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Nuclear hallucinations: creating the vantage point of tamasha through the use of comic modes and irony in order to destabilise the authoritarian knowledge claims of Indian pro-nuclear documentaries

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***NUCLEAR HALLUCINATIONS: CREATING THE VANTAGE POINT OF
TAMASHA THROUGH THE USE OF COMIC MODES AND IRONY IN
ORDER TO DESTABILISE THE AUTHORITARIAN KNOWLEDGE
CLAIMS OF INDIAN PRO-NUCLEAR DOCUMENTARIES***

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Westminster for the degree of Doctor of Philosophy

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“Nothing under the sun is new”

Abstract

This practice-based research uses the context of the documentary assertions around the Indian nuclear project to examine how comic modes and irony can be employed to undermine authoritarian knowledge claims that make use of the epistephilic dimensions of the documentary form. An analysis of the pro-nuclear assertions in the documentary narratives of two state institutions in India, Films Division and Vigyan Prasar, was done as part of this enquiry. The diverse ways in which Indian anti-nuclear films engage with these narratives in humorous and ironic ways was also studied. The insights gained from this analysis contributed to the production and circulation of a film I made titled *Nuclear Hallucinations*, which is centred around the Kudankulam anti-nuclear movement in South India. Through its processes, the research develops a specific configuration of the vantage point of what I call *tamasha* in order to unsettle the certainty of pro-nuclear knowledge claims in documentary. *Nuclear Hallucinations* experiments with the use of satirical impersonations, irony, hallucinatory voice-overs and comic appropriation of pro-nuclear arguments to arrive at strategies that can elicit a response from the realm of *tamasha*. These experiments are informed by a framework that treats film as a process that goes beyond the limits of the edited film; the sites of engagement created during the production and circulation phases of the film are treated with equal importance. The research argues that the interventions created by the vantage point of *tamasha* offer new ways to resist the epistemological violence of documentary narratives that privilege the documentary form's ability to authorize assured knowledge claims.

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While I was away in London, I lost my uncle Abdul Elah, who was a friend, philosopher and guide. This work is dedicated to him.

Author's declaration

I declare that all the material contained in this thesis is my own work.

Statutory Warning

Though this thesis aims to be academic enough through proper citation methods, quotes from relevant dead/alive white men and a careful elaboration of the rituals for conjuring up knowledge known as methods, there were times when the radioactivity of hallucinations took over. Some sections got written due to circumstances beyond all control and peer review. The only possible way to bring order was to put those sections in a different font.

May the nightmares be with you as they are with us.

Chapter-1

Introduction

My practice-based research project explores the role of comic modes and irony to destabilise authoritarian knowledge claims in documentary. This enquiry is made through a film around the Kudankulam anti-nuclear movement, which claims to be a documentary, and through the processes initiated by the film. The research emerges from the context of the Indian nuclear project, one which produces assured truths about the necessity of nuclear power plants by using practices such as expert statements, pro-nuclear films as well as intimidation and imprisonment of anti-nuclear protestors.¹

The principal focus of my research is the diverse ways in which humour and irony can work against the epistemological violence of the rationalist documentary that is “devoted to certitude-sober, certain knowledge” (Renov, 2004, p. 136). As a result, I have concentrated on the rituals of truth production in the documentary form with special reference to the pro-nuclear documentaries from India, produced by Films Division and Vigyan Prasara, both of which are state institutions. The later chapters of this thesis will analyse the pro-nuclear pronouncements of such documentaries using Foucault’s arguments on power/knowledge. As he points out, “power produces; it produces reality; it produces domains of objects and rituals of truth” (Foucault, 1995, p. 194).

My practice-based enquiry which aims to unsettle the networks of power/knowledge around the Indian nuclear project approaches research as “an open-ended, historical, context aware and narrative enterprise” (Hannula, Vadén, & Suoranta, 2014, p. 15). This framework has allowed me to think through practice in a manner in which

¹ As I elaborate in chapter 2, here I am building upon Srirupa Roy’s argument that spectacular republic day parades, boring state documentaries and police violence are part of the many encounters which constitute “the reproduction of the nation-state” in the Indian context (Roy, 2007, p. 19).

theory, practice and writing worked together to construct meanings instead of finding them (Sullivan, 2010). The subsequent chapters of this thesis will locate the interventions initiated by my work in the context of the history of documentary practices from India. The way in which this history shapes the “documentariness” (Cowie, 2011, p.50) of the pro-nuclear narratives will also be explored; this exploration will be informed by relevant academic debates about the documentary form. Since the practice based approach treats the researcher as an integral part of the process of enquiry (Hannula et al., 2014), it is important to clarify my own position within the scheme of enquiry and how it shaped the course of the study.

1.1 Positioning myself within the research process

As outlined in chapter 2, contemporary independent documentary practice in India is a site where state and corporate visions about development and progress are challenged. As a practitioner I identify myself as an Indian independent documentary filmmaker. I learnt filmmaking from AJK Mass Communication Research Centre at Jamia Millia Islamia (from now on AJK MCRC), New Delhi, which is an important institution in the history of documentary filmmaking in India (Jayasankar & Monteiro, 2016). My training at AJK MCRC and later at Goldsmiths, University of London, has shaped my attitudes towards documentary filmmaking. The training in street theatre that I received at AJK MCRC prompted me to approach the material, creative and ethical challenges that emerged during the production and circulation of *Nuclear Hallucinations* with strategies from the traditions of political street theatre in India. *Nuclear Hallucinations* is made on an almost non-existent budget and the street theatre practice of using inexpensive available materials in comic and ironic ways helped me to treat the lack of resources as a source of humour. I provide a more detailed account of the role of street theatre in my research in Chapter 4.

The contours of the research that I have undertaken is shaped by my multiple identities: that of a middle-class academic and documentary filmmaker from India, a person whose home town is approximately 90 kilometres from the Kudankulam

Atomic Power Project, a migrant student in a UK university where many of my peers work within the logic of contemporary art, and my upbringing in Kerala where comic forms are immensely popular. Since *Nuclear Hallucinations* uses the context of the Kudankulam anti-nuclear movement to plot the destabilisations it attempts to achieve, I will now provide a brief account of the key phases of the movement.²

1.2 Kudankulam anti-nuclear movement

The deal signed between India and the erstwhile Soviet Union to construct nuclear reactors at Kudankulam in 1988 was met with protests from various collectives which opposed it. Huge rallies against the project took place in 1988 and 1989. The coastal march in 1989 at Kanyakumari, which raised the Kudankulam issue as part of the problems faced by the coastal community, was met with police firing. Soon, many factors including the disintegration of the Soviet Union resulted in the project being called off (Srikant, 2009). It was revived in 1997 when the then Prime Minister of India, Deve Gowda, and his Russian counterpart signed a supplement to the original agreement of 1988. John S. Moolakkattu (2014) points out that in the late 1990s the support base for the anti-nuclear movement against the Kudankulam project was limited to the fishing community in the region. In 2004, tsunami affected the coast at the project site. 2011 and 2012 saw huge protests when several thousands of people joined the non-violent resistance against the nuclear project in the aftermath of the Fukushima disaster. These sustained protests raised a serious challenge to the pro-nuclear narrative and they mark a milestone in the history of anti-nuclear movements in India. September 2012 saw a massive state clampdown on the protests. In the resulting violence and police firing, many people were injured and one person was killed (Murari, 2012); several people were imprisoned. Hundreds of cases were filed against thousands of villagers and activists. The

² For a more detailed account, please refer to *Koodankulam Anti-nuclear Movement: A Struggle For Alternative Development?* (Srikant, 2009), *The Violence of Postcolonial Spaces: Kudankulam* (Abraham, 2016) and *Nonviolent Resistance to Nuclear Power Plants in South India* (Moolakkattu, 2014).

charges included those of sedition, waging war against the state and attempt to murder.³

In 2013, I made my first visit to Idinthakarai, the village which is at the centre of the Kudankulam struggle. By that time the situation was not the same as in 2012 when the protests were at their peak. The police did not try to enter the village anymore. But, those people who had cases filed against them would risk arrest if they ventured out of Idinthakarai. As a result, the leaders of the movement, protestors and other villagers who had cases against them were unable to leave the village. The situation changed in 2014 when three main leaders of the anti-nuclear movement stood in the 2014 parliamentary election as candidates for the Aam Aadmi party, which emerged out of the Indian anti-corruption movement. Though they did not secure many votes, this move allowed the protestors and the leaders of the movement to come out of the confines of the village. S.P.Udayakumar, who is the co-ordinator of the People's Movement Against Nuclear Energy, which works for the closure of the Kudankulam Atomic Power Project, left the Aam Aadmi party in 2014 after the election. In 2016 he formed Pachai Tamizhagam, a Green Party, in the state of Tamil Nadu (Lal, 2016).

While the participation in electoral politics has definitely helped to circumvent the restriction on the mobility of the protestors, the presence of cases against them, which include serious charges like waging war against the state and sedition, continues to be a matter of concern. The later chapters of this thesis will link the state violence against anti-nuclear protesters at Kudankulam and elsewhere in India with pro-nuclear knowledge claims, which are made across many sites including that of documentary film. This tracing of the violent undercurrents within the expert

³ As on 2017 January, more than 100 cases exist against the anti-nuclear protestors and villagers, which include serious charges like sedition and waging war against the state (Janardhanan, 2016). The police often file First Information Reports (FIR) that mention the leaders of the movement and hundred or more people who were involved. Since the FIRs rarely name the 'other' accused, anyone who was present in the area on the date mentioned could become a possible suspect. Though most of the charges are not pressed, the cases become an excellent tool to intimidate the villagers.

narratives of pro-nuclear documentaries is done with an awareness that the claims about new knowledge put forward by my own study emerge from the location of the westernised university with its association with colonialism and epistemicides (Grosfoguel, 2013).⁴

1.3 Significance of the outlook of *tamasha* in the research process

Though I am aware of the contradictions inherent in an attempt to gain a PhD by exploring ways to undermine epistemological violence, I do not know of any pristine spaces from where ‘pure’ resistance can emerge. So, in my research I have used Baz Kershaw’s (1999) reflections about the role of performance in forging spaces of resistance even in disciplinary systems that strive to be completely panoptic. In his words, “Such ‘spaces’ and ‘fissures’ are not best seen as openings into which performance can be inserted...Rather, we should see them as crucially *constituting* the dramaturgies of freedom because they present an absence that creativity seeks to grasp” (Kershaw, 1999, p. 155). He also points to the precarious nature of such performances. So, I negotiate the requirement of citing “relevant authors” (Dunleavy, 2003, p.114), who are mostly “European sages” (Chakrabarty, 2008, p. 29) whose universal wisdom seems to have an equal relevance in Kudankulam as in Paris, in a similar way to how I faced the police personnel who questioned my colleague and me while we were filming near Kudankulam. In both these encounters, the spirit of *tamasha* was useful to come to terms with less than perfect situations.

As I elaborate in the following chapters, for the purposes of this research I conceptualize *tamasha* as a mode of engagement that encompasses a number of its diverse meanings in the South Asian context, which include spectacle, perverse entertainment as well as joke. Oxford Dictionary of Foreign Words and Phrases has the following entry on the word: “tamasha...Persian and Urdu (*.tamāšā*..walking

⁴ Ramón Grosfoguel links the “epistemic privilege of Western man in Westernized Universities’ structures of knowledge”(Grosfoguel, 2013, p. 73) to the epistemicides and genocides against the following: Muslim and Jewish populations during the conquest of Al-Andalus, indigenous populations of America, Africans who were forced into slavery to work in Americas and women who were termed as witches in Europe.

about for amusement, entertainment, from Arabic *tamāšā* walk about together, from *mašā* walk). 1 (in the Indian subcontinent) a grand show, performance, or celebration, especially one involving dance. 2 A fuss, a commotion *Colloquial...*” (Delahunty, 2008, p. 337). In its Urdu and Hindi usage, the word *tamasha* can signify various meanings including carnival (Guha, 1997). While a poet like Ghalib could describe the phenomenal world as a *tamasha* (Ghalib & Kanda, 2009), on a less profound note, *tamasha* is a term that appears in many different contexts and is used to describe elections (Tharoor, 2007) as well as efforts at weight loss (Diwekar, 2010). Affairs ranging from politics, corruption and cricket to domestic quarrels can become a *tamasha*. As chapter 3 of this thesis explains, in colonial India, the subalterns approached the staging of modern science initiated by the state as a *tamasha* (Prakash, 1999). Thus visits to the museums and science exhibitions did not produce the intended outcome of evoking awe for the superior knowledge and power of modern science. Instead, as Gyan Prakash illustrates, the subalterns used such visits to amuse themselves.

In a more contemporary example, a political leader called the hosting of the 2010 Commonwealth Games in New Delhi, which required considerable financial and infrastructural investment, a *tamasha* (PTI, 2010). By doing so, he was questioning the legitimacy of the whole enterprise. Once an event or discourse is viewed as a *tamasha*, it becomes a source of entertainment and loses its legitimacy in the solemn order of things. It becomes a sort of joke in which the viewer is a participant as well as an onlooker. ⁵ The later chapters of this thesis contain a detailed elaboration about how my research uses humour and irony to locate the expertise of pro-nuclear documentaries as a *tamasha*. As I explain in the next paragraph, in the framework of my research, the use of the point of view of *tamasha* is not employed solely to contest such pro-nuclear expertise.

⁵ Although there is a popular central Indian folk form named *Tamasha* with strong comedic content, the usage of the term *tamasha* in my research is not meant to denote this folk form.

In a scenario where the intimidation of documentary filmmakers who work on the topic of the Kudankulam anti-nuclear movement is not unheard of (Bradbury, 2013), my own position as a paranoid middle-class filmmaker who is afraid of getting into any trouble was often negotiated by approaching encounters such as the one with the police as a *tamasha*. Though the policemen made my colleague and me delete the material we had filmed, playing the part of naïve women helped us to get away without further consequences. In a similar manner I have relied on the spirit of *tamasha* to navigate my concerns about passing through the eye of the needle of academic evaluation systems despite having reservations about “institutional practices” which decide “what counts as legitimate research and who count as legitimate researchers” (Smith, 2008, p. 56) and their association with colonial power relations (Córdova, 1998).

So, while a major part of this written thesis will strive to demonstrate an adherence to the existing and imagined codes of academic standards for a PhD project, such adherence comes from the vantage point of *tamasha*; the presence of the hallucinatory passages of writing is a result of this tension. Zoe Todd has written about the “myriad voices in every continent being ignored in favour of ‘GREAT WHITE HOPES’” (Todd, 2016, p. 14) in her critique of the institutional structures of academia, which allow the production of cutting edge theories of post-humanism whilst ignoring similar strands of thought from non-western philosophies.⁶ In this thesis, the decision to avoid concepts like anthropocene or actor-network theory was a conscious one. I feel that it will be more productive for the project to engage with Nāgārjuna’s writings on relational reality and knowledge (Nāgārjuna & Westerhoff, 2010), though his citation index outside the discussions on Indian or Buddhist philosophies may not be extremely impressive. I have tried to balance my scholarly act by referring to the usual suspects like Foucault, Butler and Rancière. For this project, their insights were as valuable as Nāgārjuna’s.

⁶ Todd’s (2016) main argument is about indigenous philosophies.

Since the rituals of academic writing demand reverence, I will now state the research question, aims and objectives as well as the methodology of this project. However, before doing so, I would like to clarify that as chapter three of this thesis elaborates, my research relies on a worldview that looks at empirical reality itself as a joke. Hence, an approach that relies on “rituals of analysis and verification” to arrive at facts (Sullivan, 2010, p. 36) can only end up as a heretic’s efforts to get ordained. So, instead of attempting to ace at such a self-defeating task, I have tried to take a more open-ended course, in which my journey as a researcher was informed by the processes of filmmaking, an understanding of relevant theoretical arguments and an enquiry into the film works in my chosen area of study as well as interactions with filmmakers, activists, audience members and people who live near the Kudankulam Atomic Power Project. This journey had many phases. It included waiting for hours in the morning for people who never turn up, then trying to film a hen who strayed by as a ‘nuclear expert’ and realising at the edit table that the hen is not an effective character, at least in the film that I was trying to make. Such realisations were as much an integral part of the process of enquiry as the more ordered analysis of films from the archives of Films Division, which almost prompted me to flirt with the idea of doing content analysis.

1.4 Research question

What role can comic modes and irony play in destabilising authoritarian knowledge claims in documentaries?

1.5 Aims and objectives

- (1) To explore how documentary becomes a site in which to assert knowledge claims, using the nuclear project of the Indian state as a case study.
- (2) To ascertain the role of comic modes and irony in destabilising authoritarian knowledge claims in documentary. The research endeavours to do this through a film which claims to be a “documentary” about the Kudankulam anti-nuclear movement’s campaign against the Kudankulam Atomic Power

Project, as well as through the performances, processes and writing which contribute to and situate the film within the realm of *tamasha*

1.6 Outline of methodology

In terms of methodology, my research relies broadly on the constructivist paradigm which approaches knowledge as “world constitution” (Borgdorff, 2011, p. 56). The relationship between the ontology and epistemology of the research and its methodology (Gray & Malins, 2004) becomes particularly important in the context of my project because of its focus on knowledge claims. Ontologically, my study bases itself on the concept of *emptiness* in the Madhyamaka tradition in Mahayana Buddhism, which chooses a middle way between idealism and realism. According to this philosophical tradition, “Everything is empty” of any essence and there is no ultimate reality out there (Priest, 2013, p. 218). But, this is not an idealist philosophical tradition. It argues that things have their being not intrinsically, “but only in relation to other things” (Priest, 2013, p.218). Epistemologically, my study will be informed by the Madhyamaka philosopher Nāgārjuna’s argument on knowledge. Nāgārjuna stresses not “the impossibility of inquiring that which we do not know, but the impossibility of reaching beyond what inquiry itself can deliver” (Coseru, 2013, p. 250).

In terms of methods, I have used the concept of bricoleur as described by Denzin and Lincoln (2011)⁷ to put together multiple methods and tools as per the needs of the evolving research process. For example, though I was interested in the possibility of using satirical impersonations from the beginning of the project itself, the decision to combine these with strategies from street theatre emerged as a result of the requirements of the project. During the course of the research, Kincheloe’s (2004) idea of philosophical research was useful to maintain a critical awareness about the knowledge claims of relevant academic writings in my field of enquiry

⁷ While there are different conceptualisations of bricolage, I find it helpful to follow Denzin and Lincoln’s (2011) use of the term. Hammersley (1999) has pointed out that their use differs from the way in which Lévi-Strauss, who popularized the term in the academic context, employed it. Though Denzin and Lincoln (2011) caution about mixing paradigms, in my research I do move between paradigms as well as perspectives.

and the social, economic, political and historical circumstances that make such claims possible. According to Kincheloe, a philosophical mode of enquiry into the existing discourses of a subject can help the researcher to understand the “effects of the social construction of knowledge”(Kincheloe, 2004, p. 9). Combining this with Nāgārjuna’s notion that “there are no procedures that are intrinsically and essentially means of knowledge” (Westerhoff, 2009, p. 180) was an important step in placing the knowledge claims of the state documentaries as well as the findings and “new knowledge” that emerge from my own research within their specific contexts. The writings of Winston (2008), Bruzzi (2006), Nichols (1991) and Vohra (2011) have provided me with an interesting understanding about the factors that authorize the tropes of actuality, which are among the topics of my study. However, the way in which these writings and my own research assert their legitimacy within the power structures of academia that validate proper knowledge continues to be a matter of concern for me. I have tried to address this concern by using Nāgārjuna’s idea that any way of knowing is limited by the means by which it arrives at that knowledge (Coseru, 2013). So, my enquiry is based on a premise that does not pay homage to any universal claims of knowledge.

Chapters 4 and 5 of this thesis provide a detailed account of the various methods that were formulated at different stages of my research. Following a multi disciplinary approach, I have used methods and insights from documentary filmmaking, street theatre, performance art as well as film theory, humour research, Buddhist philosophy and philosophy of science.

The specific ways in which I worked with the people who appear in the film *Nuclear Hallucinations* require further elaboration. During my initial stay in the village Idinthakarai, my filming was mostly observational. I started recording satirical impersonations during my third phase of filming at Idinthakarai. As I explain in Chapter 4 and the section on ethics in this chapter, ‘expert tables’ were set up and notices were pasted to invite anyone interested to impersonate nuclear experts. Almost all the impersonations at Idinthakarai were done before an audience

who decided to watch the proceedings. Generally, I began by interviewing the particular impersonator who volunteered as if s/he was an actual expert/politician. In most cases, someone from the audience took over from me the job of questioning the ‘expert’. I filmed these exchanges as if they were ‘proper’ documentary interviews. Most interactions between so-called documentary subjects and filmmakers involve (at least in my experience) an element of banter and small talk. At Idinthakarai, many of the filming encounters became a *tamasha*, especially because of the presence of an audience who enjoyed repartee. Apart from impersonations, *Nuclear Hallucinations* also contains observational material, which includes footage from protest marches, prayer meetings as well as everyday activities in the village. However, in the edited film, this material is not used in an observational manner, as I will discuss later in this thesis.

The second set of impersonations which appear in *Nuclear Hallucinations* were filmed in Delhi. Here, I knew the performers from before and we filmed without the presence of any onlookers. The filming style was the same as at Idinthakarai. The “official science analyst”, “minister of security” and “censor authority board director” answered my questions as if they indeed held those positions.

1.7 Ethics

In terms of my relationship with the Kudankulam anti-nuclear movement, I follow the practice of many independent Indian documentary filmmakers who align themselves with people’s movements (Jayasankar & Monteiro, 2016). At the same time, though my hometown Thiruvananthapuram is roughly ninety kilometres away from the Kudankulam Atomic Power Project, I am not an active participant in the movement against the project. During my stay, which lasted for many months during the course of over three years at Idinthakarai, the epicentre of the struggle, I have been part of many protests, campaigns and gatherings against the nuclear project. Women from Idinthakarai are in the forefront of the movement and many of these women activists became good friends. While it was clear throughout that my solidarity was with the anti-nuclear movement, I was always a different kind of

participant due to the presence of my camera. Often, during protest meetings or visits to the Superintendent of Police's office to submit petitions, the women activists would encourage me to film particular encounters. However, I made the filming and editing decisions of the finished film. I do not work under the illusion that *Nuclear Hallucinations* is an account of the Kudankulam anti-nuclear movement from the protestors themselves. While the setting up of expert tables to initiate satirical impersonations and other processes of the film definitely involved collaboration with the protestors, the edited film is also a result of my middle-class sensibilities and film school training. At the same time, I worked with the hope that the possibilities offered by satirical impersonations will allow the viewers of the edited film a different kind of access to the protestors who are not placed as traditional documentary subjects who provide interviews. The concluding chapter of this thesis explains how this could be viewed as a new practice that offers another way to problematize the expertise of pro-nuclear documentaries in the Indian context.

