The Rise of Blame and Recreancy in the United Kingdom- A Cultural, Political and Scientific autopsy¹ of the North Sea flood of 1953.

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ABSTRACT:

The North Sea Flood of January 1953 was the largest natural disaster in UK twentieth century history, accounting directly for 307 deaths on land alone. The event highlighted huge inadequacies in sea defences and disaster policy within the UK and the resultant Waverley Report formed the basis of modern UK disaster policy. Despite the lack of central government involvement in rescue efforts and the apparent non-existence of co-ordinated rescue plans, little blame or accountability was assigned. Due to the relative infancy of the mass media and the post war time frame the disaster is often overlooked by modern commentators from both academia and wider society.

Through analysis of personal accounts, regional and national press, and parliamentary papers it is shown how the devastation on the East coast in January 1953 acted as a trigger event for subsequent large scale policy and social change. By comparing the events of 1953 with subsequent UK flood events it is shown how public expectations to disaster in the UK have grown.

Keywords:

Blame; risk; UK flood events; disaster policy; social change; accountability; post-war; community of resilience; mass media

INTRODUCTION:

“...to study contemporary changes we must be able to identify initiating events.”²

The North Sea Flood of 1953 was the worst natural disaster to impact the UK in the twentieth century, accounting directly for 307 deaths on land. As well as the high death toll, the flooding, which occurred primarily between the Tees and Dover on the East coast of the United Kingdom during the night of the 31st January 1953, caused extensive amounts of damage to land and property. With an estimated 206,161 acres of land being affected³. The same weather system also heavily hit the lowlands of North Western Europe causing catastrophic consequences especially to the Netherlands; however this paper focuses solely on the events in the UK and attempts to frame the cultural legacy of this disaster.

The event highlighted huge inadequacies in both physical sea defences and in central government disaster policy. Despite the response to the flooding being predominantly community led and the fact that by the time central government became involved, most of the search and rescue effort had been completed, little blame was assigned to either individuals or agencies involved. The post war setting of the event and the relative infancy of the mass media meant that the flood has become almost forgotten in the public conscience of UK twentieth century history. However, analysis of the flood, flood response and its lasting influence on subsequent policy shows that it was in fact a decisive moment for British disaster policy.

As well as disaster policy, general attitudes of accountability and blame have grown significantly in the UK since the 1953 flood. This paper aims to show through dissecting the scientific, political and cultural aspects of the 1953 flood, how the ideas of accountability, blame and recreancy came to be commonplace in the public psyche. By comparing the 1953 event to subsequent extreme UK weather events such as the 1978 storm surge, the Great Storm of 1987 and the recent flooding of summer 2007

the changes in public expectations of disaster response will be charted. Although similar discourses occurred worldwide over this time frame, the 1953 flood directly introduced the British people to the theoretical ideas being posed by academics such as Bucher.⁴

Using a holistic approach combining the sociological, political and scientific narratives it is hoped that nationwide changes, which have occurred in the last fifty years can be charted back to the trigger event of the 1953 east coast flood.

Risk Perception:

Traditionally, psychologists, decision theorists and economists have all independently studied the concepts behind risk perception. As the field has grown it has become more inter-disciplinary, incorporating ideas from anthropologists, geographers and sociologists.

The earliest writings on risk perception were almost exclusively framed from the perspective of engineers, partly due to the fact that this was the first field to practically look at safety and risk reduction, but also largely due to the influence of a paper by Starr in 1969 which looked at the social benefit versus the technological risk of implementing new technology. Starr introduced the idea of the irrationality behind risk decisions through the example of nuclear power compared to cigarette smoking, where scientifically and statistically speaking smoking has a much larger risk of death but in the public conscience it is nuclear power that is feared.⁵

This idea continued to grow and the modern writings can be easily split into two areas. The first of these and probably the most frequently found is the idea of a public ignorance of the scientific or technical aspects of an issue. The “deficit” model of public understanding, as discussed by Irwin (1995), amongst others, in his book *Citizen Science: A Study of People*, argues that this gap in knowledge between scientists and the public is not entirely constructed out of ignorance from the public but is also contributed to by aligning policy completely with science, and not accounting for ethics in complex situations.

The second area, more commonly associated with economists rather than other *hard-scientists*,⁶ is that public reactions to controversial technologies are not based around irrationality or ignorance but in fact around economical rationale, which extends from the idea of compensation for a reduction of utility that may occur if a new technology is used. This chain of thought is linked into the phenomena of LULUs

(*locally unwanted land use*) and NIMBYs (*not in my back yard*) that have grown over the last twenty years.⁷

The first social scientists to express ideas on risk perception were psychologists, Tversky and Kahneman (1974) who contributed largely to assumptions about public irrationality with their development of the idea of heuristics. Heuristics are rule of thumb responses that humans often give in certain situations, and although technically built on millennia of human evolution, these thought processes often carry a bias that is unable to deal with modern complex decisions. The most applicable of Tversky and Kahneman's work on heuristics and one that has been investigated by subsequent psychologists working in risk perception, is the availability heuristic. Suggesting that people base their prediction of the frequency of an event or the proportion within a population, on how easily an example can be brought to mind. For example people often rate the chance of death by plane crash higher than that of death by car accident despite the statistical grounding that shows death is much more likely from a car accident.⁸

More recently, psychologists in the field have criticised availability heuristics as a theoretical tool that highlights people's perceptions and not always real actions. Despite this criticism, such as Lopes' (1991) *Rhetoric of Irrationality* where it is stated heuristics are over cited, this psychological assessment behind risk perception still held many advocates well into the 1990s.

It is from these critiques of the heuristic view of risk perception that sociological study of the field has grown, with increasing emphasis being placed on the analysis of larger community perceptions rather than individual thought processes. Slovic (1987) acknowledges the growing multidisciplinary aspects of risk perception and thus takes the psychologists heuristic theories and places them in larger sociological settings. Slovic attempts, as other sociologists of the time also noted, to show the scientific elite that the public's risk perception is not an irrational case of availability heuristics but rather that the public conscience diverts hugely from science in its definition and criteria of risk. Experts on a specific risk area

usually define the size of the risk by fatalities or injuries, however Slovic highlights that the general public rank risks on factors such as the unknown, uncontrollability, inequitable consequences and the likelihood of affecting future generations. He argues that for risk analysis to move forward policy needs to take account of both the expert and the public ways of thinking.⁹

Douglas (1992) in her collection of essays *Risk and Blame* takes the argument further, suggesting that even sociology's viewpoint is too narrow. Douglas states that to truly understand risk in a society an intergenerational stance is needed and that the current risk perception research in the fields of economics, psychology and sociology is too egocentric and thus inhibits their understanding of collective behaviour. In the first three essays of this collection she outlines the history of risk perception, frames the language used and predicts that research is heading down a coalescing path of the current compartmentalised disciplines. *The Social Amplification of Risk*¹⁰ is probably the closest any text has since come to Douglas' multidisciplinary predictions. This text includes contributions from; psychology, geography, sociology, management, environmental sciences and public policy, providing an overview of the subject to date, with useful case applications varying from BSE to nuclear power.

