



2016-17

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The big, small and influential: methods in 2016 & 2017

As this is the last MethodsNews of 2016 we are taking the opportunity to reflect on the methodological topics that dominated or played a special role in 2016, and will surely impact our discussions in 2017.

We cover the big, the seemingly small and the undeniably influential issues related to social science research methods.

Jane Elliott from the Economic and Social Research Council discusses Big Data and the challenges and opportunities they bring to social science on page 2. The following page explores the support NCRM is providing, both at home and internationally, to the development of Inclusive Research.

We then jump onto a very topical challenge for all social

scientists – attracting the attention and interest of the public and winning back their trust. Scientists need to be able to say things clearly and simply, but how can they make simple and impactful statements that will capture and influence public opinion?

Page 5 covers the biggest issue of all – the Global Challenges and how social science research methods can help to tackle them.

And finally, the last two articles focus on methods which are examples of new and creative ways of working with data: biosocial research and using paradata, marginalia and fieldnotes.

2016 was an exciting year full of methodological developments, investments and events. We hope 2017 feels as fruitful and inspiring!

Why is Big Data important and what are the challenges for social scientists?

Jane Elliott, Economic and Social Research Council

Largely thanks to Morten Tyldum's film 'The Imitation Game', many people now know the story of Alan Turing and his contribution to the Second World War. The challenge for Turing was to develop a computer that could swiftly work through many permutations to decipher encrypted German messages about their war tactics. The challenge for social scientists today is to make best use of computing power, and newly developed algorithms, to capitalise on the vast quantity and variety of data that are created at speed in our knowledge driven, and digitally connected, society.

We are living at a time of great opportunity for social science. The digital revolution has led to the generation of a huge amount of evidence about people's daily activities, including their social networks, and communications. This can be interrogated to help us understand more about individuals and the communities and institutions to which they belong. As has been argued by sociologists such as Mike Savage and Roger Burrows¹, a key advantage of much of this data is that it records actual transactions and activities rather than individuals' reported activities.

Although there is undeniably now a ubiquity of data, some datasets can be seen as more intrinsically 'valuable' than others. There is growing appreciation of the huge potential of administrative datasets, often held by government departments as a result of the routine work of the department in interaction with the public. An example would be the Work and Pensions Longitudinal Survey which links information about individuals' benefit records (held by DWP) to information from HMRC about employment and pension contributions. Gaining access to these datasets, in anonymised form and in safe settings, can be a challenge even for specially trained or 'approved' researchers. What makes this type of Big Data so valuable is that although never perfect, it does not suffer from the same biases inherent in survey data. Coverage is of the whole population not a survey sample; quality of data depends on administrative processes rather than individuals'

memories. Given the research potential of these rich data it is unsurprising that there is considerable frustration among academic researchers that often the data resources they most need are still tantalisingly just beyond their grasp. The ESRC-funded Administrative Data Resource Network was set up in 2013 to help make this administrative data more accessible to researchers.

In this new landscape of Big Data there are perhaps three main challenges for social scientists. First there is a methodological challenge. How can we develop the very best tools to help us interrogate, analyse and understand the vast quantities and varieties of data that now exist? For example, how can we ensure that the methods we use for analysing textual material fully exploit the potential of newly developed machine-learning techniques? Despite a small vanguard of individuals who are working productively with colleagues from computer science and mathematics to develop new techniques, this is still very much a niche area of working. Many academic researchers are continuing to use the methods and approaches with which they are familiar and comfortable even though this can limit the scope of their analysis.

Second there is the challenge of framing insightful research questions. Indeed this can sometimes be seen as in tension with the first challenge. There is a danger that social scientists at the cutting edge of developing methodological techniques can get distracted by the fascinating 'puzzles' of how to interrogate a new corpus of data, rather than focussing energy on the substantive evidence that can be gleaned from the empirical material. At the ESRC we are particularly interested in how we can facilitate co-creation of research questions – bringing together practitioners, policy makers and academic researchers so that they can construct questions that are interesting, useful and tractable. There is also a need to foster interdisciplinary collaborations. There can be a productive iteration here between the interesting and the possible – as new technologies such as machine learning make it possible to ask different types of question from data, this will in turn

fuel our imaginations to think of a new sets of substantive research questions.

