

Unobtrusive Research Methods – An Interpretative Essay

By Michelle O'Brien

Introduction

Unobtrusive research methods include non-reactive behavioural observation, the historical examination of pre-existing archives such as statistics or records, the study of physical traces, and the critical analysis of cultural content. Unobtrusive research techniques may not be valued in academic standards as highly as more traditional methods, but are extremely valuable tools that do not disturb or 'break the skin' of data, therefore effectively capturing ideologies that circulate at a particular space and time (Brabazon, 2010).

In order to conduct effective unobtrusive research, it is important to understand the theory behind the methods, as well as their strengths and weaknesses compared to other forms of research. The conscientious researcher must have a thorough comprehension of the various types of unobtrusive research, including trace studies, behavioural observation, the study of archives and content analysis, as well as the appropriate research topics for their uses. Ethical concerns for the application of these methods must be carefully considered, as should privacy issues involved in conducting unobtrusive research in the 21st Century.

We live in an Information Age with a plethora of data available for study, like an archeology site of modern existence waiting for excavation. By taking on the role of a cultural detective and utilising unobtrusive methods effectively, the modern researcher can find rich sources in new and overlooked areas and re-examine data in fresh, innovative ways.

Theory base for unobtrusive research methods

Unobtrusive research methods offer a strong critique of positivism, the concept that truths can be determined about the social world by scientific measurement. They instead belong to the epistemological theory of interpretivism which is that the social sciences are fundamentally different from natural sciences therefore requiring researchers to reject empiricism and grasp subjective meaning of social action (Bryman, 2004).

In terms of ontological considerations, unobtrusive methods fit into the constructionism theory whereby social phenomena and their meanings are continually accomplished and revised by social actors (Bryman, 2004). French philosophers including Foucault demonstrated how discourses and social positioning influence our views of the world and unobtrusive methods ally themselves with this theory that a researcher's account of the social world is only one version of reality rather than the definitive one. Unobtrusive methods are however sometimes criticised as lacking definitive interpretations or true representation, and of providing an etic interpretation from the point of view of the outsider who fails to grasp important emic, or in-group, meanings (Kellehear, 1993).

Weber (1978) coined the term *verstehen* to describe the phenomenon of a researcher taking on the circumstances, views and feelings of subjects so as to interpret these actions appropriately. Bryman

(2004) defines *verstehen* as the clash between explanation of human behaviour and interpretive understanding of this behaviour. As the aim of the social scientist is to gain access to common sense thinking and interpret actions and social world, *verstehen* is therefore an important theory for consideration when discussing unobtrusive research methods.

The post-structuralism theory of research, to which unobtrusive methods belong, does not rely on scientific or generalisable data-mining techniques such as sampling, but instead places emphasis on re-reading existing data to question and generate theory. Kellehear (2003) asserts that psychologists and quantitative-oriented sociologists favour a hypothetico-deductive format of research in which theory guides research, whereas anthropologists and sociologists favour the hypothetico-inductive method. Unobtrusive methods are qualitative, exploratory and inductive, making them appropriate for an array of social research topics, especially in the era of advanced information technology and widespread digital communication due to the plethora of data available for study through digital means.

Strengths of unobtrusive research methods

Kellehear (1993) argues that one of the biggest strengths of unobtrusive research is the documentation of actual rather than self-reported behaviour. Other advantages include repeatable results, easier access to data and the fact that permission from subjects is not always necessary. Unobtrusive methods are relatively inexpensive and are appropriate for longitudinal studies that follow activities over a period of time. As opposed to interventionist research, unobtrusive methods are non-reactive meaning subjects are not interrupted, their time is not taken up, and they are not prompted to disclose sensitive or potentially distressing information. From a feminist perspective, unobtrusive research is also safer in comparison to other methods due to the degree of distance, or in some cases complete anonymity of the researcher.

Ethnography as a comparative research method can be cumbersome, time-consuming and expensive. It is not always possible to generalise ethnographic findings and there is a difficulty reconciling constructive engagement with critical reflection (Karl, 2010). In ethnographic research there is also the risk of *The Hawthorne Effect*, where simply by their presence researchers can unwittingly distort their own findings (Lee, 2000), and that researchers may lose perspective 'in the field' and let their research spill over into their private life and vice versa. Karl (2009) describes the process of ethnographic fieldwork as 'culture shock' that demands an acute degree of self-consciousness, something that can be "emotionally and intellectually rewarding or quite difficult to manage" (para. 28). Unobtrusive methods, on the other hand, keep a sufficient amount of distance from a subject and thus the researcher maintains relative objectivity. Unobtrusive methods therefore prove appropriate for use when a research topic is of a sensitive nature or one personally close to the researcher.