This truly holistic aim has now been reached in the fields of risk perception and risk management; however, when referring to natural disasters, especially in a country such as the UK where disasters are relatively rare, the concepts of blame, recreancy and accountability are much more poignant. Douglas (1992) without referring specifically to the UK academically frames this idea in her essay *Muffled Ears*, where she discusses the issues of how individuals and societies perceive low probability events.

Blame, Recreancy and Accountability:

It is a small jump in the literature from the concept of risk perception prior to an event or project, to the post event allocation of blame.¹¹ Commentators have debated to what extent risk perception prior to an

event contributes to societal blame of institutes and governments after an event. Bickerstaff (2004) provides an overview of some of these points when analysing her research of air pollution in the UK. Here, she supports Walker et al. (1998) in their analysis that links economically and socially disadvantaged groups to both high levels of distrust in central risk policy and in allocation of blame.

The first paper to implicitly discuss blame in reference to disasters was Bucher's (1957) seminal piece *Blame and Hostility in Disaster*. Using data collected by the Disaster Team of the National Opinion Research Center from three successive plane crashes in Elizabeth, New Jersey, Bucher groups the differing opinions of those interviewed; highlighting in particular examples of people who felt it was an accident and accidents happen, to those who felt that three similar crashes at the same airport in a short space of time was unacceptable. Bucher then goes on to state how people were more willing to portion blame to a corporation or government rather than an individual such as a pilot.¹²

Since 1957, work on blame assigning in disasters has progressed from the position that in a natural disaster the causal agent is seen to be natural forces and therefore blame is assigned to God,¹³ to the idea that a disaster whether technological or natural is an all encompassing event that is a socially constructed problem. Blocker and Sherkat (1992) argue that assigning accountability and blame only in technological events, since humans lack control over "natural" events, avoids the "question of the meaning of *natural*." ¹⁴

In an age of increasing technological intervention with the natural world, what is controllable by humans is changing rapidly, therefore are humans playing too large a role in natural disasters to call them *natural*? Wijkman and Timberlake take this further, stating that natural disasters are simply failures between vulnerable people and vulnerable environments, dismissing earlier works that failed to include them in blame and accountability literature.¹⁵ Jankovic (2006) provides a historiography of ideas on responsibility and blame in societies throughout the last millennia. He charts the shift from God fearing

beliefs to the litigious society of today; stating that blame arises as disasters do not affect socio-economic groups equally. This disparity is becoming ever more apparent in the modern, mass media world – where news of a disaster is in people's homes as it occurs.

Take for example the huge death toll and financial costs incurred in Louisiana and surrounding states during the aftermath of hurricane Katrina in 2005. Could a hurricane that was not even the most ferocious to have made landfall in US history have single-handedly caused 90,000 square miles of housing damage throughout the Southern states and resulted in 1.36 million people filing for federal assistance?¹⁶

Both the scale of hurricane Katrina's devastation and the disparity of the social groups affected highlighted to the Western media and public, that apportioning blame post natural disaster and asking questions about accountability may be necessary and constructive.

Etymologically speaking one author has contributed significantly to the fields of risk perception and blame. Most obviously in his 1993 paper *Risk and Recreancy*, Freudenburg adopts the word, now commonly used in disaster discourses; recreancy. He defines this as, "a retrogression or failure to follow through on a duty or trust." Freudenburg was the first author to explicitly detach placing blame post disaster from vilifying individuals or institutions. It is for this neutrality of blame and to account also for the division of labour¹⁷ that he defined the word recreancy in this context.

Blame assignation in natural disasters is as an observable phenomenon a relatively recent development, and despite articles such as Blocker and Sherkat (1992) showing that there is no more fundamental reason to blame in an anthropogenic disaster than in many natural ones, little literature has been written on this subject.

Recreancy when applied to natural events, instead of ending in lawsuits and litigation,¹⁸ most commonly manifests itself as policy changes, mitigation investment and at the extreme changes of governing structure or personnel. The board on Natural Disasters of the Research Council (1999) published an overview of the progress made during the UN International Decade of Natural Disaster Reduction, within which they outline many of the strategies for mitigation being employed by high risk developed nations such as the USA and Japan. The report highlights the shift in funding from response systems, to all types of mitigation of disasters, from evacuation plans to strengthened structures. It uses the USA as a case to show how policy can mitigate a disasters impact, including planning and building restrictions on flood plains.

Similar to the discourse in risk perception outlined previously, where Douglas (1992) amongst others argued that definitions by field were too restrictive, another anthropologist Oliver-Smith (2002) criticises previous disaster study work as too defined by field. He argues that it fails to analyse the situation, as it does not take into account the interface between nature and humans. Oliver-Smith then goes on to highlight that much disaster research looks at solving symptoms rather than causes, a stance at odds with the Natural Disasters Research Council report, which highlights a shift to mitigation strategies over the previous decade. Posing the question is a disaster a natural event or purely constructed by society, the author explores ideas of vulnerability in a disaster situation; extending the concepts proposed by Wijkman & Timberlake (1988) and Blocker & Sherkat (1992) amongst others.

Nash (2006) presents an environmental historical view of the ideas that Oliver-Smith cites in reference to disaster as an all encompassing, multidimensional occurrence that sweeps across environmental, social, economical, political, and biological aspects of life. Nash's work although not specifically about disaster, aims to highlight how man is inescapably linked to larger ecosystems and whilst man has

shaped the land and changed it almost completely in areas, the local environment can still cause disease and suffering.¹⁹

The Media:

The growth of blame, accountability and recreancy in both the public conscience and scientific literature over the past fifty years has been coupled with many technological and standard of living improvements. One of the most correlatable of these technological advancements is the rise of mass media, such as radio, television and the internet, several authors have written on its role in disaster research and blame apportioning.