Third, we need to address the ethical questions that are raised by new forms of data and new approaches to analysis. For example, there are debates about whether, and what type of, consent is needed for access to these new sources of Big Data. The revised ESRC framework on data ethics includes sections on internet mediated research and other elements relevant to the use of Big Data. In addition it was announced earlier this year that the Government is establishing a new council for data science ethics.

Arguably if we can address these three main challenges we will then be more successful in gaining the trust of data owners and of the individuals and public who generate 'Big data'. The aptly named 'Alan Turing Institute' (ATI), based at the British Library, was launched in November 2015 to advance data science and foster interdisciplinary collaborations to tackle research questions that can ultimately have a positive impact. Social scientists are already contributing to the work of the ATI, but it is vital that more researchers across the social sciences develop an understanding of the potential of Big Data and the need for engagement with data science in order to address new substantive research problems.

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A good year for Inclusive Research at NCRM

Melanie Nind, NCRM, University of Southampton

In this edition of MethodsNews that looks back on 2016, one highlight must be the way in which NCRM has increasingly been engaging with – and supporting – the challenge of Inclusive Research. Inclusive Research is a useful umbrella term for the various participatory, emancipatory and partnership research approaches that re-position research subjects as experts by experience and as active agents in the research, sometimes demanding new methods.

How to do research with rather than on the people the research is about is gathering interest nationally and internationally. Participatory methods was flagged as an area of training need among qualitative researchers in the latest NCRM training needs analysis¹. This is part of the democratization of research that we discussed in the 2014 Research Methods Festival² where What is Inclusive Research?³ (in the NCRM What is? book series) was also launched. Since then I have seen growing capacity to do and support research that has an element of co-production with different community groups.

This year the NCRM Annual Centre meeting welcomed a preview by Umut Erel of The Open University of a new NCRM research project on Participatory Arts and Social Action Research exploring the potential of participatory theatre and walking methods for co-producing knowledge. This project particularly concerns methods that engage marginalized groups such as migrant families and developing materials for others to use. The NCRM Pedagogy of Methodological Learning study is an attempt to develop an understanding of research methods pedagogy that is generated with methods teachers and methods learners. At the 2016 Research Methods Festival, Ros Edwards of NCRM convened a session on post-colonial and indigenous research, including presentations from Bagele Chilisa, Helen Moewaka and Deborah McGregor that stimulated rich discussion about respectful research relationships, cultural sensitivity and the new roles for indigenous people in research in Botswana, New Zealand, Canada and beyond. Contributors to this session are also contributing to a special issue of *Qualitative Research Journal* on democratising qualitative research methods guest edited by Rosalind Edwards and Tula Brannelly.

This was also a year for supporting the development of inclusive research in Finland and Norway, where colleagues in the field of intellectual disabilities are pushing forward drives to transform the dynamics of research with people with intellectual disability. I was pleased to join researchers, some with intellectual disabilities, from Finland and Iceland for a preconference of the Nordic Educational Research Association annual conference in Helsinki presenting on the theme of how methodological practices in doing research together can work as empowering and learning spaces. Facilitator, Katariina Hakala from the Finnish Association on Intellectual and Developmental Disabilities has since visited the University of Southampton to present research on developing the participation of service users in the planning of their own community-based services in a study of Successful Choices. Similarly, the 'It's the way I like it!' project group from Norway who are doing Inclusive Research about self-determination in the lives of people with intellectual disabilities came here to present and join discussions on how inclusive research can make an impact on people's lives.

I have just returned from a seminar and meeting of researchers from across Norway who are, with our support, establishing a national Inclusive Research network. The network, initiated by May Østby of Molde University College and Anita Gjermestad of VID Specialized University, aims to build and exchange knowledge and competencies in research together with

people with intellectual disability, developing methodological approaches and strategies for collaboration across communities.

