria was* (is) *tourism, 12 months was* (is) *ethnography*' (p.269).

Wiener (1997) argues that contemporary consumption of media technology alters the terms of cultural articulation in general. In cyberspace individuals and social groups often exist in an aesthetic space in which identities are sanitized depictions of reality on screen. This aesthetic space is populated by transient consumers and audiences, and thus the validity of an ethnographic year is always in question. Bauman (1998) calls such a space Telecity, and Appadurai (1997) argues that ethnography of such a landscape is only possible by breaking convention and by renewing the ethnographic vow to stay with the society and individual and not with established practices of the method.

Geertz, who is an ardent believer in thick descriptions and sees an ethnographer as an author of lived meanings (1988), also acknowledges the complexities of the 'symbolic domain' of media. Within the context of cyberspace research, individuals and social groups are often considered shadows of the real, and cyber-ethnography an exercise involving 'moving between shadows'. Anthropologists such a Cerulo and Marcus also hold that in terms of behaviour, online and offline personae can exist independent of each other, and Hine (2005) argues that a successful cyber-ethnography is only possible by linking these online and offline personae.

I thus argue that contemporary ethnography of cyberspaces is best contextualized both in the symbolic domain and grounded existence, and that empathy with the subjects (lived-experience) is effectively created by going native in both domains. Informed by the tools and techniques of traditional ethnography, and cognizant of its limitations in cyberspace, this research was thus conducted simultaneously in a grounded locality and in cyberspace. In the following sections the way methods and practices of traditional ethnography were applied to this research are first outlined, followed by those of cyber-ethnography.

3.5 Traditional Ethnography: Designing the field work and applying the practices.

Geertz holds that the primary goal of an ethnographer is to establish the context, or subjective significance, of experience by creating an emic narrative. The responsibility of the ethnographer as author also requires him to convey the comparative and interpretive significances of the experience by creating an etic account (Geertz 1988). The practice of ethnography thus involves using multiple methods of enquiry to access the lived experience, systematic recording of human action in natural settings, experiencing the phenomena under study first hand for an extended period of time, and finally producing interpretations to highlight the unarticulated (Hammersly and Atkinson, 1995).

During the course of this two year study, my informants determined both the direction of research and fields of study, by highlighting significant networks and fields in their everyday lived experiences. Understanding and interpretation of the lived experiences of grounded subject groups also lead to a number of online consumption phenomena. Such a grounded approach was instrumental in eliminating some fields initially chosen

(such as chat, gambling and pornographic sites) and in introducing new fields (such as eBay and shopping sites). This grounded ethnography was also instrumental in identifying family as the social group which was significantly impacted by consumption in CME.

This ethnography started with the ethnographer as a complete observer and progressed through observer as participant, to participant as observer, and finally to a point where the ethnographer was a complete participant, native with a full 'experience-near' account. Much of this two year long study (between December 2003 and January 2006) was conducted during my residency in a suburban housing scheme in Mullingar, about 60 miles west of Dublin, Ireland. Immediate neighbours were the initial target group, and a snowballing technique was used to generally expand the informant network. Close social links with the informants enabled access to individuals from their extended social circle.

This study used an evolving ethnographic approach to data collection, guided by emic-etic interplay. Data were periodically analysed and interpreted to detect patterns of behaviour or identify themes. When a strong theme or pattern was identified, the emic view was placed against the etic and new lines of enquiry were established. This evolving ethnographic approach using the emic-etic interplay to guide the process of data collection (Kozintes et.al. 2004), made reference and review of literature a permanent part of the study.

Because this research applied an evolving approach to ethnography, data were collected in various stages from different fields during the immersion. The multi-sited nature of this research resulted in encounters with four thematically independent subject groups or informant networks. These four ethnographies were conducted independent to each other and comprised their own emic-etic cycles. The first group, which was the largest in terms of numbers, informed me of its practices and experiences of consumption of

simulations in general. The second group was organized around social networks of consumers in CME and illuminated the social significance of simulations and the role of simulations as possessions. The third group comprised of grounded as well as cyber informants and was instrumental in giving me an understanding of consumption narratives and marketplace discourses of power. The fourth group was also organized around social networks and provided me with an understanding of CME in mediating family lives and structures. A detailed description of these informant networks appears in chapter 4.

The evolving ethnographic approach and emic etic interplay also resulted in writing up component ethnographies sequentially. All four of these were presented in various Association for Consumer Research annual conferences individually (Siddiqui and Turley 2005a, 2005b, 2005c, 2006a, 2006b, 2006c, 2007a, 2007b), and reviewer and audience comments became part of the etic narrative. This outside view of my interpretations was also instrumental in refining my thick descriptions.

Thick descriptions in ethnography are the etic narratives that access the hidden aspects of consumption phenomena. The ethnographer compiles and juxtaposes emic narratives based on his own interpretation of relevant layers of meaning to create a polyphonic presentation that portrays the voices of natives as they enact and recount their consumption experiences (Arnould and Wallendorf 1994). Thick descriptions are created using text (field notes, memos, diaries) and visual (photo, video, memory) references. I will now describe the tools that I used for creating these thick descriptions.