Oral History as a comparative method can be criticised as having a lack of neutrality, objectivity or representativeness. This method offers insight into those in the 'dustbin of history', but in the wrong hands and when used in an inappropriate research area can be redundant or even destructive (Brabazon,

2010). Thompson (1994) also highlights the problems of data being “distorted or contaminated by the passage of time, by remembrance, or by reevaluation of earlier memories” (p. 3). This conceptualisation of experience from the perspective of the subject is removed from the equation in unobtrusive methods, resulting in less chance of data distortion.

Visuality as research method, on the other hand, can only illustrate what is visible and is largely constrained by the medium of the photograph (Doyle, 2010). According to Buckingham (2009), creative applications of visuality, such as the action-photography technique in which subjects are given cameras to express themselves, have a tendency toward empiricism due to inflated claims of empowerment. In the age of Photoshop the cliché ‘Seeing is not always Believing’ rings true, and fortunately unobtrusive methods utilise all senses in the research process rather than only the visual. Unobtrusive research therefore presents a strong case when compared to other methods and can be a tool for capturing valuable results when applied to the appropriate research questions.

Weaknesses of unobtrusive research methods

In his monograph *‘Doing research on sensitive topics’* (1993), Lee argues that unobtrusive methods are inferentially weak and a ‘sociology of the inadvertent’ only appropriate when used as validation studies in addition to other methods. There are a number of disadvantages to unobtrusive research that the researcher needs to be aware of in order to know when they are appropriate to use or when complementary or alternate research methods should be deployed.

A major weakness of unobtrusive research is the possibility of original records being distorted by intervening variables. This issue becomes prevalent when subjects know they are being observed as they might skew data, consciously or unconsciously, to create a different impression to the outsider (Kellehear, 1993). Statistics may also be biased depending on the customs or beliefs of the time, an example being the ‘cause of death’ listed on death certificates for suicide cases. Another weakness lies not with the source but with the researcher, in that the interpretation may be from the point of view of the researcher rather than the subject. Gratton & Jones (2004) argue that observation is easier than understanding and explaining in unobtrusive methods due to the researcher not having direct and responsive communication with subjects. Unobtrusive methods also have the potential for unconscious selective recording of observational data due to the identity and social positioning of the researcher, for example different findings resulting from a male or female researcher observing a group of women.

Strategies to balance or offset the weaknesses of unobtrusive research include the thorough evaluation of both sources and findings for authenticity, credibility, representativeness and meaning (MacDonald, 2006). There is also the common research mistake of single method over-reliance so another strategy is research triangulation, both within the method and also using multiple research methodologies. This is particularly important in unobtrusive research because unlike surveying or sampling, the validity of the data is not gained from within the method itself.

The careful researcher needs to understand when it is appropriate to use unobtrusive methods and when they must be complemented with other research methods. If one's research aim is to gain an in-depth understanding of embedded cultural values in a group and give a voice to a culture that might not otherwise be heard, one might consider also using ethnographic research methods. If the research aim is to empower dispossessed groups who have a lack of evidence from their lives in official archives on the other hand, oral history and interviewing might instead be appropriate. All research data needs to be analysed in the terms in which they were gathered, so if the research involves the analysis of visual sources, the unobtrusive researcher may want to substitute or complement unobtrusive research methods with visuality. No single method is appropriate for all research topics, and research projects need to be matched to unobtrusive methods with reflexivity and careful consideration.

Behavioural observation and overreliance on the interview

Kellehear (1993) questions whether important truths and accurate findings in sociology can be best gained through 'talk' due to the fact that humans are "conscious, decision-making and often irrational" (p. 12). He argues that there is more to social research than interviews or discussion, and that insight can be gained without disturbing or influencing people, but instead by listening systematically and watching with care. There is often an over reliance on the interview in social research and in more traditional academic circles research findings are not taken seriously without extensive survey and questionnaire documentations. However Webb et al. (1966) point out that this intrusion of 'the foreign' often distorts the social setting being documented, with "[interviews] creating as well as measuring attitudes; eliciting an atypical role and response" (p.1). A researcher's presence and appearance, even the wording of a question, will have subtle to substantial effects on a subject's response. People are also socially constructed to opt for middle-range answers in surveys or interviews so as not to appear extreme; studies have found that women were more likely to admit to having had an abortion when interviewed by other women and African-Americans were more likely to admit experiencing racism when interviewed by other African-Americans (Lee, 2000).