Due to the contentious nature of the topic and the volatile situation at Kudankulam, ethical considerations were central while formulating the methods and procedures of the project. During the research process, particular attention was paid to the ethical questions that arise from working in an atmosphere where the people in the village were resisting pro-nuclear claims through their protests despite their awareness of the possible consequences. Every care was taken to ensure that those who chose to participate in the research process were making an informed voluntary decision. The putting up of posters before filming was an important step in this regard. Apart from this, before the commencement of filming, the participants were informed about the details of the research including its aims. The use of masks was a strategy that emerged out of the ethical dilemmas while filming. This helped to anonymise those participants who did not want to be identified. Many of the performers who appear in *Nuclear Hallucinations* are active participants in the Kudankulam anti-nuclear movement and they often give interviews to news channels and other media outlets. Due to the various ways in which the state machinery tries to limit the entry of

outsiders into the village, the struggle committee at Idinthakarai encourages visits from filmmakers, artists, journalists and researchers. My research respects this receptiveness. I have made efforts to place the concerns of the villagers—like their possible disappearance due to a nuclear disaster or state violence—before a larger audience. At the same time, through strategies like the hallucinatory voice-over in *Nuclear Hallucinations*, I attempt to implicate myself and the viewers for our collective role in the creation of such concerns. Chapter 4 will explain how these strategies operate in relation to the documentary claims made by *Nuclear Hallucinations*. In the next section, I will provide a brief introduction to the understanding of the term ‘documentary’ that informs this work. A more detailed elaboration of the project’s relationship with documentary claims is part of chapter 2 and 3

1.8 Documentary claims

Instead of entering into the debate about what is documentary, my research finds it more productive to enquire into what practices claim the title of ‘documentary’ and the purposes served by such a claim.⁸ This approach is a result of considering documentary as a “discursive practice”, with ‘rules’ through which “documentariness” is acknowledged and authorized” (Cowie, 2011, pp. 50-51). Instead of considering documentary as a representation of an accessible reality, the project views documentary claims as performative acts.

1.9 Propositions about the performative aspects of documentary

The term performative is a contested one in documentary theory. Bill Nichols’ (1994) use of the term has been vociferously challenged by Bruzzi (2006). According to Bruzzi, “documentaries are performative acts, inherently fluid and unstable” (Bruzzi, 2006, p. 1). She criticises Nichols’ analysis of what according to him is the performative mode of documentary. Anne Jerslev on the other hand does not agree with Bruzzi’s (2000) use of the term and adds that “Performative cannot

⁸ A similar argument is made by Sternberg (2010) in his doctoral thesis, *Discovery as invention: a Constructivist Alternative to the Classic Science Documentary*. He argues that the important question is not “what is documentary”, but “when is documentary” (Sternberg, 2010, p. 149)

simultaneously be used to propose a documentary ontology and to describe the specificity of certain filmic elements, certain acts, without it being clear what kind of performativity (or performance) one is talking about” (Jerslev, 2005, pp. 105–106). Jerslev also explores the use of the term by Nichols (1991), Corner (2002) and Scannell (1996). However, she reserves a considerable amount of space to her critique of Bruzzi, as I will discuss.

In my research, I find it productive to treat documentary as being constituted performatively, similar to Butler’s (1999) idea of gender. According to Jerslev (2005), this is Bruzzi’s (2000) argument regarding documentary. I would agree with Jerslev that Bruzzi’s use of the terms “performative” and “performance” for a variety of purposes can be confusing and often theoretically incoherent. If all documentaries are performative acts, then spelling out a particular category of films as *performative documentaries* could be counter productive. Similarly, although Bruzzi (2006) states that she uses the term performative in the sense in which Austin (1970) and later Butler (1990) used it, she is not very clear about whether by performance she means a dramatic one or a performance in Goffman’s (1956) sense of the term. Also, as Jerslev points out, “If we do agree to understand the documentary as a doing, then it follows logically that it is impossible to regard any documentary as a straightforward representation of an a priori given reality” (Jerslev, 2005, p. 107). Though Bruzzi may not regard representation as straightforward, she still argues, “reality does exist” and “it can be represented without such a representation either invalidating or having to be synonymous with the reality that preceded it.” (Bruzzi, 2006, p. 5). Ontologically my research does not rely on such a realist account of reality.

Butler (1999) has described how gender is constituted through performative acts and the role iteration plays in this. She discusses the possibilities of subversive repetitions to reveal the sexually factic as a phantasmic construction. Though Jerslev (2005) does not seem very keen about the utility of transporting Butler’s arguments about identity onto the context of documentary, I feel that such an endeavour is

beneficial for my research. Butler arrives at her arguments about gender by building upon Austin's idea about the performative use of language and Derrida's discussions on citationality and iterability which followed (Loxley, 2007). I do not feel that it will be incongruous to move the arguments away from identity to apply them to documentary, especially since Butler (1999) herself arrives at her thesis by building upon a discussion which started in the context of language. The subsequent chapters of this thesis explain the ways in which my project has used Butler's writings about the possibility of creating disturbances within iterations, to destabilise the knowledge claims of state documentaries through comic modes and irony.

1.10 Chapter outline

Chapter 2 which is the contextual review of this thesis positions the pro-nuclear documentaries made by Films Division and Vigyan Prasara within the context of historical and socio-political circumstances that make their knowledge claims possible. It also examines the ways in which independent anti-nuclear documentaries challenge these knowledge claims and the role of comic modes and irony in such contestations. In addition, the chapter deals with the Eurocentric nature of a sizeable section of writings on documentary theory.

Chapter 3 presents the notions of knowledge that inform this project. Discussions about the epistemic dimensions of documentary are examined in the context of Nāgārjuna's propositions on knowledge and Foucault's writings about power and knowledge. The chapter delineates the ways in which authoritarian assertions about the Indian nuclear project are produced in the state documentaries. This analysis was an important step in the course of the research and it helped to formulate the comic and ironic strategies of *Nuclear Hallucinations*.

Chapter 4, *Methodology: sending nuclear reactors to the land of tamasha*, provides a detailed account of the production phase of *Nuclear Hallucinations* and how the film and its processes developed through the course of the research. This chapter

explains how different methods like the use of strategies from street theatre, hallucinatory voice-overs, satirical impersonations, use of masks etc. emerged as part of my attempts to extend invitations to approach the knowledge claims of state documentaries as a *tamasha*.

Chapter 5 looks at live performances, which I did during the screenings of *Nuclear Hallucinations* across different locations, including London, Delhi and Bangalore. It explains how audience responses enabled me to develop the comic and ironic strategies of the project in an interactive manner. The chapter links the production and circulation phases of *Nuclear Hallucinations* and explains how they informed each other.

The last chapter summarises the main arguments of the thesis. It discusses the major outcomes of the research. In addition, it explains how my project uses the vantage point of *tamasha* to undermine authoritarian knowledge claims in pro-nuclear state films. This chapter lists the limitations of my work and provides pointers for future research.

1.11 Contribution to knowledge

The specific ways in which the project conceptualises and uses the notion of *tamasha* could be of use to other practitioners who have an interest in the possibilities offered by comic modes and irony to undermine authoritarian knowledge claims in documentary. *Tamasha* offers a fresh perspective to look at the sober as well as epistephilic dimensions of documentary with irreverence. This research explores the potential of using documentary strategies to move beyond the realm of reason to “point to the beyond of rational sense” (Hyers, 1974, p. 35). The live performances that accompany the screenings of *Nuclear Hallucinations* could add to the small media practices of Indian independent documentaries. Bringing Nāgārjuna’s ideas on the limits of knowledge into discussions about the epistephilic dimensions of documentary and other similar approaches of the research aims to move beyond the not infrequent Eurocentric debates in documentary theory. The

research also adds to the literature on Indian documentary and the analysis of the films on the Indian nuclear project.

Chapter 2

Contextual review

2.1 Introduction

In this chapter, I will provide an outline of the existing literature and films that inform my research. The aim of this chapter is to position my project amidst relevant documentary practices and contemporary academic discussions. A more detailed engagement with the theoretical formulations and filmic practices outlined here will be a part of my subsequent chapters.

Michael Renov's (2004) critique of the absolute truth claims of a sizeable number of films from the documentary tradition that aim to build an atmosphere of consent around their claims, is of relevance to the Indian situation where the documentary form was actively mobilized for the cause of nation-building. The post-colonial Indian state shared much continuity with the colonial state. The historicist account of a backward India, which needed to be brought to the present tense of history (Chakrabarty, 2008), was one of the common narratives shared by both the colonial and post-colonial states. The post-colonial state began a development project to cure India's 'backwardness' and a fetishized account of science and technology played a major role in this initiative. Following in the footsteps of its colonial predecessor, the independent Indian state used the documentary form to 'educate' the so-called masses. Films Division, established in 1948, played a central role in these documentary efforts. The organisational trajectory of Vigyan Prasara (established in 1989), the other state institution that this study is concerned with, is different from that of Films Division. Working under the Department of Science and Technology, Government of India, it endeavours "to promote and propagate scientific and rational outlook" (Vigyan Prasara, n.d.). However, there are many similarities between the films on science and technology produced by both organizations; a sizeable number of them are influenced by the rationalist documentary that Renov (2004) criticises. The pro-nuclear documentaries produced

by these organisations can be viewed as a part of the articulations of a nuclear nationalism, which imagines a consensus around the state's nuclear project.

In independent India, the nuclear project was seen as the epitome of projects that placed science and technology in the service of the nation (Abraham, 1998). Science became a legitimising trope for the independent Indian state under its first Prime Minister, Nehru. The initial years of independence were a time when the nascent post-colonial state faced a “crisis of authority” due to multiple factors like issues relating to the accession of princely states and inheriting the structures of the colonial state (Abraham, 1998, p. 24). Drawing upon Partha Chatterjee's (1993) argument about the role of the discourse of development in the self-definition of the state in independent India, Abraham stresses the pivotal role the statist idea of science as the “epitome of and metaphor for the modern” (Abraham, 1998, p. 26) played in this discourse. The nuclear project was positioned as the pinnacle of such a science. In his book chapter *The Violence of Postcolonial Spaces*, Abraham (2016) points out that in contemporary India, the nuclear project faces challenges and its failings are visible. In his words, “Where once nuclear power was a prime resource in the production of postcolonial sovereignty, the state must now support nuclear power at all costs in order to sustain its claim that it is in fact sovereign” (Abraham, 2016, p. 334). As a result, anti-nuclear activists get positioned as anti-nationals who are a threat to the wellbeing of the nation.

According to Srirupa Roy (2007), encountering and recognising the official imagination of nation contributes to the formation and reproduction of the nation state. This does not require a *belief* in that imagination. She argues that these encounters with the state include shoot at sight orders, wading one's way through the state bureaucracy, “the annual spectacle of national celebrations” and “the ponderous address of state-produced documentaries” (Roy, 2007, p. 29). As I have indicated in the first chapter of this thesis, if we view the nuclear project of the state in the light of this argument, the knowledge claims of the state documentaries about the benefits of nuclear power can be viewed as part of a set of practices which in

recent years have included sedition charges, arrests and state violence against anti-nuclear activists. The imagined consensus about the state's nuclear project has been challenged by different resistance movements including the anti-nuclear movement at Kudankulam as well as independent Indian documentaries ranging from K.P. Sasi's *Living in Fear* (1986) and Anand Patwardhan's *War and Peace* (2002) to Sreemith's *Get Up Stand Up* (2012). Within this landscape, how does my research operate to destabilise the authority of pro-nuclear documentary iterations as a *tamasha*? An awareness about the context that facilitates the production of such iterations can help to answer this question.

In the first chapter of this thesis, I have clarified that this research is interested in delineating the factors that enable the formulation of documentary claims. Bill Nichols (2001) has illustrated the role of institutional frameworks, filmmakers, as well as audience expectations in the framing of particular works as documentaries. Chapter 3 of this thesis will examine the factors that prompt networks around Indian pro-nuclear state films to label them as documentaries. In this chapter, one of my primary concerns is to locate the historical context from which the pro-nuclear claims of Films Division and Vigyan Prasar documentaries emerge. The processes of my research are a result of an engagement with this history. The history of the documentary form in India is certainly a "part of the larger narrative of global documentary history" (Vohra & Rajagopal, 2012, p. 18). However, despite their long history and the scale of their output, Indian documentary films do not feature prominently in much of the oft-cited canons of documentary theory. Since my research demands an engagement with such canons, I will first outline the Eurocentric trajectories within them.

Scholarly Acts..

What rebellion can you bring with master's words, frames, structures?

May be a day might arrive when the words will get possessed.

Then, they will howl, screech and cry with the grief of the silence of those without words.

On that day, exorcists will lose their tools and the words will scream, bloat and burst to pieces.

2.2 Documentary theory and Eurocentrism

Nornes (2013) has written about the Eurocentric nature of historicist accounts of documentary, which ignore the multiple histories of the documentary form.

Definitions of documentary range from “creative treatment of actuality” (Grierson, 1933, p. 7) to the view that it is a genre whose acceptability depends on complex negotiations between audience, filmmakers and participants as well as the demands of the media landscape in which it operates (Ellis, 2005). Many of the seminal works in documentary theory have been written without paying much attention to the documentary practices from the so-called non-western parts of the world. Very often, authors theorize about documentary and chart its history using examples from the “west” or films from the diaspora. Practices from other parts of the world will be lucky to find a brief mention under “third cinema”. As Nornes (2013) has pointed out, *Encyclopedia of the Documentary Film* (Aitken, 2006) did not have an entry on India.⁹

In *Claiming the Real II: Documentary: Grierson and Beyond* (2008), the author agrees that the book is limited to the English speaking world and he accepts

⁹ *The Concise Routledge Encyclopedia of the Documentary Film* (Aitken, 2013) which followed did have an entry on India, but it was not free of factually inaccurate blanket statements. For example, the entry states that “In the 1980s, and even later in the 1990s, no training in documentary film was available in India, filmmakers were either self-trained, trained by foreign TV crews shooting in India, or went abroad to pursue film studies.” (Deprez, 2013, p.404). The same entry talks about Mediastorm, “a group of female filmmakers” who “worked on social and political problems related to women.” (Deprez, 2013, p. 403). Mediastorm was a collective of women filmmakers who were trained at AJK Mass Communication Research Centre, Jamia Millia Islamia, New Delhi (Garga, 2007) which was established in 1982.

Burton's criticism of him, Jacobs, Barsam and Barnouw for "marginalising other work and traditions such as those of Latin America" (Winston, 2008, p. 283). However, he cannot avoid referring to these traditions as "outside the documentary heartlands"(p. 283). A large number of the films referred to in Bill Nichol's *Representing Reality: Issues and Concepts in Documentary* (Nichols, 1991) and *Introduction to Documentary* (Nichols, 2001) are from Winston's so-called "heartlands". In *New Documentary*, Stella Bruzzi criticises Nichols' attempts to impose a "'family tree' on documentary history" since it creates a "central canon of films that is deeply exclusive and conservative" (Bruzzi, 2006, p. 4). However, she acknowledges that the "emphasis of *New Documentary* remains the British, American and European...documentary traditions." (p. 2). According to her, expanding the book beyond these traditions "would have made the project unwieldy and probably incoherent" (p. 2). She adds that her focus is on contemporary documentaries that are easily available. Thus, in the age of Internet, while discussing performance and documentary, we read about Nick Broomfield and Michael Moore; but not about Paromita Vohra or Kidlat Tahimik. John Corner (1996) discusses British and US films in *The Art of Record: A Critical Introduction to Documentary*, but he does not find it necessary to add a prefix of "British" or "US" in the title of the book. However books on Chinese or Latin American documentaries find it important to engage with theorisation on documentary that emerges from the west (Chu, 2007) though films emerging from such locations are not a major concern of "existing English-language documentary histories and theoretical-critical anthologies" (Burton, 1990, p. 7).

My argument is not that all works in documentary theory are written from a Eurocentric perspective. Books like *Imagining Reality: The Faber Book of Documentary* (MacDonald & Cousins, 1998) have engaged with aspects of documentary filmmaking in Asia including India. Similarly, *A Companion to Contemporary Documentary Film* (Juhász and Lebow, 2015) does not limit itself to the documentary context of the so-called heartlands. My critique is against a general tendency in the writings around documentary theory, in which, for example, the

works of a filmmaker like Nick Broomfield are discussed in relation to documentary and performance whereas the documentary works of Mani Kaul - on the absolutely rare occasions in which they are ever discussed - become 'Indian' documentary films; as a result, they do not complicate the history of THE documentary. A sizeable section of academic writing on documentary theory and history starts with narratives about the well-hated 'father' figure of Grierson and treats direct cinema or Rouch's cinema verite as not just significant phases in British, US or French documentary, but as milestones in 'THE history' of 'THE documentary'. While filmmakers, ideas and film practices do cross national boundaries with ease, these 'milestones' and auteur figures help to construct a "heartland" for documentary. Any account that deals with documentary practices in India, which belongs to the elsewhere of these heartlands despite the presence of vibrant documentary cultures, should begin by "drawing a new map of the documentary world where Europe has been provincialized" (Nornes, 2013, p. 210). However, Chakrabarty (2008) has referred to the difficulty of provincializing his hyperreal Europe, especially within the institutional structures of academia. Since the project of provincializing Europe "cannot ever be a project of shunning European thought" (Chakrabarty, 2008, p. 255), in this thesis I engage with the frequently quoted works in documentary theory. However, this engagement is marked by an awareness that Indian documentary landscapes do not exist for most of these works.

I am situating my study in a framework, which will argue that distinctive histories and legitimising tropes have a role in authorising documentariness (Cowie, 2011) in different contexts. So, instead of the trajectory of 'THE Documentary' which moves from "earnest exposition and purist observation" to the "post-documentary era" (Corner, 2000, p. 687), my study will acknowledge the presence of a far more messy terrain of "documentaries", whose diverse contexts shape and in turn are shaped by their documentariness. My particular focus will be on the documentaries that emerge out of the narratives around the Indian state's nuclear project. This contention about the role of distinct histories in authorizing documentariness is not based on a denial of the global nature of the documentary form (Vohra & Rajagopal,

2012). In fact, Arvind Rajagopal stresses the difficulty of charting an “Indian” documentary film history. My argument is that practices that became legitimised as documentary in the Indian scenario need to be viewed alongside the circumstances which made their legitimisation possible. Discussions about these practices and circumstances should ideally be a part of the conversation about the global documentary form as well. The term ‘Indian’ documentary itself is a problematic one. Documentary practices are very diverse in places as far apart as Tamil Nadu and Manipur. My use of the term is based on the cartographical category called India. However, this approach acknowledges that many ‘Indian’ documentary films contest this category itself.

In the following section, I will provide a brief outline of the historical processes that shaped the articulation of pro-nuclear knowledge claims in Films Division and Vigyan Prasara documentaries. Here I am not attempting the almost impossible task of providing a comprehensive history of the documentary form in India within a few pages. Instead, my effort is to make use of the writings of Srirupa Roy (2007), Jag Mohan (1969), B.D.Garga (2007), Paromita Vohra (2011, 2012), Nicole Wolf (2013), Aparna Sharma (2015), Jayasankar & Monteiro (2016), Peter Sutoris (2016) and others to place the documentary efforts around the Indian nuclear project as part of broader practices. Academic work on Indian documentary is an emerging field. So, in addition to the limited books and journal articles on the topic, I have also relied on PhD theses including those of Mulugundam (2002), Battaglia (2012) and Lucia King (2012) to form my arguments.¹⁰

2.3 Historical background of documentary films in India

A brief account of certain phases in the history of documentary films in India can be used to trace the development and legitimisation of the documentary form and its use as a “constructing discourse” (Cowie, 2011, p.5). However, I am attempting this with an awareness about the multiplicity of practices which in Wolf’s (2013) opinion can fill an encyclopaedia. In a non-fiction landscape which includes works

¹⁰ I have not referred to writings that emerge after October 2016.

ranging from public relations films like *India Innovates* (Biswas, 2007), produced by Public Diplomacy Division of the Ministry of External Affairs, to long-format news reports which get categorised as documentary (NDTV, n.d.) or the essay films of Amar Kanwar, it is important to examine the conditions that enable the documentariness of particular works. My research is interested in such an examination. However, due to the constraints of any PhD project, this one largely limits itself to the context of documentary narratives around the Indian nuclear project.

The crucial influence of the state in the historical processes behind the formulation of the documentary form in India (Jayasankar & Monteiro, 2016) is a major factor that needs to be taken into account while examining the validation of pro-nuclear knowledge claims in documentary. However, this influence of the state is not a unique Indian phenomenon; similar trajectories can be found elsewhere in the world. Film cultures certainly move beyond the territorial nation (Vasudevan, 2010). In addition to the transnational dimension of state influences on the documentary form, the porous networks around films have facilitated conversations between Indian documentary films and the documentary scene beyond its borders through collaborations, co-productions, exchange of filmmakers as well as film festival screenings. However, what became legitimised as “documentary” in the Indian context also bore the distinct imprint of multiple Indian realities. The active mobilisation of the documentary form by the state in both colonial and post-colonial times ensured that its history was markedly different from that of fiction films, although many film practitioners worked across both mediums.

The first actuality film was screened in India in 1896 within a year of the first Lumiere film screenings in Paris. Harishchandra Sakharam Bhatavdekar is often credited as India’s first filmmaker (Willemen & Rajadhyaksha, 1999). He made many actualities and newsreels including *The Wrestlers* (Bhatavdekar, 1899) and *Landing of Sir M.M. Bhowmuggree* (Bhatavdekar, 1901). Drawing on the works of Garga (2007) and others, Wolf (2013) has given a concise account of the use of the

documentary form in British war propaganda during the world wars and in the Indian independence struggle. She traces the legacy of “what is now called the ‘independent documentary film movement in India’ to the work of filmmakers whose films on the independence movement were often banned by the colonial state” (Wolf, 2013, p. 366). She also hints at international influences “beyond the often privileged influence of the Griersonian model” through examples of Indian filmmakers in colonial India who were trained abroad and were familiar with the works of Joris Ivens and Sergei Eisenstein (Wolf, 2013). Vasudevan (2011a) traces the government efforts on documentary film back to the 1910s, although the Film Advisory Board formally came into being only in 1940. Giulia Battaglia argues that “since its first exhibition the cinema programme or ‘event’ also included early documentary forms” and by the time of the Second World War, documentary in India had “established itself in relation to an audience” (Battaglia, 2012, p.92).

By 1939, the indigenous Indian fiction film industry was third in the world in terms of its output while the colonial government in India did not have much expertise in using the film medium and its contact with the indigenous film community was limited to collecting taxes or censoring films (Garga, 2007). The use of the documentary form for war propaganda and the work of Film Advisory Board and later Information Films of India cannot easily be viewed in terms of a paradigm of state versus independent filmmakers. There was considerable give and take; major figures of the fiction film industry like J.B.H Wadia and V. Shantaram, with strong nationalist sympathies, took leading roles in the colonial propaganda initiative. Both Wadia and Shantaram considered it important to work against the spread of Fascism. The early years of Indian cinema were a period of complex negotiations. For example, during this period, J.B.H Wadia and his brother used to make fiction films which managed to circumvent the strict censorship of the colonial government by referring to the nationalist struggle allegorically (Thomas, 2005). There were criticisms of cooperating with colonial propaganda. But, “the possibilities for the future that the idea of a Government film unit contained” (Shaw in Garga, 2007,p.68) were not overlooked by everyone.