Field Notes: Field notes transform direct observations into vivid descriptions and thus constitute an important component of data in ethnography. Field notes give the ethnographer the authority and capacity to include his voice in the emic narrative. Emmerson, Fretz, & Shaw (1995) hold that good ethnographers must learn to remember dialogue and movement like an actor, to see colours and shapes like a

painter, and to sense moods and rhythms like a poet. They also recommend using field notes to enhance the quality of data; felt environment, situational cues, body language, as well as theoretical observations and self-evaluations are best captured through field notes. They also hold that the continued evaluations collected in the field notes permit an on going reflective dialogue to help the researcher understand when saturation and completeness have been reached.

I must emphasize here that although as an ethnographer my core responsibility was to present the lived meanings extracted from informants' actions, in the later part of my immersion, when I had come close to being a native, I found my own lived experience was arguably as rich a source of data as any other. I also found that my ethnographer's creative and artistic license yielded a richer kaleidoscope of consumption narratives as compared to the one articulated by the informants.

My field notes were a loose bundle that took diverse forms. Many were sporadic comments and descriptions on scrap pieces of paper; some were planned and executed pieces of text, while many others were electronic notes on data files or on PDA. For some part of the study I used a PDA with a freehand script interface, which allowed me to scribble verbatims, accounts as well as notes on the screen and later retrieve them as text files. There was also a period in the study when I kept a small pocket notebook along with a 3G mobile phone, which allowed me to take pictures, record audio as well as memos. I also took many videos and videotaped interviews which were later used to create memos.

Research Diary: My research diary was a set of Microsoft Project files which kept the research on track and schedule by chronologically organizing field activities. It acted as a coherent central record of ideas, information and activities, and occasionally as a stimulus for reflective thinking. Diary entries comprised accounts and records of events and informants, as well as commentaries and introspective notes. Unlike field notes,

diary entries were planned activities and occasionally recorded events and accounts that were not recorded on field notes. Diary entries were also more analytic, reflecting on understanding and organisation of lived experiences, as well as meanings. Diary entries often triggered sorting of field notes and memos, as well as their coding and interpretation.

Because of its electronic nature, my research diary could also include all files on my computer. In such a view, my research diary also included my thoughts and reflections, records of literature along with comments, summaries and quotes, a record of phone calls and meetings, my supervisor's comments and observations, search indexes and bibliographic references, notes on methodology, notes on unresolved problems, issues and questions, plans for action, keywords, and videos and other visual material.

Videography: The use of videography in consumer research is a fairly recent practice. Belk and Kozinets (2005) argue for its use and effectiveness in capturing the visual and unarticulated aspects of emic narrative. The initial phase of my research leaned heavily towards videography of research subjects and resulted in the production of two short videos which were presented at conferences. Although this thesis does not contain references to, or elements of these videographies, textual accounts created from these constitute an essential ingredient of primary data.

Organization: Material from fieldnotes and diary was periodically classified into three categories of observational notes, theoretical notes and methodological notes. Observational notes represented direct recording of lived experience and were accounts of events and interactions that contained no interpretation or analysis. Theoretical notes were my interpretations of meaning extracted from the lived experiences recorded in observation notes. Methodological notes were infrequent, mostly etic views that reflected completion of a phase, redirection of enquiry, new plans or external critiques (mostly my supervisor's) of my research methods and findings. This exercise, which is

particular to an evolving ethnographic approach, provided me with an ongoing, developmental dialogue and helped define and refine my research.

Methodological notes were often the first step in the movement from data collection to analysis and writing of research papers. These were compiled and tied together into an idea grid, which was developed and expanded to the point that they yielded coherent interconnected themes of enlightenment. Thematic processing of all these data, and how they were woven to write the four component ethnographies is presented at beginning of ethnographic chapters 5,6,7 and 8.

3.6 Cyber-Ethnography: Designing the field work and applying the practices.

This section discusses current cyberspace research methods and practices and leads on to a description of Deep-Web Cyber-Archaeology, a cyber-research technique developed during this research. It must be acknowledged that because it is theory intensive, the line of argument may come across as somewhat dense, but I feel that the theory and arguments in this section are essential to ground the notion of cyber archaeology.

The need for development of cyber-archaeological orientation has its roots in my belief that cyberspace is characterized more by dichotomies and disjuncture than anything else. Having spent many years interacting with mediated environments and in cyberspace, I also question the validity of observation of consumption of simulacra in the hyperreal. In Sherry Turkle's terms I have lived multiple assumed lives on the screen, and have found that at times an assumed identity and life in cyberspace can overpower one's real grounded existence, unreality becoming a reference of reality, its own pure simulacrum. And so I also often ponder how a researcher can ensure that the consumer behaviour under study is itself not a simulacrum. Any assumed identity and

life on the screen constitutes a very small component of the larger cyber-society and culture, but heavily impacts a consumer's grounded existence, social relations and local culture.