There is so much that may not be revealed in an interview and often the most interesting findings arise through astute and unobtrusive observation rather than written or verbal probes. An example of this theory can be seen in Pettersson et al.'s (2004) study of the interaction between adults and children in supermarkets. He observes that in interviews or surveys, subjects often do not have the objectivity to accurately describe their behaviour, especially if it included adverse elements. Another example is Allen's (2008) report on the use of deterrence psychology behind online copyright infringement laws whereby only after extensive behavioural observation could a pioneering alternative approach be developed based on voluntary deference, cooperation and compliance.

With pressures including time constraints, limited resources and decreasing funding for data collection, it is no surprise that research subjects are not always treated with the utmost sensitivity. Interview

techniques are often based on how to get the most information from subjects rather than how to be the most ethical researcher, including ordering questions in a way to gain trust before approaching sensitive issues and offering the right body-language to appear empathetic and make the subject open up (Ritchie, 2003). Behavioural observation is therefore an important method of unobtrusive research as it not only aids emic understanding, but also gives research subjects the respect, attention and voice they deserve.

Historical research, archives and pre-existing data

Kendall (2007) believes that like a detective investigating crime, the unobtrusive researcher should look for clues. Instead of creating their own data sets from scratch, many researchers could be more time and resource efficient by interrogating the huge amount of pre-existing data surrounding us. Documents intended to be read as objective statements including official reports, private letters and photographs, but also cultural sources including buildings, songs, plays and novels, are all subjective and socially produced on the basis of ideas and principles of the time (MacDonald, 2006). Lack of funds or resources to support extensive data collection is no excuse for not being able to conduct quality social research, with examples of publicly accessible data appropriate for unobtrusive research including the UK's official public archive *The National Archives* ("<http://www.nationalarchives.gov.uk/>", 2010), beta-version website *Family Search* ("<https://beta.familysearch.org/>", 2010) and the *Marriage Records Online* database ("<http://www.marriagerecords.org/>", 2010). Valuable examples of the use of historical data sources include Stone's (1979) detailed analysis of the history and evolution of family life in English society between the years 1500-1800, and Hughes' (2006) *Encyclopaedia of Swearing* which documents the social history of profanity and foul language in the English-speaking world.

Data does not always have to be 'historical'. An example of the appropriation of contemporary data to generate new findings and theory is Cascio's (2010) report on the carbon footprint made through the production of a single cheeseburger. Meindersma's *'How pig parts make the world turn'* (2010), on the other hand, exposes the vast array of non-pork products for which different parts of a pig are utilised including bullets, shampoo, fish-feed and artificial hearts. Data can be used in creative ways to reveal new truths, and McCandless' *'The beauty of data visualization'* podcast (2010) shows how visually designed data reveals new patterns, understandings and findings. Through extensive investigation and thorough, 'detective-like' research of existing data, groundbreaking truths can be exposed that challenge society to look in the mirror and question itself.

There have been many studies conducted using official statistics on suicide, a renowned example being Durkheim's *'Suicide: a study in sociology'* (1897). By examining statistics in terms of locations, weather, age, gender and religion, Durkheim concludes that social stability is a protection against suicidal tendencies in populations. Another example is Phillips & Zhang's (2002) report on suicide rates in China from 1995-99. The missing data from official statistics used in this report tells us more about China's censorship, laws and the stigmatisation of this social phenomenon than it does about actual suicide rates. These studies are examples of the appropriateness of unobtrusive research techniques to generate new

theory by analysing pre-existing data but they also draw attention to the questionable reliability of 'official' statistics, especially in socially stigmatised areas. Vigilance and critical evaluation are essential when analysing any type of unobtrusive research data, however identifying missing or distorted data can also reveal interesting information and lead to unexpected findings.

Content analysis: cultural items as sources

According to Lee (2000), "everything in and of the world is irredeemably cultural, and therefore open to study, no matter how seemingly peripheral, insignificant or taken for granted" (p. 8). This observation leads to the discussion of content analysis as unobtrusive research method. In the role of the researcher one simply needs to 'scratch the surface' to reveal meanings, as culture is a social reflection of a time, place and production, and a "network of narratives or stories built on the hidden" (Kellehear, 1993, p. 13). Seemingly trivial cultural items such as children's toys are rich in analytical information for research, for example the Barbie doll (Handler, 1959), with over a billion dolls sold worldwide since its launch in 1959. The evolution of the doll's appearance can be seen as a reflection of society's views of women, but Barbie is also an embodiment of the American racial divide with the first 'Black Barbie' range having only launched in 2009. This is also demonstrated by Brabant & Mooney's (1999) report on racial stereotypes of family life in Sunday comics with the comparison of relationships and themes across various cartoons revealing that African families are generally depicted as more united and socially engaged whilst white families are depicted as more socially isolated. The comic strip and children's toys, items which at first seem too trivial to be important records of cultural patterns, are in fact valuable sources for cultural studies.