Singer and Endreny (1993) conducted a survey of media reporting to try and establish what kind of hazards the media report, how accurate their reporting is, and who is held responsible for hazards and their prevention. Their findings interestingly show that generally the media reports hazards in an “inaccurate” way and leaves critical figures such as probability of the events occurrence out. They also found that blame is rarely assigned by the media in natural disaster events, however it is worth noting that their samples were taken from 1960 and 1984 and so results are not indicative of current media trends.²⁰

Button (2002) looks at how the media *re-frames* technological disasters, and shows that the media can shift the general public’s perception of disaster events in a relatively short space of time; adding that too much emphasis is placed today on professional opinion, when in many cases a local knowledge could better add to our understanding of why an event has occurred. The frames created by the media only serve to reinforce our cultural ideologies and prevent the public from inquiring why victims are vulnerable in the first instance.

Stallings (1996) further defines the media framing of disasters, introducing the term *coupling* as the media phenomena post disaster that takes two facts or trends and presents them as having proven links. This working hypothesis being presented as fact by the media can result in misplaced or over apportioned blame in public response. Stallings provides an empirical example of the coupling phenomena in his 1990 paper about structural failures of bridges in the US. Also talking of proximity, he states that the lower down the rung an agent is, the easier it is to assign blame and that as a result, the media look for acts that are proximate to couple with the disaster. In Fischer and Harr (1994) an empirical study is presented showing that despite media coverage of an event being largely positive or neutral, the small amount of negative reports disproportionately affected the public's opinion.

Alongside eyewitness accounts and interviews it is predominantly through the relatively infant mass media's myopic lens that the North Sea Flood of 1953 is analysed.

The North Sea Flood – 31st January 1953:

The flood of the evening of the 31st January to 1st February 1953, which affected predominantly the eastern counties of Lincolnshire, Norfolk, Suffolk, Essex and Kent, was caused by a combining of two meteorologically distinct events. The first of these was a depression and subsequent anticyclone wind system that developed in the Atlantic, travelled around the North of Scotland ²¹and then intensified as it was funnelled south along the East coast of the UK. Both Rossiter (1953) and Steers (1953) provide detailed charts of the weather systems that developed along the coastline of the UK with Steers stating that, "it was the worst northerly gale on record in the British Isles."²²

The depression combined with a spring tide along the east coastline, the height of which many harbours and the Met office had under-predicted. In Southend the observed tide ultimately was 2.4 metres higher

than had been forecast.²³ Due to, the shallow nature of the North Sea, the localised decrease in atmospheric pressure from the cyclone and the high tide combined, the level of the North Sea rose by 2 metres south of the Humber with waves reaching over 4.9m.²⁴

As the surge travelled south along the east coast it increased in intensity and size. Its first impact with the shore was as dusk was falling at Spurn Head, Yorkshire around 16:00; it reached its maximum of 2.46 metres near Kings Lynn, Norfolk at 19.20, and caused much of its destruction along the Essex coast in the early hours, especially at Canvey Island where it struck at 01.10 on the 1st February.

The first casualty of the weather system was the MV Princess Victoria which sank on its crossing from Stranraer, Scotland to Larne, Northern Ireland, resulting in 133 deaths.²⁵ Despite the Princess Victoria being abandoned at 14:00 on the 31st January and the surge hitting the east coast as early as 16:00 in Yorkshire no warning was given to any of the settlements further down the coast. As many of the southern towns of the Thames estuary settled down for a night of, "...gale-force winds, severe in many places, and squally showers, mainly of hail or snow..." the storm surge hit with devastating consequences.²⁶

There were 1200 breaches of defences along the coastline²⁷ the extent of which are shown by Figure 1. Much of this coastline had neglected sea defences due to lack of investment during the war period and many of the worst affected communities were housed in temporary prefabricated or bungalow accommodation due to post war housing shortages. Baxter (2005) highlights that of the 307 deaths on land, 216 (70%) of these occurred in five main clusters, as shown respectively on Figure 1, at: Mablethorpe and Sutton on Sea (16 dead), Hunstanton and Snettisham (65 dead), Felixstowe and Harwich (over 40 dead), Jaywick (37 dead) and Canvey Island (58 dead).

Figure 1: The extent of the flooding on the East Coast- 1st February 1953 – Adapted from Steers, 1953.

A detailed account of the meteorology of the event is given by Rossiter (1953) whilst detailed descriptions of the event and response to the flood are comprehensively covered by Steers (1953), Grieve (1959), and Pollard (1978). Along with the BBC Timewatch documentary, *The Greatest Storm* (2002) these provide more than sufficient information for the interested reader.

The response to the flooding was predominantly community led, as highlighted by the volunteers shown in Figure 2, with limited liaising between districts and without the central Government becoming involved until the Monday morning after the storm and flooding had struck on the Saturday evening.²⁸

Across the whole area came reports of great personal sacrifice and heroism in the face of adversity; US Air-Force servicemen, from their base at Scunthorpe, were some of the first to respond to the disaster, reaching the lower Hunstanton area within under an hour.²⁹ Corporal Leeming becoming the first non-British recipient of the George medal, despite being a non-swimmer he saved 27 people in the region in a rubber raft that he self inflated.³⁰

The overarching narrative of the time was one of community resilience and solidarity, the *Blitz spirit*³¹ so prevalent during the war re-emerged as a community survival mechanism. By framing the flood events in the wartime ideals of resilience, adaptability and resourcefulness, the communities' worst affected showed a reaction to adversity that clearly contrasts the strong individual vulnerability, prevalent in the modern discourse.

Figure 2: An army of volunteers repairing a breach of the bank of the Great Ouse at Magdalen – Walmsey & Webb – taken from Pollard, 1978

Analysis of eyewitness accounts; both from the time of the event, taken from the BBC sound archive's collection of radio newsreel, and from more recent interviews, such as the BBC Timewatch documentary *The Greatest Storm* (2002) both highlight this community attitude. An attitude and immediate response

to the disaster from the worst affected and often poorest sectors of society which is alien in today's climate of blame and accountability. Exemplified by the Reverend J.W. Bell from Burnham-on-Crouch, who when interviewed for BBC radio spoke of a terrifying experience but of the "*wonderful courage and fortitude* of his rescuers" (emphasis added).³² It is worth noting that interviews conducted whilst much of the death and hardship was still unfolding may be lacking in assignation of blame due to the shock and proximity of the tragedy. With this in mind, regional newspapers have been turned to in analysis as a more formal and controlled outlet by which to assess the attitudes of those affected.

