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Perspectives on 'The Lens of Risk' interview series: Interviews with Tom Horlick-Jones, Paul Slovic and Andy Alaszewski

Bob Heyman and Patrick Brown

Abstract

This article is the fourth and final one in a series of interviews with a selection of significant contributors to the social science of risk. It provides quasi-verbatim interviews with Tom Horlick-Jones, Paul Slovic and Andy Alaszewski. Tom Horlick-Jones contributed to chapter 6 of the Royal Society (1992) *Risk* monograph, on risk management. He offers further insights into the debates which underlay its production to those given by Nick Pidgeon (Heyman and Brown, 2012) in the first article of this series. Paul Slovic provides a North American perspective on risk social science. Andy Alaszewski in the last of the nine interviews discusses his views about risk in relation to the evolution of his journal *Health, Risk & Society*.

Short title: Interviews

Introduction

At the suggestion of the editor of *Health, Risk & Society*, Andy Alaszewski, Patrick Brown and Bob Heyman have undertaken a series of interviews with a sample of leading risk social scientists, including Andy Alaszewski, Judith Green, Tom Horlick-

Jones, Nick Pidgeon, Ortwin Renn, Paul Slovic, Peter Taylor-Gooby and Joost Van Loon.

The interviews have been or will be presented across the series of special issues on *Health Care Through the Lens of Risk* published in 2012/2013. They cover views about: the meaning of the term 'risk'; the significance of the Royal Society (2002) *Risk* report and equivalents from other countries; the history of risk social science; and the impact of risk-thinking on wider society and government policy. All of these topics are not necessarily included in every interview. Instead the most interesting material has been selected. The chosen interview content has been presented more or less verbatim. However, the interviewees were given the opportunity to edit the text as they wished, to accept small changes suggested by the editors, and to add references which, for this article, have been inserted directly into the text. Interviewer comments are shown in square brackets or endnotes. The order of presentation has been varied from the actual interview sequence which was variable and free-flowing. Interview extracts to date have been published for Nick Pigeon (Heyman and Brown, 2012), Joost Van Loon and Ortwin Renn (Brown and Heyman, 2012) and Judith Green and Peter Taylor-Gooby (Heyman and Brown, 2013).

The present and final article in the series includes material from Tom Horlick-Jones, Paul Slovic and Andy Alaszewski. Tom Horlick-Jones is a Professor of Sociology at Cardiff University. Much of his research has been centrally concerned with re-thinking the sociology of risk in terms of practical reasoning, language, knowledge and social interaction. His work draws on his practical experience as a policy analyst and consultant.

Paul Slovic is a professor in the Department of Psychology, University of Oregon. He is a founder and president of Decision Research, a non-profit research organisation investigating human judgement, decision-making, and risk. Decision Research conducts both basic and applied research in a variety of areas including ageing, aviation, environmental risk, finance, health policy, medicine, and law. He studies judgement and decision processes, with an emphasis on decision-making under conditions of risk. His most recent research examines psychological factors contributing to apathy toward genocide.

Andy Alaszewski has recently retired from the post of Professor of Health Studies and Director of the Centre for Health Studies at the University of Kent. He continues to be editor of the journal *Health, Risk & Society* which he founded, and which makes a seminal contribution to risk social science. He has published nearly 200 papers and books, most recently *Making Health Policy: A Critical Introduction* (Alaszewski and Brown, 2012).

The three interviewees all take a strongly interpretivist approach to risk phenomena, bringing the socially situated perceiver to the centre of analytical enquiry. Tom Horlick-Jones argues for the on-going relevance of now largely forgotten ethnomethodological accounts of social interactions. He sharply criticises the 'bubble' of orthodoxy which he believes that some risk social scientists have fallen into, a mind-set which makes it *de rigueur* to cite Beck in every paper. As an author of the Royal Society *Risk* monograph, he offers, along with Pidgeon who was interviewed previously (Heyman and Brown, 2012), an insider account of its

production. Tom's commentary offers a reminder that the issue of objectivism divided social scientists, and was not merely a source of contention between them and the natural scientists who contributed to the *Risk* monograph.

The interview with Paul Slovic offers a critically reflective perspective on the relationship between risk-thinking and society from a founder of, and globally leading contributor to, the social psychology of risk. Like the other interviewees, Paul emphasises the role of the observer in risk judgements, particularly with respect to concealed values. He describes similar tensions in the USA between proponents of objectivist and interpretivist notions of risk to those which surfaced in the writing of the UK Royal Society *Risk* report. He mentions in the interview the finding from his research that public perceptions of positively and negatively valued consequences are negatively correlated. This finding suggests that research participants, overall, are reluctant to acknowledge that potential choices can carry mixes of positive and negative implications. Such 'flights from ambivalence' may help individuals and social groups to feel more comfortable about difficult decisions, but are likely to cause attitude polarization depending on whether 'goods' or 'bads' are emphasised. Ambivalence denial may also generate social and personal instability if downsides of accepted risks and upsides of rejected ones are ignored.