The entertainment industry, with sources such as movies, songs, plays, games and novels, also provides important cultural and social narratives for analysis. For example Gatsiounis's '*Hollywood still seduces the world*' (2008) analyses increased foreign appreciation for Hollywood films despite anti-American sentiment being at an all time high. Through critical analysis of films, including increased non-American castings and transnational plot themes, the conclusion is drawn that audiences make a distinction between US culture and foreign policy. In reference to film and literature as sources for unobtrusive research, fiction can often reveal more about a time and place than traditional 'truths' (i.e. journalism). An example is the film *Crash* (Haggis, 2004) which tackles controversial and relevant social issues including classism, prejudice, social responsibility, ignorance and racism, thus providing insightful data for the unobtrusive researcher into a post-9/11 American society.

Journalism and the media are valuable sources for critical analysis, with MacDonald (2006) pointing out bias and selectivity of editorial policy, distortion (from journalist or source), propaganda and specific audience context as reasons for the subjective nature of these texts. For example the critical analysis of the *Michael Jackson Official Website* fan forum ("<http://www.michaeljackson.com/us/forum/>", 2010) provides very rich analytical data on the impact and legacy of an artist's music and fame, compared to

more traditional archives or press records. The mass media both mirrors and moulds our culture, making critical analysis of cultural sources an important method for unobtrusive research.

Physical trace studies

Social researchers should use unobtrusive methods to devote more attention to the evidence people leave behind as they traverse their physical environment. Lee (2000) classifies these 'physical traces' as either running records or episodic records. An example of running records can be seen in Templer's (1995) historical and theoretical analysis of the staircase, with dips in a step telling us a great deal about patterns of human behaviour under specific environmental conditions and mainstream human 'flow' being predicted according to architecture, design, origin and destination, crowding and cultural codes such as keeping to the left or the removal of shoes. An example of episodic records is graffiti, a crude form of communication that is free of the social restraints that prevent people from giving uninhibited reign to their thoughts (Abel and Buckley, 1997), at the same time offering insight into authors or artists, and the society in which they belong. Klofas & Cutshall's (1985) report on unobtrusive research for criminal justice discusses how content analysis of graffiti provides further insight into the social structures of correctional communities. Graffiti is an uninhibited measure of the public sentiment whether it be on prison walls, school desks or the back of toilet doors, and an example of this phenomenon in the Digital Age is the *Super Free Draw* online art project ("<http://www.superfreedraw.com/>", 2010) which mirrors the idea of the anonymous 'toilet door' graffiti canvas and leads to the interesting observation that the graphic themes covered in the graffiti are very similar to the bathroom equivalent. Another example is The Gum Wall of Post Alley, Seattle which is a brick wall entirely covered in chewing gum (Steve, 2010). A source for research on chronic yet spontaneous public art installations, The Gum Wall is also used for research on the deterioration levels of chewing gum over time. Much can be learned through analysis of human behavioural traces, including pilgrims to pop-culture shrines such as this one.

People often do not realise the research value of the traces they leave behind. An example is Pullen et al.'s (2000) unobtrusive study of discarded cheat sheets in universities in which students unwittingly provide valuable research data by leaving their cheating notes behind after exams. In the classic song *Traces* (1969) from the band Classics IV, the lyrics list emotionally-charged 'memories in bits and pieces' that an ex-lover has left behind including faded photographs, torn tickets, jewelry and love letters. This song conjures the plethora of physical traces from human actions and interactions even in our own homes and the research data intrinsically surrounding us in our daily lives. However there are pitfalls in the use of physical traces for unobtrusive research such as selectively recording observational data and allowing the researcher's personal interpretations and bias to distort findings. An example of the inappropriate use of unobtrusive research methods can be seen in the documentary *UFOs Are Real* (1979) which features the Director of the Center for Physical Trace Research, and his study of UFO landings based on 'physical residue' from extra-terrestrial spaceships. There will always be multiple interpretations on any data and due to the fact that evidence is inherently subjective, it is important that all data be evaluated in a contextual and critical way.