Regional Press:

Both the Canvey News & Benfleet Recorder, and the Felixstowe Times had run articles in the weeks prior to the flood about delays in sea-defence improvements³³ due to the governments circular issued during the steel shortage of June 1952 notifying local authorities that any defences requiring steel would have to be slowed down.³⁴ This highlights that even prior to the events of 31st January 1953 many of the local authorities affected knew both of the dilapidated post war condition of their sea defences and of the delays to restoring these protecting structures.

In the weeks following the disaster the regional newspapers along the east coast, most of them weeklies, acted as an inter-community information and communication system. Printing stories focussed solely on facts and figures, with little polemic and devoting much page space to notices from relocated businesses and families trying to locate relatives. Hall (1992) states how journalism plays a pivotal role in the circulation of dominant discourses in a society and Ewart (2000) provides an empirical study of how a regional newspaper, shapes a communities discourse and views as a more trusted representation than the often distrusted metropolitan or national media. This notion is clearly prevalent in the regional papers of 1953 who carried messages of hope and resilience for the communities, as are expressed in The Felixstowe Times "flood special" on the 7th of February which ran the headline,

“The people’s spirit was unbroken amid the scene of havoc...”³⁵

The community resilience and positive reporting shown by these newspapers however, is not that dissimilar to today where many regional newspapers have a close affinity to their readership and often are lacking in more obvious political stance or policy criticisms, other than those affecting their insular interests.³⁶

Owing to this, the national newspapers post 31st January 1953 were analysed to try and establish a broader representation of cultural opinion to the events. Especially as the flood was declared a national disaster by the government, when only a relatively small proportion of the population was affected; approximately 32,000 people were evacuated out of a national population of 49 million.³⁷

National Press:

In a similar vein to the regional newspapers, the first few days after the floods were dominated by articles in both the tabloids and broadsheets detailing the facts and figures of events on the East coast. The national newspapers dedicated large sections to coverage of the flooding and a typical format was that of the front page of the Daily Express from the 2nd February, with the headline, “The Deluge” followed by bullet points highlighting discrete facts such as the death toll [*sic*] and the approximate amount of homes affected.³⁸ Many also ran double page spreads of photographs showing graphically the scale and extent of the devastation caused by the storm and surge (figure 3).

It can be garnered from the public’s response in the newspapers, both to appeals for aid and through letters featured, that even in places geographically detached from the devastation a deep kinship and camaraderie was apparent. Within a week £125,000 had been donated by the British public to the Lord Mayor’s Flood and Tempest Distress Fund.³⁹

Figure 3: The Daily Mirror – 2nd February 1953 – Pgs 6 & 7: A typical graphical format that the national dailies adopted in the immediate aftermath of the disaster.

This resilient community spirit both regionally and nationally was as Furedi (2007) has suggested a remnant of the Blitz Spirit; however its existence may also be down to the dominance of a more sectarian society in 1950's Britain than is prevalent today. A submission by a Dr Sangster in the Express on the 3rd February 1953 highlights this,

“There are...thinkers who seem to suppose, that when a disaster of this kind occurs, that God is wreaking his vengeance on certain wrongdoers. That is plain blasphemy.”⁴⁰

This is an example of what Douglas (1992) attributes to sin and taboo, the discourse of religious faith, stating that this is eventually replaced in western industrialised nations by the more neutral, uniform vocabulary of risk and blame.

To leave the cultural analysis of the great flood as a purely blame free discourse, attributed both to the existence of wartime resolve and religious designation would be extremely naive. It has long been accepted that blame is a, “usual, if not inevitable, feature of disasters,”⁴¹ therefore what is key is how this blame culturally and socially has manifested itself throughout differing societies.

Further analysis shows that, as the newspaper’s commentary on the flood continues- over time becoming more dissociated from the human face of the tragedy- elements of blame and questioning of authority seep into the text. These misgivings first start to appear in the regional press about three weeks after the flooding in the form of reviews and polite suggestions aimed toward parliament. The coroner for Felixstowe made the point in his inquest that he would not allow questions tending to establish blame, however in his verdict the foreman went on to state,

“...that the authorities should institute a system of warning to be put into operation whenever circumstances similar to those pertaining on the night...arise in the future.”⁴²

This is not an assignation of implicit blame that would be recognisable in today’s society, such as those brandished at the Met Office after the Great Storm of 1987, but is still an outlet for feelings that however underlying in the cultural narrative of the day were clearly simmering below the surface of resilience.

This tepid and somewhat relatively restrained form of accusation and blame casting is apparent much earlier than three weeks after the flooding in the national press. The Daily Mail ran the headline, “Could calamity have been averted”⁴³ as early as the 4th February, and nearly every national paper reported on the socialists questioning of conservative coast protection policy in the House of Commons on the 3rd February. In this episode Mr Bevan, former minister for health and largely responsible for the formation of the National Health Service, argued that the first measures for sea defence post war, introduced by

Labour, were now being sabotaged by the current Conservative government. The home secretary Sir Maxwell-Fyfe responded by accusing Mr Bevan of using, “exceptionally terrible and tragic circumstances...to beat his political opponents.”⁴⁴

The speaker also intervened in the house to stop matters of a national disaster becoming a party matter. The 5th of February saw most nationals continuing their coverage of the ongoing debate in the House of Commons, which had now extended to attacking the Conservatives circular of the previous June which in light of national steel shortages had effectively stopped the strengthening of the dilapidated sea defences. It seems that these initial attempts to apportion blame and accountability close to the event, however softly aired, were quickly tempered and countered by those in the firing line.

Post 1953 Extreme Weather Events:

When compared with subsequent extreme weather events in the UK, the national newspapers response and representations of the public’s opinions in the aftermath of the great flood exhibit stark contrast.

On 11th January 1978 a similar weather system to that of 1953 progressed down the east coast of the UK again causing much damage but no loss of life due to the now fully functioning national flood warning system. In many regions the storm surge tides were marginally higher than those experienced in 1953.⁴⁵ As Steers wrote a primary analysis of the prevailing weather systems and affect of both the 1953 and 1978 events in a similar format it is easy to draw many direct comparisons. The 1978 event happened late on the 11th January and through the night into the 12th, therefore it was first reported in the national newspapers on 13th January 1978. Although many front pages ran with the format familiar from 1953, a combination of photographs and small factual pieces of information, one only has to delve to

pages two and three of both the tabloids and broadsheets to find accusation and blame unabatedly being cast.