There have been many calls to refine cyber-research methods by removing disjuncture and by developing techniques that permit access to the whole consumption narrative. Hine (2005) holds that to understand behaviour in cyberspace, a researcher has to link it to an individual and her life-world. Holt (1995) points out that synergies and congruencies between consumers' claims and actions are rare, and Cortazzi (2001) stresses detection of such disjuncture through observation and collection of the whole narrative. Marcus (1995) and Kozinets (1997) hold that triangulation among multiple sites outside of cyberspace is needed to access this whole narrative and to validate any cyber-research. In the context of narratives, Plummer (2001) and Orgad (2005) prescribe that such triangulation begins with detection of naturalistic life-stories of interest, by observing how different narratives relate to each other and how narrators' actions complement the narrative and fill gaps. These diverse views on cyber-research highlight the need for accessing the whole narrative, which may include elements beyond cyberspace.

Cyberspace, Culture and Consumer Research: Hine (2005) also argues that claiming the internet to be a 'cultural context' has resulted in ethno-sociological approach becoming the mainstay of enquiry into cyberspace consumption behaviour. She further suggests that '*our knowledge of the internet as a cultural context is intrinsically tied up with the application of ethnography*' (2005, p.8). Cyber-ethnography has enabled researchers in cyberspace to trace cultural formations across and within multiple sites of activity (Kozinets 1997, Hine 2005). By intersecting across the trajectories of diverse loci of activities, such ethnography assembles a pastiche from these fragments and helps present an integrated view of the phenomena. However, as

Hines points out, a strong focus on social and cultural dimensions of cyberspace has obscured other significant dimensions. Consumption in CME is largely viewed and studied in a social, communal and cultural context. This rather narrow focus is predicated on the social identity quest of a neo-tribalized individual (Maffesoli 1988) and, in the context of research in cyberspace, is manifested in attempts to view consumption in CME as e-tribalization (Kozinets 1999). Hine questions this overemphasis on cultural orientation thus: '*is all online consumer behaviour cultural in nature*? ' (Hine 2005, p-8)

Cyberspace is apparently an easy to access field, and netnography (Kozinets 1997) has emerged as a popular cyber-adaptation of ethnography. It is aimed at deciphering the cultural and communal code of cyberspace, and at bridging the gaps between cyberspace and geophysical space. However, perhaps because of this ease of access to the field (by even armchair anthropologists), netnography has been misapplied to phenomena which are neither social nor cultural in nature. Further, some research has appeared that claims to have applied netnography but lacks any geographic/local context. Some researchers have used downloaded contents to decipher communal and cultural codes in cyberspace and link them to geographically local cultures without attempting triangulation. In many such cases online content download is used as primary data, and participant observation as the lived-experience context, to claim them as ethnographies.

Netnography: A Universal tool? It is easy to mis-apply netnography by taking it merely as a written account of online *cyber-culture*, and perhaps as a rendition of textual ethnography. The merits of textual ethnography have been debated in cultural anthropology as a means to explore both extant and extinct cultures (Crane 1991). Bernhardt (1993) posits that online texts, by being situationally embedded, interactive, functionally mapped, modular, navigable and graphically rich in nature, affect the

reader more powerfully than printed text. However the problem in considering contemporary cybertexts on a par with texts from other media and previous generations is that where those earlier texts were creative accounts of reality, most online narratives represent a genre of media driven figments and creative imagination.

It is also apparent that cybertexts do not suffer from lack of articulation, as is the case with many ethnographic accounts and consumption narratives. If anything, cybertexts often contain more articulation than required to narrate the consumption. In this way the authority of an emic written account (chat, text or web-page content downloads as used in some netnographic applications, for example as used by Gould and Lerman, or Hamman) may at times appear greater than the observational account of traditional ethnography. However, an immersive ethnography presents located aspects of the human condition from the inside through its access to the lived-experience context (Geertz 1988, Willis and Trondman 2000); textual downloads, by lacking the essential dimension of context, may not be considered as authoritative as an immersive ethnographic narrative.

Any ethnography informed by a single mode of research is detached from the larger context. Where immersive ethnography is well adapted to study of the ‘local’, cyber-researchers have assumed that download-netnography is ideally suited to study of the somewhat de-contextualized ‘global’. Many applications of download-netnography study macro-social processes in cyberspace like MUD and chat-rooms. However, such macro-social processes in cyberspace dynamically and actively intersect with micro-systems of geographically local societies and communities, and thus cannot be considered decontextualized of grounded realities. Binsbergen (1998) points out that in the absence of a geographically local context, online-offline consumption / self-construction dichotomies make comparisons and connections difficult to establish.

So what are these content Archives? Ethnography or Historiography? In true critical hermeneutic perspective, any ethnography, and especially textual ethnography of cyberspace, is a form of historiography (Harvey and Myers 1995). Firat (1987) comments that historiography is considered more a scientific method associated with positivistic enquiry, almost unfit for an interpretivist's methodological repertoire. In the case of research in cyberspace, it can be a good interpretive tool where an interpretivist's agenda is etic. In as much as '*writing is both the mirror and the medium of our thoughts*' (Brownlie 1997), downloading large scale data from chat rooms for hermeneutic analysis can neither be considered ethnography nor historiography; removed from its context such a text is liable to create the dialectic of meanings in text as a whole and interpretations of its parts.