We saved the last interview in the entire series for Andy Alaszewski, invited at the suggestion of Brown and Heyman, not his own. His founding and nurturing of *Health, Risk & Society* as a vehicle for the study of uncertainty management in health and related contexts has been hugely significant to the field. It complements his own massive personal contribution over several decades to healthcare studies. In the

interview, he articulates clearly an anthropological approach to risk in which the values concealed in official scientific accounts are themselves problematised. As he notes in the interview, Andy encourages authors of papers submitted to his journal to write in the first person, reversing the conventional wisdom. Of particular interest in the interview is his insider account of the UK government's proactive response to the risks linked to Swine Flu, a response which involved spending nearly 500 million pounds on the anti-viral Tamiflu in 2009 despite concerns about its effectiveness. As a member of the committee tasked with shaping the UK response, he found himself unable to persuade senior figures of the merits of the only demonstrably effective, albeit politically inexpedient, response, namely quarantining infection hotspots in order to reduce the transmission rate.

Interview with Tom Horlick Jones

How do you see your own contribution to risk social science?

Tom: At the forefront of my mind when I started to write about risk were political issues about planning. But also, I became increasingly interested in the nature of disasters. In 1990 I wrote a monograph '*Acts of God*' with the subtitle '*An Investigation Into Disasters*' which created a huge amount of interest. I wrote that whilst still working as a policy advisor [on disaster planning for the Greater London Council]. I spent some months trying to get my head round the nature of disasters and how best to plan for them. That included a whole range of very practical, technical problems, but I was getting increasingly interested in the sociology of disasters. I was always pretty eclectic in my interests - I was reading sociology books

when I was a mathematics undergraduate. I had a fairly eclectic background in terms of disciplinary commitments.

I've put *Acts of God* on my webpages (<http://www.cf.ac.uk/socsi/resources/acts-of-god.pdf>), making it freely downloadable. It's an interesting historical document which offered a very critical analysis of the then current state of disaster legislation, and also of local central government relations. But it was also a grounded theory analysis, using secondary data, rather like Barry Turner did for his PhD, on what sorts of factors predispose systems to fail. Publication produced considerable media interest, and a lot of newspaper articles. I remember the London Evening Standard devoted a whole page to my monograph. The Sunday Times wrote an article about me and the work I was doing which described me as 'London's Mr Disaster'. It took a long time for me to live that down!

The work I was involved in on the Notting Hill Carnival stands out as particularly interesting. The ESRC [Economic and Social Research Council] gave us some money to find some practical organisational risk management issues that were problematic in various ways; and to see if we could support decision-making processes using techniques developed in management science and operational research, called problem-structuring methods. These are methods that allow groups of people to agree a shared understanding about the nature of a problem. It uses various techniques such as small, soft models expressed as little pictures, to help participants to create transparency. I combined that approach with organisational ethnography in which I would go in to organisational settings and gain a very rich understanding of what was going on and why the particular risk management issue

in question was problematic. We would use that understanding to design an intervention using problem-structuring methods. And we were quite successful in that we did a number of big projects including the strategic management of the Notting Hill Carnival. We did work with Railtrack on designing a technique for analysing the risks from railway junctions; and with the Post Office on trying to manage the risks associated with their fleet, particularly a very large number of road traffic accidents.

Bob: Could you tell us a bit more about the issues associated with the Carnival?

Tom: The ostensible issue that everybody was supposed to have been looking at was the safety of the public. And no reasonable person could disagree with the wish to make the Carnival a safer affair. But what we found when we dug away at it was that the different organisations involved all had different agendas and different understandings that they were projecting onto the risk object. For the Carnival organisers it was the continued success of the Carnival itself. And the main risk that they identified to the continuation of the Carnival was the hostility, as they saw it, of various public authorities such as the local government and the police. The police were anxious about public order issues, rather than safety *per se*, and that was driving what they were doing. We found that their means of policing the Carnival was shaped by a whole series of implicit understandings that they had developed amongst themselves, which we viewed as a risk trade-off rationale for not acting. There were a number of instances when the police didn't act in what appeared to be clearly risky situations. And the accounts that they gave of why they didn't act were very uniformly similar, even in very different situations, and with different police officers. And that was, 'We didn't act because we might have created a breakdown in

public order'. The informal logics which shaped people's behaviour deviated from the formal operating procedures that they were adhering to, and from formal commitments to the risk issue that they were supposed to be managing.

How do you understand the term 'risk'? What do you think of the Royal Society definition of risk?

The Royal Society (1992, p.2) Risk monograph defined risk as follows:

'These definitions begin with risk as the probability that a particular adverse event occurs during a stated period of time, or results from a particular challenge. As a probability in the sense of statistical theory risk obeys all the formal laws of combined probabilities.'

Tom: My work has tended to invert the approach to thinking about risk from 'How do we look at human behavioural aspects of managing these things in the world which threaten us', towards redefining; or - to use an ethnomethodological expression - re-specifying, risk issues in terms of practical reasoning and practical action. I think of risk issues as those for which human beings find it particularly difficult to give a good account of themselves for their involvement in those issues. So I would redefine risk issues in terms of social accountability.

Bob: So it's where social accountability breaks down?