For the purposes of my study, the institutional measures taken by the colonial government to facilitate the reception of its documentaries and newsreels are significant. In 1943, the Defence of India Act was amended and all distributors were forced to screen the Indian News Parade and to pay for it (Willemsen & Rajadhyaksha, 1999). These compulsory screenings did have an impact on viewing patterns. While topicals were an “‘added attraction’” to the fiction films and were highly popular in the first decades of the 1900s (Garga, 2007, p.15), by the 1940s, following the Act, cinema halls used to advertise the timing of the main film so that people could avoid the compulsory screenings (Vasudevan, 2011a). In addition to this, the colonial government also controlled the rationing of film stock during the wartime. During the peak of the Quit India movement led by Gandhi, several newsreels, short films and documentaries on the independence movement were seized and possibly destroyed by the colonial state (Garga, 2007). I would argue that these measures, along with the non-fiction films produced by the colonial state with their efforts to “communicate a fixed meaning” (Vasudevan, 2011a, p. 76), can be viewed as attempts at constituting a reality which could not tolerate questions about the basis of its construction.

Prior to independence, in 1946, Information Films of India was dissolved and compulsory documentary screenings were discontinued. India became independent in 1947 and Films Division was established in 1948. As the “central film producing organisation of the Government of India”, Films Division had a mandate to produce and distribute documentaries and non-fiction programmes with an emphasis on their educational and motivational value (Films Division, n.d.).¹¹ Vasudevan (2011a) has pointed out the continuities between Films Division and its colonial predecessors in terms of personnel as well as policies. Both Vasudevan and Garga (2007) have touched upon the role of individual filmmakers, the film community and the

¹¹ Here and later in the chapter, I am referring to the Films Division website which contains a section which elaborates on the organization’s mission, responsibilities and activities since its inception.

national elite in arguing for the prospect of using films for educational purposes and the need for compulsory film screenings.

In independent India, Section 12(4) of the Cinematograph Act 1952 made it compulsory to exhibit approved films in cinema theatres. Films Division had a mandate to supply these approved films. Despite the continuities, what is significant is the reinvention of “documentary film as the handmaid of a national rather than a colonial state” and this was part of the larger project of reimagining “the new, postcolonial India” (Roy, 2007, p. 38). Srirupa Roy (2007) has given an exemplary account of how a distinctive state documentary characterised by boredom and non-resonance helped in the production of the state as a “particular kind of authoritative entity” (p. 62); she stresses the role of iteration in this. During the first few decades after independence, Films Division had a considerable hold over the production and distribution of documentary films. Anuja Jain has elaborated on the need to question “our only summarization of Films Division as a statist tool” (Jain, 2013, p. 16). As an organisation with a history that spans more than half a century, Films Division has also been a ground for experimentation for a number of filmmakers who experimented with the documentary form; it has served as a site for debates about documentary regarding its aesthetics, content, the role of the filmmaker, educational value of the film etc. However, Films Division’s role in consolidating “a statist vision of nationhood” (Roy, 2007, p. 47) has been significant. As Roy points out, this was achieved in collaboration with other state organs of communication.

Giulia Battaglia has criticised what she calls a “nationalist historiography” of Indian documentary (Battaglia, 2012, p.92). She critiques academics like Srirupa Roy for following the argument of the nationalist historians of Indian documentary, which according to her include B.D.Garga, Narwekar and Jag Mohan. She criticises the nationalist historians and their so-called followers for treating film as a fixed text, both in the analysis of films in the colonial period and in the discussions surrounding the work of Films Division. According to her, this reading does not give enough agency to the people behind these films and the audience. In the

context of Films Division, I do agree with Battaglia about the need to acknowledge the multiple registers in which it operates and the agency of both filmmakers and audience. However, while acknowledging the diversity within Films Division's work, one cannot ignore its role in consolidating a visual narrative for the state (Roy, 2002) and the boredom a large part of its work produced. Sources ranging from the 1967 report of the state-appointed Chanda Committee to a recent article in the newspaper *Hindustan Times* (Bhaskaran, 2014) refer to the boredom of watching a particular kind of state documentary. According to Srirupa Roy (2007), this boredom or non-resonance produced by the state documentaries had a definite influence in enabling the viewer to identify the audio-visual narratives of the state. I will extend her arguments and contend that the state's active investment in the form also had an impact on what came to be identified and legitimised as documentary in India.

The efforts to 'educate' an audience who came to the theatres to partake in the alluring experience of commercial cinema through the compulsory screening of state documentaries or newsreels may not have served its desired aims. But my contention is that it could have led to the legitimisation of the claims of certain tropes about their access to "reality" as against the 'unreal' world of commercial fiction films. Although the compulsory screening of approved films is no longer strictly imposed in contemporary India (Seetharaman, 2013), the long history of these screenings (including the ones in colonial times) meant that they had a significant role to play in deciding what the audience recognised as documentary. Authoritarian and disembodied voice-overs, expert opinions and a general sense of boredom came to be associated with the documentary form. In Thomas Waugh's words, "Films Division has ensured at least one consensus among its independent successors, and this is in terms of audience practice. Films Division fare has been so universally hated that commercial theatres are the last place anyone will ever want to show a documentary!" (Waugh, 2011, p. 242). He traces the independent Indian documentary filmmakers' resourceful strategies in building unconventional viewing platforms to this history of the documentary form. So my argument in this project is

that in the Indian context, the epistemic dimensions of documentary and the knowledge authorized by it through its claim as a record of “reality” need to be seen together with the state’s use of the form to narrate a certain knowledge, especially in the case of science and technology-related films.

In contemporary India, the cacophony of about 393 private satellite news and current affairs channels (Government of India Ministry of Information and Broadcasting, 2014) might seem to be enough to drown out the significance of statist narratives about its nuclear project. But, as Chakravarty and Gooptu (2000) point out, the idea of the nation is a domain of struggle where diverse ideologies contest for legitimacy. They argue that the liberalization of the Indian economy and the arrival of satellite television added the figure of the consumer citizen to the state narratives. This addition was not the result of a radical departure. Instead, the corporate imagination drew upon and elaborated the visual strategies of the state. They cite the example of private companies that used these strategies in their advertisements for consumer products to fashion the middle class as the legitimate citizens (Chakravarty & Gooptu, 2000) in the imagined consumer republic of India. In terms of the nuclear project the overwhelming consensus in the mainstream media is that “nuclear power provides clean fuel to develop a strong India” (Kaur, 2012, p. 165). For example, in 2014, the English news channel Headlines Today celebrated “India’s first Thorium based Nuclear Reactor” in its Good News Today section (Headlines Today, 2014). The explanations about indigenous technology breaking new ground in the video could easily have belonged to a Vigyan Prasara film.

In contemporary India, documentary practices which are aligned to “what is now called the ‘independent documentary film movement in India’” (Wolf, 2013, p. 366) strongly contest the state’s nuclear narratives. As Shweta Kishore (2013) points out, in the post liberalized Indian context, documentary films are often a terrain of dissent where the rhetoric of the state and corporate media are challenged. Although the figure of Anand Patwardhan is often viewed as the harbinger of the present

independent documentary film movement in India, Giulia Battaglia (2012) questions this notion and traces another link between the fiction films of the Indian new-wave or parallel cinema and the present-day independent documentaries. Both Battaglia and Wolf (2013) link today's independent documentaries with the non-fiction films and newsreels on the Indian freedom movement, which were often banned or confiscated by the colonial state.

The term “independent” in the context of Indian documentaries needs a bit of elaboration. Jag Mohan (1990) discusses the presence of independent filmmakers who predated the documentary efforts of the colonial state and continued through the initial years of the post-colonial Indian state until their efforts became consolidated in the formation of the Indian Documentary Producer's Association (IDPA) in 1956. The independents worked with Films Division as well as non-state patrons of short films like Shell Film Unit. His view of independents is in terms of a public sector versus private sector model. However, the presence of filmmakers who saw themselves as independent practitioners cannot be refuted. Srirupa Roy (2007) sees the relationship between the post-colonial Indian state and independent artists during the initial years as collaborative. It is difficult to catalogue the diversity of practices by different sets of independents over a span of several decades under one label. The relationship between the state and independent filmmaking community involved extensive negotiations, and there were spaces of accommodation as well as experimentation and subversion. But as Wolf (2013) points out, the time around the Emergency (1975-77), when India experienced dictatorship, can be seen as a point of departure from when the independent documentary film movement emerged in its present form by challenging the statist narratives of the nation. Diverse factors like the advent of video technology in the 1980s (Battaglia, 2014), the use of the documentary form in social movements, and the rise of women documentary filmmakers, all contributed to the rich array of practices which are seen today as belonging to the independent documentary film movement. In 2004, the Films Division-run Mumbai International Film Festival (MIFF) became a site of conflict regarding censorship and the festival's dubious selection procedure. This resulted in

the formation of VIKALP: Films for Freedom by independent documentary filmmakers. The forming of VIKALP is seen by many critics as “a moment when the Indian documentary movement names itself.” (Kapur, 2008, p. 40).

However, even in the contemporary scenario, I would argue that viewing the documentary practices of state and independent filmmakers as mutually exclusive will not be very productive.¹² While filmmakers like Anand Patwardhan make films without taking any state funding, many filmmakers who identify themselves with the independent documentary film movement make films with trusts like Public Service Broadcasting Trust (PSBT), which receive funding from government ministries. During my fieldwork, a filmmaker who works for Films Division spoke about how he attended both MIFF and VIKALP screenings in 2004 (Personal Interview, 2014). With the setting up of FD zone, which screens films from the Films Division archive along with other films, the interaction between Films Division and independent filmmakers has become even more dynamic. Vigyan Prasar relies mainly on outside producers to make its films. For example, the production of the films that were made as part of the *Public Awareness Campaign on Nuclear Energy* was outsourced.

In the sphere of ‘independent’ documentaries, *Nuclear Hallucinations* places itself within the traditions of films that become categorised as activist (Battaglia & Paolo, 2014), alternative¹³ (Mulugundam, 2002) or political documentaries (Lal, 2005). Though such a classification can be questioned on various grounds, it has a pragmatic value in this work. Since I am using the term independent in a broader sense, classifying specific practices and films that belong to “critical independent documentary practice” (Jayasankar & Monteiro, 2016, p. 2) is important for my project. The anti-nuclear films that I discuss in this thesis, ranging from *Buddha*

¹² Jayasankar and Monteiro (2016) also make a similar argument in *A Fly in the Curry: Independent Documentary Film in India*.

¹³ Mulugundam uses the term alternative documentary to denote films that challenge “dominant notions of development as envisioned by the state and the market” (Mulugundam, 2002, p. 90).

Weeps in Jadugoda (Shriprakash, 1999) to *High Power* (Indulkar, 2013) belong to this category.

But, this categorisation needs to take into account the criticism about the limitations of defining documentaries which engage in a direct confrontation with the nation state “as necessarily *the* political form of documentary” (Sharma, 2015, p. 18). Similarly Paromita Vohra (2011) challenges the tendency to equate a particular documentary style with ‘political-ness’. This project does not rely on such limited categorisations of political documentaries that Sharma and Vohra criticize. It is difficult to separate ‘political’, ‘activist’ or ‘critical independent documentary practice’ from the larger territory of independent documentary films in India in terms of content, form or even funding and circulation practices (Deprez, 2015). In such a scenario, my research relies on Rancière’s definition of politics that states, “The essence of politics is dissensus” and “Dissensus is not a confrontation between interests or opinions” but “the demonstration (*manifestation*) of a gap in the sensible itself” (Rancière, 2010, p. 46). As a result, this research draws from the processes of critical independent documentary in India that attempt to create a gap in the sensible through their practices. Thus, *Nuclear Hallucinations* is part of the “layers of sedimented practice” and disjointed moments of history (Jayasankar & Monteiro, 2016, p. 2) that are created through the legacy of films on the Indian freedom movement that were confiscated by the colonial government, the polemical works of Anand Patwardhan, Mani Kaul’s experiments with the documentary form (King, 2012), the multiplatform essayist work of Amar Kanwar, the fearless performances in the films of Paromita Vohra and much more. An understanding of this terrain will require an approach that treats the processes behind the formation of a film with as much importance as it treats the edited film. The links between critical independent documentaries and social movements (Jayasankar & Monteiro, 2016), as well as the way in which these films work through networks of solidarities that help in the production as well as circulation phases, need to be mapped through further research. However, such an endeavour is beyond the scope of this project. At the same time, *Nuclear Hallucinations* traverses the pathways created by such

diverse initiatives including Odessa,¹⁴ video rallies,¹⁵ vikalp and cinema of resistance.¹⁶

My research views the practices of political documentaries in India which combine production, circulation as well as activism (Jayasankar & Monteiro, 2016) through the framework of small media. In her PhD thesis, Battaglia (2012) discusses listservs like *docuwallahs*, which facilitate conversations between Indian documentary film practitioners and others interested in the documentary form, as a small media practice (as described by Sreberny-Mohammadi and Mohammadi (1994)). Using the context of the Islamic revolution in Iran, Sreberny-Mohammadi and Mohammadi (1994) have elaborated on the role of small media forms like the cassettes containing the speeches of exiled leaders in organizing popular opinion. They mention the Indian independence movement led by Gandhi while referring to strategies of political mobilization that go beyond the conventional use of mass media. A more contemporary example of the effective use of small media in the Indian context can be seen in its deployment by the ultra-nationalist Hindu right-wing, which made use of political performances (Hansen, 2004),¹⁷ as well as video chariots (Pinney, 2004), recordings of rabid speeches and suchlike to fashion the reality of the Hindu India (Brosius, 2005) that needed to cure itself of a varying set of ‘anti-national’ forces, among whom the Muslim minority is accorded a prominent position. Here I would argue that Indian independent documentaries - which mainly rely on non-commercial screening networks (Waugh, 2011) and bring together a group of people who often partake in discussions that are catalysed by the documentaries - could be seen as a small media practice. The prevalent practice of a

¹⁴ Odessa, filmmaker John Abraham’s collective, was active in the state of Kerala in the 1980s. With a 16mm projector, the members of the group travelled to diverse locations including villages, educational spaces as well as prisons to screen world cinema, avant-garde works as well as documentaries (Battaglia, 2014). Voluntary donations from viewers were used to fund the activities of the collective, including film production.

¹⁵ In Kerala, activist networks were mobilized to conduct video rallies where filmmakers travelled across the state with their films (Jayasankar & Monteiro, 2016).

¹⁶ With chapters across India, cinema of resistance is a “community-based grassroots cultural movement” (‘Cinema of Resistance’, 2014), which began in 2006.

¹⁷ According to Thomas Blom Hansen (2004), political performances can be viewed as magnified varieties of the everyday performances of self as elaborated by Erving Goffman (1956).

filmmaker travelling across the country with his/her documentary to screen it at various locations including community halls, class-rooms and film festival venues¹⁸ might seem unremarkable in the context of conceptualizations that privilege the impact of mass media. However, this practice, which often circumvents censorship (Jayasankar & Monteiro, 2016) and initiates passionate discussions, creates spaces to articulate the unutterable.¹⁹ In the next section, I will attempt to locate the documentary iterations about the state's nuclear project amidst this complex terrain of diverse documentary assertions.

2. 4 Films Division and Vigyan Prasara documentaries about the nuclear project

The pro-nuclear documentaries of Films Division need to be situated within the context of the organization's stated aim of "Educating and motivating the people towards enlisting their active support and participation in the implementation of national programmes" (Films Division, n.d.). From the late 1950s onwards, films like *Uranium* (Ahmad, 1957) and *From Tiny Grains of Sand* (Chaudhuri, 1961), which build the pro-nuclear narrative, are part of its documentary endeavours. The 1982 Films Division documentary *India - A Tryst with Destiny* (Chaudhary, 1982), which commemorates thirty-five years of Indian independence, devotes a significant sequence of the film to eulogizing the achievements in the field of nuclear energy. Similarly, another Films Division film *Science and Technology* (1968) lists nuclear energy among the means of plenty science has bestowed on the nation. So what were the key characteristics of the Films Division's documentary output around the nuclear project of the Indian state? I outline this below, although a more detailed

¹⁸ Such screenings take place without the presence of the filmmaker as well.

¹⁹ While many examples can be cited to strengthen this argument, I find the case of the film *Khoon Di Barav-Blood Leaves Its Trail* (Fatima, India, 2015) particularly relevant. This film on enforced disappearances in the Indian administered Kashmir has been screened at many venues inside (and outside) India despite its content, which includes a strong articulation of the Kashmiri desire for independence from India. Like another prominent documentary on Kashmir, *Jashn-e-Azadi: How We Celebrate Freedom* (Kak, 2007), the film does not have a censor certificate and relies on private screenings. In India, both fiction films and documentaries are subject to pre-censorship. For a more detailed discussion on the censorship of documentary films in India, please refer to *A Fly in the Curry: Independent Documentary Film in India* (Jayasankar & Monteiro, 2016).

analysis of films about nuclear energy from both Films Division and Vigyan Prasara will be a part of my third chapter.

Raminder Kaur positions Films Division documentaries about the nuclear project in the category of nuclear revelations, which according to her comprise “narrative, image and performance” (Kaur, 2012, p.144) that carry selective utterances and information about nuclear energy. The films on the topic that I was able to access at the Films Division archives include those about the different aspects of nuclear energy and films that mention nuclear energy among the scientific achievements of the nation-state. Biographies of scientists, films on scientific organizations and films that explain scientific processes also contain references to the nuclear project. Apart from these, there are newsreels on the various aspects of the topic and a group of films which caution against the dangers of nuclear weapons. The films that deal with the perils of a possible nuclear war avoid references to the Indian nuclear weapon test in 1974, although most of them were made after that.²⁰

Srirupa Roy’s argument that the “contending imaginaries produced by the Films Division” point to the “fragmented nature of the statist vision” (Roy, 2007, p.48) is relevant to the context of its films around the nuclear project.²¹ Spread over four decades and made by different filmmakers at various points in history, they have considerable differences as well as similarities. For example, a film like *From Tiny Grains of Sand* (Chaudhuri, 1961), which explains the necessity of nuclear energy

²⁰ During the research, I also came across a Films Division news magazine titled *Uranium Radiation in Jadugoda* (Kumar, 2000), whose narrative was interesting. Made much later than the other Films Division films discussed in this study, this news magazine looks at how Uranium mining in Jadugoda has *adversely* affected the lives of the indigenous people who live near the mines. The voice-over of *Uranium Radiation in Jadugoda* is not overtly critical of the nuclear establishment. However, through visuals and the placement of interviews, it manages to convey how uranium mining has severely affected the indigenous people of the area.

²¹ Films Division was not the only state institution that was involved in articulating the audio-visual vocabulary of the state. In the arena of non-fiction programming, the role of the state broadcaster Doordarshan and other communication wings of the Government of India also need to be studied to decipher the recurrent tropes around the state-sanctioned audio-visual imagination about its nuclear project. However, such an elaborate endeavour is beyond the scope of my PhD, which is around documentary practices that are outside broadcast contexts.

and elaborates on the processes behind the mining of atomic fuel, follows the ponderous style that was characteristic of a large section of Films Division films. On the other hand, *Atomic Energy and India* (Chandra, 1972) directed by Vijay B. Chandra, who is categorised as a filmmaker associated with the experimental phase of Films Division (Gangar, 2006), endeavours to be formally innovative and relies on montages, text and music to build its narrative and avoids voice-over narration.²²

Despite these differences, the films around the nuclear project produced by Films Division work together to create documentary iterations about the necessity of nuclear energy, which they claim is essential to fulfil the needs of the nation. They enlist various tropes such as explanatory voice-overs, evidentiary editing, animation and graphics to facilitate their documentary utterances. These films envision nuclear energy as a way to obtain limitless energy (Dutta, 1978), and they do not mention the links between nuclear reactors and nuclear weapons. Instead, they weave a narrative in which the atom is a tameable monster that can cure poverty and liberate India from the waiting room of history.

The documentary assertions of Vigyan Prasar around the nuclear issue should be viewed in the context of its filmic practice, which is different from that of Films Division. In its efforts to instil a scientific outlook among the nation's population, Vigyan Prasar enlists the service of interactive CDs, activity kits, radio programmes and suchlike. The audio-visual material produced by the organization includes factual material as well as fiction. Vigyan Prasar films are often screened in the context of initiatives such as the *Public Awareness Campaign on Nuclear Energy*, which combine film screenings in colleges and schools with interactive discussions, speeches and quizzes. Here its initiatives can be seen to have an existence similar to the practices of independent Indian documentaries, which travel to villages, schools,

²² Amrit Gangar puts forward what he calls the "Cinema of Prayoga" (Gangar, 2006, p.9) to complicate the notions about the experimental in the Indian context. He and other scholars have identified phases in Films Division's history which stimulated formal experimentation. Due to time and logistical concerns, I will not endeavour to unearth more details about these junctures in Films Division's history.

community halls and other such venues, where very often the documentary is part of a larger conversation about the topic concerned. Although Vigyan Prasar has a broadcast presence, its documentary output on nuclear energy as part of the *Public Awareness Campaign on Nuclear Energy* is primarily shown in non-broadcast context.

What was the nuclear narrative articulated by these documentaries? A more detailed analysis of these films forms part of the third chapter of this thesis. The films that are part of the *Public Awareness Campaign on Nuclear Energy* were the result of a collaboration between Vigyan Prasar and the Nuclear Power Corporation of India Limited (NPCIL). Made between 2012-13, these films have much in common with the sleek production styles of the satellite news channels, which target an urban middle class audience. This is not surprising because the production companies involved in making these films come from the post-liberalised Indian media landscape where competition among private players prompts them to vie for the very short attention span of viewers. For example, the New Delhi-based Pulse Media Pvt Ltd, which made the film *Safe Haven - Safety of Indian Nuclear Power Plants* (Kondapalli, 2012-13), lists a host of clients ranging from National Geographic and Asian Paints in its website; Vigyan Prasar is listed among its government clients (Pulse Media Pvt. Ltd, n.d.). So, instead of the ponderous style, which is often attributed to the state-sponsored non-fiction films, *Safe Haven-Safety of Indian Nuclear Power Plants* (Kondapalli, 2012-13) attempts to dazzle the viewer with fast edits, split screens and visual effects.

However, in terms of content, the Vigyan Prasar films follow the dominant pro-nuclear narrative of Films Division documentaries. Made after the Fukushima disaster and the public protests against nuclear plants in India (especially at Kudankulam), these films declare in no uncertain terms that Indian nuclear plants are safe from tsunami (Kondapalli, 2012-13) and that nuclear energy is essential for the progress of the nation (Rahman, 2012-2013). The tropes they use to make these assertions are similar to the ones employed by many of the Films Division

documentaries on the topic, although these tropes have definitely become more sophisticated in the Vigyan Prasara films.