Before we find a use and application for these extensive content archives, containing countless online consumption narratives, we have to understand their nature; where do they originate from, and how do they maintain their existence in cyberspace?

The field behind the Screen: Cyberspace, before being an evolutionary space moulded by consumers' desire and interactions, was a created tectonic system (Stolterman 2000). CME, for all practical purposes, is represented by the web of internet. This web is no longer limited to acts in cyberspace alone; increasingly many real life consumption activities are being mediated through it. Since consumption is increasingly more about interacting with technology (Mick & Fournier 1998), even traditional forms of having, being and doing are now more likely to be technologically mediated (Lash 1999).

This web, as an apparently superficial and dynamic entity representing transient acts of consumption and consumers, is at one level a depiction of post-modern society. An individual may appear to be an anonymous and fragmented entity, untraceable in this seemingly fluid and disembodied domain; '*on the net nobody knows you are a dog*'

(Giacomello 2000). At another level, this web is a stable and everlasting chronology and record of events in cyberspace. An individual leaves a trail of his activities, traceable through what can be called click stream data (Moe and Fader 2004). Unbeknownst to the consumer, each and every act in cyberspace is recorded; logons, e-mail traffic, surfing and site visits, chat-room sessions and file downloads are all recorded in minute detail. Most of this data is not available at the surface, and some of it remains behind security firewalls. As the web deepens it increases the depth and the breadth as well as access to such data.

The Deep Web: Cyberspace has generally been romantically idealized in terms of its spatial orientation, a space that consumers can traverse limitlessly at break-neck speed. Where terms like 'surfing' can trace their lineage to marine or space travel, other terms like 'home-page' provide grounded feeling. Because of its instantaneous electronic nature, cyberspace appears as a '*here and now*' entity, and thus its temporal orientation and potential is often not realized. The following illustration depicts both spatial and temporal orientations of the web (figure 3.1).

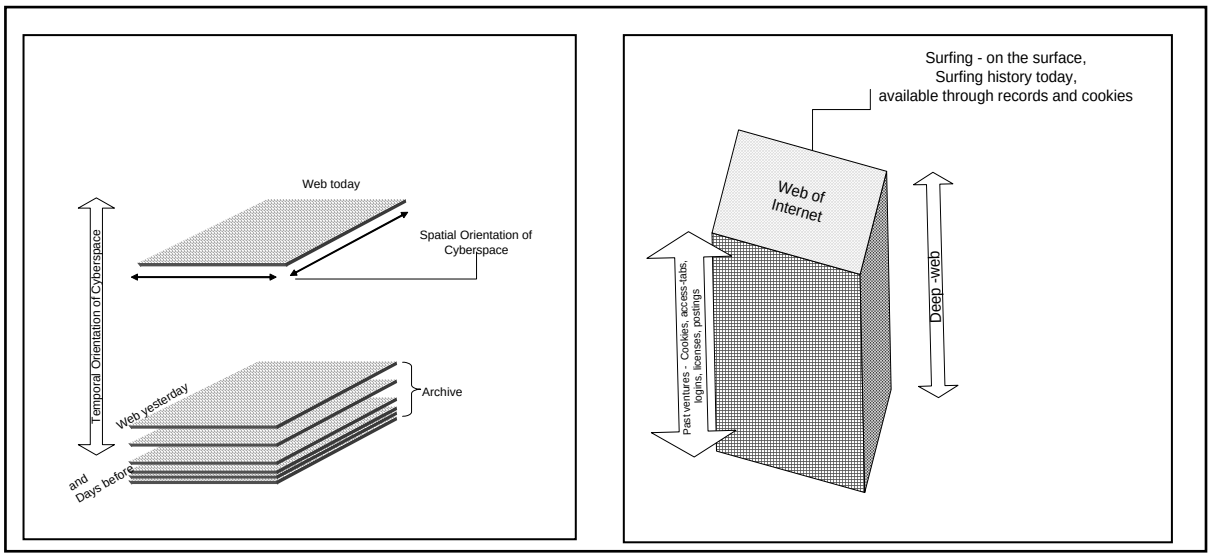

Fig 3.1 spatial and temporal orientations of the web

Temporal orientation of cyberspace is called the Deep-web. It is quantitatively much larger and qualitatively very different from the surface web. Warnick et.al. (2001)

estimated that the deep-web content is at least 550 times larger than the surface web. While some of this content is restricted behind firewalls, most freely accessible deep-web content is dynamic in nature and constitutes database archives with non-fixed directory structures. Dynamic content is not accessible through 'surfing' tools and thus most deep-web data remain hidden during normal web-searches. However, understanding of the architecture of the web, together with now commercially available deep-web mining tools enable researchers to access a valuable source of previously unexplored data. Businesses are regularly using these tools to target prospective customers. Using a technique called 'split-level searching' many websites act as front ends for searchable databases. Even free access sites such as 'Complete Planet', and 'IncyWincy Spider' provide many quick links for quality web database searching.