The significance of all this is that not only is the need to build capacity in Inclusive Research being recognized by NCRM and internationally, but that we are reaching out to work across countries and community groups that are marginalized in different ways to meet that need. As a Centre committed to increasing the quality and range of methodological approaches used by UK social scientists it is vital that we involve as partners and collaborators people whose lives can be improved by respectful engagement in generating knowledge in the spirit of 'nothing about us without us'. It is also vital that we work together with international collaborators on building a bank of research resources to support the sustainability of developments and further innovations. I look forward to seeing what 2017 brings.

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We don't need no expertise! How academics lost the public, and how we can win them back

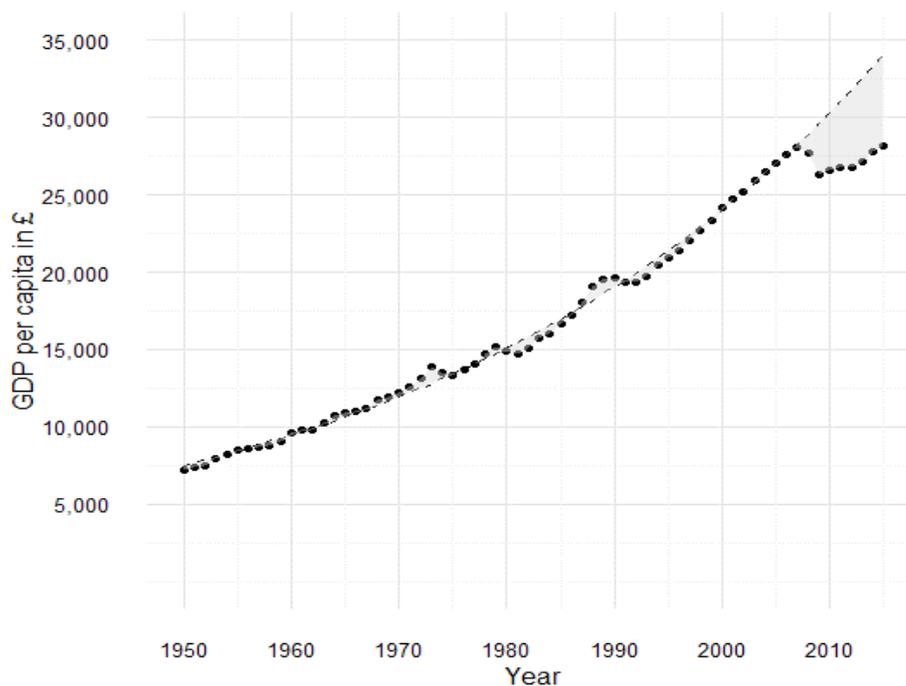
Jonathan Minton, University of Glasgow

“People in this country have had enough of experts.” So said Michael Gove, then Justice Secretary, a month before the EU Referendum. The referendum was as much a referendum on experts as on the EU, dominated by two competing claims expressed as numbers: £4,300, which was produced by experts, and £350 million, which wasn't. £350 million is a big number, much bigger than £4,300, especially when painted on the side of a bus.

The big number won, even though the big number was really the much smaller number, and according to almost all experts the wrong number. £4,300 was an estimate of the annual loss to the economy of leaving the EU, divided by the number of households. £350 million was claimed to be the amount 'sent to' the EU by the UK each week. With around 27 million households in the UK, £350 million equates to around £680 per household per year. Converted the other way, £4,300 per household per week equates to around £2,200 million per week, more than six times as much. And as a number of exasperated experts pointed out, the net contribution per week was nearer £160 million, implying around £315 per year per household, a more than ten-fold difference between the cost and benefit of leaving the EU. Delve into the 200 page technical report which gave rise to the £4,300 claim, and on page 158 we're told that the 'basic specification' of the model used is:

$$\begin{aligned} \ln(T_{ijt}) &= \alpha_{ij} + \gamma t + \alpha_1 (Y_{it} * Y_{jt}) + \alpha_2 \\ \ln(POP_{it} * POP_{jt}) &+ \alpha_3 \ln(DIST_{ij}) + \\ &\alpha_4 COMLANG_{ij} + \alpha_5 COLONY_{ij} + \alpha_6 \\ &BORDER_{ij} + \epsilon_{ijt} \end{aligned}$$