2.5 Documentary and knowledge

While analysing the documentary narrative about the Indian state's nuclear project in a selection of Films Division and Vigyan Prasara films, I am aligning their knowledge claims with a broader account of modern science in the Indian context, where science is often used as a tool to legitimise the position of the state and the Indian elite (Nandy, 1988). My research treats the nuclear narrative produced by these films as a part of a reality in which assertions that position nuclear energy as a national achievement and radiation as benign (Goldmine Goldmineltd, 2013) co-exist with the imprisonment of anti-nuclear protestors and police violence against them.

In chapter three, I will explore these ideas in detail and will enter into a broader discussion about how documentary becomes a favoured form to assert knowledge claims. Bill Nichols (1991) aligned documentary realism with epistophilia. Nichols' notion of epistophilia was critiqued by Renov for situating documentary "on the side of conscious rather than unconscious processes" (Renov, 2004, p. 98). The relationship between knowledge and documentary was further explored by Elizabeth Cowie (2011). In the Indian context, Mulgundam (2002) traces the links between truth and knowledge in the documentary form. According to her, epistophilic aspects of documentary get redefined according to the nature of the audience. She points out the role of personal experience in this redefinition.

Just as films like *Clearly Nuclear: Indian Nuclear Power Programme* (Rahman, 2012- 2013) or *Nuclear Power: A National Achievement* (Gupta & Gupta, 1980) can be seen as a set of practices which include land acquisition and police firings, anti-nuclear films made by independent documentary filmmakers in India can be viewed as part of practices such as protest marches, hunger strikes and street processions against the state's nuclear project. Anti-nuclear films including Patwardhan's *War*

and Peace (2002), Shri Prakash's *Buddha Weeps in Jadugoda* (1999), K.P Sasi's *Living in Fear* (1987), Amudhan's *Radiation Stories* series (2010-12), Sreemith's *Get Up, Stand Up* (2012), Yamini Parameswaran and Suresh Narayanan's *Stolen Democracy* (2012), Manila C. Mohan's *Anugundu -The Atom Bomb* (2012), Satish K's²³ *Voices From the Daughters of the Sea-Koodankulam* (2012) as well as Pradeep Indulkar's *High Power* (2013) and *Jaitapur Live* (2014) have challenged the truth claims of the state's nuclear narrative. Many of these films employ humour and irony to problematize the state's pro-nuclear discourse. Anand Patwardhan's *War and Peace* (2002) is a notable film in this regard. An analysis of the film will help to position my own interventions, which attempt to destabilise authoritarian pro-nuclear knowledge claims in documentary through comic modes and irony, in relation to his.

2.6 Jung Aur Aman/War and Peace

The film begins with images of Gandhi's death. To situate the context of nuclear proliferation, Patwardhan's first person voice-over links these visuals to a series of diverse images ranging from those of mushroom clouds to the sufferings in the aftermath of the atom bomb blast in Japan. *War and Peace* juxtaposes the non-violent Gandhian worldview with the language of the nuclear bomb. The non-violent narrative is articulated through voices including those of villagers from India, Pakistani school girls, peace marchers, anti-nuclear activists, Hibakushas²⁴ and ordinary people from both India and Pakistan. On the other hand, the film presents the narratives of the nuclear bomb that inspire the Hindu right in India, the Muslim right in Pakistan, as well as ultranationalist sentiments on both sides of the border. Patwardhan places the jingoistic articulations around the bomb within the structures of the international military industrial complex through visuals of defence expos, texts about exponential defence budgets and his own voice-over. The close link between the civil and military aspects of the nuclear project is also dealt with in the film. *War and Peace* does not confine itself to the borders of India and Pakistan.

²³ The film credits Satish.K as the director. The concept is from Anitha.S and Satish.K.

²⁴ Hibakusha is the Japanese term for those who survived the atom bomb blasts.

Instead, it travels to the USA and Japan to chronicle the horrible after-effects of the atom bomb blasts in Hiroshima and Nagasaki. In Japan, images from the Hiroshima Peace Memorial Museum and testimonies about the blasts bear witness to one of the most tragic incidents in history. On the other hand, in the USA, the military industrial complex and jingoism prevent an exhibition at the Smithsonian Museum from dealing with the horrors of Hiroshima and Nagasaki with any amount of reflexivity in terms of the role of the USA as a perpetrator. The 1 hour 45 minute film²⁵ ends with an epilogue that brings home the senselessness of violence. In this epilogue, visuals of the 9/11 attack on the World Trade Centre in the USA and its aftermath appear on screen without any sound. The voice-over that follows invokes the words of Mahatma Gandhi to reiterate the meaninglessness of any kind of victory in a nuclear war. The film ends with a still image of Gandhi. Thus, *War and Peace* begins and ends by invoking Gandhian ideals of non-violence. The precariousness as well as relevance of such ideals in an atmosphere of nuclear proliferation is a constant theme throughout the film.

In *War and Peace*'s juxtaposition of the two narrative strands of, on the one hand, the language of nuclear proliferation and, on the other, that of Gandhian non-violence, comic modes and irony play a pivotal role. Patwardhan's voice-over aligns itself with Gandhian non-violence. The framework of the film privileges the articulations in favour of peace made through interviews with radiation-affected villagers, ordinary people from India and Pakistan, Gandhian activists and similar. Placed against these, jingoistic statements about the need for the nuclear bomb, 'rational' arguments from nuclear scientists and shots from defence expos appear ludicrous. Linda Hess talks about these juxtapositions in her article on *War and Peace*. These juxtapositions and the resultant irony also point out to the viewer that "You can't leave out anything. . . Do not forget anything. Expand your mind and heart to comprehend the multiple, difficult realities of our world and our history" (Hess, 2003, p. 158). Patwardhan successfully incorporates satirical performances by Dalit activists to underline the anti-nuclear stance of his film. He also uses text to

²⁵ There is also a shorter version of the film.

bring out the irony of escalating defence budgets in an India that is still fighting poverty. He uses the music of the Sufi band Junoon to highlight the senselessness of the arms race between India and Pakistan, where “[t]here is no rest for a moment” when human destiny itself is ephemeral (Patwardhan, 2002). Apart from juxtapositions, Patwardhan also employs an interviewing style²⁶ that opens up the absurdity in a particular point of view. For example, in Mumbai, Patwardhan questions those who celebrate the nuclear tests of 1998 until they argue that India has technology that can eliminate nuclear weapons before they fall on the ground. In another instance, at Pokhran town, whose name is synonymous with the Indian atomic tests conducted in the area, a supporter of the right wing ruling party BJP argues, for the camera, that the nuclear tests have made Pokhran a household name. Patwardhan relentlessly questions him till he says that when compared with the fame the area has earned through them, the possible threat to the health of the nearby population from the tests is a worthwhile cost. Similarly, a music video that attempts to counter the criticisms against the Indian nuclear tests in 1998 is used to evoke a comic response in *War and Peace*. This music video projects happy faces of Indians from various sectors of life who sing that they are proud to be Indians. Military might is the cornerstone of this sense of pride; the soldier has a prominent position in this narrative. In the subsequent sequence of the film, Patwardhan juxtaposes this sense of bravado with the resentment of villagers at Khetolai, the nearest village to the Pokhran test site. A more scathing and ironic use of the lines of the music video occurs towards the end of the film. Over the music track that declares “we are proud to be Indian”, visuals from the secret recordings made by *Tehelka*, which exposed the extent of corruption in defence deals, are laid.²⁷ Visuals of high-level functionaries from the ruling right wing BJP and its allies accepting bribes on camera make the patriotic fervour of the music appear ridiculous.

²⁶ He uses this style in his other films including *Ram ke Naam* (Patwardhan, 1992)

²⁷ In 2001, journalists from *Tehelka.com* used the identity of a fictional defense company to secretly film several key individuals, including the then party president of BJP, Bangaru Laxman, taking bribes.

Apart from Patwardhan, K.P.Sasi and Amudhan are two of the other directors who use humour and irony to bring pro-nuclear articulations to the register of farce. Amudhan uses the sound track of the national song 'Vande Mataram' against the visuals of radiation victims in *Radiation Stories Part 2: Kalpakkam* (2012). K.P Sasi's *America America* (Sasi, 2005) released on Hiroshima Day in 2005 uses satire and mixes dance performance and archive footage to critique the American war machine.

While my research draws from these strategies, it also proposes the possibility of using comic modes and irony to form the vantage point of *tamasha*. So, in what ways do the comic and ironic interventions of *Nuclear Hallucinations* differ from other Indian anti-nuclear documentaries? Of course, the documentary strategies in many of the anti-nuclear documentaries are radically different from the expository style of state documentaries like *Nuclear Power a National Achievement* (Gupta & Gupta, 1980). For example, filmmaker Sreemith uses protest songs in his *Get Up Stand Up* (2012) and *Neythalin Paadal* (2011). Patwardhan uses a personal voice-over. But, a close examination of many of the anti-nuclear films will reveal that their use of irony and modes of comedy does not necessarily question the tropes of realism used by the state to arrive at its rational construction of knowledge about scientific progress.²⁸ Juxtaposing the knowledge claims put forward by films like *The Atom-Man's Most Powerful Servant* (Pendharkar, 1974) or *Safe Haven- Safety of Indian Nuclear Power Plants* (Kondapalli, 2012-13) with the assertions of an anti-nuclear documentary like *Get Up, Stand Up* (Sekhar, 2012) provided me with an interesting realisation. For example, *Safe Haven- Safety of Indian Nuclear Power Plants* uses motion graphic sections to explain the safety features in a nuclear reactor. On the other hand, a graphics section is used in *Get Up, Stand Up* to show that harmful radioactive elements are produced during nuclear fission in a nuclear reactor and ionizing radiation from them can enter the human body through food and air. I realised that, as a layperson who is not trained in the intricacies of nuclear

²⁸ K.P Sasi's *America America* does not speak from a realist register. However, the video is generally named as a music video and not documentary (crazymindseye, n.d.).

technology, I could be equally convinced by both arguments. The motion graphics in *Safe Haven- Safety of Indian Nuclear Power Plants*, which explained the different levels of safety in a nuclear plant, looked ‘scientific’ enough. Similarly, the explanation provided by *Get Up, Stand Up* about how gamma rays from radioactive elements can cause various health disorders seemed equally valid.

While the ‘science’ put forward by the state documentaries can easily be challenged by using widely accepted arguments from the realm of modern science itself, my research is concerned with the possibility of creating disturbances within the narratives that lend authority to the knowledge claims of pro-nuclear documentaries. In terms of my practice, *Nuclear Hallucinations* certainly aligns itself with the narratives of anti-nuclear documentaries including *Living in Fear* (Sasi, 1987) and *Buddha Weeps in Jadugoda* (Shriprakash, 1999). However, its concern is not to produce more evidence to counter the state claims. Instead, I experiment with the possibility of using comic modes and irony to destabilise the state’s nuclear narrative by revealing its phantasmic nature through subversive repetitions of the rhetoric and tropes through which it is constituted.

Comic traditions within the repertoire of documentary include such varied works as those of Michael Moore, Paromita Vohra, Kidlat Tahimik and Mark Lewis. Mockumentary form also uses humour and irony to undermine the evidentiary status of documentary. In my research that uses satirical impersonations, acts performed by groups like The Yes Men and Guerilla Girls also become significant. Similarly, films ranging from *The War Game* (Watkins, 1966) to *The Atomic Café* (Rafferty et al., 1982) have used comic modes and irony to challenge nuclear reason. While such endeavours certainly inform my research, the strategies I employ were developed in response to the specificities of the pro-nuclear knowledge claims around the Indian nuclear project.

2.7 Summary

This chapter has situated the epistemological violence of the authoritarian knowledge claims in the pro-nuclear documentaries of Vigyan Prasar and Films Division within the larger history of documentary practices in India. I have also explained the project's relationship with scholarship in documentary. The chapter provides an overview of the pro-nuclear films produced by Films Division and Vigyan Prasar. The significance of the interventions of *Nuclear Hallucinations* is outlined through an analysis of the state films as well as the anti-nuclear films made by independent documentary filmmakers from India. The next chapter will enter into a detailed discussion about the epistemological orientation of the project. It will also examine basis of the construction of knowledge claims in Films Division and Vigyan Prasar films.

Chapter 3

Documentary, science and formulation of knowledge claims

In Chapter 2, I have given an outline of the historical and theoretical framework that informs my research and the practices amongst which *Nuclear Hallucinations* positions itself. In this chapter, I will focus on the knowledge claims made by pro-nuclear Films Division and Vigyan Prasara documentaries as well as the notions of knowledge, science and documentary that facilitate the certainty of their knowledge production. Using Foucault's (1980) arguments on power/knowledge and Madhyamaka Buddhist philosopher Nāgārjuna's propositions on knowledge (Nāgārjuna & Westerhoff, 2010), I will examine the knowledge production of the state documentaries about the Indian nuclear project. This analysis was an important step in the research process and it informed the specific comic and ironic strategies of *Nuclear Hallucinations*. This chapter will also provide an elaboration of the way in which the term *tamasha* is conceptualised for the purposes of this study.

Before I build my arguments about the way in which pro-nuclear knowledge claims use the documentary form, I will outline how my research approaches knowledge. As I have indicated elsewhere in this thesis, I am relying on Madhyamaka Buddhist philosopher Nāgārjuna's propositions on knowledge.²⁹ An understanding of the Buddhist concept of emptiness is essential to view Nāgārjuna's epistemology in its context. The thesis of emptiness argues that all phenomena are "Empty of inherent existence" or essence (Garfield, 2002, p. 25). For Nāgārjuna, the notion of emptiness does not mean that things do not exist at all, but that things are "dependently arisen, causally produced" and this causal relation is perceived as "brought about by the mind", and "not as something existing mind-independently in the world out there." (Nāgārjuna & Westerhoff, 2010, p. 48). In terms of epistemology, he argues that there are no intrinsic means of knowledge or objects of knowledge. For him, "There is no context-independent concept of knowledge we

²⁹ There are various conflicting accounts about Nāgārjuna's life and works (Westerhoff, 2009). Scholars across the span of almost two thousand years have interpreted his works differently. In this project, I am relying mainly on the writings of Jan Westerhoff (2009, 2010) and Jay L. Garfield (2002).

could use to form the idea of a truth that lies beyond all epistemic contexts” (Westerhoff, 2009, p. 220). In other words, Nāgārjuna is emphasising that the different ways of arriving at knowledge claims are useful human conventions. Some of these claims can be a result of a more coherent conceptualization than others. However, “our conventions and our conceptual framework can never be justified by demonstrating their correspondence to an independent reality” (Garfield, 2002, p. 25).

Nāgārjuna’s thesis on knowledge emerges from the context of early India when an externalist approach to knowledge, like that of Nyaya philosophy, which links knowledge to a truth of the external world that can be accessed through correct procedures (Bonevac & Phillips, 2009, p. 309), was prevalent. In the contemporary framework, Jay. L. Garfield (2002) brings Nāgārjuna’s ideas to the field of philosophy of science to come to terms with multiple ontologies, methods and explanations offered by various disciplines ranging from quantum theory and neuroscience to anthropology. If we accept Nāgārjuna’s proposition that “to exist is to exist conventionally, dependently,” (Garfield, 2002, p. 74) then scientific theories can be viewed as useful conventions. From this perspective, different explanatory frameworks will be relevant without hierarchies about “real science.” (Garfield, 2002, p. 75). In the context of documentary, Robert J. Sternberg has written about the significance of using constructivist accounts of science that situate “discovery as *invention*” and considers “scientific knowledge as *manufactured* within the institutions of science.” (Sternberg, 2010, p. 8).³⁰ Through his practice led work, he proposes a constructivist alternative to what he calls the “classical science documentary” (Sternberg, 2010, p.48-49) which privileges fixed notions of scientific truth. Vincent Campbell’s (2016) analysis of television science documentaries also examines the ways in which science and documentary are used

³⁰ Sternberg (2010) stresses that such a constructivist understanding does not deny the existence of material reality. This position is not the same as that of the Madhyamika Buddhist formulation of relational reality which informs my study. However, the propositions on science which Sternberg puts forward from a constructivist basis are not incompatible with Garfield’s (2002) position that approaches discussions in philosophy of science through Nāgārjuna’s ideas on knowledge.

to form claims to the real. In the case of the pro-nuclear knowledge claims made by Films Division and Vigyan Prasara documentaries, one needs to take into consideration the specific configuration of science in India. As I have explained in chapter 2, this configuration had a significant role in legitimising the authority of the state and the elite in India.

A closer analysis of specific films can be useful to examine the narrative devices that script the authority of science in Indian pro-nuclear state films. In the next section, I will attempt such an analysis of a Films Division film *The Atom-Man's Most Powerful Servant* (Pendharkar, 1974)³¹ and *Clearly Nuclear: Indian Nuclear Power Programme* (Rahman, 2012-13), which was produced by Vigyan Prasara.

3.1 The Atom-Man's Most Powerful Servant

This black and white film begins with an expository male voice-over in English. This self-assured voice-over has an authoritative tone. The very first visuals of the film show the sun; the voice-over compares nuclear energy with atomic energy from the sun that sustains life forms on earth. The opening credits appear after a declaration that in atomic energy man has found “a servant more powerful and quicker than the genie who came out of Aladdin's lamp”. Shots of an atomic reactor, including its dome and a low angle pan of its impressive interior, appear before the opening credits. This sets the tone for the rest of the film, which relies heavily on visuals of technology. The evidentiary style of editing (Nichols, 2001) makes use of the words of Nehru, the first Indian Prime Minister, and Bhabha, the architect of the Indian nuclear programme, to build a case for the “absolute necessity” of nuclear power while stressing the peaceful nature of the Indian nuclear project.

The film employs quite a few camera movements. Pans, zooms and tilt ups work together to frame the fuel complex which supplies fuel rods to atomic reactors,

³¹ The Films Division website lists the year of the film as 1975 ('ATOM – MAN'S MOST POWERFUL SERVANT, THE | Films Division', n.d.). However, the year shown at the end of the film is 1974.

interiors of nuclear power stations and the under construction Madras atomic power station at Kalpakkam in a majestic manner.³² Over such visuals, the voice-over cites the Indian accomplishments in the field of nuclear energy while cheerful instrumental music provides the background score.

The film uses a few onscreen sound bites; all of them are from senior nuclear scientists. The first such sound bite introduces the process of making radioisotopes and their utility in various fields. This sound bite of Dr.V.K.Iya is filmed in a clumsy manner, making one wonder about the skills of the cameraperson who filmed the shot. The interviewer and one more person are visible while Dr.Iya appears in a side profile. The explanation about radioisotopes is followed by an account of the uses of controlled doses of radiation, especially in the field of medicine. The visuals of a patient who is being airlifted are used to illustrate how the irradiation facility at BARC (Bhabha Atomic Research Centre) helps to sterilize medical products so that they can be used in all conditions.

The voice-over links this section on the everyday uses of nuclear technology with visuals from the Indian nuclear weapons test in the Rajasthan desert in 1974. What follows is a framing of this nuclear test as a scientific experiment. Sound bites from the Chairman of Atomic Energy Commission, Mr Homi Sethna, and other scientists, as well as visuals of the weapons test, work together to form this framing. Mr Homi Sethna stresses that “First of all, it is not a blast; it is an experiment”. He refers to it as an effort to stimulate oil and gas production from Indian oil fields. Other senior scientists in the film also provide expert sound bites that stress the scientific nature of the experiment. Their explanations are intercut with visuals from the weapons test site in the Rajasthan desert. The voice-over stresses that each inch of the site is being studied.

The last section of the film focuses on the future prospects of nuclear energy. This

³² Some of these visuals appear in other Films Division films as well. It was not an uncommon practice for different Films Division films to use the same visuals (Roy, 2007)

section highlights the importance of research to further the progress of the Indian nuclear project. The film ends on a note of hope about the possibilities of fission reaction and the scientists' quest for it. The then Director of Bhabha Atomic Research Centre, Dr. Raja Ramanna, talks about the possibility of using hydrogen from sea water as a source of fuel in fission reaction. In his words, this will solve "the problem of energy in the world." The film ends with his sound bite and visuals of sea.

During the course of its roughly 13-minute duration, the film employs visuals from the technical processes within nuclear reactors as evidence with which to build a narrative that locates the Indian nuclear project as a "scientific endeavour to tame and train" the atom in the service of man. The images of such technical processes have the qualities of a *darshan*, as I will discuss in the next chapter.³³ For example, over the visuals of the 1974 nuclear weapons test, the voice-over of the film stresses that the audience is watching "the only filmic record" of the event. In the case of the visuals from inside atomic reactors and other nuclear facilities, an average viewer will find it difficult to ascertain whether the voice-over is accurately describing a particular technical process. Someone who is not well acquainted with nuclear technology will not be able differentiate between a nuclear fuel complex and a facility that makes radioisotopes. As a result, an average viewer will have to rely on the voice-over to make sense of visuals from such facilities or technical processes happening inside them.

Overall, the film has the tone of a boring lecture. The monotonous voice-over and a visual narrative that largely concentrates on showing complicated machinery contribute to this tone. The film is edited in a fairly fast pace and it employs a range of camera movements. Still, the film looks dated for a 1974 film. It will be unfair to compare *The Atom-Man's Most Powerful servant* with the popular Hindi fiction

³³ *Darshan* refers to the Hindu act of worship where the worshiper views and is in turn viewed by the deity. In terms of cinema, the term is used to analyse gaze and perception in Indian cinema (Vasudevan, 2011b).

films of the era like *Sholay* (Sippy, 1975) or *Amar Prem* (Samanta, 1972) due to the budgetary and other constraints of the Films Division film. However, a comparison with Films Division films made around roughly the same time, including *Atomic Energy and India* (Chandra, 1972), shows that *The Atom-Man's Most Powerful Servant* was definitely not among Films Division's own best output of the time.

3.2 Clearly Nuclear: Indian Nuclear Power Programme

Vigyan Prasar's *Clearly Nuclear: Indian Nuclear Power Programme* (from now on *Clearly Nuclear*) was produced in 2012-13, almost two decades after India's first nuclear weapons test.³⁴ The tone of its male voice-over in English is more informal than that of *The Atom-Man's Most Powerful Servant*. The film frequently addresses the viewer directly. It begins by asking the question of why "we" are reluctant to appreciate the benefits of nuclear reactors despite power shortages. Visuals of the Kudankulam nuclear reactor are placed within the context of India's three-stage nuclear program. This film uses visual effects, text and voice-over to list the milestones in the history of the Indian nuclear project. The film stresses indigenous achievements in the field and highlights the contributions of Indian industry to the nuclear project. Graphics, fast camera movements, quick edits and jubilant music aids this narrative of progress.

Like the first and only record of the nuclear "experiment" that *The Atom-Man's Most Powerful Servant* takes pride in, *Clearly Nuclear* also includes moments of "nuclear revelations" (Kaur, 2012, p. 140). Such moments can also be situated within the scope of *darshan*. The film uses visuals of calandria and marvels at the luck of the viewers who have the unique opportunity of beholding it. The voice-over exclaims, "Plain lucky you! No one would ever be able to see it like the way you are watching the final works in this particular calandria. . ."