There is a huge variation in the type and depth of data retrievable through these tools, and because some commercial data-mining tools use mining generalizations suited to marketing activities, they may be directly applicable in consumer research. Figure 3.2 illustrates the various categories of deep-web data and limits to their accessibility.

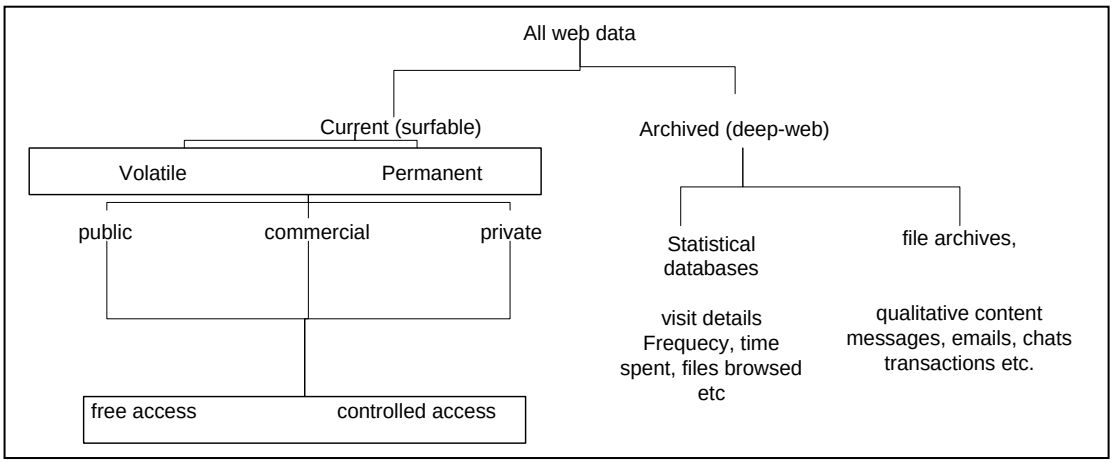

Fig. 3.2 types and contents of Deepweb data

Much of this deep-web data is dynamically emergent and thus difficult to categorise fully, however, Bergman (2001) categorises some of the freely accessible deep-web data as;

- Topic Databases -- subject-specific aggregations of information, such as SEC corporate filings, medical databases, patent records, etc.
- Internal site -- searchable databases for the internal pages of large sites that are dynamically created,
- Publications -- searchable databases for current and archived articles.
- Shopping/Auction.
- Classifieds.
- Portals -- broader sites that included more than one of these other categories in searchable databases.
- Library -- searchable internal holdings, mostly for university libraries.
- Yellow and White Pages -- people and business finders.
- Calculators -- while not strictly databases, many do include an internal data component for calculating results. Mortgage calculators, dictionary look-ups, and translators between languages are examples.
- Jobs -- job and resume postings.
- Message or Chat .
- General Search -- searchable databases most often relevant to Internet search topics and information.

Although Johnson (2001) considers such online data secondary in nature, being rich and divergent in nature, it can be a valuable resource in understanding cyberspatial consumption phenomena. Deep-web is an archive of all acts and events in cyberspace and its depth is only dependent on the storage capacity of servers. Due to monitoring, technical, legal and financial reasons most of this data is kept in archival files for a few years. Many service providers do not carry out periodic system purging or data disposal, and thus it amasses constantly.

Archaeology of the Deep-Web: Perhaps my inspiration for developing cyber-archaeology came from Hine's (2000) argument that cyberspace is not only a cultural space but a cultural artefact in its own right. In the bricks and mortar world, cultural artefacts are often archaeologically excavated, recorded and interpreted. Archaeologists seldom pick up things from the surface, they excavate artefacts by digging deeper; anthropologists never dig. Where cyber-ethnography treats cyberspace as a cultural space and seeks to decipher its cultural and communal codes by providing a view of

condition from the inside, albeit at the surface, the cyber-archaeological approach developed during this research considers cyberspace as a cultural artefact and digs into all available data to link individuals and events together.

I believe that cyber-archaeology is neither contradictory nor very distant from many other forms of cyber-ethnography already in vogue, but because it combines elements from both consumer culture (subject focused) and material culture (object focused) orientations of consumer research, it could be considered a follow-on to cyber-ethnography and a means to present an holistic picture of both consumer and consumables in cyberspace.

How was it applied in my research: Treating cyberspace as a cultural artefact, I developed and used split level search tools to excavate it from a temporal orientation, and gathered sequentially linked trails that revealed rich data on individuals and their consumption over time.

I found that deep-web cyber-archaeology has the ability to reveal many previously unnoticed consumption practices. Without digging deeper in cyberspace, individuals cannot be tracked or traced, and thus peculiarities in consumption and experimentation appear as discrete acts and often connections are permanently lost in file archives. In theory, having access to a capable deep-web search engine makes it possible to track a consumer in cyberspace over time. Although she may still be hidden behind an assumed screen identity and persona, the real consumer is revealed through her travel plans, site visits, and public message exchanges, surfing and searching logs, role-playing and file sharing. Accessing and exploring deep-web data enabled me to follow threads and reveal many aspects of both consumers and consumables.