Tom: Yes, it creates a fragility if you like, or a difficulty. All social situations involve people giving a reasonable account of themselves. What's special about risk issues

is, it makes that task particularly difficult. And that means that it opens up the possibility of a very rich micro-politics of how people cover their back in situations that are in some sense risky. The other thing is that - and this really got me on to thinking about risk in micro-sociological terms - is how there's an ambiguity about the very nature of the risk object itself. And aside from the fact that terms like 'adverse' and 'challenge' can be contested, it strikes me that, even going down to the formal laws of combining probabilities comes unstuck. And if you go to logic, it's the excluded middle, that's the problem. The law of the excluded middle, as you may remember, in logic rests on the idea of a sort of continuity of essence of objects in the world. In other words, either A is true or A is not true, but you can't have both being correct. Now it strikes me that risk issues are, to use another ethnomethodological expression, indexical. In other words, they come into being in the specific context in which they are considered. And there is an ambiguity about the nature of the risk object because different actors will, in different, specific situations, bring different understandings to what the risk issue is about.

Can you tell us about your involvement in the writing of Chapter 6 ['Risk Management'] of the Royal Society (1992) Risk monograph?

Tom: Barry Turner led a team of authors of whom I was one. But he became unwell after writing the first draft. He dropped out of the project for a while. Chris Hood took over the lead role for chapter 6. (I think it was Chris who coined the expression, '*Four chapters good, two chapters bad*', paraphrasing Orwell's *Animal Farm* in response to Royal Society unease about the social science chapters.)

Bob: How far did the final form of chapter 6 correspond to Barry Turner's draft?

Tom: The final version of chapter 6 was very much the work of Chris Hood, reflecting his interest in cybernetic models of organisations. I was critical of that analysis, feeling that it side-stepped some fundamental issues about the extent to which the risk object is, at least in part, socially constituted (Horlick-Jones, 1998, p. 80). As such, it didn't really threaten a more technocratic view of risk issues.

But the draft chapter I considered certainly didn't have a sociological feel to it. Looking back now, it's surprising how much relevant work from social research simply didn't get a mention. Barry is perhaps best known for his book *Man-Made Disasters* (Turner and Pidgeon, 1978), which examined the social and organisational roots of failures. Although material on systems failures did find its way into chapter 6, the chapter omitted a wide range of important contemporary risk-related work: for example, in the sociology of health and illness and in socio-legal studies. Erving Goffman and Tony Giddens didn't get a mention, and neither did Steve Rayner's work on hospital radiation hazards. One could go on. At the time, somebody who moved in Royal Society circles, and was in a senior position, I remember this person saying to me that even though I had done research in theoretical physics, they thought I sounded like a sociologist. But when they spoke with Chris Hood, they thought he sounded like a physicist!

How do you see risk social science?

Tom: I suppose the first thing to say is that it's **not** science, at least not the sort of work that I do, and in which I'm interested. Of course that doesn't mean that it cannot be rigorous, skilled and systematic. On the contrary, at its best I think it's as hard and complicated as anything I encountered in theoretical physics. I can understand why some colleagues like to portray themselves as scientists, but there's a problem here. One can be scientific about measuring the trajectory of a beam of electrons, but human being and electrons are different sorts of objects. In particular, electrons don't read newspapers or have conversations.

I feel that there is a sort of academic establishment which looks at risk in certain fashionable ways. When I was reading through your questions, it occurred to me that, if you want me to distinguish my approach, it's really not wishing to be fashionable. And you know, the old joke, I think it might go back to Freud actually, and it was picked up by Groucho Marx and Woody Allen, who said that they wouldn't want to belong to any club that would have them as a member.

One of the difficulties we have with risk scholarship at the moment is that there's an emerging bubble, and I see many colleagues living in a bubble. They're talking about risk issues in the same sort of way. And that seems to me to have coincided with, over the last ten years, a diminution in the amount of data that one sees in published papers. It's only latterly that I've increasingly thought about the risk bubble. I am aware that certain theorists have attempted to understand such social bubbles more generally in terms of systems; particularly Nicholas Luhmann, and the idea that social sub-systems generate codes which then which then shape their evolution. They develop a sort of introspection in which the logic of their being tends to be

inward-looking; attempting to continue the life of the system in its present form even though it needs to interact with its environment.

In this respect, it's interesting to look at the trajectory of *Health, Risk & Society*. I remember going to the opening launch meeting in London and being very excited about the prospect of a journal that would look eclectically at a range of risk phenomena. And I have contributed quite a lot of papers over the years to the journal (e.g. Horlick-Jones *et al*, 2001; Horlick-Jones, 2005; Horlick-Jones and Prades, 2009). But even though *Health, Risk & Society* continues to be a journal that anyone interested in risk should be reading, an increasing number of papers appearing in the journal tend to be in this bubble. There's a, 'One has to cite Beck' attitude. And one has to articulate one's position in certain ways. A sort of orthodoxy has grown which isn't entirely productive in terms of understanding the nature of risk phenomena. I should add that I feel this tendency is fairly widespread within social research and publication. I guess it's a sign of the times, and perhaps a genealogical history of these events will be written one day. But that's not to say that these tendencies shouldn't be resisted.

Interview with Paul Slovic

How do you see your own contribution to risk social science?

Paul: Everything I have done has been done with other people. I have had probably 200 collaborators [laughter].

Bob: This is your opportunity to boast!

Paul: Well, with two colleagues, we have shown that, just as you can attempt to assess risk from the quantitative technical side of things, you can also assess it on a social psychological or perceptual basis, producing orderly results that have implications for policy. And we found that risk perceptions were related to people's values. And then we found that not only was it values that were linked to perceptions, but also feelings and emotions. More recently, we have linked in ideologies and worldviews. We have documented the complexity of this concept we call 'risk'. Our contribution has been to broaden the appreciation of risk as a complex technical, scientific concept, which it certainly is, but also its social, cultural and communicative aspects. We have to appreciate all of those facets in order to communicate about, and manage, risks properly.