Clear? Simple? Persuasive? The £350 million claim might have been false – clearly, demonstrably so – but at least it was comprehensible. By contrast, without expertise in econometrics and a willingness to spend a weekend digging through algebra and databases, for much of the general public the £4,300 claim had to be taken on trust: trust in economists, trust in politicians, trust in experts. The £4,300 claim fell, and the £350 million claim rose, no matter how often we experts tried to shoot it down. The academically trained economists at HM Treasury, and elsewhere, weren't trusted as experts (perhaps justifiably given some of the modelling assumptions). If the EU referendum was about expertise, the experts lost.



As an academic discipline, economics isn't unique. Our claims to expertise often fall flat, if we even bother making them at all. Though claims of hiding in ivory towers predate it, the REF may have made the situation worse, with both institutional funding and individual standing ever more dependent on producing 4* papers, as assessed by our peers. Academic papers, in specialist academic journals, are usually incomprehensible even to other academics. And until the recent Stern Review, 'impact' was often thought to mean trying to broadly promote specific papers only written for a narrow audience. There's a reason why electron microscopes are not advertised on ITV: they're the wrong product for the audience.

To convince the general public of our expertise and relevance, we need to make suitable products. As well as spending years writing tightly referenced monographs and months writing academic articles for ourselves, we also need to be more willing, and more supported, in writing books, newspaper articles and blog posts for everyone else. We need to react to the news cycle rather than stand apart from it. This means learning to do many things quickly, not just some complicated things slowly. And we need to be able to say things clearly and simply. Quick and simple work may not win 4* REF assessments, but it can help win the public over. Ultimately, we are public servants, working for publicly funded institutions. Public engagement is not an optional extra, but a duty.

Here's an example of doing and saying something simple: The figure above shows how GDP per person changed in the UK from 1950 to 2015. The line shows the trend from 1950 to 2008, and the points the actual values. Put simply – and we have to – something changed after 2008, we stopped getting richer as a nation as we used to, and if we were still getting richer the way we had been since the 1950s, there would be around £5,000 more in the UK per person. This wasn't about migration, which rose after 2004, but something else.

The last sentence, with its simple statements, likely matters more than the figure. It's the narrative, the claim I'm making, the way I want readers to think differently about the world. I would love to tell people that the R-squared on the regression model was over 0.98, the data sources I used, and my equivocation about whether to inflation adjust the GDP estimates and if so using which inflation index, but I won't, as such details get in the way of the message.

To do simple things quickly, we need new skills in both the production and communication of information. For quantitative social scientists, this means learning how to fit the pipes connecting raw data to new insight together faster. Just as Keynes hoped that eventually economists would win a spot alongside dentists in public rankings of expertise, perhaps we should all aspire to be more like plumbers.

Meeting the Global Challenges: how social science research methods can help

Jane Falkingham, University of Southampton

The Earth's population passed the 7 billion mark in 2011 and, although global population growth is slowing, it is highly likely that by 2050 we will reach the 9 billion, with many demographers believing that the world's population will stabilise at between 10 and 11 billion by the end of this century. Such global population growth underlies the key global challenges of food and energy security, biodiversity loss, global governance, migration, conflict, and climate change. These individual and collective challenges in turn reflect complex interacting systems, and solving them will require transdisciplinary and transgovernmental responses.

At the core of the global challenges is the fundamental question of how we manage the process of economic and social development and the use of resources in a balanced fashion. In September 2015, world leaders set out a new 2030 Agenda for Sustainable Development, recognising that ending poverty must go hand-in-hand with strategies to tackle climate change and environmental protection. On 1 January 2016, the 17 Sustainable Development Goals (SDGs)¹ officially came into force.