As films and monographs such as *'Plastic Planet'* (Boote, 2009) and *'Rubbish! The Archaeology of Garbage'* (Rathje, 2001) demonstrate, one can draw significant conclusions about a society's trends in consumerism and material values by what is thrown away. As Lee states, "data can be found anywhere and everywhere, even in dustbins" (2000, p. 12), and it is no surprise that the largest proportion of litter in western cities is generated by the biggest fast-food corporations such as McDonald's (Gray, 2009). Interestingly, Jayne's book *'Cities and Consumption'* (2006) highlights the truism that 'one man's trash is another man's treasure' by exploring the growth of recycling and use of second-hand products in a capitalist, post-GEC society. In this case it can be illustrated that one can also conduct effective unobtrusive research by studying what is *no longer* thrown away.

Ethics for unobtrusive research methods

Ethics should always remain a top priority for social researchers and fortunately, ethical concerns have caused the practice of unobtrusive research to become more transparent over the past decades. Kellehear (1993) categorises ethics in social research as privacy, consent, confidentiality, protection of subjects, and avoiding cheating, deception and the negative use of research by the researcher. Examples of ethically dubious unobtrusive research conducted in the past include 'wrong number' phone calls to assess helpfulness, fake collapses on trains, and staged shoplifting to assess shoppers reporting behaviour. These techniques are intrusive to the lives of subjects and can create emotional turmoil due to the trauma of the experiment or the results reflecting badly on those involved. Bulmer's monograph *'When is disguise justified?'* (1982) presents an almost humorous debate, by today's ethical standards, on undercover participant observation. Bulmer offers alternatives to covert observational strategies but many of these are still ethically dubious, such as the role of the 'covert outsider or overt insider' whereby researchers occupy non-research positions in a social context in order to gain access to otherwise closed research settings. Today, much greater permissions are rightfully required when conducting undercover research in any setting and this has raised the bar in terms of unobtrusive research ethics.

Another ethical concern raised by unobtrusive methods is when subjects commit illegal acts under observation, an example being Retting et al.'s (1998) report evaluating the influence of a red light enforcement program on violation rates. Whilst results showed a decrease in red light violations over time, many violations, including full details of the offending vehicles, were still recorded in the experiment. Fulford's article *'Bullied to Death?'* (2010) explores the complex research area of high school bullying and highlights bystanders who passively observe bullying as a crucial problem. This notion of the 'passive bystander' raises serious ethical questions about the role of the unobtrusive researcher and their obligation to report findings to authorities if behaviour observed in a research context is illegal or has serious implications for the subjects or community. Ethics is always a sensitive and subjective area in social research and should always remain the highest of priorities throughout the entire research process, whilst using any type of research method, as well as during the dissemination of results.

Unobtrusive research in the Information Age

As Brabazon wryly asks, "If we live in an information age why do we need more information?" (*Unobtrusive Research Methods* Podcast, 2010). Unobtrusive methods are now more relevant than ever before, providing useful tools such as 'data-mining', digital traces studies and cultural analytics to better understand the huge amount of data surrounding us and the evolution of social behaviour and communication on a digital platform. The Information Age also has serious advantages for the fields of humanities and sociology as a whole, acting as an "aid to fulfill the humanities' basic tasks of preserving, reconstructing, transmitting, and interpreting the human record" (Frischer, 2009, p. 15). Rather than viewing digital data and sources as 'second rate', researchers must come to the realisation that we live in a world where print is no longer the exclusive or the normative medium in which research is produced and disseminated (Pressner et al., 2009). The humanities are still lagging behind other research areas in utilising and adopting digital communications to their full potential; researchers from the various humanities disciplines need to work together to set common protocols for the use and evaluation of digital cultural sources, to build a strong community of digital humanities scholars, and to respect the value of open access and collaborative research and dissemination tools and techniques.

Privacy and ethics are increasingly important issues regarding unobtrusive research in the Information Age. The proliferation of rich internet-based research sources raises serious questions about the ethical aspects of studying digital data and what levels of permissions from subjects should be sought. Examples of this dilemma can be found in research papers including Rohle's '*Desperately seeking the consumer: Personalized search engines and the commercial exploitation of user data*' (2007), plus news articles such as Adhikari's '*Online Behavior Tracking: No Such Thing as Enough*' (2008) and Hafner's '*Researchers Yearn to Use AOL Logs, but They Hesitate*' (2008). As the 2010 *Wikileaks* scandal has shown, just because we have more information than ever before doesn't mean our Information Age is a truly open access one. In its mission to 'Open Governments', *Wikileaks* raises serious questions about data protection and ownership, censorship, freedom of speech and taking responsibility for your research findings (Assange, 2010). The detention of Assange in December 2010 also highlights the potentially drastic consequences for both researchers and those implicated when research findings are disseminated. *Wikileaks* provides a beacon of warning for the digital humanities that clear paths through ethical and privacy concerns must quickly be addressed and resolved for the future of this academic field.