Much of the study on narratives in cyberspace and cyber-marketplace discourses of power that appears in chapters 7 and 8 was conducted using cyber-archaeology. Deep

web excavation was used to uncover examples of hobbyist bidders on auction sites such as eBay. These were individuals for whom watching and following auctions of interest was an end in itself. Many of them put bids on several items, always ensuring that they never end up winning anything, by either bidding much lower than the going auction value or by retracting bids before auction ended. Using archival research tools I was able to detect that some of these hobbyist bidders were spending far more time on the eBay site than many winning bidders who often spent substantial amount on auctioned items.

Detection of such examples of consumption in cyberspace suggests that deep-web cyber archaeology is well suited to unobtrusive observation of naturally occurring behaviour. Whether current or archival, deep-web archaeology enables tracking and linking of communications by a consumer, his social interactions as well as his fantasies and role play. As the web deepens, it enhances the ability of a researcher to create a long term holistic picture of a consumer's consumption activities both in real as well as virtual worlds.

Cyber-archaeology shares one limitation with netnography; Just like netnography, the historiography created by archival data is at best partly contextual and relative and sometimes a comprehensive context may not be framed through the data available. Perhaps in time deep-web cyber-archaeology can be used in tandem with netnography to establish comprehensive contextual connections with consumers' life-worlds.

Issues and concerns with the use of Deep-web data.

Although deep-web archives have been available for several years now, their potential as a rich resource of unobtrusive data for social and consumption phenomena has only recently been noted (e.g. see Kraut et al. 2004). Like any other type of qualitative data, deep-web data is subject to validity concerns and evaluations (Denzin and Lincoln

1994). Incorporation of such archival data in an interpretive framework requires the application of ethical, epistemological and aesthetic (Denzin 2001) evaluative criteria.

Ethical concerns. Application of naturalistic research methods and techniques to newer environments is inherently evolutionary in nature. Rossiter (2004) notes that tests for scientific knowledge in macrotheories or microfindings, like the Armstrong Test aim to test the replication of learned wisdom through an instructive, top down approach. However, Michael Bakhtin (1993) argues that one can only strive for a bottom-up ethical wisdom built upon concrete examples, and disputes the possibility that any rigid top-down application of universal rules can determine the ethical complexion of actions. Research techniques and practices are validated iteratively over a period of time. This very act of validation accords them a status of universality which later may result in rigid top-down applications.

Since deep-web cyber-archaeology has the capacity to reveal both private and public data, a researcher has the opportunity to observe current as well as past behaviours that on one hand can be deemed public, but on the other hand can be highly private. It has been established that most cyberspace research is less obtrusive and involves lower risk levels to an individual than research based on subscriptions and financial information on a commercial website.

A reading of Hine (2005) may suggest that there are three key ethical issues in cyberspace research: does it,

1. Protect the subjects from harm as a result of the research fieldwork and practices.
2. produce good quality social science research
3. unnecessarily perturb the phenomena being researched

In observing naturally occurring online behaviour, either current or archival, anonymity is difficult to achieve, and the very nature of anonymity versus identifiability becomes

an issue, especially when an individual is identified, tagged and followed in the click stream. Kraut et. el. (2004) have expressed concerns about cyberspace research and advise that in ethical research individuals shall always remain anonymous, and private, identifiable information shall not be disclosed outside the research context. It is understandable that such ethical issues demand a very delicate balance between what is known, what is recorded and what is disclosed.

Ethical issues are also always involved in accessing pre-existing public and private data, especially when such data were never meant to be used for research purposes. Kraut et. al. (2004) suggest acquiring anachronic consent from subjects. However, my experience suggests that most individuals are uneasy with attempts to recreate their past ventures in cyberspace. It will hopefully become evident in chapter 7, which uses such deep-web data, that efforts have been made to ensure that individuals are not identified beyond their public cyber-identities.

Noting that such data have been used by marketers and researchers for the last few years, the American Psychological Association (APA) commissioned ethical guidelines for use in validating research publications in its journals. At the behest of APA, Kraut et al. (2004) established stringent ethical criteria (See fig. 3.3) to acquire and document consent from such subjects. It is a useful ethical tool, and its criteria were used to validate data access throughout my own research.

I found this archaeological approach very useful in cases where netnography could not be applied fully. Rather than divorcing the virtual from the real, cyber-archaeology helps create bridges linking consumers' physical and phenomenological worlds.