The next sequence of the film obliquely refers to the international sanctions that followed the nuclear weapons test. The voice-over explains how Indian engineers

³⁴ India conducted its second nuclear weapons test in 1998.

tackled a technical issue in the Rajasthan Atomic Power Station when international experts refused to help. The non-cooperation of countries with nuclear expertise is framed in a critical manner. However, the film does not mention the Indian nuclear weapons test, which was the reason for such a refusal to help. This section of the film edits together visuals of technicians and engineers working inside present day nuclear facilities to allude to the time when the Indian nuclear establishment had to come up with a solution of its own to deal with the technical issue at hand. The use of music that builds suspense, shots of the serious faces of technicians inside nuclear facilities, and the voice-over, which stresses the critical nature of the situation, make this a tense segment in the film. The section ends with a note of elation about how Indian engineers were able to come up with a unique solution of their own to tackle this technical issue, which required the replacement of the coolant channel.

From here, at around 12 minutes into this 17-minute film³⁵, the narrative turns to the ecological impact of nuclear reactors. Shots of nuclear power plants are edited together with visuals of birds, animals and pristine natural surroundings to produce the ‘truth’ of the non-polluting nature of the nuclear enterprise. The voice-over claims that the nuclear plant at Kaiga “works equally peacefully as the birds”. The evidentiary potential of the documentary form is invoked to convince the viewers of what “we” saw. A lizard and hornbill pose for the camera; a kingfisher agrees with the film crew on the non-threatening nature of the nuclear plant. One of the major concerns of the fishing community at Kudankulam about the impact of the nuclear reactor on fishing is also dealt with in the film. Visuals of birds hunting fish from the area of the lake into which water from the Kaiga nuclear plant is expelled works as a testimony. The film crew drops the camera into the water and are surprised to see fish. The marine life is shy, but surely there, to provide evidence of the non-polluting nature of the nuclear power plant. The film signs off with the shot of a bird which flies off, leaving the viewers to ascertain for themselves the achievements of nuclear power plants which, according to the film, produce electricity with minimum impact on the environment.

³⁵ The exact length of the film is slightly over 17 minutes

3.3 Authority of ‘science’ and ‘documentary’

A close examination of the narratives of *The Atom-Man’s Most Powerful Servant* and *Clearly Nuclear* will reveal that their pronouncements, which at times border on the bizarre, use the sites of science and documentary to validate their knowledge claims. For example, the knowledge claim in *Clearly Nuclear* (Rahman, 2012-13) rests on the argument that “we” have been there at the nuclear power plants and not any fictional character in a make-believe world. The ‘truth’ of this narrative is not a mere result of pointing a camera at “real” situations and “real” people. As I have explained in chapter 2, the narrative’s truth-value is also a result of a history in which the form has been routinely used by the state since colonial times to produce its certain knowledge. Similarly, in *The Atom-Man’s Most Powerful Servant*, what the film puts forward as routine scientific explanation about radioisotopes is used to strengthen a narrative that asserts the benign and scientific nature of nuclear weapons testing. This instance can be used to look again at some of the less controversial ‘scientific’ knowledge claims in similar documentaries. In other words, when the top nuclear scientists in the country aid the documentary magic of turning a nuclear weapons test into an experiment about reducing the viscosity of crude oil, then why should one take the more routine explanations like the one about the radioisotopes at face value? Here my intention is not to deny the existence of radioisotopes. Instead, the question is about the ways in which the documentary form is used to produce knowledge claims that demand acceptance in the name of science as well as documentary. In the accounts produced by films like *The Atom-Man’s Most Powerful Servant*, there is no space for doubts about the claims put forward by the narrative. The pro-nuclear films of both Films Division and Vigyan Prasar employ strategies identified by Campbell in his examination of television science documentaries such as “reliance on indexical imagery, expert testimony” and the authority of the narratorial voice (Campbell, 2016, p. 32). While the rhetoric used in the construction of the unquestionable authority of science through the documentary form certainly has parallels across the globe, as I have specified earlier, in this thesis I am particularly concerned with how they operate in pro-nuclear state films in India. With regard to the Indian situation, the “application of

science as universal reason” (Prakash, 1999, p. 4) in the narratives of the state as well as the elite in colonial and post-colonial phases of history, and the use of the documentary form in such narratives, need to be taken into consideration.

According to Paul Ward (2005), even in a non-essentialist notion of documentary which accommodates films ranging from *Salesman* (Maysles, Zwerin, & Maysles, 1968) to *The War Game* (Watkins, 1966) there is one idea which is unchanging. This is that documentary “is a form that makes assertions or truth claims about the real world or real people in that world...” (Ward, 2005, p. 8), although the modalities of this assertion might differ. I would argue that these claims to the real need to be evaluated in detail because they serve as the basis for the construction of the pro-nuclear reality. The potential of the documentary form to lend a halo of the ‘real’ to narratives makes it a favoured site on which to exert knowledge claims.

Chapter two has mentioned Nichol’s (2001) writing, which points to the role of institutional structures, the community of filmmakers as well as the audience in categorising specific works as documentary. In the Indian context, the government as well as the market has a role in certifying specific films as documentaries (Rajagopal & Vohra, 2012). The audience might have resented the compulsory screenings, which attempted to ‘educate’ and ‘enlighten’ the ‘masses’. But, as I have explained in chapter two, such screenings before commercial fiction films in theatres also made the “realness” of documentaries visible against the make-believe world of fiction. The iteration of narrative devices including assured voice-overs, explanatory visuals and expert sound bites to assert authoritative documentary accounts made it possible to use such devices to make truth claims. The authority of such devices rests on an idea of documentariness that “constitutes reality as knowable and produces a knowledge of reality” (Cowie, 2011b, p. 5). In the case of Films Division and Vigyan Prasar films, their pro-nuclear knowledge claims are facilitated by the formulation of the documentary and non-fiction form as a medium which is conducive to educating the (often unwilling) Indian population whose lack of scientific temper was a major cause of concern (Roy, 2007). The association of

the documentary form with the pedagogical project of the state makes it a recognisable site where knowledge claims can be framed.

As a result, Vigyan Prasar calls its films that are part of the Public Awareness Campaign on Nuclear energy ‘documentaries’. These films, which are intended to communicate messages like “nuclear energy is a boon to mankind” (Vigyan Prasar, 2013, p. 61), could also be termed as advertorials. In fact, Vigyan Prasar does call its newspaper messages that were part of this campaign which aims to improve “public trust on nuclear power” (Vigyan Prasar, 2013, p. 59), advertorials. However, when it comes to films, the term used to describe them is documentary. I would argue that this claiming of the name of documentary is a result of its ability to authorize knowledge claims through its iterative powers.

In addition to their use of the documentary form, the state films on the nuclear project also rely on the authority of science.³⁶ In its colonial career, modern science was part of the mission to civilize the natives. The Indian nationalist configuration of science differed from the colonial one (Prakash, 1999). However, as Gyan Prakash points out, “The idea of India as a nation....meant not a negation of the colonial configuration of the territory and its people, but their reinscription under the authority of science” (Prakash, 1999, p. 7). Documentary films were a major site in which the authority of science was made visible to the general population.

The knowledge claims of pro-nuclear films ranging from *The Atom- Man’s Most Powerful Servant* (Pendharkar, 1974) to *Atoms for Peace- a Film on Peaceful Uses of Nuclear Energy* (Mahajan, 2012-13) need to be viewed in the context of films like *The Scientific Attitude* (Bose, 1981), which stresses the need to accept the scientific value system as opposed to the superstitious beliefs stemming from old traditions. The knowledge production in the pro-nuclear state documentaries depends on the acceptance by the viewer of the explanations offered through graphics, voice-overs and visuals as ‘science’. As Raminder Kaur points out, it is

³⁶ Here I am talking about the authority of science in its Indian context.

common practice to use the “idealised and arcane figure of knowledgeable, worthy, humble and selfless Indian scientists” as a safety valve to circumvent questions concerning nuclear risk (Kaur, 2013, p. 170). While the documentary form has a role in scripting the authority of science and the unquestionable expertise of the scientists, invoking that authority directly also enables the formulation of knowledge claims in documentary.

Within such an understanding about the documentary form, the positioning of the camera as a scientific instrument (Winston, 2008) plays a pivotal role. For example, in *Clearly Nuclear*, in the scene where the crew immerses it underwater, the camera has a function that is analogous to a thermometer or a similar device. This scene assures the viewer that fish can thrive in a river where discharge from the nearby nuclear plant is released. In other words, unlike what anti-nuclear protestors claim, nuclear plants do not affect marine life adversely.

Such assertions work through the twin authorities of documentary and science. Here it is important to pay attention to the operations of power that authorise the above-mentioned claims. As Foucault points out, “The exercise of power perpetually creates knowledge and, conversely, knowledge constantly induces effects of power. It is not possible for power to be exercised without knowledge and it is impossible for knowledge not to engender power” (Foucault, 1980, p. 52). In the context of the Indian nuclear project, the capillary nature of power creates interlinked networks which create knowledge about Indian nuclear reactors where the atom is tamed like a genie (Pendharkar, 1974) to produce electricity in the service of the nation. As I have explained before, in these networks, pedagogic documentary practices work together with police violence and intelligence agency reports about a ‘foreign hand’ behind anti-nuclear protests (TNN, 2014). Together they bring into being a pro-nuclear reality.

3.4 Pro-nuclear reality

I would argue that the reality of the nuclear situation as envisaged by the state documentaries is a performative act³⁷ and documentary utterance plays a role in bringing this reality into being. It is co-constituted by other performative acts like the bravado of the Prime Ministerial announcements about the country's latest nuclear weapon tests, the foundation-stone-laying ceremonies for new nuclear reactors, expert sound bites on national television about the necessity of nuclear power, and police violence against anti-nuclear protesters. As Raminder Kaur observes "A variety of information and imagery" about the Indian nuclear project "appears in the performative space of the nation through media reportage, documentaries, national parades, nuclear tests...parades, ceremonies, public meetings, party politics and festival displays" (Kaur, 2012, pp. 145–146). The easy transference of the nuclear rhetoric into ultra-nationalist Hindutva registers, where tableaux about the country's nuclear success are incorporated into religious festivals like Ganapati Puja (Kaur, 2010), can be viewed as yet another element in the construction of the dominant nuclear narrative.

By citing this narrative inappropriately and by inflecting it with irony and comedic modes, my practice-based research attempts to question the existence of this narrative as the only permissible reality around the nuclear. Here, my research is informed by Richard Rushton's (2011) discussions about film and reality. He questions the assumption that films represent reality and that there is a more 'real' world outside the film. He uses Cornelius Castoriadis' (Castoriadis in Rushton, 2011) argument that asks why dreams, cultural products and other things which belong to the realm of human imagination should not be considered as having a primary importance instead of being treated as secondary to the material aspects of the physical world. Although he makes the argument using examples from fiction films, I feel that it has an equal relevance for documentary films. While Rushton

³⁷ As mentioned in the introduction, here I am building on Butler's (1999) ideas on gender and applying them to documentary.

(2011) begins with Cornelius Castoriadis' exhortation to look at the products of human imagination as primary and the physical or material world as secondary. In my research, I am relying on the Madhyamaka tradition of Mahayana Buddhism's understanding of relational reality, according to which reality exists only relationally and nothing has an inherent essence or being. Both ideas and material things exist in relation to each other.

My contention is that there are many realities and that documentary films have a role in constituting these. Thus, films like *The Atom-Man's Most Powerful Servant* or *Clearly Nuclear* do not necessarily operate through their persuasive powers. The production of the "fictions and fantasies" of the Indian state as facts (Roy, 2007, p. 62) in the documentary form does not mean that these 'facts' were accepted as such by the viewers. As a viewer, one could be indifferent to the pronouncements of pro-nuclear state documentaries. However, refusing to abide by their truth (Foucault, 1980) by being part of an anti-nuclear movement can result in being at the receiving end of police firings or sedition charges. So, the functionality of these films depends on their placement within networks of power and knowledge that form the pro-nuclear reality through state violence and expert testimony, as well as documentary pronouncements.

My experiments which attempt to reveal the phantasmic nature of this pro-nuclear reality rely on the subversive repetitions of the documentary tropes of such a reality. These experiments were not centred on the idea of a closed and finished film text. Instead, they approached film as a process and their attempt was to create sites of re-circulation (Butler, 1999), using insights from performance art and the vibrant culture of political street theatre in India. My endeavour to subvert pro-nuclear narratives situates itself as part of a range of practices, including the hunger strikes and protest marches of anti-nuclear protestors, documentaries, fiction films and songs that aim to challenge the truth of such narratives. Amidst such practices, the documentary films that question the pro-nuclear narrative in India were of particular importance to my work. For example, when a film like *From Tiny Grains of Sand*

(Chaudhuri, 1961) waxes eloquent about how the mining of atomic minerals brings foreign currency and prestige to the nation, anti-nuclear films like *Buddha Weeps in Jadugoda* (Shriprakash, 1999) or *Living in Fear* (Sasi, 1987) bring in the bodies of the people who were affected by congenital disorders or cancer as a result of the mining of atomic minerals to contest such claims.

Chapter 2 of this thesis has mentioned that the contestations of *Nuclear Hallucinations* differ from those of other anti-nuclear films such as the ones mentioned above because the focus of my work is on creating a vantage point of *tamasha*. Since the legitimisation of “modern science as a universalized belief system” with its priesthood of experts (Mathai, 2013, p. 58) is integral to the pro-nuclear documentary narratives, questioning the premise of such legitimisations is a major concern of my research. This does not mean a total rejection of the ideas and practices of modern science. Instead, drawing from Shiv Visvanathan’s (2009) writings on cognitive justice, I work from a premise that looks at modern science as one epistemological system within an ecology of diverse epistemological systems.

Gyan Prakash’s (1999) observation about the subaltern responses to the staging of colonial science in India (quoted above) was a useful reference point for *Nuclear Hallucinations*. Since it was not easy to assert the universal authority of modern science amidst the various existing ecologies of knowledge systems in the subcontinent, the colonial state resorted to diverse practices to affirm this authority. Gyan Prakash stresses the involvement of the Indian elite in the configuration of the authority of modern science, though their endeavours and conceptualizations were not identical with those of the colonial state. However, “the subaltern continued to occupy an unmanageable position” (Prakash, 1999, p. 44) vis-à-vis both elite Indian and colonial endeavours. Exhibitions and museums were an important part of the staging of science in colonial India and “If the lower classes did not threaten the project of disseminating science by spreading rumours, they undermined its gravity by demanding frivolous amusements as the price of their participation” (Prakash, 1999, p. 44). Gyan Prakash (1999) quotes Edgar Thurston from the *Administration*

Report of the Government Central Museum for the Year 1894-95, Government of Madras. According to Thurston, “the great mass of visitors to the museums in India” regard such museums “as *tamāsha* [show] houses, it matters but little what exhibits are displayed, provided only that they are attractive” (Thurston in Prakash, 1999, p. 45). This attitude, which responds to the authority of modern science from the inappropriate vantage point of *tamasha*, became a key strategy in my research. The narratives and practices that authorise the epistemological violence around the Indian nuclear project in contemporary India are not necessarily similar to the operations of power around modern science in colonial India. However, there are structural continuities that exist between both. The fourth chapter of this thesis provides a detailed account of how *tamasha* informs the processes of *Nuclear Hallucinations*. Before entering into an elaboration about how *tamasha* is conceptualised in my research, it is important to clarify the way in which I use the terms “modes of comedy and irony”.

3.5 Modes of comedy and irony

In his discussion about modes of comedy in documentary, Paul Ward (2005) has talked about how comedic expression can be in conflict with the idea of documentary truth. He argues that there is no need to view documentary as a discourse of sobriety in which documentary comedy means mock documentaries and spoofs alone. Since irony and modes of comedy can be used for many purposes, including reactionary ones, my research explores the specific ways in which they can serve a counter hegemonic agenda in political documentaries. In his chapter on documentary and comedy, Paul Ward mentions irony as well (Ward, 2005). My research is informed by the philosophy of irony employed by “both Gandhian and antinuclear protestors” when they “consciously invoke *death* as an organizing principle for *life*” (Seery, 1990, p. 324). It treats irony as a mode that is distinct from comedy. Similarly, my research does not base itself on the Aristotelian stream of thought, which sees a dichotomous relationship between tragedy and comedy. According to Lee Siegel, such a division “fails in the Indian context” (Siegel, 1987, p.8) because the comic tradition in India is not envisioned in opposition to the

tragic. Many Indian philosophers have described the phenomenal world as cosmic trickery. In this context, “seeing through the great metaphysical flimflam and epistemological bamboozlement, getting the ultimate joke.... might be liberation.” (Siegel, 1987, p.15). My study is informed by this spirit of the comic and my aim is to move the certain knowledge claims of the state narrative on to a plane of *tamasha*.

3.6 Tamasha

As mentioned in chapter one, the term *tamasha* has broad connotations in my research. According to Julia Hollander (2007), although the word had its origin “in the north” where it had connotations of “‘fun’ or ‘play’”, it is used nowadays across all the languages of India, often pejoratively, to describe an escapist entertainment, a farce, a ludicrously extravagant political rally or chaotic public event” (Hollander, 2007, pp. 73-74). The word may not be present in all Indian languages because the linguistic diversity of the country is huge. However, it is certainly used across many parts of South Asia where it has a host of connotations ranging from trivial or empty entertainment (Trevithick, 1990), to carnival (Guha, 1997), spectacle (Kuldova, 2012) or farce (Singh, 2003). James Lambert (2014) stresses the trivial and even vulgar implications of the word and criticises Yule and Burnell’s (1886) use of the term to describe religious ceremonies. In Lambert’s words, applying the term *tamasha* in relation to a religious ceremony trivialises such a ceremony (Lambert, 2014). Ronald Inden (2014) has written about *tamasha* in the context of Hindi film. However, I find his notion of *tamasha* as extravaganza or entertainment limiting.

Using a few examples that point to the different ways in which the term is used in diverse contexts might help to clarify the notion of *tamasha* in my research. A news item in the web portal Zee News declares that “For some Indians everything is a ‘tamasha’” (Kumar, 2015). The author of the article uses the term to report an incident in which an elderly couple was physically attacked. People who gathered around did not come to the rescue of the couple. Instead, they chose to watch it as a *tamasha*. Here the term *tamasha* is used to denote a very inappropriate response

from the onlookers when, instead of intervening and correcting a situation, they chose to treat it as a source of almost perverse entertainment. On a different note, in the writings about the Mughals (Waraich, 2012) and the British Raj (Trevithick, 1990), there are references to the masses' fascination with *tamasha*. Often the rulers provided outlets for this fascination. For example, a letter written to *The Pioneer Mail* titled "TAMASHAS FOR INDIAN TROOPS (1920) by "An English Woman" has an interesting request. The lady writes,

Sir-As a nation we Britishers are apt to show a dislike for tamashas or any public way of showing appreciation. We forget that since the days of Akbar the great Emperor and long before his reign the people here in India look upon a tamasha or public ceremony as a sign of victory and rejoicing. Can I plead for the native regiments coming from Mesopotamia where they have spent these last weary years that we should on their landing in Bombay and Karachi show our appreciation of what they have done by outwardly honouring them with a tamasha

Though the lady categorically distances the British from a penchant for *tamasha*, she is not using the term in a derogatory sense. Here, the intended meaning is closer to entertainment or carnival. I am not suggesting that there is any one particular way of being part of or witnessing a *tamasha*. In my conceptualisation of the term for the purpose of this research, I have tried to engage with its fluidity. In my study, I have focused on the role of onlookers or participants to form the register of *tamasha*. A domestic quarrel or parliamentary election becomes a *tamasha* depending on the way in which people engage with it. Thus, in a context where votes are bought and money and muscle power play an important role in determining the results, it becomes easy to perceive elections as a *tamasha* (Thakur, 1995). This mode of engagement often has an amount of self-derision attached to it. I am interested in the possibility offered by the viewpoint of *tamasha* to ridicule seemingly invincible operations of power/knowledge around the Indian nuclear project. Here, I am not

writing off the prospect that in its connotations as entertainment or spectacle³⁸ *tamasha* could become a site for regressive practices. My argument is that it is difficult to police the boundaries of *tamasha* because often the gawking audience can turn what is intended for solemn acceptance or reverence also into a *tamasha*. This is because the only requirement for turning something into a *tamasha* is to approach it as one.

Often, when someone calls something important (for example, a government scheme) a *tamasha*, it is an entry point for others to share such an outlook. The resulting delegitimisation of the scheme as a joke or farce at least in the minds of those who share this outlook could offer possibilities for resistance. Viewing a government scheme as a *tamasha* may not be the same as opposing it and this may not be a radical act. The word itself suggests the presence of ineffectual participants. However, I would argue that a shift in outlook about something that is as unopposable as the nuclear project of the Indian state could foster spaces of dissensus (Rancière, 2010) which can contribute to the destabilisation of the state rhetoric in the longer run.

Here, I am not making yet another attempt to change the world through the power of documentary films. I am not arguing that the film *Nuclear Hallucinations* will change the outlook of the viewers through its magic bullets (Sparks, 2013). The film serves as an invitation to enter an anti-nuclear narrative, which calls the truth of the state's nuclear rhetoric a *tamasha*. So, while the expert in a film like *Safe Haven-Safety of Indian Nuclear power plants* (Kondapalli, 2012-13) attempts to tutor the masses about the almost indestructible nature of Indian nuclear reactors, *Nuclear Hallucinations* prompts the viewer to take such claims as part of a narrative in which radioactive waste can be safely disposed of in plastic bags and electricity from nuclear reactors can be touched without fearing an electric shock.

³⁸ I am not using spectacle in the sense in which Guy Debord (1967) uses it. I work with the assumption that the negative or positive connotations of spectacle arise from a given context.

Throughout the research process, I was aware that my attempts to destabilise the authoritarian knowledge claims of pro-nuclear state documentaries should be undertaken with caution. Meera Nanda has written about “the Indian anti-Enlightenment brigade” who according to her “have seen through the *maya* of reason and realised that all is power” (Nanda, 2001, p. 1480). She points to the heavily oppressive nature of Brahmanical upper caste Hindu traditions that can masquerade as “the knowledge of the ‘little people’”(Nanda, 2001, p. 1483). Though I definitely do not share Nanda’s aversion to constructivist accounts of science, I feel it is important to acknowledge that a diatribe against ‘western science’ can offer visions of past glory to toxic Brahmanical and right wing Hindutva world views. However, my frame of reference is the ‘science’ that emerges from the context of the Indian nuclear project. It hardly has anything in common with the “science” of the lower caste innovators and workers whom Kancha Ilaiah calls “subaltern scientists” (Ilaiah, 2009, p. 25).