Brabazon states that, "Ironically, in the midst of the knowledge economy, students are being less creative, innovative and dynamic" (2006, para 38), highlighting the problem that living in an Information Age doesn't necessarily produce more discerning researchers. This is due partly to rapidly evolving digital communications techniques, the growing use of social networking in peer-to-peer communications or, as the media claims, shortened attention spans caused by an ever-growing trend in digital multi-tasking. In Hill's article *Reflections on Leaving Facebook* (2009), he argues that online social networks create unhealthy power structures by encouraging passive and voyeuristic observation into the private communications of others. It is important now more than ever, to give researchers the tools to actively

and discerningly utilise the data surrounding them and to critically analyse information in an ethical and objective way. Due to the growing influence and integration of technology in our society, unobtrusive methods are an appropriate and valuable form of research that not only compete with but also supersede more traditional research methods in many ways. However, only through setting academic standards and careful consideration of privacy and ethical issues, can the digital humanities flourish into a rich and respected area of study.

Conclusion

Unobtrusive research offers an array of advantages and unique opportunities for the 21st century researcher through methods including analysis of behavioural observation, study of archives and pre-existing data, content analysis of cultural sources and physical trace studies. However after highlighting important issues surrounding ethics as well as the application of unobtrusive research in the Information Age, it is evident that clear paths through privacy concerns need to be negotiated.

Lee (2000) argues that data obtained opportunistically should in no way be seen as inherently inferior to data designed for a particular purpose and that researchers need to overcome the notion that the task of social science is measurement, whether unobtrusive or not, as opposed to “interpretive or critical understanding of social reality” (p. 11). Unobtrusive methods offer a critical approach and fresh perspective to research that challenge traditional academic standards in innovative and creative ways, and through analysis of existing data including the sources that life has left behind, they allow exciting new interpretations and findings to emerge.

Webb et al. (2000) assert that “ingenuity is required if the social sciences are to fulfill their promise” (p. xvi), and whilst not appropriate for all research topics, the relevance and importance of unobtrusive research in the Information Age is growing, along with emerging respect as an academic field. The nature, potential and indeed magic of unobtrusive research is strikingly exemplified by the film *Wings of Desire* (Wenders, 1987). Set and filmed in Berlin just before the fall of the Wall, the film depicts two angels who are invisible to humans. Unobtrusively and respectfully observing the activities, conversations, relationships and behaviour of those around them, they gain astute insight into their environment and become wise masters of the city and the people who inhabit it.

Bibliography

- Abel, E.L. & Buckley, B.E. (1997). *The Handwriting on the Wall: Toward a sociology and psychology of graffiti*. Westport, Conn: Greenwood Press.
- Adhikari, R. (2008). Online Behavior Tracking: No Such Thing as Enough. *E-Commerce Times*. Retrieved from <http://www.ecommercetimes.com/story/Online-Behavior-Tracking-No-Such-Thing-as-Enough-62051.html?wlc=1286905034/>
- Allen, P.J. (2008). Rip, mix, burn ... sue ... ad infinitum: The effects of deterrence vs. voluntary cooperation on non-commercial online copyright infringing behaviour. *First Monday [Online]*, 13:9 (24 August 2008).
- Assange, J. (2010). (Founder) *WikiLeaks*. Retrieved from 213.251.145.96
- Boote, W. (Director/Writer). (2009). *Plastic Planet* [Motion Picture]. Vienna, Austria: Thimfilm/Neue Sentimental Film.
- Borgman, C. (2009). The Digital Future is Now: A Call to Action for the Humanities. *Digital Humanities Quarterly*. Fall 2009, Vol. 3, No. 4, 2009. Retrieved from <http://www.digitalhumanities.org/dhq/vol/3/4/000077/000077.html>
- Brabant, S., & Mooney, L. (1999). The social construction of family life in the Sunday comics: race as a consideration. *Journal of Comparative Family Studies*, 30, 113-133.
- Brabazon, T. (2010). Unobtrusive Research Methods. From *Practising Media Research, Week 2* [Podcast]. Retrieved from <http://studentcentral.brighton.ac.uk/>
- Brabazon, T. (2006). Herpes for the information age: plagiarism and the infection of universities. *Fast Capitalism*, 2:2.
- Bryman, A. (2004). *Social Research Methods*. Oxford, UK: Oxford University Press.
- Buckingham, D. (2009) "Creative" visual methods in media research: possibilities, problems and proposals, *Media, Culture and Society*, 31(4), 633-652.
- Bulmer, M. (1982). When is disguise justified? Alternatives to covert participant observation Reason: ethical questions regarding observation. *Human Sciences Press*, 1982, 251- 263.
- Cascio, J. (2010). The Cheeseburger Footprint. *Open the Future* [Web log]. Retrieved from http://www.openthefuture.com/cheeseburger_CF.html
- Doyle, J. (2010). Visuality: Exploring Visual Analysis. From *Practising Media Research, Week 3* [Podcast]. Retrieved from <http://studentcentral.brighton.ac.uk/>
- Durkheim, É., Simpson, G. (Editor) & Spaulding, J.A. (Translator). (1997, first published 1897). *Suicide: a study in sociology*. New York: Simon & Schuster.
- Fulford, J. (2010, October 18). Bullied to Death?. *Time Magazine*, 32-35.
- Family Search (2010, November 15). *Family Search Beta Version*. Retrieved from <https://beta.familysearch.org/>
- Frischer, B. (2009). *Art and Science in the Age of Digital Reproduction: From Mimetic Representation to Interactive Virtual Reality*. I Congreso Internacional de Arqueología e Informática Gráfica, Patrimonio e Innovación, Sevilla, 17-20 de Junio de 2009.