Bob: Do you think that, in the USA, policy-makers have taken that on board?

Paul: Not so much. I wish I could say that things have changed a lot because of our work, but, I don't think so. For example, since 1982 we have been trying to find a place to store nuclear waste with 100 nuclear reactors operating, and 30 years later, we still don't have a place.

Bob: It's the same in the UK.

Paul: The people who are in charge of siting tend to be brilliant engineers who don't appreciate the importance of process, or understand that risk is not simply a matter

of probability. If we were operating more in tune with the complexity of the issues, we would have different processes and be further along than we are now. That's just one example. I think that there is now more appreciation of the need to bring the public into the discussion of these issues. Occasionally that happens, but we still have a long way to go.

How do you understand the term 'risk'?

Paul: It's a term that we are very comfortable about using without thinking carefully about its meaning in any particular context. I can see numerous ways to conceive of risk: as hazard; as probability; or when we are really referring to a consequence. I am most comfortable with defining risk as a blend of the probability and severity of some hazardous outcome. Because the evaluation of an outcome is fairly subjective, it is a subjective concept. It's best to define risk for any particular use that one wants to make of it. It's not that one has to define it in any one way or another. But if you are going to use the term in a serious way, for example in setting up health policy, then it should be carefully defined so that everyone knows what you are referring to in that context.

Bob: Are you suggesting that sometimes risk is not defined carefully enough?

Paul: It's a word that rolls off our tongue, and people judge by the context in a general or vague way what's being referred to. We are very good at using part of the context of a conversation or a discussion to get a sense of how this word is being used. As things get serious, or there is a controversy, which there often is, then one

has to look more precisely at the way the word is defined. The definition is important because the notion of risk is taken very seriously. It is treated as the key element of rationality in any kind of analysis of an action plan. Whoever gets to define the concept carries a lot of weight. That's why I have said that the defining of risk is an exercise of power because it can dominate the decision that is made.

Bob: Does a particular example come to mind of the hidden politics of defining risk?

Paul: I became sensitised to this in work on nuclear power in the 80s and 90s. The technical community argued that nuclear power was extremely safe, and a strong, energetic opposition held that it was too risky. So what was going on there? I think that the industry were looking at the probability of an accident being miniscule. According to the technical community, because the probability was so small, the expected loss was low and acceptable. Opponents probably disagreed about that [very low probability of a nuclear plant disaster], but they were also giving great weight to the dread nature of the consequences of a nuclear accident. The technical community did not consider the risk of non-adherence to safety protocols, or the involuntary nature of the risks which the public might be exposed to. What you bring into the equation for defining risk in a particular way has a great impact on how risky the technology is judged to be. There was a strong tendency to say that the public's opposition to these chemical and nuclear technologies was based on a combination of ignorance and irrationality. I took exception to that.

Bob: It's difficult with probability because single events, however catastrophic, don't tell you the underlying likelihood.

Paul: Well it's a challenge to try and estimate the probability of rare events where you don't fully understand the generational process. With some systems like transportation, we can estimate probabilities quite precisely because we have huge amounts of data and can empirically identify environmental and driver risk factors.

Bob: Similarly, in the health field, even where knowledge is poor you can at least count outcomes.

Paul: Yes, but even in the health area where we have a lot of data, when you introduce some new intervention, you again run into the problem of whether you have enough data or experience. For example, when you introduce a new drug onto the market, the screening is usually not lengthy or extensive enough to detect the likelihood of relatively infrequent problems.

What do you think of the Royal Society definition of risk?

The Royal Society (1992, p.2) Risk monograph defined risk as follows:

'These definitions begin with risk as the probability that a particular adverse event occurs during a stated period of time, or results from a particular challenge. As a probability in the sense of statistical theory risk obeys all the formal laws of combined probabilities.'

Paul: If you want to define risk as probability that's fine, if you can get away with it in your local constituency, and you can say, 'Okay this is the way we are defining risk'.

But in that case, I would say, 'Why bring risk in?'. If you define risk as probability, call it probability. We have an immense body of theory, knowledge and experience relating to probability. Once you call it 'risk', you are maybe obscuring that knowledge because you are bringing other things in, interpreting it in different ways. I think it's a mistake. Why suddenly bring in the muddied and complex concept of risk when you wish to analyse probability?

Bob: As you said in one of your e-mails to me, one of the key issues is that the Royal Society definition takes adversity for granted as an intrinsic property of events. So conflating probability and risk smuggles in value judgements.

Paul: In my research, I found that the 'risk' of getting wrong change in the grocery store was rated highest among a set of consequences. Lennart Sjöberg (Sjöberg, Moen, and Rundmo, 2004) found much the same result. All kinds of inferences could be drawn from this finding - about how strange people are in their judgements of risk. I concluded that this occurred because, when asked about the risk of a consequence, people think of risk as a probability and getting the wrong change in a store has a higher probability than more serious, and, in my opinion, more risky consequences such as getting AIDS from an infected needle. You can see that I prefer a definition of risk that considers both probability and severity of consequences.

Is there a US equivalent of the Royal Society Risk monograph, where an august body has tried to tie down risk?