1. End poverty in all its forms everywhere.
2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.
3. Ensure healthy lives and promote wellbeing for all at all ages.
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
5. Achieve gender equality and empower all women and girls.
6. Ensure availability and sustainable management of water and sanitation for all.
7. Ensure access to affordable, reliable, sustainable and modern energy for all.
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all.
9. Build resilient infrastructure, promote inclusive and sustainable



industrialisation, and foster innovation.

10. Reduce inequality within and among countries.
11. Make cities and human settlements inclusive, safe, resilient and sustainable.
12. Ensure sustainable consumption and production patterns.
13. Take urgent action to combat climate change and its impacts (taking note of agreements made by the United Nations Framework Convention on Climate Change forum).
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation, and halt biodiversity loss.
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
17. Strengthen the means of implementation and revitalise the global partnership for sustainable development.

Earlier this year, the UK Government announced an investment of £1.5 billion in the Global Challenges Research Fund (GCRF) to support cutting-edge research that addresses the challenges faced by developing countries². New technologies and medical breakthroughs will be important. However, alone they will not be enough. The engagement of social scientists in the research funded by the GCRF will be critical in informing the understanding of required behavioural change and of the role of economic, social and political systems - whether

it is the in-depth understanding of culture, norms and values of societies obtained via detailed ethnographic studies, insights into the role of political institutions in shaping legislative behaviour, through to modelling of individual behaviours using agent-based modelling.

Social science will also be essential in informing us as to how well we are doing in tackling the challenges, as measured by our progress in meeting the new UN Sustainable Development Goals. Monitoring progress requires investment in reliable and sustainable sources of data on, for example, poverty, inequality, education, and health, and in the analytical techniques needed to understand both the causes and consequences of changes in these fundamental indicators of human well-being. New and emerging forms of data offer opportunities to gather information on marginalised and vulnerable populations such as nomadic tribes and slum dwellers, previously excluded from routine data gathering operations such as Censuses, while social media and mobile phone data can aid our understanding of the movement of people and of diseases. There has never been a more important and more exciting time to be studying social science and investing in innovative social science research methods.

The key challenge of the twenty-first century will be how to end extreme poverty, fight inequality and injustice *and* fix climate change. World class social science, underpinned by cutting edge qualitative, quantitative and computation methods, will be central to providing the answer.

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What is new about biosocial research methods?

Tarani Chandola, NCRM, University of Manchester; Meena Kumari, University of Essex

Biosocial research is concerned with the dynamic interplays between biology and experiences and behaviours over the course of a person's lifetime, with the aim of enabling our understanding of the complex pathways and mechanisms that shape physical and mental health, social behaviours and outcomes, and genomic, neurological and physiological systems¹.

Biosocial research is both old and new science. Rudolf Virchow, who believed "Medicine is a social science; and politics is nothing else but medicine on a large scale" studied how the social becomes biological in the 19th century through his identification of the specific social conditions in Prussia that made typhus endemic². What is new is the open access to high quality data on the social environment together with biological measurements. Recent developments in the social sciences in relation to biosocial research include new biosocial datasets (e.g. Understanding Society, and the English Longitudinal Study of Ageing), the ESRC framework on Biosocial Research, and the increase in funding schemes for biosocial research.

These biosocial datasets allow us to understand the two way relationships between our social and economic circumstances and our health as they include detailed measures of both social factors and health. This represents an advance on the available data as too often medical or clinical studies provide rich information on different aspects of health, but little on the social environment, while social studies have provided rich data on every aspect of people's lives but only a few general questions on health. The biosocial data resources collect 'biomarkers', i.e. objective indicators of biological processes, which provide new information on different dimensions of health than questionnaire data and tell us about people having or being at risk of an illness before they experience any symptoms.