- Gatsiounis, I. (2008). Hollywood still seduces the world. From *Yale University* channel on iTunes U [Podcast]. Retrieved from <http://deimos3.apple.com/WebObjects/Core.woa/Browse/yale.edu-dz.2821778456?i=1124680772/>
- Gratton, C. & Jones, I. (2004) *Research Methods for Sport Studies*. London, UK: Routledge Press, 158-165.
- Gray, L. (2009). McDonald's waste makes up largest proportion of fast food litter on streets. *The Daily Telegraph Online*. Retrieved from <http://www.telegraph.co.uk/earth/earthnews/4223106/McDonalds-waste-makes-up-largest-proportion-of-fast-food-litter-on-streets.html>
- Hafner, K. (2006). Researchers Yearn to Use AOL Logs, but They Hesitate, *The New York Times Online*. Retrieved from <http://www.nytimes.com/2006/08/23/technology/23search.html?pagewanted=all/>
- Haggis, P. (Director/Writer). (2004). *Crash* [Motion Picture]. Los Angeles, C.A: Lionsgate Films/ Bob Yari Productions.
- Handler, R. (1959), (Founder) *Barbie Doll* [item of material culture]. El Segundo, CA: Mattel, Inc.
- Hill, D.W. (2009). Reflections on Leaving Facebook. *Fast Capitalism [Online]*, 5(2). Retrieved from http://www.uta.edu/huma/agger/fastcapitalism/5_2/home.html
- Hughes G. (2006). An Encyclopedia of Swearing: The Social History of Oaths, Profanity, Foul Language, And Ethnic Slurs in the English-speaking World. Armonk, NY: M.E. Sharpe.
- Jayne, M. (2006). *Cities and Consumption*. London, UK: Routledge Press, 110-118.
- Karl, I. (2010). Ethnography. From *Practising Media Research, Week 4* [Podcast]. Retrieved from <http://studentcentral.brighton.ac.uk/>
- Karl, I. (2009). Technology and women's lives: queering media ethnography. *Reconstruction*, 9(1), 2009. Retrieved from <http://reconstruction.eserver.org/091/karl.shtml>
- Kellehear, A. (1993). *The Unobtrusive Researcher*. Sydney, Australia: Allen and Unwin.
- Kendall, D. (2007). *Sociology in Our Times*. Andover, UK: Cengage Learning, 56-62.
- Klofas, J. & Cutshall, C. (1985). Unobtrusive Research Methods in Criminal Justice: Using Graffiti in the Reconstruction of Institutional Cultures. *Journal of Research in Crime and Delinquency*, 22(4), 355-373. Washington, DC: SAGE Publications.
- Lee, R.M. (1993). *Doing research on sensitive topics*. Washington, DC: SAGE Publications.
- Lee, R.M. (2000). *Unobtrusive methods in social research*. Buckingham, Open University Press.
- MacDonald, K. (2006). *Using Documents*, in N. Gilbert (ed.), *Researching Social Life*. London, UK, Sage.
- Meindertsma, C. (2010). *How pig parts make the world turn* [Video podcast]. Retrieved from http://www.ted.com/talks/lang/eng/christien_meindertsma_on_pig_05049.html
- Michael Jackson Official Website Fan Forum (2010). Retrieved from <http://www.michaeljackson.com/us/forum/>
- Marriage Records Online (2010). *Public Marriage Records*. Retrieved from <http://www.marriagerecords.org/>
- McCandless, D. (2010). *The beauty of data visualization* [Video podcast]. Retrieved from <http://blog.ted.com/2010/08/23/the-beauty-of-data-visualization-david-mccandless-on-ted-com/>