Paul: I don't think there is. There are some monographs on risk assessment. For example, the National Academy of Sciences (1983) did a monograph on risk assessment in the Federal Government which was very influential. They did a lot with toxicology and chemical risks. It wasn't very sensitive to the social science elements, but was influential in guiding policy. The National Academy (Stein and Fineberg, 1996) did a study which I was part of called '*Understanding Risk: Informing Decisions in a Democratic Society*' which brought in all of those social elements that I and others had been working on during the previous decade. It showed that risk assessment is a complex process that involves value judgements, negotiations and power issues. I don't think that that document put forth a very precise definition of risk, but it recognised that how you evaluate a risk is very critical. And we argued for a more inclusive process that included a lot of stakeholders at the table in risk evaluation.

Do you think risk has become a key feature of late modern society?

Paul: That's a good question. Because risk is heavily influenced by culture and politics, the answer will depend on where you live . I can answer best for the US, but as you know America is not homogeneous.

In the US, risk is a big issue. Concern about risks has grown steadily. Google made available digitalised versions of millions of books, and you can search there for the frequency of different words like risk and safety. You can see that, in the past, 'safety' and 'risk' were used about equally often. As the decades roll on, you see

exponentially increasing usage frequency for the term 'risk', whereas 'safety' sort of pootles along without much changeⁱ. Risk is now everywhere in contemporary society, triggered by events. In the last decade, terrorism has come on the scene, and is a risk which has dominated and influenced our society in many ways, mostly adversely. It tends to take away people's liberties and privacy in the name of trying to reduce a low probability threat even lower.

Bob: Do you have any thoughts about why, as you said, safety has bumped along while risk-thinking has shot up?

Paul: I'm not sure I know the answer. We see that natural disasters are increasing in frequency and severity, so that's one element. Climate change involves more extreme weather events which can be immensely destructive, and the population has increased in size and is located in vulnerable areas. If you look over the last 20, 30, 40 years, you see again an exponentially increasing curve of losses from natural disasters, coupled with the increased ability of the media to make us aware of such events. There is now a heightened sensitivity to risks from nature, and we have risks from other types of physical systems, and of political and non-political violence. A book by Steven Pinker (Pinker, 2011) argues that violence in the world has declined steadily over recent centuries. But this is still a very brutal world. Even though life expectancy in many places is now better than it ever was, risk is still a major concern in our minds (Slovic, 2000). Modern communication media have contributed to that by bringing all these events right into our living rooms.

Bob: The question coming out of that is to the extent to which the world has become 'riskier' as against the extent to which we are less willing to tolerate hazards which in the past would have just been accepted?

Paul: Psychologically, there is a strong tendency to say the world is riskier. In the 70, 80s and 90s, when we did a lot of our survey research, we would always ask respondents whether they thought that risk was greater than it was 20 years ago. They always thought that today's risks were worse than the risks of the past, but I don't agree with that. It's probably different from what it was in the past, but the past was very risky as well. Disease was rampant, with less effective treatments available to deal with it, and violence was just horrific. There is a reason that all these cities in Europe had walls because people were attacking their neighbours constantly.

Today there are different types of risk, and it's not just that the type of risk has changed. The number of people who may be affected by an event is greater, but our population is greater. The chance of getting millions of people killed in a natural disaster is much greater today than in the past. The interconnectedness of people in different societies today and dependence on systems that we don't understand creates vulnerability which is a key term. More and more, one hears calls for vulnerability assessment as well as risk assessment.

A view that has evolved over the last 10 or 15 years is that of 'risk as a feeling' (Slovic, 2010). And that's an issue that I slowly became interested in and developed out of the work in nuclear arena. We found that across hazardous activities, costs

and benefits are negatively correlated in people's minds, whereas in the world they can't possibly be. We eventually realised that research participants were judging the risks and benefits of some activity on the basis of how they felt about it. Whether they liked or didn't like the activity came first, and risk and benefit judgments were derived from those feelings. For a risk analyst who is calculating with data this is not likely to be the caseⁱⁱ. But for a person who is just going on gut feeling, their intuitions drive their judgements about risks and benefits. Over time, we came to realise that this is a guiding factor in the way most people relate to risk, and argued that it derives from way back in evolution. We didn't use toxicology to assess whether the water in a stream was safe to drink. We used our vision ('How clean does it look?'), our sense of smell and taste, our past experience, for example whether it made us sick or not. That was the way we judged risk, and we still do so today most of the time. We rarely do a calculation. When we appreciate the importance of feelings and emotions, then we can understand what's going on with the difference between responses to terrorism and to climate change. The image in our minds of a terrorist act is so horrific, dreadful and obnoxious that it conveys very strong feelings which dominate the probability of the event. When we think about certain types of terrorist activities we get this very strong visceral feeling and disregard the probability of such acts. That's been shown in studies. It's called Probability Neglect (Sunstein, 2003).

With climate change, it's different. The types of consequences tend to be vague; we see them as distant in time and geographic proximity; and they don't have that sense of dread attached to them. It's harder to get people energised about it. I am quite pessimistic about this, and think that the record of actions today to mitigate climate

change is very dismal. Ultimately, I fear that we are not going to act until it's very late in the day, and then of course we will suffer the consequences.