Some Factors Relevant to Internet Research Influencing Whether Informed Consent Is Required and Must be Documented

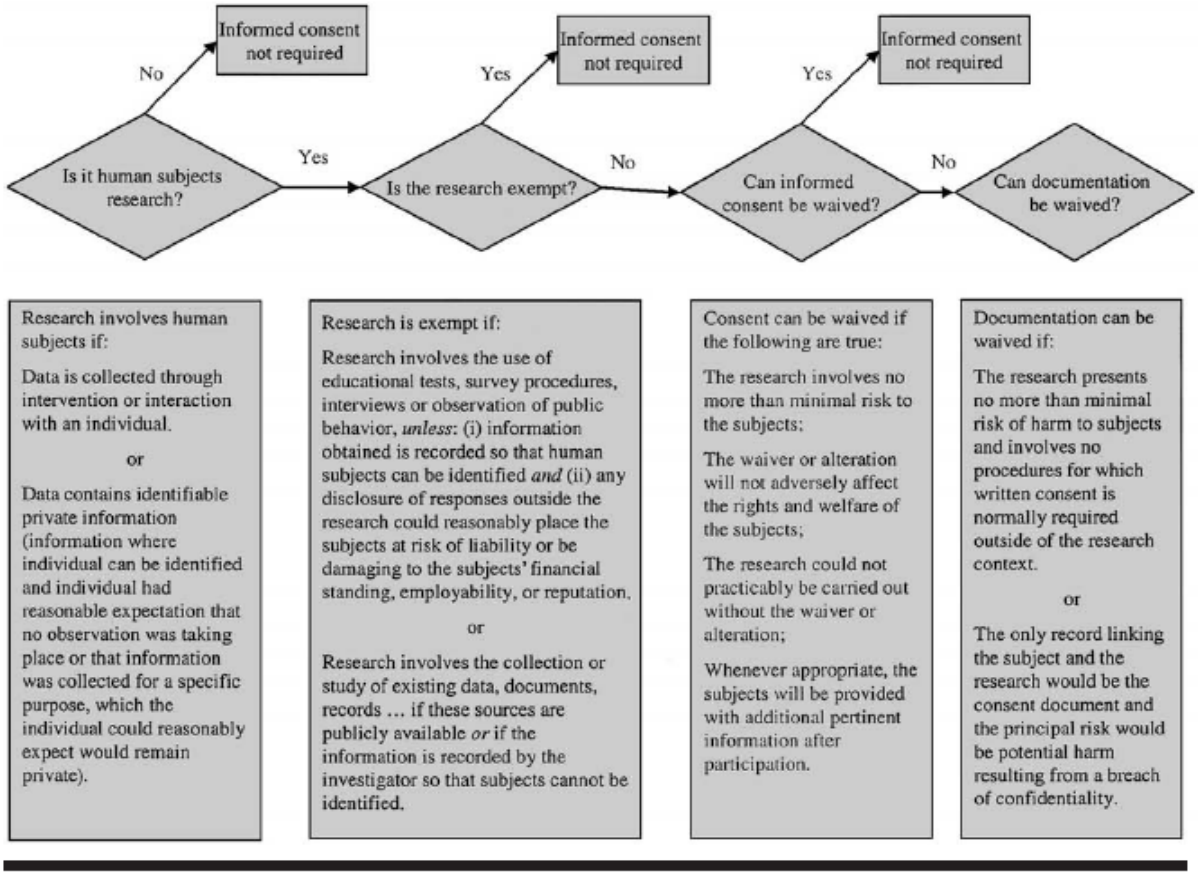

Fig 3.3 (From Kraut et al. 2004)

3.7 Data collection and analysis

The process of analysis brings order, structure and meaning to the data. It should make the data come alive by illuminating hidden dimensions. Two years of ethnography yields huge volumes of data, which in my case, was truly multimedia in nature. There were notes on diaries as well on scraps of paper, electronic files, computer printouts, videos, audio files, and thousands of webpage printouts. This data varied in both its relevance and importance to the core aims of each study. Because it was not possible to treat and process all data equally, ethnographer's license of sorts was used to go through the raw data several times in its original form to detect significant themes. This was done by extracting quotes and notes corresponding to significant existing and emergent themes. This process, which was essentially a top-down approach, ranked

raw data in levels of significance, and allowed me to convert only those that seemed to be most revealing and significant to textual format. Because thematic discovery was an ongoing process for each of the studies, this exercise was performed at fairly regular intervals. Rough sets of terms and key words emerged from multiple readings of various texts. These sets acted as tools for bottom up investigation of the data, as well as for verification of larger themes. This emic set of key words and terms proved useful in cross-linking findings from independent studies and in providing final coherence.

The first phase of textual analysis was to code the data, which brought order and synergy to elements of diverse origins. This coding was a continual process and was performed on batches of data several times within a study. This continuous categorization was an important means in both generating familiarity with the data, and in tracking what data had been collected, and what still needed to collected. Coding was a comparative analytic technique prescribed by Glaser and Strauss (1967). Understandably, if strictly applied, it follows a rigid method of data analysis which promises the production of an objective or 'essential' theory, and Glaser and Strauss recommend it for grounded theory construction. Ethnographies tend not to apply such a method, but because of the selective treatment of portions of raw data, it emerged as a suitable option. The first stage was initial line-by-line coding which comprised multiple readings and generation of a rough set of key words and themes. At the end of this coding all keywords and themes were corroborated with previous lists of keywords and themes to detect linkages. This would often result in informal 'memoing'; many of these memos in my case were yellow post-it notes stuck to every available vertical space. Often a thematic framework would also emerge at this point.