- Pettersson A., Olsson U. & Fjellström, C. (2004). Family life in grocery stores – a study of interaction between adults and children. *International Journal of Consumer Studies*. 28(4), September 2004, 317–328.
- Phillips, M.R., Li, X. & Zhang, Y. (2002). Suicide rates in China, 1995-99. *The Lancet*, 359(9309), 835-840.
- Pressner, T., Schnapp, J., Lunenfeld, P. (2009) *The Digital Humanities Manifesto*. Retrieved from http://www.humanitiesblast.com/manifesto/Manifesto_V2.pdf
- ProphecyGuru. (2007, August 5). *Physical Traces*, excerpt from documentary *UFOs Are Real* (1979) [video file]. Retrieved from <http://www.youtube.com/watch?v=4yNg8yU0eUU/>
- Pullen, R., Ortloff, V., Casey, S. & Payne, J.B. (2000). Analysis Of Academic Misconduct Using Unobtrusive Research: A Study Of Discarded Cheat Sheets. *College Student Journal*, 34, 616-625.
- Rathje, W. (2001). *Rubbish!: The Archaeology of Garbage*. Tucson, AZ: University of Arizona Press.
- Retting, R.A., Williams, A. F., Farmer, C.F. & Feldman, A.M. (1998). Evaluation of red light camera enforcement in Oxnard, California. *Journal of Accident Analysis and Prevention [Online]*, 39, 169-174.
- rgb3000 (2010). *Super Free Draw* [Online art project]. Retrieved from <http://superfreedraw.com/>
- Ritchie, D. (2003). *Doing Oral History: A Practical Guide*. Oxford, UK: Oxford University Press.
- Rohle, T. (2007). Desperately seeking the consumer: Personalized search engines and the commercial exploitation of user data. *First Monday [Online]*, 12:9.
- Steve (2010, September 15). *Stuck On You: Seattle's Gum Wall Is Pretty, Gross* [Web log article]. Retrieved from <http://weburbanist.com/2010/08/29/stuck-on-you-seattles-gum-wall-is-pretty-gross/>
- Stone, L. (1979). *The family, sex and marriage in England 1500-1800*. New York: Harper Torch Books.
- Templer, J. (1995). The Staircase: Studies of Hazards, Falls, and Safer Design, 89-104. Cambridge, MA: MIT Press.
- The National Archives (2010). *Catalogues and online records*. Retrieved from <http://www.nationalarchives.gov.uk/>
- Thompson, P. (1994). Believe it or Not: Rethinking the Historical Interpretation of Memory. *Memory and History: Essays on Recalling and Interpreting Experience*, ed. Jacklyn Jeffrey and Glenace Edwall. New York: Lanham, 1-16.
- Webb, E., Campbell, D., Schwartz, R, Sechrest, L. (2000). *Unobtrusive Research Methods*. Thousand Oaks: SAGE.
- Weber, M. (1978). *Economy and society: an outline of interpretive sociology, Volume 2*. California: University of California Press, 57-60.
- Wenders, W. (Director/Producer/Writer), Dauman, A. (Producer), Handke, P. (Writer). (1987). *Wings of Desire (Der Himmel über Berlin)* [Motion Picture]. Berlin: Die Freiwillige Selbstkontrolle der Filmwirtschaft (FSK).
- Yost, D. (1969). Traces [Classics IV featuring Dennis Yost]. On *Classics IV - Greatest Hits* [CD]. Los Angeles, CA: Imperial Records.

Further reading

Abandoned Technology Group Photo Pool. (2010). *Flickr*. Retrieved from http://www.flickr.com/groups/abandoned_technology/pool/

Babbie, E.R. (2010). *The Practice of Social Research*. Andover, UK: Cengage Learning, 16-20.

Brabazon, T. (2010). Oral History: Hearing, Listening and Thinking. From *Practising Media Research, Week 5* [Podcast]. Retrieved from <http://studentcentral.brighton.ac.uk/>

Hine, C. (2005). *Virtual methods: issues in social research on the Internet*. Oxford, UK: Berg Publishers, 199-205.

Kimmel, A. (2007). *Ethical issues in Behavioural Research: Basic and Applied Perspectives*. Hoboken, NJ: Wiley-Blackwell. Rugg, G, & Petre, M. (2004). *The unwritten rules of PhD research*. Maidenhead: Open University Press.

Twitter Trending Topics (2010). Retrieved from <http://www.whatthetrend.com/>