There is also a cultural element. We attend to information about risk, and interpret that information in ways that support the kind of worldview that we want to endorse. That sort of analysis has its origins in the work of Mary Douglas (Douglas and Wildavsky, 1982). We know that reactions to risk are related to the kind of worldview, hierarchical, individualistic, or egalitarian that a person holds (Kahan and Braman, 2006). This poses a challenge as information that is meant to educate is interpreted in a way that reinforces one's worldview and leads to further polarisation of attitudes and behaviour.

Interview with Andy Alaszewski

How do you see your own contribution to risk social science?

Andy: My first degree was in social anthropology. And, as (1988) convincingly argued, producing ethnography has more in common with creating fiction than with writing scientific papers. For example, both ethnography and fiction can and do make use of the first person narrator while science papers use the passive voice to conceal the active agency of the researcher. I still favour the interpretive aspect of social science. I ask authors who want to publish in *Health, Risk & Society* to write in the active voice. I think my interest in risk was stimulated by reading fiction. For instance, Peter Carey's novel *Oscar and Lucinda* originally published in the 1980s (Carey, 1998) offers a perfect illustration of the unpredictability of the future and that

'the answer to the question, "What might happen" must be "Absolutely anything!", including events which scientists consider impossible' (Heyman, Alaszewski and Brown, 2013 p. 3). Going back to the second half of the nineteenth century, George Eliot's novels explored both the limitations of modern calculative rationality, and how it was replacing other forms such as those grounded in religion or hope. She provided important insights into the ways that many modern institutions such as the medical profession developed out of religious institutions. From this perspective, priests use sin and modern professions employ risk to control behaviour and punish deviants.

My interest in interpretive social science has influenced my approach to research. For example, in our studies of risk and nursing and of stroke survivors and the ways they manage risk (Alaszewski *et al.* 2000 and Alaszewski *et al.*, 2006) we used diaries, and I have written a textbook on diary research (Alaszewski 2006). Diaries can be used both as a literary device and as a means of accessing individuals' experiences. Some texts do both. For instance, Daniel Defoe's *Journal of a Plague Year* (Defoe 1722) can be read as a work of fiction and as an ethnography.

Bob: How has your research influenced your approach to risk?

Andy: I was fortunate in that my first project was an ethnographic study of a learning disability hospital (Alaszewski 1986). The background reading involved a number of Foucault's early texts, while the research itself brought me into contact with a group of vulnerable adults whose social status at the time was defined in terms of risk. They were a group of adults who, at that time, were judged unable to protect

themselves, and were seen as not able to undertake simple everyday activities like crossing the road. The protective cocoon grounded in basic trust (Giddens, 1991, p. 244) that exists around most people did not necessarily apply to them.

With the development of anti-institutional ideologies such as the normalisation philosophy, the challenge became to recognise human rights for people with learning disabilities, including the right to take risks. So when we worked with Barnado's we were trying to address the issue of how do we allow people with learning disabilities to spontaneously take risks but at the same time keep them safe (Alaszewski and Ong 1990). More recently, I have explored the lived experiences of risk through work which my wife Helen and I have done with stroke survivors. Helen, who is a brilliant interviewer, has followed a group of stroke survivors for two years. As Helen's interviews and stroke survivors' diaries show, stroke is often experienced as a traumatic event in which a sudden loss of control punctures the cocoon of basic trust, exposing individuals to an uncertain and potentially unmanageable future, in which their survival is in question. All faced uncertainty, and tried to regain control over their bodies and lives, but in diverse ways. Some adopted a structured rational approach, drawing on expert assessment and strategies for managing risk. Others effectively reject expert advice and used their personal biography to reassert their confidence in their bodies (Alaszewski, Alaszewski and Potter, 2006).

Bob: How does editing the journal fit with your approach to risk research?

Andy: I see *Health, Risk & Society* as offering an invaluable opportunity to develop insights into risk. The emphasis on health can be a bit restricting, but I am happy to

take an inclusive approach. When Patrick Brown starts editing special issues on risk and social theory we will take an even broader approach. *HRS* provides an opportunity for health researchers to publish longer articles drawing on qualitative data. Articles grounded in quantitative data are also important. For example, the article by Finucane, Slovic and colleagues (2000) about the White Male Effect on risk perception remains the most cited in *HRS*. However, I think that qualitative papers, especially those grounded in ethnographic data, provide particular insights into the ways in which 'risk' is managed and used. I particularly enjoyed editing the two linked special issues on risk and everyday life (Alaszewski and Coxon 2008 and 2009).

I was looking through the *HRS* website recently. I think you [Bob Heyman] are the most published author in *HRS*, and you started with an important editorial in the first Volume in which you explored the relationship between risk analysis and health practice (Heyman 1999). I am grateful for your continued support and contribution to *HRS*. Your work in making these four special issues such a success has been amazing.

How do you understand the term 'risk'? What do you think of the Royal Society definition of risk?

The Royal Society (1992, p.2) Risk monograph defined risk as follows:

'These definitions begin with risk as the probability that a particular adverse event occurs during a stated period of time, or results from a particular challenge. As a

probability in the sense of statistical theory risk obeys all the formal laws of combined probabilities.'

Andy: In our ESRC funded study of risk and health (Alaszewski, Harrison and Manthorpe 1998) we defined risk as the probability of undesired consequences.

Bob: That matches the Royal Society definition, with risk rendered as the probability of a defined adverse event category?