In the second phase of analysis, the thematic framework was used to select appropriate portions of the data and the data were recoded in terms of themes. Themes were structured and categorized around context, perspectives, interactions, processes,

activities, events, strategies, relationships and consequences. As categories became refined, and often saturated, significant themes were added to the thematic framework and the lesser significant ones discarded. Often this would mark another cycle of the iterative process of data collection and analysis.

I must mention here that because ethnography enjoys plentiful access to respondents, data is in abundance, and the researcher has the option of returning to the field and ask the same informant 'focused' questions to seek further coherence, clarity or verification. A consequence of this abundance of data is that all of the data accessed can neither be converted to textual form, nor made part of the analysis. This may appear to be 'non-scientific', but is in fact an accepted part of contemporary ethnography (Kozinets et.al 2004). However, to counter this, traditional ethnography benefits from 'revelatory moment/insight' phenomenon, which often contributes more significantly to understanding than a comprehensive textual analysis.

As established earlier, this research was conducted using an evolving ethnographic approach, using emic-etic interplay to guide data collection as well as analysis. This approach resulted in a set of four studies, each with its own thematic focus, interdependent but identifiable informant network, and unique data and analysis. Although these four studies together form parts of the same larger study, each of these was conducted more or less independently, and thus both data collection and analysis techniques varied slightly between them. Data collection and analysis techniques used for each of these subject/informant networks are embedded in data presentation sections in the following order.

Chapter five presents the first study. It is based on extended interactions with a varied but stable group of informants and documents the integration of simulations in their lifeworlds. The first part is exploratory in nature and establishes simulations as

consumption objects. The second part explores the role these simulated consumables play both in consumers' lives and in self extension.

Chapter six features the second study and documents my encounters with the social networks of consumers of simulation and the role these simulations play in mediating and restructuring their social lifeworlds. It is based on an immersive interaction with a group of Irish families and explores how CME technologies have impacted family structures and the social relations that underpin them.

Chapter seven presents the third study, which is a cyber-ethnography based on a two year immersion in eBay. It is a thick description which blends the ethnographer's lived experience with informant narratives to provide a grounded context and uses online data to provide the cyber-context. Chapter eight is an analytical and interpretive study of the ethnographic and deep web data collected during immersion on eBay. It presents an emic-etic view of discourses of power in these new fluid marketplaces.

3.8 Sources and application of analytical rigour

Geertz characterizes the validity and rigour of ethnography as:

'*ethnographers need to convince us* .. (sic).. *not merely that they themselves have truly 'been there', but ….. that we have been there, we should have seen what they saw, felt what they felt, concluded what they concluded'* (1988, p.16).

Rigour in ethnography rests upon its ability to trace the practice and response back to causality and authority, to highlight how individual interests and views of informants are often firmly secured within collective processes and practices, and to create an etic which appears as emic to the native. Readers may disagree with an ethnographer's interpretation and conclusions, but they should recognize the descriptive details as accurate (Fetterman 1998).

Ethnography is more of an art than a science, and thus it takes considerable conscious effort to convert ethnographic accounts into academic texts. Geertz (1988) argues that making objectivity transparent in writing ethnography, by making the text 'author-vacant', enhances neither the validity of the text nor the rigour of the study. Geertz also argues that ethnography is a 'thick description', and that ethnographic data are thick because '*what we call our data are really our own constructions of other people's constructions of what they and their compatriots are up to*' (1993, p.9). The interpretive flexibility in construction and meaning makes many claims of rigour obsolete.

The other issue I find significant in establishing robustness or rigour of ethnography pertains to the ethnographer's ability to capture a valid thick description. Often expressed as '*is it a mile deep and an inch wide, or a mile wide and an inch deep*', this notion questions the primacy of rigour over completeness. An ethnographer can use all the right tools and the correct techniques to record minute details of an encounter, but may miss the revelatory moment. I am certainly not arguing that *Sex and The City* is an authentic ethnography of New York city's night life, but I do find it populated with many revelatory moments. Does the absence of academic references, and abundance of revelatory moments make it any less rigorous?

I found that the application of rigor in ethnography is not an easy task. The usual practices of ensuring rigour: use of multiple methodologies, multiple sources of information, multiple processes of data collection and analysis; comparing data and interpretations to those from other sources including literature; comparing experience-near to informant accounts and observations and re-enquiring where necessary; focusing on themes emerging from multiple participants and sources; looking for agreement (through lack of exceptions) on interpretations by fellow researchers, seeking exceptions in times of agreement; seeking the whole narrative and looking for

connectedness within the narrative were applied throughout this research. But ultimately, rigour was achieved by focusing on larger themes which emerged from multiple data sources, as well as by verification of interpretations through additional data collection and analysis.

The next chapter describes the organization of my data sources around thematically focussed areas of enquiry, and outlines the informant networks accessed in the course of this study.