On the contrary, the expertise that generates the knowledge claims in the pro-nuclear documentaries mentioned in my study derives its authority from the Brahmanical position of scientists (Roy, 2007). As Shiv Visvanathan (2016) points out, the expert custodians of the Indian nuclear state are predominantly Brahmin, with a significant number of Tamil Brahmins. While Brahmanical power structures are not necessarily tied to the numerical proportion of Brahmins in an essential manner, the ferocious arrogance with which the nuclear establishment dismisses dissent (Visvanathan, 2016) comes from sources that are not entirely limited to the scientific authority of the nuclear high priests. Examining the narrative structure of pro-nuclear state films can provide interesting insights. For example, the Films Division film *The Mysterious Atom* (Dutta, 1978) intersperses its narrative about the magic of atomic energy with Sanskrit hymns. Many of the pro-nuclear films use imagery that juxtaposes wretched, poor and apparently naïve peasants with knowledgeable scientists who are working to cure Indian poverty through development aided by science. I would argue that the Sanskrit hymns in films like *The Mysterious Atom* are positioned to add a layer of Brahmanical authority to the

expert Indian scientists who have not lost their ‘Indianness’ in the pursuit of science and modernity.

The experiences of the anti-nuclear movement at Kudankulam point to the perils of challenging an authority that is ‘Indian’ as well as ‘scientific’. This authority can find a “foreign hand” in anti-nuclear activities at a fishing hamlet at Tamil Nadu and its reasoning progresses with the confiscation of passports, imprisonment and bullets. From one perspective, this march of progress can seem almost unstoppable. The knowledge claims surrounding the nuclear project which position the anti-nuclear activist as “a marginal creature, frowned upon as anti-national and anti-scientific” (Visvanathan, 2016, p. 187) are integral to the narratives of nuclear reason in India.

In this context, I feel inciting responses from the point of view of *tamasha* becomes relevant. A person who observes a *tamasha* is a participant in it as well.³⁹ While encountering the narrative of nuclear reason as a *tamasha*, the participant onlooker is refusing to meet the power/knowledge of the Indian nuclear state on its own terms. This approach may not result in an instant repeal of cases against the anti-nuclear protestors or an immediate end to the nuclear power (bomb) project. But, even for someone who is wary of the consequences of questioning the pro-nuclear state assertions, it offers a position that is different from that of a reluctant approver. Like the subaltern’s response to the invincible stagings of science in colonial India, s/he can approach the apparently self-evident authority of ‘science’ and

³⁹ Here parallels can be drawn with Bakhtin’s writings on carnival (Bakhtin, 1984). Bakhtin points out that carnival does not distinguish between actors and viewers. However, it is not my intention to theorize *tamasha* in terms of Bakhtin’s ideas on carnival. The multiple connotations of *tamasha* in the South Asian context that my research attempts to work with are different from Bakhtin’s conceptualisations around carnival. An enquiry into the similarities and differences between *tamasha* and Bakhtin’s carnival could be an interesting exercise. However, this is not the focus of my study. Just as there is an organic link between carnival and Rabelais’ work that informs Bakhtin’s writing on carnival in *Rabelais and His World* (Bakhtin, 1984), the framing of *tamasha* in my work emerges from an understanding of the subaltern’s use of the vantage point of *tamasha* vis-à-vis colonial science. Here, my argument is not that Bakhtin’s formulation of carnival is irrelevant in South Asia or that the viewpoint of *tamasha* is of no use in Europe. However, situating *tamasha* in terms of carnival or vice a versa could be a limiting exercise.

‘documentary’, which are used to script pro-nuclear assertions as a *tamasha*. From this position, solidarities could emerge that can resist the terms which categorise the anti-nuclear protestor as anti-national and anti-scientific. Such solidarities also offer the possibility of reimagining the configurations of “nation” and “science”.

However, even while I try to formulate a conception of *tamasha* that privileges its potential to create destabilisations within authoritarian knowledge claims, I am very much aware of its negative connotations. For example, in her article on domestic violence in India, Sreeparna Ghosh (2011) writes about the approach of onlookers who do not intervene to stop domestic violence because they enjoy watching it as a *tamasha*. My own position in approaching the pro-nuclear assertions as *tamasha* comes from an awareness of my complicity, especially because I avoid a more active role in the anti-nuclear movement due to my fear of facing imprisonment and other such consequences. The way in which a member of the protest movement against Kudankulam Atomic Power Project responds to the invitation to view the pro-nuclear knowledge claims as a *tamasha* might be significantly different from my own response. The notion of *tamasha* that forms the processes of *Nuclear Hallucinations* attempts to be open to such diverse responses.

As mentioned before, my approach is different from that of anti-nuclear documentaries like *Living in Fear* (Sasi, 1987) that contest the facts behind the knowledge claims of pro-nuclear arguments. This can be viewed as part of plural resistances (Foucault, 1978). In his writings about power/knowledge, Foucault (1980) points to the prospect of insurrections of disqualified knowledges like those of the mentally ill. From the terrain of *tamasha* it might be easier to be more receptive to the weak knowledge of the indigenous leader who asserts that Uranium mining should stop in *Buddha Weeps in Jadugoda* (Shriprakash, 1999) or the woman suffering from cancer in *Radiation Stories Part 2: Kalpakkam* (R.P, 2012).

Since my research relies on the role of irony and modes of comedy to move the knowledge claims of state documentaries to the sphere of *tamasha*, I will now

outline my stance amidst the slippery terrains of humour where myriad theories clamour for prominence.

3.7 Encountering the many theories of humour

Earlier in this chapter, I have clarified that I will be treating irony as a category that is separate from humour. Also, I use the term comic in a sense that incorporates the Indian perspectives that approach empirical reality as a joke (Siegel, 1987).

However, I understand that since I have taken up the task of obtaining a PhD by ridiculing expertise, I cannot avoid the diverse discussions that emerge from the field of humour research. At the same time, I would like to clarify that it is not my intention to map these discussions to provide an overview.⁴⁰ I will limit myself to the examination of arguments that I feel are relevant to my research.

In the discussions around the comic, Palmer (1994) has talked about the impossibility of narrowing the notion down, when in the English language alone there are hundreds of terms which suggest ‘funniness’. One of the first spectres one encounters while entering into the uncertain territory of the comic is a collection of theories, which speculate on the reasons behind laughter. Morreall (2009) provides an impressive list of them which includes superiority theory, incongruity theory and relief theory. Since, in the context of my research, attempts to fix the causes of laughter seem similar to the efforts to ascertain the precise number of angels who can stand on the tip of one needle, I will argue against the need for such rationales.⁴¹ As Olsen has pointed out, superiority theory, incongruity theory and relief theory have their limitations and each of them “understands humor at a different level and dimension, thereby leaving out a number of other levels and dimensions” (Olsen, 1990, p. 22).

⁴⁰ For more elaborate discussions, please refer to *Humorous Political Stunts : Nonviolent Public Challenges to Power* (Sørensen, 2015) and *The Primer of Humor Research* (Raskin, 2008).

⁴¹ Similarly, I leave the hair splitting about how laughter and humour cannot be equated, difference between humour and comic etc. to other competent academics.

Since the spectre of Greece, where apparently most things under the sun began, haunts various academic disciplines including humour research, one frequently comes across statements like this one. “Democracy requires critical thinking and discussion, and so it is no accident that both democracy and comedy were born in fifth century Athens” (Morreall, 2009, p. 114). On a better note, *Encyclopedia Of Humor Studies* speaks about comic traditions across the world which have merged with the European idea of comedy (Parkin & Davis, 2014). Similarly, definitions of satire might have their preoccupations with Juvenalian, Horatian or Menippean satire (Auger, 2010). However, I will be using these terms as the English language equivalents of diverse comic notions which have existed across the globe in traditions as varied as the folk forms of Tamil Nadu (Shulman, 1985) or the poetry of medieval Persia (Davis, 2013).

In the context of documentary theory, the writings on comic modes and irony are not extensive. Middleton (2014), Smaill (2010), Hight (2013), Ward (2005) and Nichols (1991) have elaborated on the role of the comic modes and irony in documentary. Amongst such writings, I found Belinda Smaill’s (2010) analysis of what she calls “dissent documentary” (Smaill, 2010, p. 114) useful. She mentions the use of ironic and carnivalesque tactics by activist movements as well as dissent documentaries. Such an exploration of the subversive potential of ironic and comic strategies in documentary is one of the main points of enquiry in my research. However, unlike Smaill, my focus is not on the affective possibilities of such strategies. Instead, I am using Butler’s idea of performativity to explore “possibilities of recirculation” (Butler, 1999, p.41) through which the state’s truth claims about its nuclear project can be destabilised from within through ironic and comedic appropriation of such claims. Alisa Lebow (2006) has explored Butler’s ideas in the context of mockumentary and I will enter that discussion later in this chapter. Kate Kenny (2009) has also engaged with Butler’s notions in her analysis of the film *The Yes Men* (Smith, Ollman, & Price, 2005). She has used Butler’s ideas to investigate the role of parody in destabilising hegemonic institutions. However, Kenny’s focus is on institutions and corporates and the way in which The

Yes Men parody them. She does not focus on the debates around the notion of 'performative' in documentary. In the introduction to this thesis I have explained how my research engages with such debates. Since I follow Butler's arguments on the performative aspect of gender, where parody plays an important role in subversive repetitions, I will now explain the concept of parody that informs my project.

3.8 Parody

In her study of parody in art forms, Linda Hutcheon (1985) says that the literature on parody suggests that its meaning changes depending upon historical contexts and places. In this project, I have tried to work with Butler's proposition about the subversive aspects of parody. She argues that gender parody "reveals the original to be nothing other than a parody of the *idea* of the natural and original" (Butler, 1999, p.41). However, despite attempts at bricoleur somersaults, concepts do not easily agree to transmigrate from gender studies to documentary theory, especially because there are different configurations of parody as evident from Dan Harries' (2000) work on film parody. Here, I have turned to Alisa Lebow's words when she uses Butler's ideas to specify the relation between documentary and mockumentary. She writes "“ reality itself is a mockumentary, for which there is no 'doc'” (Lebow, 2006, p. 235). However, my analysis differs from that of Lebow because, unlike her, my research is not concerned with the Lacanian 'Real' (Lebow, 2006); I am more interested in the performative construction of specific realities by different documentaries. Also, *Nuclear Hallucinations* claims the name of documentary and not mockumentary.

3.9 Claiming the label of documentary

Questioning the documentary form's claims to the real through satire and other humorous devices is an established tradition in mockumentary or fake documentaries (Roscoe & Hight, 2001). However, I am not labelling my work as mockumentary because I feel that claiming the name of documentary is a performative act. For example, the state narrative around the nuclear demands

legitimacy on the basis of iterations which link certain filmic practices with an access to a stable truth about the world around us. The distinction between fiction films and documentaries might be questionable (Ward, 2005). However, this does not prevent iterations that assert documentary truths about the reality of the nuclear situation on the basis of such a distinction. In this scenario, to create trouble within these iterations, I feel that it is important for me to claim the label of documentary and not the ‘fictive’ or ‘fake’ associations of mockumentary (Juhasz & Lerner, 2006). However, my project has certainly drawn inspiration from the mockumentary tradition, where comic strategies are often used as tools for subversion (Roscoe & Hight, 2001).

Although I have claimed the generic label of documentary for my film around the anti-nuclear struggle against the Kudankulam nuclear power plant, I am not adhering to the sober traditions (Nichols, 1991) in documentary. While all-knowing voice-overs, expert sound bites and explanatory graphics in the state films might take the evidentiary status of the image for granted, my appropriation of these strategies aims to move them to the site of *tamasha*.

3.10 Summary

This chapter clarifies the epistemological position of my project which bases itself on Nāgārjuna’s (Nāgārjuna & Westerhoff, 2010) outlook on knowledge. It examines how the authority of particular notions of science and documentary are employed to form pro-nuclear narratives. A detailed analysis of one pro-nuclear film each from Films Division and Vigyan Prasar was part of this examination. It also maps the diverse constituents of the pro-nuclear reality and the possibility of destabilising the iterative practices of this reality. In this chapter, I have provided a detailed conceptual framework of *tamasha* that my research uses in its efforts to create destabilisations within the knowledge claims of pro-nuclear documentaries. The chapter spells out why *Nuclear Hallucinations* claims the name of documentary instead of mockumentary. The ways in which the terms comic modes and irony are used in this project have also been clarified. The next chapters will focus on how the

processes of *Nuclear Hallucinations* at production and post-production phases worked together to form sites of *tamasha*.

We used to light your books, your words, your knowledge,
to make a calm fire. But the cold embers could never
cook any food, any rebellion.

Chapter-4

Methodology: sending nuclear reactors to the land of *tamasha*

4.1 Introduction

In the first chapter of this thesis, I have outlined the methodological approach of my research. In this chapter, I will focus on the multiple methods that were employed during the production phase of my research to form the register of *tamasha*. In the framework of my research, which views film as a process and not a product (Whiteman, 2004), the different phases of production, post-production and circulation are interconnected. However, in order to structure a more coherent outline of the research, the circulation phase will be discussed in the next chapter. Before entering into a detailed discussion about the production phase, I would like to stress that my research treats the edited film as just one element in the filmic processes. The multiple sites of engagement created by these processes work together to create the register of *tamasha*. Identifying the tropes of actuality that script the authoritarian knowledge claims of pro-nuclear state documentaries was an important step in my research. This chapter will elaborate about how my project attempts to undermine such tropes.

4.2 Tropes of actuality

As I have pointed out in the earlier chapters of this thesis, the pro-nuclear documentary assertions use certain common tropes. These include explanatory voice-overs, interviews, expert sound bites and graphics, which provide ‘proper scientific’ explanations. In terms of practice, my research tries to appropriate and destabilise these tropes of actuality⁴² by placing them in the realm of *tamasha*. In *Nuclear Hallucinations*, the explanatory voice-overs turn into hallucinatory ramblings, the interview loses its parking space in the land of evidence, and the graphics inadvertently illustrate the skeletons in the cupboard of logical certainty.

⁴² Celia Lam has also used the term *tropes of actuality/tropes of reality* (Lam, 2014) to talk about the links between prosumer aesthetics and emotional realism in fiction films. Here I am using the term to denote the stylistic devices used by the state films to make their claims to the real.

Through satirical impersonations and devices such as the toy plant, *Nuclear Hallucinations* creates a tension between the tropes of actuality and the ‘actuality’ that gets conveyed through them. As I will explain in the next section, the impersonations were unrehearsed and unscripted. The camera followed the actions unfolding in front of it without making any efforts to direct them. However, these tactics were used for comic or ironic effect rather than in any search for “documentary authenticity” (Nichols, 2001, p. xi).

While engaging with the tropes of actuality and trying to create disturbances within their iterations, it was important to reach a decision about the extent to which my film *Nuclear Hallucinations* should follow the conventions of Films Division films. These conventions, which were often criticised for inducing boredom (Roy, 2007), included the use of voice of God narration and stock music. The decision about how to problematize such conventions through inappropriate iterations in *Nuclear Hallucinations* was influenced by my experience of watching Films Division films during the fieldwork stage. Initially, I considered the option of closely following the visual and narrative style of a Films Division or Vigyan Prasar film and creating disturbances within such a structure. However, two factors made me decide against such an approach. The first one was the experience of watching the Films Division films on the nuclear project, which I collected as part of my archival work. Though these films were not identical in their formal approaches, watching a large selection of them left me with a sense of boredom which reminded me of the correlation between “the realist documentary and the boredom of education” (Smaill, 2010, p. 15). I felt that closely following the style of a typical Films Division film like *The Mysterious Atom* (Dutta, 1978) could run the risk of inciting a similar sense of boredom in the viewer. There are films which intend to bore viewers as part of an effort to challenge the “time-killing strategies of dominant cinema” (Misek, 2010, p. 783). However, my research did not explore such a strategy because boredom is not a response that is generally associated with *tamasha*. The second reason behind the decision not to base *Nuclear Hallucinations* entirely on the general conventions of Films Division or Vigyan Prasar films on the nuclear issue was that such an ironic

endeavour might be lost on the members of the audience who may not be entirely familiar with such conventions.

The intended audience of the film and the performances that surround it could be anyone who encounters and engages with them regardless of nationality or familiarity with the history of documentary films from India. So, *Nuclear Hallucinations* appropriates such elements of Films Division and Vigyan Prasar films that are also part of the repertoire of the global factual form. The comic strategies that inflect these appropriations underwent considerable development through the course of the research. In the beginning of the research, I tried to rely on editing to achieve the comic and ironic effects that this projects aim to engender. At this stage, I felt that “cutting on the absurd” (Middleton, 2002, p. 61) would be a good enough technique to arrive at what I was aiming for. Here I was influenced by the editing style of documentary filmmakers like Anand Patwardhan or Amudhan who use juxtaposition to bring the jingoism of the state’s nuclear narrative to the plane of the absurd. But, after my first attempts at editing, I realised that while juxtaposition or cutting on the absurd could definitely add comic or ironic dimensions to the film, they were not enough to take the state arguments to the level of *tamasha*, where the legitimising tropes of actuality might lose their authority. As a result, *Nuclear Hallucinations* uses hallucinatory voice-overs, nonsensical graphics, special effects as well as ironic use of the language of news channel reports. These were then juxtaposed with satirical impersonations at the edit table to form the narrative of the edited film.

In terms of filmic style, during the screening stage (especially during the screenings in academic spaces), it has been pointed out to me that the impersonations in the film have similarities with Rouch’s ethno-fictions. However, rather than Rouch’s method which combines improvisation as well as documentary and fictive elements (ten Brink, 2007), my work prefers to use the framework of satirical impersonations. Unlike Rouch’s approach, which focuses on specific protagonists, my work uses expert tables which provide anyone who decides to sit behind them the opportunity

to impersonate nuclear experts. A brief account of the filming process can help to provide a better understanding of the interventions that *Nuclear Hallucinations* attempts to achieve.

Process of production

My first visit to Idinthakarai was in 2013. The pre-production and filming was done in seven phases, over the course of almost three years. At the onset of the filming itself, I was clear that I wanted to stage satirical impersonations. This decision emerged as a result of my response to the tropes of actuality which were employed by pro-nuclear state films as well as my own preferences as a practitioner who is interested in problematizing the realist documentary register.⁴³

However, initially I did not attempt to set up and film satirical impersonations. Instead, during my first two production visits to Idinthakarai, I concentrated on building a rapport with the people in the village. During this period, I mainly filmed observational material. I also recorded a few interviews and songs. I spent a considerable amount of time in and around the protest tent in front of the St. Lourdes church, Idinthakarai, which is one of the main centres of activity in the village. Soon, I became friends with the group of women from the village who were regulars at the protest tent. Most of these women were middle-aged homemakers who were at the forefront of the anti-nuclear struggle. As a younger woman who was staying alone at the village, they were concerned about my safety and well-being.⁴⁴ During my subsequent visits, the camaraderie between us developed further. While I was on my third production visit to Idinthakarai, I discussed my plan to stage satirical impersonations with these friends of mine. At first, they were

⁴³ In my earlier films, *Talking Heads (muslim women)* (2010, Nizaruddin) and *Another Poverty Film* (2012, Nizaruddin), I use reflexive strategies to work against dominant modes of documentary representation. *My Mother's Daughter* (2011, Nizaruddin) has a more conventional narrative than the other two films, but it relies on an autobiographical account.

⁴⁴ Ms. Yashodhara Udupa who is a friend accompanied me as a cameraperson during one of my visits to Idinthakarai. This was the only time when I had a crewmember. The rest of the filming at Tamil Nadu was done alone.

amused by my proposition. This was because, although documentary filmmakers, news reporters, researchers and writers interviewing people were common occurrences in the village, my suggestion of impersonations was new to them. Still, the women encouraged me to go ahead with my plans. Earlier in this thesis, I have explained about how I put up notices, which invited people to come and enact the role of pro-nuclear experts or politicians. These notices were placed in locations such as the protest tent, community hall and street corners where community members tended to gather in the village. At Idinthakarai, public meetings, protests and other activities, which are part of the anti-nuclear movement, are common occurrences. Through satirical impersonations, my intervention added the register of *tamasha* to such anti-nuclear assertions. Moreover, staging the performances in spaces frequented by the community members at Idinthakarai helped to place the outlook of *tamasha* before a large cross section of people who frequented such spaces for various purposes.

After pasting the notices and setting up the camera for mock-experts, I would generally simply wait for respondents to come forward. Most of the performances that made it to the edited film took place in and around the protest tent. Generally in the afternoon, at the protest tent, my women friends used to conduct a special prayer in which they asked for the help of the almighty to close the Kudankulam nuclear power project. This prayer was a constant occurrence throughout the years in which I filmed at Idinthakarai. From around 11 am onwards, many women from the village used to come into the protest tent and they left after the prayer at around 3.30 pm. This time frame became a key period for me to stage the impersonations. Since my women friends who were regulars at these gatherings already knew about my research and my plans to film satirical impersonations, they were often the first people to respond to my invitation.

The onlookers who gathered around the performances consisted of people who were already in the protest tent as well as those who came in to watch what was going on out of curiosity. The time frame within which these impersonations took place was

very much dependent on the performers. I have clarified elsewhere in the thesis that I began by interviewing the impersonators. Their answers were based on the position of the people they were impersonating and more often than not, the crowd of onlookers also confronted the impersonators with their own set of questions and repartee. Hardly any of the performers were trained actors⁴⁵. However, many of them delivered impromptu performances with complete ease. The duration of the impersonations lasted from 20 to 45 minutes depending on whether the performers were able to deliver a sustained encounter with the camera and the crowd around them. Such performances ended when the performers decided to stop the impersonation.

Not all the performers who responded to my invitation were able to deliver compelling performances. Some of them could not speak more than a few sentences and a few others ended up laughing uncontrollably. In such cases, the performances were rather short; hardly any of these are part of the edited film. The practice of staging the impersonations at a number of different spaces at Idinthakarai where community members would gather made this process of impersonations familiar to the community. The performances certainly became more nuanced during my later visits and the familiarity with the staging could have contributed to this.

Though the idea of staging impersonations was there from the beginning of the filming process, the conceptualisation of *tamasha* in the specific manner in which my project employs it emerged slightly later. After experimenting with satirical impersonations and other such comic devices during the early phases of filming and editing, I struggled for a while to arrive at a conceptualisation that could provide a frame within which the destabilisations my project attempts could operate. Eventually, I settled for the term *tamasha*. Building upon the word's multiple meanings and their diverse uses allowed me to create situations where a range of people -including the performers, the onlookers around them as well as the viewers

⁴⁵ During the course of my filming at least 40-50 people would have participated in the impersonations that I staged. None of the performers from Idinthakarai who are part of the edited film were trained actors.

of the edited film- could respond to the pro-nuclear reasoning with irreverence. The impersonations that happened after I arrived at the formulation of *tamasha* that I put forward in this thesis were not markedly different from the earlier ones. In fact, my experience of witnessing the chaos as well as the atmosphere of merriment and ridicule that were initiated by the impersonations at Idinthakarai contributed to the way in which this project configures *tamasha*. Though explanations about the aims of my research and its efforts to move pro-nuclear claims to the realm of *tamasha* were an integral step of the filming process, the way in which people responded can be viewed more as an organic reaction to the stagings than as an engagement with my theoretical explanations.