There have also been recent developments in biosocial methods. There have been huge advances in methods and data collection. For example, there are new ways of collecting biological data that are less intrusive for survey participants (through hair or blood spots) and increasing validation of these new methods of data collection against so-called gold standard methods. In the social sciences, advances in the analysis of mixed mode survey designs (web, telephone, in person) alongside

auxiliary sources of data have been made. Alongside the development of these new methods, within disciplines, there have been new scientific discoveries, linking biological data such as genetic characteristics to health and social outcomes. These new discoveries give us greater insight into the 'dynamic interplays between biology, experiences and behaviours over the course of a person's lifetime' to which ESRC refers. Furthermore, there have been some advances in new conceptual and theoretical models on biosocial research. An 'ABCDE' of Biosocial research has been developed, referring to the interplay between 'Alleles, Brains, Bodies, Contexts and Experience' over the life-course³. A framework for how the social become biological outlines some concepts and principles useful for biosocial research⁴. However, considerable methodological challenges remain:

- Newer biomarkers covering genomics, epigenetics and metabolomics are also increasingly available in such datasets, for which standard protocols of measurement and analysis are still being developed.
- Missing data remains a significant problem for many biosocial datasets, with much higher proportions of missing biological data (especially for sensitive measures like blood and genetics based measures) compared to missing survey data. This missing data problem becomes amplified with longitudinal biosocial data.
- There is a need to develop common language and understanding across disciplines. Very often, disciplinary specific terms (e.g. socio-economic status, embedding, resilience) mean something quite different in other disciplines.
- Much of biosocial research is about showing associations, and yet very often causal processes are inferred. This can be seen in popular descriptions of biosocial research ('cells to society' or 'neurons to neighbourhoods'), which do not appear to take into account processes going from the society or neighbourhoods to biological outcomes.
- Most PhD research training is largely within disciplinary contexts. Interdisciplinary PhDs are rare and also not easy to do.

In 2016, NCRM hosted an Autumn School in collaboration with Understanding Society and the International Centre for Lifecourse Studies in Society and Health on the use of biomarkers in social science research. NCRM currently funds two biosocial

research programmes, one on missing data approaches on biosocial research⁵, another on combining social science and molecular genetic research to examine inequality and the life course⁶. We have a number of planned events for 2017, including a one-day workshop on biosocial research in March. We will also be working closely with the new Centre of Doctoral Training on Social-Biological research.

There is a need for more research and training events in biosocial research. Letting social scientists analyse biological data without sufficient sensitivity to the data and related inferences could result in erroneous reports and publications. The same can also be said of biological scientists who construct 'social phenotypes' from a variety of data sources, without being sensitive to the different meanings and contexts of these social data. What is also becoming quite clear is that while some amount of interdisciplinary training is important, we also need experts to work together and not in silos. This is because advances within certain biological disciplines are so quick, that a considerable amount of disciplinary expertise is needed to keep abreast of the latest developments in research and methods.

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Working with by-products of and for research: paradata, marginalia and fieldnotes

Rosalind Edwards, NCRM, University of Southampton; John Goodwin and Henrietta O'Connor, University of Leicester; Ann Phoenix, UCL Institute of Education

In recent years, methodological innovations have led social science researchers to attend to features of their research beyond the data collected. On the one hand, rising costs and falling response rates have led survey researchers to find ever-more sophisticated ways of understanding and improving survey quality and costs. Towards these ends, the analysis of the macro and micro paradata generated during data collection is becoming well established in the quantitative field. On the other hand, as part of a 'reflexive turn', qualitative researchers have developed analyses of fieldnotes in order to better understand how research accounts are co-constructed between researchers and participants. Similarly, in the field of humanities, researchers are focusing on notes marked in the margins of books as a way to illuminate the art of meaning making in reading. **By focusing on paradata, marginalia and fieldnotes as 'by-product' material of and for social research, we can throw light on their substantial analytical value and the potential to add depth to our understanding of the research process.**

By-product materials of and for research can range from brief written calculations, digitally recorded computer keystrokes, extensive pieces of written narrative or digitally recorded verbal exchanges. They have moved from being background shadows of research practice to a place in the spotlight as informative and illuminative in themselves, helping to elucidate the methodological or substantive specificities of a particular period, place, research study and/or person. They point to the normative research and social assumptions of the time.