Headlines such as;

“Flooded out – By Red Tape.”⁴⁶

Coupled with quotes from affected communities expressing anger such as,

“Kings Lynn mayor Frank Cork called for fresh thinking on flood warnings. “People had too little time to prepare defences- if they had any time at all.””⁴⁷

Insinuate a community response at huge odds to that found through the national media in the immediate aftermath of the 1953 flooding. Despite the storm being in the same region as 1953 and thus making comparison easier, the fact that no fatalities were recorded could be argued to be the reason that in 1978 blame casting occurs so swiftly in the media.

In response to this, analysis of the media coverage of the Great Storm which occurred on the evening of 15th October 1987 across the South of England causing 13 deaths was also undertaken. The damage unlike 1953 and 1978 was predominantly caused by the intense wind speeds, rather than the storm surge as the cyclone passed from Cornwall across the UK in a north easterly direction through the night of the 15th October.⁴⁸

The media response to this event, rather than asserting the viewpoint that blame is reserved and slow to surface where death in natural disaster is involved,⁴⁹ in fact charts further shift to a social narrative of individuality and blame in the UK post 1953. No longer are criticisms of policy and governance reserved for print weeks after the event as in 1953, or for the inner pages of the news as in 1978. By 1987 the

media and the British public seemingly expect better protection from *acts of God* and testament to this can be found immediately after the event emblazoned on the front pages of all the leading dailies.

The Telegraph on the 17th October 1987 led with the headline:

“Met men fail to predict “worst recorded storm””⁵⁰

Whilst the Daily Mirror leads on the same day with:

“Why didn’t *they* warn us?”⁵¹

This event charts further the rise of blame casting and questions of accountability that were evident after the 1978 event to new unparalleled levels across the British public conscience. The Met office and more directly BBC weatherman Michael Fish were infamously singled out as scapegoats for the lack of prediction of the event.⁵²

The newspapers also carried stories about claiming insurance damage and how to ensure that this was done before delays due to the large volume of claims occurred.

“Claim and make it snappy!”⁵³

This, too, is indicative of a society that had shifted hugely from the post-war climate of the 1953 flood where the majority of victims had no insurance and nearly all insurance policies did not cover flood damage. Dr Francis a historian at the University of Cincinnati estimates that in the 1953 flood the average insurance claim works out at approximately £60 per house, with the majority of this being claimed by a few large estates affected by the flood.⁵⁴ Compared to the \$450-\$750 million of damage to insured property in 1987⁵⁵ this clearly highlights how shifts in class, wealth and expectations had occurred parallel to the changes in blame and recreancy in the UK post 1953.

Whether the rise of blame in society is now a widespread and uniform discourse or if its prevalence is still growing is not easily distinguishable. The above comparisons of events in 1953, 1978 and 1987 suggests its continued growth over the industrial to post-industrial time frame, however has this accusation system now become stagnant and accepted or is it still dynamic and growing?

The interim findings of the Pitt Review, commissioned by the UK government in response to the widespread flooding of summer 2007, suggest that the societal functions of blame and recreancy are still dynamic and changing if not tangibly still increasing. Sir Pitt suggests that the country was fortunate to not suffer much more severe consequences and he announces 15 urgent recommendations and 72 interim conclusions which need addressing for future flood prevention.⁵⁶

The publication of this interim report, only four months after the flooding, coupled with the sheer volume of media coverage designated to events of summer 2007; show that a blame and recreancy discourse is now the socially accepted response to extreme weather events in the UK. The tone of coverage of the summer 2007 flooding seems to be shifting away from negative blaming techniques and scapegoating towards a narrative of constructive blame and recreancy as highlighted by Sir Pitt's recognition that response to the events was good and well co-ordinated, but that there is still scope for improvement.⁵⁷

Political and Long Term Legacy:

“...bureaucracy is insensitive to warnings of dangers it hasn't already met; markets foresee danger only from the individual perspective.”⁵⁸

Despite the great flood of 1953 often being referred to as a forgotten tragedy of modern British society⁵⁹ or as Baxter (2005) states, “a footnote in the history of post-war Britain,” its long term legacy for both physical sea-defences and disaster policy were of huge significance to the UK. Through analysis

of the review process which followed the events of the 31st January 1953, the bills created and general political legacy of the event, it is hoped that further insight can be made into how this event helped trigger a paradigm shift of the British public psyche toward rhetoric of vulnerability and blame.

The immediate parliamentary action after the flood events of 31st January 1953 was the creation of the Coastal flooding emergency provisions bill which was passed on 19th May 1953. This bill enabled many of the affected coastal areas for a limited period only, until 30th June 1954,⁶⁰ to bypass other regulatory laws and procedure such as the Town and Country Planning Act, 1947, or the Public Utilities Street Works Act, 1950, which would slow sea defence repair.⁶¹

It also handed much of the responsibility for the initial sea defence repairs to the regional River Board Authorities, and outlined where extra funding for works would be available from. This bill may have seemingly been an attempt, by a national government which was slow to assist regional bodies in what it quickly labeled a national disaster, to pacify the affected areas by providing them with the power and funds to start repairs immediately. The bill wording itself, however, provides little evidence of this, being written purely as a legal facilitating document, with little scope for the view that its speed in being passed through parliament was due to guilt or blame shifting rather than the real need for urgent works on the affected coasts.

The larger political legacy of the 1953 east coast flooding was established by the formation of the Departmental Committee on Coastal Flooding and its subsequent publication of an interim report and complete report in May 1954, known as the Waverley Report after its chair the Viscount Waverley. The committee, consisting of 14 prominent figures including Professor Steers,⁶² was appointed on 28th April 1953 with four terms of reference as shown in Figure 4.

- (i) “ to examine the causes of the recent floods and the possibilities of a recurrence in Great Britain ;
- (ii) to consider what margin of safety for sea defences would be reasonable and practicable having regard on the one hand to the estimated risks involved and on the other to the cost of protective measures ;
- (iii) to consider whether any further measures should be taken by a system of warning or otherwise to lessen the risk of loss of life and serious damage to property ;
- (iv) to review the lessons to be learned from the disaster and the administrative and financial responsibilities of the various bodies concerned in providing and maintaining the sea defences and replacing them in the event of damage ; and to make recommendations.”