In terms of power relations, my collaborations with the respondents at Idinthakarai were different from the interactions I had with the performers in Delhi. While the people who participated in the project in Delhi were more or less from the same social milieu and class as me, at Idinthakarai, I worked with a range of people from different classes and backgrounds. Though activists and highly educated villagers who belonged to a similar class as me also participated in the performances at Idinthakarai, the majority of the people who responded to the project was lower middle class. Most of them did not study beyond high school. I might appear to be over-educated when compared with them. However, many of them had a deep understanding of the intricacies of the nuclear question including the impact of nuclear power plants on the environment. Their lived knowledge about anti-nuclear resistance was certainly superior to my academic understanding of the same. Under these circumstances, the interactions which happened around the tables for mock-experts unfolded within a collaborative framework that made use of my skills as a filmmaker as well the participant's experience of being part of the anti-nuclear movement. The common ground that made these collaborations possible was the anti-nuclear view point which the participants at Idinthakarai and I shared. At the same time, there was one fundamental difference between us. As a result of their active participation in the anti-nuclear movement against the Kudankulam Nuclear Power Project, many of the villagers at Idinthakarai had to face various hardships

including cases of sedition and accusations of waging war against the state. They were living under the constant scrutiny of Kudankulam police and, often, simple tasks like procuring a passport were difficult for them. I on the other hand, could move back to the safety of my familiar surroundings in Delhi or London after each phase of filming.

While my parents live at Thiruvananthapuram, which is roughly 90 kilometres from the Kudankulam Nuclear Power Project, and, like many others who could be seriously affected if a breakdown happens at Kudankulam, neither my parents nor I have been a part of the protests against the project. So, when I began my association with the Kudankulam anti-nuclear movement for this PhD project, despite my solidarity with the movement, I certainly was not starting from a position similar to that of my participants at Idinthakarai. This difference between us is a key factor that needs to be taken into account while discussing our relationship. The reflexive elements within the film *Nuclear Hallucinations*, especially in the female voice-over, are a result of an attempt to foreground this specific dynamic of my relationship with the respondents at Idinthakarai. Through the real or feigned mental illness of the person behind the voice-over (who could also be the filmmaker), the film underscores the ability of this person to distance herself from the plight of the protestors and the price of that privilege.

However, despite the imbalances in my relationship with the movement, throughout the course of this project my efforts have been to place my camera alongside the movement even though it may not be the camera of the movement. At Idinthakarai, my filming process created a space in which the participants could confront the nuclear rationale and move it to the realm of *tamasha* without having to encounter the violent apparatuses that secure the legitimacy of this rationale. The following section of this chapter on satirical impersonations will discuss in detail the significance of these impersonations.

On the basis of my interactions with the participants at Idinthakarai, I would argue that despite the differences in our class and background, we were able to find a common ground due to our shared anti-nuclear stance. At the same time, as I have mentioned before, my research certainly bears the imprint of the differences between us as well. Since satirical impersonations were the central point around which my interactions with the participants at Idinthakarai and Delhi took place, and they are integral to the edited film as well, I will now elaborate on how these impersonations work in the context of my research.

4.3 Satirical impersonations

According to Joel Schechter, if we consider satire “as a political art responding to specific social situations” (Schechter, 1994, p. 5), then satirical impersonations have the potential to contest the legitimisation of authority. In my research, such impersonations operate on several levels. The decision to invite anti-nuclear activists from within and outside Idinthakarai village to impersonate state functionaries was in response to the state decision to file cases of sedition against the protestors (Sudhakar & Kumar, 2012). Apart from raising questions about the absolute certainty of state claims by moving those claims to the realm of *tamasha*, these impersonations also undermine the indexical claims of the state documentaries. For example, in *Clearly Nuclear*, the camera’s ability to show birds around a nuclear plant exists as supposed proof of the peaceful co-existence of the nuclear plant and nature. The grounds from which such a claim is made could be the “documentary response” (Vaughan, 1999, p. 58) which viewers might have in relation to documentary material. However, as I have mentioned in the earlier chapters, this documentary response is also the result of a combination of factors including the compulsory screening of state documentaries and state violence against those who oppose the pro-nuclear agenda.

The staging of the satirical impersonations was an important site created by *Nuclear Hallucinations*. Apart from their positioning in the edited film, these impersonations also have an independent existence as dramatic performances in front of a live

audience. At Idinthakarai, they were enacted before an audience who often decided to participate in such performances. They questioned the impersonators about the premises of the state's pro-nuclear claims, which frequently border on the absurd. Thus the invitation to approach the state's nuclear discourse as a *tamasha* was not intended for the audience of the edited film alone. It was a choice put forward before the impersonators who enacted the role of various government functionaries before the camera as well as the audience around them.

The staging of satirical impersonations at Idinthakarai was different from the similar impersonations that took place in Delhi. While editing the rough cut of *Nuclear Hallucinations*, it became clear to me that there might be a need to position the satirical impersonations at Idinthakarai alongside similar more official looking impersonations from elsewhere. The sound bites of the Minister of Security, Official Science Analyst and Censor Authority Director, which were all shot in Delhi, were a result of this. During the screenings of the edited film, audience members were often curious to know who were the "real" officials. Such an ambiguity was essential to create fissures within the logic of pro-nuclear knowledge productions. While it is easy to read that a woman sitting on the floor of her house is not the director of the nuclear complex, it is more difficult to place someone like the Official Science Analyst, whose words and demeanour could very easily have belonged to any of the diverse experts who provide daily sound bites for the nation. At Idinthakarai, as I have mentioned earlier, I had formed a good rapport with many of the performers who appear on screen. Being together at prayer meetings, protest marches, shared lunches and election campaigns had resulted in camaraderie among us. After finishing the filming at Idinthakarai, I was hoping that I could film similar impersonations in Delhi with ease.

However, the anti-nuclear activists whom I approached in Delhi were reluctant to adopt the method of impersonations. Though I met people who were ready to give interviews, hardly anyone would engage in a satirical impersonation. As a result, I decided to focus on people whom I already knew instead of looking for anti-nuclear

experts who might be open to the idea of talking in a non-serious frame. Both Saiam Hasan and Anish Ahluwalia, who impersonated the Minister of Security and Official Science Analyst respectively, were people I knew from before. Both of them held views that were sympathetic to the struggles of people's movements across the country including the one at Kudankulam. Shabani Hassanwalia, who performed the role of the Director of Censor Authority, was my classmate at AJK MCRC. However, the reason for choosing her to play that particular role was similar to those for the impersonations at Idinthakarai. She is a documentary filmmaker who faced difficulties with the censor board while trying to obtain a censor certificate for her documentary, which included a section on Kashmir. The censor board found this section objectionable.

Overall, my experiences with satirical impersonations have made me reach the conclusion that while it might be easy to elicit a sound bite or an interview from a relative stranger, the kinds of impersonations which appear in *Nuclear Hallucinations* demand a deeper engagement between the performer, the filmmaker and the audience members who gather around such performances.

4.4 Techniques and strategies from street theatre

While staging these impersonations, I have borrowed techniques from the tradition of political street theatre in India. I have mixed these techniques with the standard tropes of documentary filmmaking like unscripted interactions and interviews. Nandi Bhatia (2004) has explored the political use of theatre in colonial and independent India. She stresses the “utter centrality of theatrical activity, in its varied forms, to subversive cultural practices” (Bhatia, 2004, p. 119). Street theatre draws from these traditions and the folk forms of India; it continues to play an active role in people's movements (Srampickal, 1994). According to Jacob Srampickal, satire and humour are among the key characteristics of street theatre; they have a role in holding the audience together and in making powerful social critiques.

Documentary films about people's protest movements often film such street theatre performances. For example, Amudhan's (2012) *Radiation Stories Part 3: Koodankulam*⁴⁶ has a sequence that depicts a street theatre performance on a busy road. A performer declares that "My name is America. The world is too small for me" (R.P, 2012). Three performers who use minimal props ridicule the servile attitude of the Indian nuclear establishment. This stands out as one of the most powerful sequences in the film. Instead of recording such a dramatic performance, I have tried to facilitate the staging of such performances as part of my filming process using strategies from street theatre.

In street theatre, the performers go and find their audience (Srampickal, 1994) instead of waiting for them. So, during the filming phase, I went to places like the protest tent and the churchyard at Idinthakarai village where people used to assemble. I set up 'expert' tables at these places for interviews on camera. Here I was referencing the documentary practice of providing expert sound bites, to support or question an argument. Instead of the songs or shouts of invitation of the street theatre performers, I used a notice in Tamil which said, "Nuclear comedy: interested people can come forward and perform". Along with the paraphernalia of a camera on tripod, this was enough to collect an audience who came in the spirit of *tamasha*.

Those who decided to do satirical performances were addressing the camera, as well as the audience who gathered around them. During one such impersonation, which is not part of the edited film, the audience decided to force the imposter Prime Minister to sign a document to close the nuclear power plant. I feel that such instances show the potential of the act of viewing a discourse as *tamasha* to move into concrete action, even though the action might only be a symbolic one. Strategies from street theatre had an important role in the circulation phase of the edited film as well. Details about this are a part of the next chapter of this thesis.

⁴⁶ The place name is spelt as both Koodankulam and Kudankulam in English. In my writing, I am using Kudankulam, which is more widely used.

Street theatre's use of simple props that do not adhere to the demands of realism was another strategy that I have found useful in my attempts to create comic dissonances within the iterative practices of the state documentaries. The use of the toy plant in the context of the filmic process was inspired by street theatre, and it works in contrast with the images of the nuclear plants in the pro-nuclear state films. Shots of the interiors of nuclear power plants form an important segment in many state films and they demand a reverential gaze. Abraham (1998) has written about the use of religious imagery in the construction of the pro-nuclear narrative in India. Hindu religious references are present in Films Division and Vigyan Prasar documentaries around the topic. *Clearly Nuclear* produced by Vigyan Prasar uses a song which praises nuclear power; this song is modelled on a Hindu religious *bhajan* or hymn. In the narrative universe of *The Mysterious Atom* (Dutta, 1978), nuclear reactors are compared to the sun. The film begins and ends with a Sanskrit verse that praises the sun. In this context, it might be appropriate to approach these films using the notion of *darshan*, which refers to the Hindu act of worship where the worshiper views and is in turn viewed by the deity. Christopher Pinney (2004) argues that the scope of *darshan* is more than that of vision; he links it to the human sensorium and insight. In terms of cinema, it is often used to denote a way of looking in which the viewer is a devotee who is worshipping the image or the person s/he is looking at. This is different from an idea of gaze that privileges the viewer as some one with the power to turn the person or the image s/he is viewing into an object of the gaze. There is a growing literature around *darshan* and, in the context of commercial Indian cinema, there are many discussions about the significance of the concept of *darshan* in the interaction between the image and the viewer, as well as about the relationship between star and fans (Vasudevan, 2011b).

In my research, I am concerned with the idea of *darshan* from the point of view of Hindu worship. Eck's observation that *darshan* "is not an act which is initiated by the worshipper" (Eck, 1998, p. 6) in the religious sense, and that it is the deity who is envisioned as bestowing the privilege, is significant to my project. The images of

the nuclear reactor that attempt to dazzle the viewers with the might of technology have the qualities of a *darshan* in this sense. Such images need to be seen in the context of the secrecy around the nuclear project, whereby apparently even the Defence Minister is kept in the dark about nuclear tests in the interests of national security (Kaur, 2012). Since the nuclear energy and weapons programme are closely linked (Abraham, 1998), this lack of transparency extends to the working of the nuclear reactors as well. The nuclear revelations that appear in the public domain are very selective. So, the images of the interiors of the nuclear plant as in films like *Clearly Nuclear* and *The Atom-Man's Most Powerful Servant* are rare sightings bestowed on the 'masses'. In my research, the toy plant, which stands in the place of the images of nuclear technology, does not have any of the qualities of a deity that demands worship. In fact, the villager who questions the imposter scientist topples it. The engagement that the toy plant demands is not that of *darshan*, but of *tamasha*.

The key notion that I wanted to destabilise about the state's nuclear narrative was the one of expertise. The whole premise of the nuclear project is based on the notion that the state and state-sanctioned high priests of technology have the absolute knowledge, which allows them to take decisions on behalf of everybody else. As argued earlier, this epistemological violence precedes and informs other acts of violence around the nuclear including police violence and charging of cases against the anti-nuclear protestors. Many of the tactics employed in my film are efforts to move such claims of expertise to the register of *tamasha*. Setting up expert tables with a few props like a plastic globe or name plate was an attempt to provide spaces in which the official figures and their expert opinions could be moved away from other state apparatuses that aid their certainty. When the cabinet minister, nuclear scientist and other state functionaries are removed from the safety of police protection and bureaucratic procedures, it becomes possible for a school boy, a fisher-woman or a daily wage labourer to question them. In the current scenario this can only happen during satirical impersonations; they nevertheless point to the possibility of another world to the participants who perform in the village and their

audience, as well as to the audience of the finished film. In the words of Joel Schechter, such impersonations often create “an alternative to the system or persons it ridicules” (Schechter, 1994, p. 5).

In terms of how the performers engaged with the invitations extended by the filming process, my interactions with them during the various stages of this research made me conclude that the impersonations and the parodic way of engagement allowed the participants to express themselves in a manner that was very different from a traditional documentary interview. Some of the people with whom I conducted interviews during the initial phases of filming also participated in the impersonations during the later stages of the research. While many of the respondents used humour to challenge pro-nuclear narratives during interviews, the sober framework of these factual interviews limited the scope of this humour. On the other hand, satirical impersonations and the possibilities for parody offered by them freed participants from such limitations. This in turn helped them to expand their comic engagement with pro-nuclear expertise in such a way that more people, including the onlookers around them, could partake in viewing such expertise as a *tamasha*.

My understanding of how the parodic way of expression freed up the participants from the more rigid confines of factual interviews was a result of my analysis of how the participants used both ways of engagement differently. During interviews, the responses rarely moved beyond matter of fact answers to the questions put forward. Even those interviewees who used humour did not employ it as the main mode of engagement. However, satirical impersonations resulted in uninhibited exchanges whose core was shaped by comic modes and irony. Here, I would like to stress that instead of a formal questionnaire that asked the participants about how they engaged with the parodic way of expression, I relied on informal conversations as well as the conclusions I arrived at as a practitioner to make sense of how respondents used this way of expression. This approach that refrains from using a

formal questionnaire was also a result of the scepticism with which my research deals with empirical tools of enquiry.

4.5 Use of voice-overs, masks and graphics in the filmic process

A prominent characteristic of most state documentaries on nuclear power is the voice-over that aims to give a scientific and rational elaboration of the nuclear reality. These voice-overs put forward facts that carry no awareness about their construction within institutional settings (Latour & Woolgar, 1986). Such facts claim legitimacy on the grounds of science, rationality, expertise and documentary. The notions of science and documentary that inform these voice-overs are stable categories that can provide the only worthwhile knowledge about the world around us. The science here does not have any post-Kuhnian qualms. The idea of documentary behind these voice-overs has moved from the expository voiceover of *The Atom- Man's Most Powerful Servant* (Pendharkar, 1974) to *Clearly Nuclear* (Rahman, 2012-13), which carries its reflexive acknowledgement of “we”, the filmmakers with perfect suavity. However, this acknowledgement is “mimetic” and not “truly reflexive” (Chapman, 2009, p. 115). The logic of an idea of documentary that can serve as the authoritative account and document of the reality around the nuclear travels without much trouble from *The Atom- Man's Most Powerful Servant* to *Clearly Nuclear*. Most of these voice-overs have what Paromita Vohra calls a “unitary quality” which speaks for “a unitary being who had gathered knowledge and then processed it for our benefit into bite-sized bits” (Vohra, 2011, p. 46). *Nuclear Hallucinations* inflects these voice-overs with comic strategies and irony. It disturbs the fabric of their monologues through hallucinatory accounts that range from the assured reading of First Information Reports filed by the police against the villagers to the ramblings of a supposedly mentally unstable person. Since my research is based on a foundation that looks at the subject as being constituted through various acts and not as a single embodied person, the voice-overs reflect this idea.

A few other devices employed in my research, for example the use of the mask, came from the specific demands of the filming process. One of the issues that I faced while filming was that most men in the village did not want to appear on camera. They were reluctant to be part of a filmic record that would identify them as anti-nuclear protestors. With hundreds of cases filed against the anti-nuclear activists, there was an atmosphere of paranoia in the village. Cases were filed against both men and women; one of the women who appear in the film has been in jail. However, the men of the village feel that they are easy targets for police excesses. This prompted me to provide masks to performers who would like to disguise their identity. Most of the women refused masks.⁴⁷ Many men were ready to participate in the filmed impersonations with a mask on. Apart from disguising their identities, the presence of people with masks in the village opened up space for other connotations. During my stay, many villagers talked about police informers; one of the concerns was that it is often difficult to identify a police informer. Although the masked people impersonated scientists, and this is the role they have in the edited film, I would argue that the masks exceeded this meaning at the filming stage.

The paranoia that existed in the village had a definite impact on the filming process. While the villagers were worried about police informers or the confiscation of their passports, I was also worried about a case against me or the confiscation of my filmed material. Neither the villagers nor I were sure about how much of our fear was justifiable. One of the leaders of the protests used to regularly tell the villagers that power is just about an idea of fear; if the general population lost that fear, the

⁴⁷ Not all men at Idinthakarai who participated in the research process were insistent on hiding their identities. A few women also chose to wear the masks. Within the socio-cultural context of Kudankulam, the arrest of a woman would have caused a bigger public outcry. For example, a young man is an easier target for the police than a middle-aged woman homemaker. When I mentioned the masks, many of the women told me “we are not afraid”. Many young men on the other hand mentioned routine harassment by the police as the reason behind their reluctance to participate in the research process. I accepted all these responses without any further enquiry about the reasons behind them because of my own experience of navigating the stressful atmosphere at Kudankulam. For example, as I have explained elsewhere in this thesis, the police questioned my friend and me while we were filming near Kudankulam and our footage was deleted. This prompted me to be more careful during the later stages of filming.

violent apparatuses of the state would be rendered useless. However, I feel that the filming process and the dramatic performances happened in a context in which people chose to speak in spite of their fear and the filmmaker chose to film despite her fear. Another bigger fear that united all of us - the filmmaker behind the camera and the people who spoke or performed or sang in front of the camera - was the fear of the possibility of a big accident at the plant or the possible harmful effects of ionizing radiation. These paranoias merge in the hallucinatory voice of the supposed mentally ill person in *Nuclear Hallucinations*. The film juxtaposes this voice with photos, songs and prayers from the anti-nuclear movement against the Kudankulam Atomic Power Project. During the circulation stage, I wore a mask⁴⁸ to impersonate the fictitious Scientific Rational Security Intelligence Officials⁴⁹ and surgical masks were handed out to the audience members. This provides a further access point into the culture of fear that prevails around the Indian nuclear project, especially at Kudankulam and surrounding areas.

Apart from the use of masks, another comic device used by *Nuclear Hallucinations* is absurd graphic sections. Elspeth Kydd (2011) acknowledges the use of graphics as evidence in documentary. In India, the use of graphics has been a standard trope in state films about the nuclear issue since at least the 1960s. The graphics sections of these films often have a classroom lecture quality about them. This is relevant because, according to the state narrative, ignorance fuels the opposition against nuclear plants (Basu, 2011). Along with visuals of the technology, these graphics can be viewed as standing in for a fetishized account of science. The graphics that illustrate technological processes are aided by voice-overs, which explain these processes further. Very often, voice-overs of these segments are more boring than the rest of the film. While viewing these films, the graphics segments were a cue for

⁴⁸ At the circulation stage, I wore the masks that were worn by the performers at Idinthakarai.

⁴⁹ The use of the plural term *Scientific Rational Security Intelligence Officials* for my performances was part of the comic manoeuvres of the project. During the performances, I used to address the audience as “we” as if there were a group of “officials” in front of the audience. However, this was clearly not the case.

me to lose interest. The decision to edit graphics together with a nonsensical voice-over was a result of this experience.

4.6 Impediments on the road to tamasha

Not all comic and ironic strategies employed during the filming process were successful. For example, the street performance at JNU in 2015 titled *Rational Radiation Awareness*, which was part of the production phase of the film, did not work out in the way I had anticipated. *Rational Radiation Awareness* was one of the activities in which I collaborated with artists and performers who did not subscribe to the pro-nuclear position. By the time of this performance, I had finished a substantial part of my filming as well as a rough cut of the edited film. So far, the filming was done almost entirely at Idinthakarai village and areas near Kudankulam. Satirical performances and collaboration with performance artist Victoria Nivedita had worked well at Idinthakarai. As I have mentioned earlier in this chapter, at this stage, I felt the need to move the film beyond Idinthakarai and Tamil Nadu. The national capital Delhi, where decisions are made about producing 25 per cent of the electricity requirement by 2050 from nuclear power plants, became the next location for the film. The villagers at Idinthakarai cannot afford to forget the precariousness of living on a tsunami-affected coast near a nuclear power plant, which malfunctions frequently (Sundaram, 2015). On the other hand, concern about nuclear safety is not an important topic of discussion in the national capital.⁵⁰ However, the national media had reported on the protests against the nuclear power complex at Kudankulam, which intensified in 2012 when thousands of villagers from Idinthakarai and regions surrounding the nuclear power complex assembled to demand its closure.

In this context, the idea behind staging *Rational Radiation Awareness* in Delhi was to invite the audience who gathers around it to approach the Indian state's nuclear narrative as a *tamasha*. For this purpose, I collaborated with Mr. Saïam Hasan, who

⁵⁰ For example, during my fieldwork, an anti-nuclear activist in Delhi complained that generally not many people turn up for anti-nuclear protests in Delhi.

does stand-up comedy and performances. Through our discussions, we arrived at a decision to set up a banner, which read “Rational Radiation Awareness”, near a popular teashop at Jawaharlal Nehru University (from hence forth JNU).⁵¹ We hoped that the banner and camera would help to gather a few onlookers; Saiam was to take on the role of a pro-nuclear expert during his interactions with them. Drawing on the non-transparency culture of the Indian nuclear establishment and the expert claims that sometimes borders on the bizarre, we had a tentative plan about the nature of *Rational Radiation Awareness*. We were to hand out surgical masks to the people who gathered. On the whole, the event would be modelled around the various official awareness camps conducted by different government departments. However, the event did not turn out in the way in which we had planned. Initially, the audience who gathered did wear the surgical mask provided by Saiam. But, as he ventured into his absurd lecture about the benefits of nuclear energy, the audience grew uneasy. The interaction that followed soon turned into a serious one. Rather than approaching the pro-nuclear arguments as a *tamasha*, the people who gathered became involved in a serious debate. They argued about the factors that make the ruling dispensations disregard the safety concerns and livelihood issues raised by villagers who live near nuclear power projects.