Andy: Yes, but that's not surprising as the Royal Society Report was 'set reading' for all applicants to the ESRC Risk Programme. However, the report was coming from a natural science base. It did not specify who was defining adversity, whereas our definition focused on individuals with their desires and experience of undesirable consequences.

How do you see the history of risk social science?

Bob: Do you think risk studies have a future?

Andy: Yes, it's a big area and there are links to other interesting issues such as trust, suffering and hope. However, I think traditional rational science-based approach may be more problematic.

Bob: Why?

Andy: It's grounded in a fallacy, that science and scientist are rational and the public is irrational –

Bob: and need to be educated?

Andy: Yes. However there are irrational elements in science, and scientific work takes place in a social context. The rationality of science is therefore limited, and there are frequently tensions within the scientific community. The public are often perfectly rational. It just happens that their rationality and their interests are different to those of 'risk experts'. Some social scientists such as Adam Burgess are interested in fighting bad science and urban myths such as the story that the use of a mobile phone on the forecourt of a petrol has caused an explosion and could do so again. It's good if some academics want to do that, but for me it is important to understand everyday perspectives of both experts and other people.

My background was in anthropology, and ethnographers traditionally explored the issue of how people in pre-modern societies dealt with situations and events that we now have quite a lot of scientific knowledge about. Given the development of Western medicine, there is a good understanding of how parasites, infections, viruses, bacteria affect the body, and that understanding provides a basis for predictions. The question is how to deal with the uncertainties which remain. It's a central problem and underlies magic, divination, the whole phalanx of belief systems that are filling the gap that medicine leaves in our society. Of course, in our society, medicine does reduce uncertainty to some extent. But those other approaches still float around, and tend to be less collective and more individualistic. The case of Steve Job's getting diagnosed with cancer and spending nine months doing holistic

medicine before he had his operation offers an interesting example of that sort of floating around.

Do you think risk has become a key feature of late modern society?

Andy: Yes. Clearly you need to consider risk alongside uncertainty which is an intrinsic part of the human condition. When I was studying social anthropology I learnt that in both modern and pre-modern society, individuals in their everyday lives have to make important decisions in conditions of uncertainty. Evans-Pritchard's (1976) account of the Azande originally published in the 1930s showed how they used religious rituals and practices such as divination to manage these uncertainties. A risk framework offers one particular way of managing uncertainty which is advocated by experts such as doctors and engineers as more 'modern' and intrinsically better than previous approaches. It has the symbols of modernity. Its advocates claim it is 'rational', scientific and evidence-based. It uses complex mathematics and can be expressed in hard numbers. By focusing on the objective and measurable, risk-thinking can also paper over some of the cracks of modernity, for example the difficulty we have with values.

It is important to remember that, as Zinn (2008) so convincingly argues, risk co-exists with other ways of dealing with uncertain futures such as trust and hope. Even in areas where risk appears to be the accepted means of managing uncertainty, it is important to be sensitive to the possibility that individuals use other strategies, the operation of which may be hidden by the dominant risk discourse. For example, in a recent *Health, Risk & Society* article on how people use and understand probability,

Burton-Jeangros and her colleagues (2013) explored the ways in which pregnant women responded to the results of screening for the probability of foetal chromosomal anomalies. Some mothers accepted the expert risk discourse, grounding their decisions in the numerical results of their screening. However, others rejected the numbers, grounding their decision in their understanding of their own body, or in the magic of modern medicine.

Bob: So you see one of the functions of risk as providing a modern way of dealing with uncertainty?

Andy: Yes. It makes us believe we are modern and superior, that we don't base our decisions on the irrationality of religion or superstition and old wives' tales, we don't deal with sin, we don't deal with morality, we are not prejudiced, we can provide technical solution to complex problems. Risk conceals the role of judgements and values.

Bob: In some of your work you say that if you talk to ordinary people, they don't actually think about risk all that much?

Andy: Yes. I think that Giddens (1991) deals with this issue rather well when he argues that we live in a cocoon of trust which brackets out risk. As some of the articles in *HRS* on eating make clear, in everyday life and activities we often don't think of the potentially dire consequences of many of our actions. Individual misfortune such as a stroke or a collective disasters particularly those in which horrific images are rerun in the media such as 9/11 (Pollard, 2011) can puncture this

cocoon of trust and make us aware of the uncertainty and fragility of our existence, impelling us to engage in expensive, futile even counterproductive attempts to manage the future such as the Bush/Blair 'War on Terror'. However, such events are rare and exceptional, and our everyday life is mostly not one of uncertainty, danger and anxiety.

One of the interesting findings of the SCARR research network managed by Peter Taylor-Gooby was the contrast between those aspects of life which individuals are willing to see in terms of risk, and those which they are not. When discussing the formation of intimate relations, individuals did not see risk as an appropriate or pleasant way of framing uncertainty. Individuals entering an intimate relationship accepted that things could go wrong, but they did not really want to consider failure as they wanted and expected to experience an intimate and loving relationship. In contrast, individuals who lived close to a nuclear power station had already reflected on the possibility that it might blow up, and were willing to talk about it.

Bob: So you are saying that uncertainty is present, but people push it to one side?

Andy: Uncertainty and danger are ever-present, but you can choose whether to highlight them, and experts seem only too keen to highlight them for you. I don't believe that you can look at, for example, the organisation of work without considering risk, how claims and counterclaims over risk expertise are now central to the nature of professionalisation.