Figure 4: The terms of Reference of the Departmental Committee on Coastal Flooding- from the Waverley Report, 1954.

The committee had two large and well-documented⁶³ effects on subsequent British Coastal policy, namely the inception and development of the Storm Tide Warning Service, and the opening of discussion on London's flood vulnerability which directly led to the completion of the Thames Barrier in 1984.

As well as the more direct and tangible results, the Waverly report is responsible for many other, more subtle developments in both policy implementation, terminology and report language, that can be deemed pioneering. In its consideration of where and to what level to improve defences, it takes into account financial factors and can therefore be regarded a prototype to the modern practice of the benefit-cost approach to flood defence management.⁶⁴ Using terminology such as fair, reasonably and practicable, the Waverley committee were pre-empting the field of Risk Assessment and its language that was to become so prevalent worldwide throughout the 1970s.⁶⁵ The Health and Safety at Work Act, 1974 defines all its measures with the phrase “reasonably practicable” a term that would not have looked out of place in the Waverley report some twenty years earlier.

It is difficult to extract direct accusations of blame from modern government reports as their remit is often, “to review lessons to be learned” (Figure 4) or similar directives, as it was with the Waverley

Report in 1953.⁶⁶ However, it is possible to read further into the text, linking the report with other background information.

As mentioned in the newspaper analysis previously, a government circular was issued in June 1952 stating that due to a national steel shortage, all local authorities should cease any coastal defence works until further notice.⁶⁷ Despite this memo coming under criticism directly in the House of Commons from labour politicians such as Bevan, the Waverley report makes no mention of the halt that had been imposed on all sea defence repairs nationally. If this had occurred in today's individualist climate it is seemingly obvious, by looking into the response to the 1987 great storm,⁶⁸ that not only would it have been picked up in the report, but also it is plausible that a responsible civil servant or politician may have been forced to resign.

The idea that politics and policy is learning from the event without the implicit allocation of blame or with individual's being directly responsible, which can be found in extreme weather events post 1953, is in line with the narrative of recreancy which was not defined until 1993.⁶⁹ The literature on risk and blame narrates a discourse of societies progressing from implicit blame allocation to the more useful and positive notion of recreancy. As the response to the flood of 1953 shows signs of recreancy in its, "lessons to be learned" stance coupled with few signs of public allocation of blame it may seem that the academics discourse advocated by Freudenberg and Douglas⁷⁰ of societal blame developing through the post industrial time frame to recreancy is inaccurate.

DISCUSSION:The North Sea flood as a catalyst for social change:

Penning-Rowsell et al. (2006) discuss how UK flood events have repeatedly provided a window for policy acceleration, showing that these policy accelerations were not based on new ideas except in the case of the 1953 flooding. They attribute the large scale shifts in policy and the introduction of new ideas to the political arena after 1953, which arose in the Waverley Report, to the huge scale of the 1953 event and the large death toll.⁷¹ If this event could clearly act as an unparalleled trigger for UK disaster policy, then can it be extrapolated that such a large event could actually trigger a paradigm shift in the social fabric of the UK from communities of resilience to a climate of blame?

In order to be able to clearly see whether trends analysed, in the aftermath of 31st January 1953 and its lasting affect, acted as a trigger for social changes it is first necessary to frame these events within larger social shifts of the decade. There are two extremely relevant and large changes that were occurring in the post war period in which the flood occurred; these were the growth of the middle classes and the augmentation of a national mass media.

Post war the growth of the mass media had increased exponentially, a trend which into the 1950s saw television overtaking radio in popularity. In 1950 there were 350,000 combined sound and vision licenses; by 1954 this number had exceeded 3 million.⁷² Coupled with this growth in both television and radio, national press continued its wartime trends of overtaking and replacing regional print. National Sunday newspapers circulation peak was 30.59 million in 1951, whilst national morning newspapers peaked in 1957 at 16.71million.⁷³ This shift to an immediate reporting of the news, throughout the whole country whether by newspaper, radio or television meant that national identities and discourses on current affairs were strengthened.

Mass communication it has been argued creates a *hold* over its audience, closing off other forms of cultural experience and therefore gaining a paramount role in determining the cultural content of our society.⁷⁴ As Button (2002) states, frames created by the media serve to reinforce cultural ideologies and prevent the public from inquiring why victims are vulnerable in the first instance.

This rise in mass media post Second World War was being driven by larger demographic and economic changes, which saw the resurgence of the middle class and the rise of youth culture with the birth of the teenager in the early 1950s. With this growth came not only money and increased expectations across British society but also questions posing what kind of mass society the UK wanted to live in. As Savage (2007) states, “1945 was year zero,” the spread of American values of a society living in the now, that was pleasure seeking and product consuming was changing the face of English society.⁷⁵

Once the large changes post-war have been considered as outlined above it becomes clear that the flood of 1953 occurred at a time of unique social dynamism in the UK.

It may be argued that any large-scale event, such as a flood will always cause a degree of change be that in policy or more subtle social attitudes. However, the worst flood in sixty-five years on the east coast had occurred just four years earlier on the 1st March 1949, if disaster always brought change then this event would have, “initiated measures that might have reduced the impact in 1953.”⁷⁶ As it was, the implications were ignored at the time and little changed as a result of the 1949 flooding.

The economic and social background, which the 1953 flood was superimposed onto, meant that the flood acted as a facilitator for and catalyst to, changes that were already simmering within the British public conscience. Longer term changes in blame allocation and risk perception as charted by academics, such as Douglas, can clearly be seen as fringe phenomena of the 1953 discourse; in both the media analysis and language of government reports.

Hannigan (1995) outlines three claims making groups, on which society's willingness to recognise and solve environmental issues rests; *issue entrepreneurs* in science, the *mass media* and *politicians*.⁷⁷ For the events of January 1953 these three groups all had a key role to play in the subsequent changes that were to occur both to policy and socially.

Figure 5: The Funnel Effect- A visualisation of how the large scale flooding of 1953 caused three discourses to uniquely interact and facilitated large scale social and policy changes nationally.