Relationships are integral to paradata, marginalia and fieldnotes, both constituted through their production and reflected in their study. Researchers pursuing the craft of studying by-product materials are engaging with often-complex sets of relationships. These can include:

- Between a field interviewer and their interviewee: The by-products of research point to the relational exchanges that are integral to the collection of data, such as the interactions between interviewers and respondents in the conduct and delivery of survey interviews in the field. Approaching the interview setting as a social interaction that is subject to conversational norms

'By Products' off/for Social Research

By Products	Examples
Paradata (macro)	Key strokes, respondent details, 'contextual' data, access information, duration of data collection, research instrument properties, respondent refusals and non-responses.
(micro)	Letters, correspondence, photographs, images, notes, observations, research ephemera.
Fieldnotes	Fieldnotes, interviewer notes, recorded observations, research diaries.
Marginalia	Annotations and augmentations to research instruments, books, book proofs, letters and correspondence

can reveal the necessary relational work that underlies the production of the survey data through the posing and answering of questions.

- Between a field interviewer and the core research team: The actual process of data collection may be undertaken by contracted field researchers who then pass that material to the (academic) research team who have designed the study and will analyse the data.

- Within research teams: Where research is conducted among teams of people, the by-product communication materials that 'go along' with the research process can be revealing of relationships among the team. Intricate webs involving the tense and disputatious as well as creative relations between researchers working together may be evident.

- Between the creator of paradata, marginalia or fieldnotes and themselves: There are moments when the by-products of research and reading activities appear to be an analytic commentary in which the creator attempts to explain to themselves how they should understand a situation or argument.

- Between a reader of a text and another reader of that text, known or unknown: The creation of marginalia is not just associated with primary practices, but can be a form of secondary practice, such as annotations to a primary text; responses to the text that are created by the reader of that text. In a further layer, they are sometimes not produced (only) as conversation with one's self in response to reading but composed with other readers in mind and with an eye to posterity.

- Reader engagement with writers, material and meaning: Writing in books or notes on interview materials or fieldnotes functions

can give analytic insights into the concerns and identities of the writer, as well as how they actively struggle to clarify intended meanings.

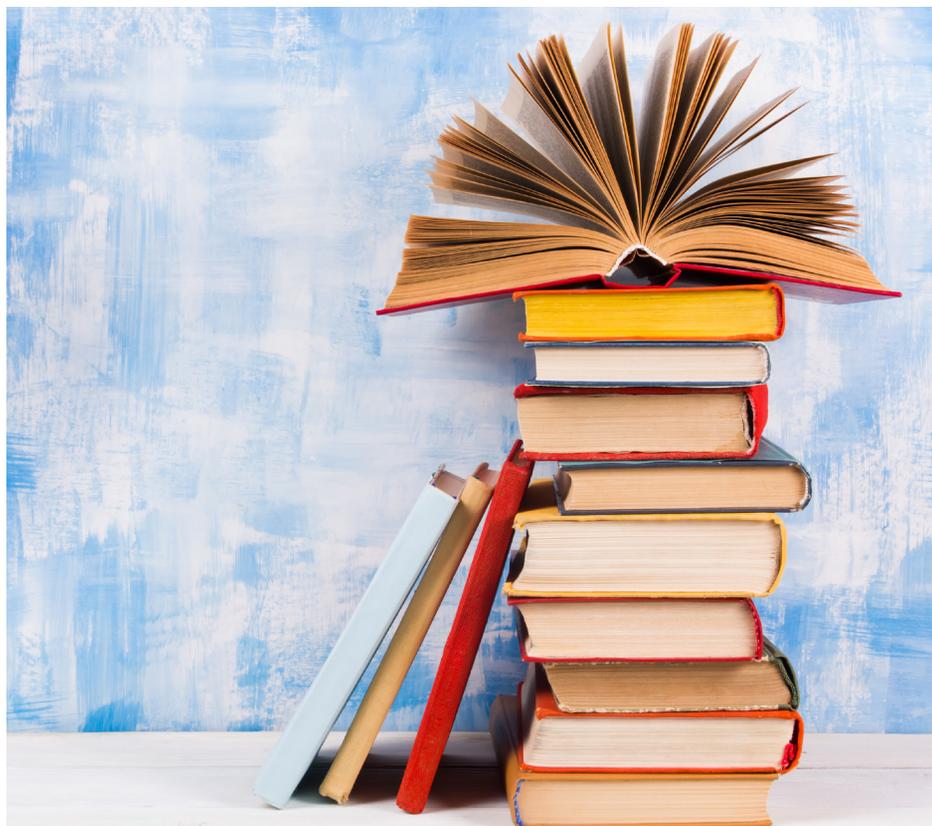
- Between the creator/s of the paradata, marginalia or fieldnotes and the researchers who analyse it: The by-products of the activities of research and reading are subject to (secondary) analysis by people other than those who created them, who are thereby propelled into some form of relationship with those originators. They have the potential to convey a sense of being at the interview, alongside the survey interviewee and field interviewer who are creating paradata, bridging between the creator and researcher over time.