Bob: Judith Green said in her interview for this series that if you are a front-line professional, you get these wretched forms, and you have to tick the boxes, but there are real questions about how they relate to actual risk management practice.

Andy: Yes I did a study when I was at Hull with my wife Helen (Alaszewski, Alaszewski, Ayer and Manthorpe 2000) on nursing and risk, and it was very clear that in different areas of nursing risk had varying prominence. If you were supporting people with mental illness, risk loomed large because a nurse could at any moment have one of his or her clients axing somebody to death, and the decision-tree would track back to that nurse. Nurses working with older people or people with learning disabilities were not in the same risk spotlight. However, the learning disability field may be changing since we did our research as there have been a few high profile incidents recently in which vulnerable clients have been very badly abused and killed by their so-called friends. At the time when we did our studies, there was evidence of support for positive risk-taking but attitudes change.

Do you think risk has become a key element of government policy?

Andy: In our recent book on health policy making (Alaszewski and Brown, 2012) we explored the ways in which policy makers invoked rationality to justify their policies. Risk has become a key source of legitimacy for policy-makers. Given the way in which risk embodies the key features of modernity, it is hardly surprising to find it featuring prominently in contemporary policy-making. In the UK, the New Labour Government (1997-2010) drew heavily on risk-thinking which it used to justify the restructuring of the National Health Service (NHS). When they gained power in 1997,

New Labour inherited a reformed NHS in which rationing and claimed economic rationality were key elements of the internal health care market. The Government needed to soften this hard cost-cutting rhetoric, and risk provided the perfect tool. It enabled ministers to retain the internal market, but use clinical governance to shift the emphasis from rationing and cost-cutting to managing risk and enhancing patient safety. New Labour were very open to current academic thinking, particularly Anthony Giddens. For example, the second Lecture of Giddens influential Reith Lecture series was on risk (1999). This approach gave health policy a neoliberal slant, with individuals expected to take responsibility for their own health and to manage their own risks, with the state empowering individuals through initiatives such as the Expert Patient and Public Health programmes. A risk framework provides the illusion of control, allowing those who make policies and decisions to assert they are acting for the collective good.

Bob: Do you think that the risk-based approach is not so prominent in current policy?

Andy: I do. It is instructive to look at the Public Health policy of the present [Conservative-led] Coalition Government. Unlike her predecessors as Chief Medical Officer, Sally Davies doesn't come from Public Health. She's a physician with a scientific research background who has downplayed a lot of the risk rhetoric. Her approach has been highly laid-back, to the point of scrapping advertising campaigns for flu-jabs.

Bob: Yes. There's an interesting comparison to the response to Swine Flu which is in our book (Heyman, Shaw, Alaszewski and Titterton, 2010).

Andy: I was on the [New Labour] Government Pandemic Flu Committee, and got insight into the operation of a coalition between Public Health experts in the Department of Health and the drug companies. The Public Health experts were comfortable with responses that built around drugs. They were very happy with Tamiflu, an antiviral drug designed to reduce the symptoms of flu, and were willing to fund the drug companies to produce vaccines against specific flu viruses. They were not comfortable with other approaches. I raised the issue of social distancing. We have evidence from the 1918/9 flu pandemic, when cities in the United States adopted different social distancing measures. Those cities that were shut down, and in which people were prevented from moving around, were the ones with the lowest infection and mortality rates. If you have a rerun of 1918/19 you need to start thinking about social distancing, shutting schools, public transport and sporting events. But the Public Health people seemed scared of being accused of being part of the nanny state and infringing individuals' civil liberties. All they wanted to talk about were drugs and individual hygiene, blowing your nose and washing your hands.

Bob: Anything where it's the individual taking responsibility.

Andy: The other point that I was trying very clearly to make was that actually you need to be able to inform people of the level of threat. Are we dealing with a 1918 epidemic or are we dealing with a 1968 situation, a virulent strain of the flu virus but one that is not particularly lethal?

Bob: 'We don't know' might have been a sensible answer?

Andy: We didn't know, but certainly there were no signals [of an exceptionally dangerous disease]. The World Health Organization classified swine flu as a global pandemic, meaning a potential 1918/9 flu scenario. But it killed hardly anybody, and didn't seem to spread very fast from person-to-person. In retrospect it wasn't much worse than your average winter flu.

Bob: The problem is that at the time you don't know how virulent and lethal it's going to be. This is something you can only find out in retrospect.

Andy: I was sitting there at the time, and I really didn't think it was going to take off, but that was just a sort of personal feeling. If you took the SARS example, then you really did have a virulent virus rapidly spreading, but Public Health seemed to work quite well once the authorities begin to track it. I wonder why they didn't have a little bit more confidence in rather more traditional Public Health approaches? They seemed to have lost their nerve with this.

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ⁱ Skolbekken (1995) made a similar point in the pre-internet era about the increasing prominence of 'risk' in medical research, using Medline as his analytical tool. It can be easily tested these days for any health issue, e.g. the proportion of papers with 'coronary' in the title which also include the word 'risk' by using the 'Googlescope' via Google Scholar (Heyman, Shaw, Alaszewski and Titterton, 2010, pp. 3-4).

ⁱⁱ Cynics, including the interviewer, might be less confident that professional risk analyses are driven by data rather than *a priori* feelings, assumptions or interests.