Figure 5 illustrates graphically how the interactions between these three sporadically contacting social spheres were forced together by the tragedy of January 1953. Sheail (2002) outlines a similar triangular relationship between government, business and amenity bodies in his dialogue on the development of air pollution laws in the UK. Despite initial interactions between these three spheres first occurring officially in January 1920 under a committee headed by Lord Newton, it took until December 1952 and the trigger event of “the Great Smog,” which caused 4000 deaths in Greater London, for the facilitation of a Clean Air Bill to occur.⁷⁸ The case of the Clean Air Act, 1956⁷⁹ fits directly into the funnel effect

model posed in Figure 5, however in this case the place of the academics and media have been replaced with the businesses and amenity bodies.

It may be found that other situations in policy acceleration within the UK twentieth century discourse fit within this funnel effect model with three or more social sphere's interactions catalysed by a triggering or facilitating event. The case of the Clean Air Act works well as a comparison as it occurred in the same time frame as the Great Flood and therefore is subject to the same unique social dynamism, as discussed, in its evolution.

The Forgotten Tragedy- forgotten survivors:

As stated in the political analysis, the flood soon became a footnote in the twentieth century history of Britain.⁸⁰ Dr Francis suggests, in the BBC Timewatch documentary *The Greatest Storm* (2002), that maybe the reason this event is not remembered in the UK public conscience is because it does not fit with the common image of the 1950s as a time of post war prosperity. It was a decade defined by a new Monarch, the conquering of Everest, the rise of new technology such as television and a need for the British public to forget the atrocities and hardships of the Second World War.

These ideas were presented at the time by a social model of resilience,⁸¹ exemplified by one survivor in the BBC documentary who states that after losing her daughter she was told by her Mother and Mother in law, "You've buried her now...you must pull yourself together Doris."⁸²

However, to consider that vulnerability and suffering did not occur before the academic discourse existed would be oversimplified, as studies of the mining disaster in the Welsh village of Aberfan in 1966 have shown.⁸³ It is posed by commentators that the resilience of the community is merely a reflection of social expectance and that much suffering is often internalised.⁸⁴

Blame, vulnerability and risk are all words that when considered as phenomena in society have negative connotations, however, it is in the light of this internalised suffering that they may provide an important social role and so their rise post 1953 may be understood. After the flooding of January 1953 other than physical donations and financial support, the afflicted communities received no support for bereavement or symptoms of trauma.

The effects of this can clearly be seen in the BBC Timewatch documentary (2002) where many survivors recollect the events of the night of 31st January 1953 for the first time. Typified by the two surviving Manser family members, who lost three siblings that fateful night, who state that they have lived their lives without closure because their parents never spoke of events, not even knowing where their siblings were buried until fifty years after the flood. In many communities that suffered large death tolls in the flood of 1953, such as the five clusters identified in Figure 1, it is possible that *corrosive community* symptoms⁸⁵ arose despite commentators suggesting that in natural disasters, communities act as a social sponge.⁸⁶

This undetected trauma resulting from events, which was overlooked in post-war disaster response is hugely contrasted in the response to the floods of summer 2007. Sir Pitt's interim report dedicates a whole section to the topic of health and well being in an event which had no direct deaths linked with it, focussing chiefly on the increase in mental health problems, anxiety and depression post flooding.⁸⁷

Vulnerability in UK society may be seen as a gradually increasing idea, coupled with the loss of attitudes of resilience and solidarity that were prevalent post-war. However, analysis of the events of January 1953 and its aftermath, show that elements of this discourse were beginning to emerge and that the flood may have helped trigger a shift from a society of collectiveness and post-war stabilisation to one of modernist growth and individuality.

CONCLUSION:

As Baxter (2005) and Furedi (2007) have previously commented it is clear from the analysis of both the media and political responses that the East coast flood of 31st January 1953 belongs to a discourse no longer found in UK disaster responses. Comparison of this event to subsequent storm and flooding events in the UK in 1978, 1987 and 2007 have shown that since 1953 a shift has occurred; from communities of resilience to an individualistic climate defined by vulnerability and blame.

The modern dialogue is characterised by the academic concepts of blame allocation and recreancy; scapegoating often occurs, which highlights and reinforces social fractures that already exist.⁸⁸ Despite the dominating narrative of the 1950s flood being one that aligns with the war time *Blitz Spirit*, through the analysis of the press coverage and political debate in the aftermath of January 1953 it has been shown that blame and individuality were starting to appear in British post-war societies by 1953.

The long term legacy of the devastation to the East coast of the UK in 1953 was not only in the physical and visible policy changes which saw sea defence improvement and the inception of a national warning system. The event it seems, through the pioneering Waverley Report, introduced Britain to the ideas of risk perception and assessment, twenty years before this field was defined by academics. This huge shift in policy coupled with the newly established reach of the mass media in its ability to shape national identity⁸⁹ were the main contributors to the floods position as a triggering event for the social changes that followed, introducing albeit subtly, the ideas of accountability and recreancy.

The three-sphere interaction, as shown in Figure 5, highlights how the flood acted in bringing discourses that usually interact slowly over time together and focussed their discussion. However, it is naïve to consider that the trigger action provided by this event is the sole reason for the large changes both socially and in policy facilitated. As discussed, the larger social dynamism of the 1950s is key to how this

event could paradoxically be both an accelerator for huge social improvement and also a forgotten event in UK twentieth century history.

It is not suggested that this event alone created a climate of blame, vulnerability and individualism that is prevalent in the UK's post-industrial society, however it has been shown that it was a vital event in enabling shifts that, although already emerging in UK society, may otherwise have taken decades in their growth.

Whether these findings, for either natural or technological disaster, as a facilitator for shifts in societies from community resilience to a climate of blame and individuality, can be extended beyond the UK would require further research and analysis. It may be posed that UK history is unique globally during this time-frame with its adoption of American capitalism coupled with the meteorological climate of low probability and low intensity disaster. However, without comparison across other similar countries disaster discourses' this is hard to ascertain.

Analysis has shown how a single environmental event in lieu of its economic and social costs can act as a key provider of change both to governance and society itself. Showing that if blame casting and accountability are measured in their use and formulation that positive can come from them through improvements to policy and in providing closure and post traumatic help to communities.

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NOTES:

¹ In reference to Klinenberg 2002 - Heat wave: a social autopsy of disaster in Chicago

² Carr 1932, 217

³ Steers 1953, 116

⁴ See Bucher 1957 for an early insight into academic theory on blame in disaster

⁵ Starr 1969,

⁶ Freudenburg 1993, 911

⁷ See Schively 2007 for an in depth account of the rise of LULU and NIMBY phenomena both from a planning and economic utility perspective. It is argued that more links are needed between policy and the sociological and psychological reasoning behind public risk decisions that lead to NIMBY attitudes.