Paradata, marginalia and fieldnotes are often messy and evocative, reflecting complex structures and operating at multiple levels that deserve and require a sophisticated analytic approach. Their study raises knotty issues around whether or not the study and analysis of these materials 'fix' them and/or bring us close to what was actually going on at the time of their creation. Nevertheless, the relationality and multi-dimensionality of by-products are able to make a valuable contribution to research understanding. Studying paradata, marginalia and fieldnotes is so engaging and informative that it can become addictive and a primary focus.

Paradata, Marginalia and Fieldnotes: The Centrality of the By-Products of Social Research, edited by Rosalind Edwards, John Goodwin, Henrietta O'Connor and Ann Phoenix will be published by Edward Elgar in 2017

<http://www.e-elgar.com/shop/working-with-paradata-marginalia-and-fieldnotes>

NCRM training and events 2016/2017



Opinion polling in the EU referendum: challenges and lessons, Chair: Sharon Witherspoon, 8 December 2016, London

The what, why and how of citizens juries, Andrew Thompson, 12 December 2016, Edinburgh

Poetic autoethnographies: exploring the potential of collaborative arts-based research, Helen Johnson, 6 January 2016, Brighton

Gathering and analysing social media data from Twitter and YouTube, Mike Thelwall, 11 January 2017, Manchester

Sentiment analysis: how it works and how to use it in the social sciences, Mike Thelwall, 12 January 2017, Manchester

CAQDAS qualitative software planning seminar, Christina Silver, 25 January 2017, Belfast

Cognitive interviewing for testing survey questions, Pamela Campanelli, 22 - 23 February 2017, Southampton

Creative research methods, Helen Kara, 2 March 2017, Cardiff

To find out more about our training courses and events and to register please visit www.ncrm.ac.uk/training. New courses are continuously organised and added to the database.

ABOUT NCRM

The ESRC National Centre for Research Methods (NCRM) is a network of research groups, each conducting research and training in an area of social science research methods.

NCRM brings together researchers from across the UK with a wide range of research methods expertise, at the frontiers of developments in research methodology.

NCRM disseminates innovations and developments in research methods through training courses and events and through other direct engagement with researchers, but also by cooperating with other organisations and initiatives with an interest in social science research methods.

NCRM was established in 2004 as part of the Economic and Social Research Council's (ESRC) strategy to improve the standards of research methods across the UK social science community. NCRM acts as a strategic focal point for developments in research, training and capacity building related to research methods, both at the national level and cutting across social science disciplines.

For more information about the NCRM and its activities please see our website www.ncrm.ac.uk

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