⁸ Tversky and Kahneman 1974

⁹ Slovic 1987

¹⁰ Kasperson, Slovic et al. 2003

¹¹ See Douglas 1992, 3-22

¹² Bucher 1957

¹³ Dynes and Yutzy 1965

¹⁴ Blocker and Sherkat 1992, 155-6

¹⁵ Wijkman and Timberlake 1988

¹⁶ Elliot and Pais 2006, 302

¹⁷ See Durkheim 1893

¹⁸ See Picou et al. 2004

¹⁹ Nash 2006

²⁰ Singer and Endreny 1994

²¹ Causing the sinking of the MV Princess Victoria on its crossing from Stranraer, Scotland to Larne, Northern Ireland, resulting in 133 deaths- for further information see Cameron, 2002

²² Steers 1953, 283

²³ *Ibid* – or 8 feet

²⁴ Baxter 2005, 1295

²⁵ For further information on the MV Princess Victoria see Cameron 2002

²⁶ Met office forecast, Steers 1953, 282

²⁷ Baxter 2005, 1295

²⁸ *Ibid*, 1293

²⁹ Pollard 1978, from Baxter 2005, 1300

³⁰ BBC sound archive 1953, ref: 19394

³¹ Furedi 2007, 238

³² BBC Sound Archive 1953, ref: 19009

³³ Canvey News & Benfleet Recorder 1953; Felixstowe Times 1953a

³⁴ Telegraph 1953b

³⁵ The Felixstowe Times 1953b

³⁶ Ewart 2000

³⁷ Baxter 2005, 1305 - estimates the number of evacuees contrasted with the 1951 UK census listing England and Wales's population as 43,744,924 and a Scottish population of 5,095,969.

³⁸ The Daily Express 1953a

³⁹ Risk Management Solutions 2003, 5

⁴⁰ The Daily Express 1953b

⁴¹ Bucher 1957, 467

⁴² The Felixstowe Times 1953c

⁴³ The Daily Mail 1953a

⁴⁴ Telegraph 1953a

⁴⁵ Steers et al 1978, 194 – Conditions were especially worse in 1978 along the Wash region of South East England than in 1953.

⁴⁶ The Daily Mirror 1978

⁴⁷ The Times 1978

⁴⁸ Mitchell et al. 1989, 392-93 – for a detailed meteorological analysis of the storm.

⁴⁹ Blocker and Sherkat 1992, 155

⁵⁰ The Telegraph 1987

⁵¹ The Daily Mirror 1987a - *emphasis added*

⁵² See <http://search.bbc.co.uk>, type Michael Fish into the video and audio search to see his infamous weather report given on the day of the event. Also found when searching Michael Fish under video and audio are numerous excerpts of Fish defending his report on that fateful October day and stating how the media took his comments out of context and made him a scapegoat for events.

⁵³ The Mirror 1987b

⁵⁴ BBC Timewatch 2002 - Catalogue: LSFR683P

⁵⁵ The Times 1987; The Independent 1987

⁵⁶ Pitt 2007, 1-2

⁵⁷ *Ibid*, 2

⁵⁸ Douglas 1992, 66

⁵⁹ BBC Timewatch 2002 - Catalogue: LSFR683P

⁶⁰ Coastal Flooding Emergency Provisions Bill 1953

⁶¹ Mitchell 1953, 484

⁶² See Steers 1953 and Steers et al. 1979 - a founding member of the Institute of British Geographers, who was an expert on the South East coast of the UK, publishing many articles and books on the regions geography, morphology and flooding (Stoddart, 1988). Who along with Proudman, an oceanographer from Liverpool University, is shown to have dominated the committees debates on policy change (Penning-Roswell et al., 2006).

⁶³ See Baxter 2005; Penning-Rowse et al. 2006; and McRobie et al. 2005

⁶⁴ Penning-Rowse et al. 2006, 331

⁶⁵ Baxter 2005, 1308

⁶⁶ See the Agricultural Committees 1st Report on the Storm Damage of 16th October 1987 (1988) and Annex E, Chapter 9 of the Interim Report to the Pitt Review (2008) for examples of the terms of reference of more recent reports into disaster events in the UK.

⁶⁷ Telegraph 1953

⁶⁸ See Mitchell et al. 1989, especially their chapter titled *Policy Issues after the Storm*, where the blame cast by both the media and politicians is covered. Also it is worth noting that the Met Office managed to only alleviate pressure after it allowed two independent assessors of its internal inquiry (Met Office Online, 2008)

⁶⁹ Freudenberg 1993

⁷⁰ Although only Freudenberg and some limited other commentators use the phrase recreancy, earlier writings including Douglas (1992) and Dynes and Quarentelli (1977) discuss the ideas presented by this term.

⁷¹ Penning-Rowse et al. 2006

⁷² Along with this rise, radio listening figures continued to increase. The defining moment for the establishment of television in the British social fabric, is often seen as the Queens coronation in June of 1953, an event that an estimated 20 million viewers saw (History of the BBC: 1950s Factsheet, BBC).

⁷³ Seymour-Ure 1996

⁷⁴ Maisel 1973, 160

⁷⁵ Savage 2007

⁷⁶ Baxter 2005, 1309

⁷⁷ Hannigan 1995

⁷⁸ Sheail 2002, 247-8

⁷⁹ *Ibid*, 248-9 - Despite the Great Smog of 1952 triggering key accelerations in the formation of the Clean Air Act, the truncated processes of parliament and the influential position of industry amongst those in power meant the Bill only received the Royal Assent in July 1956.

⁸⁰ Baxter 2005, 1294

⁸¹ Furedi 2007, 237-8

⁸² BBC Timewatch 2002, Catalogue: LSFR683P

⁸³ McLean and Johnes 2002 - The disaster in the Welsh mining village of Aberfan in 1966 saw a school engulfed by a coal tip slide, leading to the death of 116 children and 28 adults. Studies interviewing the survivors have shown that despite nearly all refusing psychological support at the time many have gone on to suffer mental health problems later in life (Morgan et al. 2003).

⁸⁴ Wolfenstein 1957

⁸⁵ Freudenburg and Jones 1991, 1157-8

⁸⁶ Quarentelli 1985

⁸⁷ Pitt 2008, Sections 9.6, 9.7 & 9.8

⁸⁸ Douglas 1992, 35

⁸⁹ Maisel 1973, 160