Though in this research I am focusing on the efficacy of comic modes and irony to destabilise authoritarian knowledge claims in documentary, I am not suggesting in any way that the comic mode or irony is the only way to confront authoritarian assertions around the Indian nuclear project. The debates that were initiated by *Rational Radiation Awareness* did not engage with the nuclear issue from the point of view of *tamasha*. Still, I consider this interaction to have been an important part of my project since it created a space to confront and question the pro-nuclear rhetoric. At the same time, since my specific focus of study is the role of comic modes and irony, I will try to ascertain the reasons behind the inability of *Rational Radiation Awareness* to become a site of *tamasha*. Here, it might be useful to look

⁵¹ One of India’s top universities, JNU is known for its left leaning politics as well as a vibrant culture of discussion and political debate. Though the university is generally seen as a left bastion, right wing Hindutva organisations also have a presence here.

at Jennifer Hay's (2001) arguments about the strategies that support a humorous response. She lists an agreement with the humorous message as a factor that supports humour. While she accepts that humour can be appreciated even without such an agreement, Hay affirms the role of agreement in gaining full support for humour. At Idinthakarai, the onlookers who gathered around and responded to the satirical performances were mostly people who were actively engaged in the anti-nuclear struggle. This resulted in powerful exchanges, which made it into the edited film, as in the case of the interaction with Supreme Scientist in *Nuclear Hallucinations* (time code: 09:45). On the other hand, the audience members at JNU had a diverse range of opinions about the Indian nuclear project. While many of the audience members were sympathetic to the plight of a village that is at the receiving end of the violence of pro-nuclear assertions, not all of them were against the nuclear project per se. There were some members who felt that concerns about villagers and safety are less important than the use of nuclear energy to make India a developed nation. A lack of agreement with the comic message that was being conveyed might have contributed to the audience's refusal to engage with the performance from the viewpoint of *tamasha*. This insight proved to be very valuable at the circulation stage since the edited film aims to reach a very diverse audience. I will enter into the details about this in Chapter 5.

4.7 Irony

One of the concerns I had while moving the state narratives to the realm of *tamasha* was that the sufferings endured by the anti-nuclear protestors, ranging from deaths to imprisonments, police violence and restriction of mobility, should not fall into the same comedic realm. Here, the sense of irony, which, according to Seery (1990), informs both the anti-nuclear movement and the non-violent Gandhian protestors, becomes significant. As I have mentioned in chapter three, my research treats irony as a concept that is different from the comic mode. In Seery's account, when a disabled woman disobeys the warnings of police personnel in full riot gear, she is making an ironic appeal to a larger population. This ironic consciousness is very much evident at Idinthakarai, the centre of the anti-nuclear movement against

Kudankulam Atomic Power Project, where a village opposes the Indian state with all its military capability through non-violent means. For example, during the 700th day of the non-stop protest against the nuclear complex, the villagers “dropped dead” on the streets in a symbolic move (IANS, 2013).

During my stay in the village over a period of many months during the course of two and a half years, I realised that the protestors collectively foresaw a future where their village will be wiped out from the face of earth. In that future, the government will cover up the disappearance through bureaucratic manoeuvres. I have used the assistance of irony to bring this future into being for a larger collective to view. The onlookers are implicated in this future because there is a possibility to stop it from happening. Such a future becomes very plausible if one takes into account the pro-nuclear reality of the present, where radiation is a boon (Goldmine Goldminelt, 2013) and protesting non-violently against the nuclear project, a cause for imprisonment.

The villagers’ fear about their total annihilation is based on the probability of an accident in the Kudankulam nuclear complex due to a natural cause like tsunami or due to technical faults in the plant. My film shares their fear that the pro-nuclear narrative, which is constituted by phantasmic claims and Kafkaesque legal and bureaucratic procedures, will not be troubled by the disappearance of a village. Through irony, the possibility of such a scenario is envisioned. In order to articulate the fear of the village about its imminent disappearance without abandoning *Nuclear Hallucinations*’ documentary claims, my research uses Juan Francisco Salazar’s writing about documentary’s ability “to speculate and anticipate” (Salazar, 2015, p. 45). Using examples of films that present “anticipatory futuring” of ecological change (Salazar, 2015, p. 44), he stresses the possibility of using documentary to provide access to a time when such changes have already taken place.

At the same time, *Nuclear Hallucinations* does not treat the dystopian future it presents as the inevitable end. Instead, the research points to the possibility of reconfiguring the possible and sayable around the Indian nuclear project (Rancière, 2010)

Periodically, she used to go near the roaring sea at Idinthakarai -to dump Rancière.

But, he always returned back undead.

His face pale like the fossils of Greek philosophers,
hands strong like that of French workers who made art.

Then she used to carry him, the Vetala,⁵² on her back.

Maybe, he pretended to know the way out of the maze of ionizing radiation.

4.8 Research process and attempts to imagine a different world

My research is not looking to identify a stable category of devices in documentary that can work against oppressive discourses like the nuclear narrative of the Indian state. As Butler points out, “subversive performances always run the risk of becoming deadening clichés through their repetition” (Butler, 1999, p.xxi).

Creating dissonances within iterations demands an inventiveness that can cope with

⁵² Vetala: The spirit in the Vikramaditya and Vetala stories. The king carries the Vetala on his back. The spirit tells him stories that end with a riddle. Once the king answers the question correctly, the Vetala goes back and hangs from a tree and the king has to fetch him back. The spirit tells 25 stories in this manner (Das, 2005).

the assimilation of the subversive devices into the accepted order of things. There is nothing essentially subversive about satirical impersonations or hallucinatory voice-overs. They have the potential to create destabilisations within the state narrative about its nuclear project only because they are not considered as worthwhile tropes by that narrative at present. Once they become part of the order of iteration, there will be a need to look for other devices to create destabilisations within such iterations.

By attempting to move the state's nuclear narrative into the realm of *tamasha*, my research aims to explore the possibility of circumventing the dilemma of how to critique modern science's dominant philosophy by using its own language and criteria (Nandy, 1988). This attempt is not about just challenging the dictates of the rational. It is also informed by a philosophy of the comic as in Zen, which does not imagine the human as the centre of the universe and accepts the suchness of the world around and the "relativity of all things and all truths and especially of our own position" (Hyers, 1974, p. 117). As Hyers points out, this framework, which is based on a principle of non-self, goes against the Cartesian idea of the self and it questions subject-object dualities and sees absurdity and laughter in the reluctance of things to obey the neat categories of order we design for them. Viewed through this lens, claims of scientific expertise and rationales about a neat trajectory of progress, from a temporal or geographical past and present to the future, lose their legitimacy and turn into fanciful gibberish. If we combine this with an outlook that refuses to identify the human as a category that is separate from the rest of the universe, the project of the nuclear which, even without any catastrophe or weapons manufacturing, will leave waste that will pollute the earth for millions of years, becomes grossly unethical. Moving the claims of the pro-nuclear narrative onto the plane of *tamasha* by using this framework could make it possible to imagine another world wherein the grand schemes of ecological suicide devised through the logic of rationality and progress will have to be resisted and the greedy consumption behind them will need to be ridiculed. In that world, it will not be possible to construct the reality of a nuclear project that peacefully co-exists with nature and provides

unlimited energy, because the tropes of reiteration as well as the content proposed by them would have lost their legitimacy.

4.9 Summary

This chapter has provided details about the steps and processes that I have employed at the production stage of *Nuclear Hallucinations* to destabilise the certainty of the Indian state's nuclear narrative by moving it onto the realm of *tamasha*. The interconnected nature of the different stages of research enabled me to rework my comic and ironic strategies based on the insights from the success or failure of particular attempts. The constituents of the pro-nuclear reality were identified and their inappropriate iteration was achieved through satirical impersonations, use of masks, hallucinatory voice-overs, irony as well as inversion of tropes of actuality and performances. Insights from street theatre and performance art were also used to move the pro-nuclear arguments to the domain of *tamasha*.

The research treats film as a process that goes beyond the limits of the edited film. The project attempts to conjure up a different world where the pro-nuclear assertions will lose their ability to inflict violence. As I have indicated in this chapter, Butler's (1999) idea of performativity and Rancière's (2010) notion of dissensus guided this attempt. In the next chapter, I will examine the circulation phase of the research as well as the way in which *Nuclear Hallucinations* relates to the audience who gathered around its processes.

Chapter 5

Sites of *tamasha*: circulation and live performances

"So, what is the end of the story? Did comic modes destabilise authoritarian knowledge claims?"

You are forgetting irony

"Ok, ok. Add irony too. So, what was the result?"

She is in academic hell. To escape, she needs a bailout from the 'audience'.

"So, didn't the audience die with the author?"

5.1 Introduction

The question of audience and reception in documentary is bound to result in debates about the "impact" of documentary films. Whiteman has criticised a "distribution centered model" that assesses the impact of a political documentary by virtue of its mass reach and possible effects on individual audience members (Whiteman, 2009, p. 458). *Nuclear Hallucinations* does not concern itself with the possibility of eliciting such a tangible impact. Instead it is informed by Rancière's proposition that "The images of art do not supply weapons for battles. They help sketch new configurations of what can be seen, what can be said and what can be thought and, consequently, a new landscape of the possible. But they do so on condition that

their meaning or effect is not anticipated.” (Rancière, 2009, p. 103). In the framework of my research, the vantage point of *tamasha* aims to engender such new possibilities vis-à-vis the permissible articulations around the Indian nuclear project. How does this framework relate to the audience members who gather around the processes of *Nuclear Hallucinations*?

The destabilisations that my research aspires to achieve are closely linked with audience responses. The ways in which the audience members choose to respond to the invitation to approach the assertions of the pro-nuclear documentaries as a *tamasha* can offer insights about the potential of comic modes and irony to undermine authoritarian knowledge claims in documentary. Before entering into a discussion about how audience members engaged with *Nuclear Hallucinations* at its various stages, I would like to stress that my approach to the question of audience emerges from a practitioner’s point of view.

The debate about whether there is an audience who wait to be studied (Hughes, 2011) by competent researchers with questionnaires and other tools is bound to remain an open one. As Hughes points out, “The unstructured group that we refer to as a media audience is continuously being constituted, dissolved, and reconstituted with each media experience” (Hughes, 2011, p. 293). In the Indian context, S.V.Srinivas (2001) has provided an analysis of the ethnographic work on film and television audiences.⁵³ Though there are diverse methods, ranging from surveys and experiments to ethnography, that aim to measure or contextualise audience responses, I have relied on the access I had as a practitioner to inputs from diverse groups of audience members at the production as well as circulation stages. As a result, instead of conducting interviews or surveys to gauge audience responses, I decided to adopt an interactive approach whereby the reactions of audience members influence the course of *Nuclear Hallucinations*. In my research, this interactive approach works in three major ways. The first is the way in which

⁵³ A more recent work is *House full: Indian Cinema and the Active Audience* (Srinivas, 2016) which deals with the audience of fiction films in theatre contexts.

changes were made in the edited version of the film after inputs from audience members who attended the fine cut screenings of *Nuclear Hallucinations*. Details about these screenings and their influence on the research process are elaborated in the next section of this chapter. The second main interactive component of the research consists of the reconfiguration of the live performances at the circulation phase based on audience feedback from earlier screenings. Later in this chapter I will provide a detailed account of these live performances. The other significant interactive element of the project is how responses of the live audience to the performances at the production stage influenced the later phases of the filmic process. Chapter 4 of this thesis has provided a detailed example of this through the case of the performance *Rational Radiation Awareness*. Now, I will explain about the concept of interactive that informs this project.

5.2 Interactive approach and the register of *tamasha*

While shaping the comic and ironic strategies that aimed to destabilise the expert pro-nuclear claims, I have tried to employ an interactive approach.⁵⁴ Kate Nash (2014) has talked about the shift in documentary spectatorship when a host of factual forms that use platforms ranging from mobiles phones to ITV extend an invitation to the audience to engage in ways which are not limited to being mere spectators. While whether the audience members were ever “merely spectators” (Nash, 2014, p. 50) is a point of contention, I find the dictionary definition of interactivity that Nash mentions useful: “In everyday usage interactivity denotes ‘reciprocity’, a process between agents in which they act and ‘have an effect on each other’ (Oxford dictionary online)” (Nash, 2014, p. 50). Nash also cautions that interactivity does not necessarily translate into an empowerment of the viewer.

In terms of my research, an interactive relationship with the audience that values reciprocity became crucial because, in a *tamasha*, the onlooker is also a participant. As a result, *tamasha* demands an engagement that is very different from the

⁵⁴ I am using the term ‘interactive’ in a very specific way, as detailed in this section. Kapur & Sharma (2016) provide a broader contextualisation of interactive documentary practices in India.

aesthetic of boredom, which characterised much of the state efforts to impart knowledge about the nuclear project. To ensure better audience responses, the edited film was finalised after a range of screenings in Delhi, Bangalore, London and Idinthakarai, where viewers watched a fine cut of *Nuclear Hallucinations*. Except at Idinthakarai, these screenings had accompanying live performances. The inputs I received from these screenings were used to arrive at the finished film.

During these screenings I realised that different sections of the audience responded differently to particular comic and ironic strategies. Writings about the ability of humour to build group cohesion as well as to exclude certain members (Attardo, 2002) became useful to me at this point. As a result, I became aware of the importance of being receptive to the different ways in which the audience members engaged with the invitation to approach the pro-nuclear experts' claims as a *tamasha*. Thus, the processes of the film were shaped by interactions with the audience members whereby their responses (both verbal and non-verbal) influenced these processes in a manner not unlike the way in which such processes aimed to influence the audience.

After a total of 10 screenings spread across London, Delhi, Bangalore and Idinthakarai, I arrived at my final decisions about the form of the finished film. The inputs from audience members prompted me to drop three minutes of the edited film as well as to make changes to the colour grading and sound design of the film. Arriving at these decisions was not easy because the suggestions from different audience members at diverse screenings were not necessarily similar. For example, some of them felt that certain parts of the film, like the use of clock wipes and a few bites of Saiam as the Minister of Security, lacked sophistication. On the other hand, a larger section of the audience found these parts humorous; as a result, I decided to keep them in the final edited version of the film. Observations about several false endings in the film prompted me to cut three minutes from the initial fine cut.

These interactions were not limited to the edited film. The performances that were part of the film screenings also evolved in relation to audience responses. In these performances, I appeared with a white mask and spoke as ‘Scientific Rational Security Intelligence Officials’. A documentation of selected performances is submitted with this thesis as an appendix. As part of these performances, audience members were provided with surgical masks to cover their mouths. They were warned about the mental instability of the director and the risk of contracting unofficial opinions about nuclear energy through the atoms emanating from the film.

5.3 Live performances

In terms of practice, forms ranging from expanded cinema to live cinema extend viewing experiences that are not completely tied to the screen. However, the main reference point for the live performances in my research is the public awareness campaign on nuclear energy undertaken by Vigyan Prasar in collaboration with NPCIL. This campaign combines the production and screening of pro-nuclear documentaries with workshops, quiz competitions and similar activities. The Vigyan Prasar website catalogues the workshops it has conducted to inform the public about the benefits of nuclear power (Vigyan Prasar, n.d.). The report on one such workshop conducted for students of mass communication at Guru Govind Singh Indraprastha University in Delhi (‘Report_Media_Workshop_Delhi.pdf’, n.d.) provides an account of interactive lectures by nuclear experts, screenings of documentaries including *Clearly Nuclear* and slogan writing contests for students. All of these activities endeavour to drive home the point about the necessity of the nuclear option. Here documentary works in conjunction with face-to-face communication to narrate pro-nuclear knowledge. This mode of circulation of Vigyan Prasar films is similar to the way in which many independent Indian documentaries place themselves as part of discussions, gatherings and other formations around their topic of concern.

Nuclear Hallucinations appropriates the expert lectures and other activities that are part of the Public Awareness Campaign on Nuclear Energy to create viewing situations that strive to undermine the logic of pro-nuclear reality. The live performances that were part of the screening of *Nuclear Hallucinations* were formulated according to the specificities of different screening situations.



Figure 1: A still from my performance at University of Westminster, London
Photo Courtesy: Sue Goldschmidt

In London, I began the performances before the screening of the film with an acknowledgement about the services rendered by the *Trident Nuclear War Escalation Unit*. Similarly, the performances that were part of the Indian screenings mentioned the expertise of ancient Indian sages in nuclear technology to highlight the ultranationalist Hindutva undercurrents within the pro-nuclear narrative in India.

Unlike the edited film that I finalised after the inputs from these ten screenings, the performances are open to reconfiguration depending on the responses from audience members. For example, initially there was only one performance during each screening and this was done before the film was shown. However, during an interaction after the Bangalore screening, one of the audience members pointed out that he had worn the surgical mask throughout the screening of the film and was expecting a follow up which did not happen. Based on this input, for later screenings I developed post film performances. Drawing from the street theatre practice of collecting an audience instead of waiting for one, the performances were also used to gather an audience for the screenings at some venues. For example, the screening in Delhi at Jawaharlal Nehru University in 2016 was not a well-organised one. Towards the beginning of the screening, it became clear that the audience turn out would be very low. This prompted me to wear the mask and costume that I use for comic performances that accompany the film, and to walk through the university handing out notices about the screening of *Nuclear Hallucinations*. Apart from details about the film screening, the notice also mentioned the presence of Scientific Rational Security Intelligence Officials who would address the audience. During post film discussions, I realised that this effort managed to gather at least a few additional audience members to the screening.

The context of circulation in which *Nuclear Hallucinations* situates itself also influenced the formation of live performances. These performances aim to bring the satirical impersonations and other comic and ironic strategies employed in the film off the screen and into the midst of audience members. The circulation sites of independent documentary films in India range from video rallies which travel with films (Battaglia, 2014) to film festivals. The possibilities offered by such non-broadcast and non-theatrical screening situations for live performances made it easier for me to combine screening of the edited film with live performances.

The main aim of the live performances was to create sites that could offer the audience multiple points of entry to approach the pro-nuclear state assertions as a

tamasha. There was another major factor that prompted me to use these performances. It was the possibility offered by them to situate the filmic construction of the pro-nuclear reality along with the other constituents of that reality including expert speeches as well as reports from intelligence agencies about the anti-national dimension of the protests against nuclear energy (TNN, 2014).

In my research, the live performances are not in any way meant to point to the limitations of the film text. As I have clarified before, my research approaches films as important constituents in an interconnected web of material things and ideas that bring into being different realities. For the live performances, I referenced the confrontational approaches from the repertoire of performance art to interlink them with filmic sections that strive to implicate the viewer. The borrowings from performance art which catalyse the performances that were part of the production and circulation phases of *Nuclear Hallucinations* were informed by the insight that, in the Indian context, performance art practices and theorisations around them need to be aware of the embedded nature of performance in Indian everyday life (Ratnam, 2014).

One more element was built into these performances. This was the precariousness of screening a film which did not go through the censorship process to purge official qualms about the possible seductions the film might pose to the viewer that might prompt him/her to enter the supposedly seditious world of anti-nuclear activism. Questioning the pro-nuclear assertions and circumventing the censorship process could leave one vulnerable to becoming a target of different kinds of violence. The research endeavours to approach such a possibility through the lens of *tamasha* rather than fear.

In order to elicit a response of *tamasha*, the diverse phases of *Nuclear Hallucinations* were structured in a manner whereby they influenced the course of each other. In chapter 4, I have provided an example for this using the case of the performance *Rational Radiation Awareness* that I staged in collaboration with

performer Saiam Hasan. An analysis of the inability of this performance at the production phase to evoke a response from the realm of *tamasha* helped me in the conceptualization of the satirical performances at the circulation stage. In the following section, I will explain about the interaction between various phases of *Nuclear Hallucinations*.

5.4 Lessons from production phase

In Chapter 4, I reached the conclusion that the audience's diverse opinions about the Indian nuclear project might have contributed to the failure of *Rational Radiation Awareness* to become a site of *tamasha*. This was an important realisation and I used this understanding to arrive at certain decisions about the performances at the circulation stage.

Nancy Bell's (2015) observations about the importance of setting up a humorous frame or key were helpful in arriving at some of such decisions. She uses Bateson (1972) and Goffmans's (1974) ideas on frame and Gumperz's (1982) writing on cues to specify the need for a humorous frame or key. According to her, "An utterance is either framed as playful or serious. If done successfully, the speaker will have selected appropriate contextualization cues to signal the frame and the hearer will have been able to recognize the cues as the speaker intended." (Bell, 2015, p. 53). She also stresses the slippery nature of such cues and frames and the diverse ways in which the audience might respond to them.

While acknowledging the flexible nature of humorous frames and cues, I also became aware of their importance in situating an event or utterance as comic or ironic. I felt that stronger cues about the humorous frame could help to influence the audience to become more predisposed to engage with the pro-nuclear rhetoric as *tamasha*. So, as mentioned before, apart from the use of surgical masks which were provided to audience members, at the circulation stage I also decided to use a mask to cover my face. The mask is also part of the edited film and apart from its association with the film, I felt that it would also serve as a distinct cue to approach

the situation as a comic one. During *Rational Radiation Awareness*, though Saiam's speech was clearly absurd and the masks that were provided to the audience members signalled a humorous frame, there were some elements that could have belonged to a more serious frame, such as an awareness camp about nuclear energy. For example, Saiam was dressed in a manner that did not signal any difference from an expert who might conduct a similar awareness camp. While the fluidity present in the possibility of this being read as an actual expert talk was very much part of our intention when we put together this performance, I realised from the result that such an approach may not be the most appropriate one for the performances at the circulation stage. So, apart from the mask, I also decided to use a more theatrical way of speaking and to avoid engaging with the audience members in "normal" conversations. In the performances at the circulation stage, I made sure that someone who was part of the organisation holding the screening introduced me as 'Scientific Rational Security Intelligence Officials' and I spoke as "we". All these were meant to serve as cues to frame the performance as a comic one. On the whole, these cues worked at the circulation stage; the audience members did not respond to the performances within a serious frame.

Rational Radiation Awareness also helped me to decide whether to collaborate with a performer at the circulation stage. While I had a very good experience of working with Saiam, there were times when I felt restricted by my position behind the camera during the course of the proceedings. As the event was a live one where we did not have the scope to interact with each other apart from exchanging a few words, it was totally up to the performer to lead the course of the audience interaction. Saiam did this remarkably well. As soon as he realised that the audience was not ready to engage in a comic or ironic mode, he shifted his approach to suit the specific situation.

But, I realised that, at the circulation stage, where I was looking for a very specific way of engaging which correlates with the invitation extended in the film to approach the pro-nuclear rhetoric as a *tamasha*, I might need to have greater

flexibility to influence the course of interactions. This resulted in the decision to do the performances myself instead collaborating with a performer.

Thus, the various phases of *Nuclear Hallucinations* work together to create comic interventions within the documentary discourse about the Indian nuclear project. In what way do such interventions attempt to achieve the destabilisations that they aim for? This question is closely tied to the way the project positions itself in relation to its audience.

5.5 Relation with audience

Though I have stressed earlier that the film is not meant only for an audience which has strong anti-nuclear views, it is equally important to clarify that *Nuclear Hallucinations* is not intended to persuade those who have strong pro-nuclear convictions to adopt an anti-nuclear stance. In terms of the intended outcomes of the film, I am more interested in offering an invitation to view the pro-nuclear rhetoric as a *tamasha*. Diverse audience members who encounter the edited film and the processes of the film might respond to this invitation or not. My focus is on creating sites of *tamasha* in a way in which a range of people can engage with the film. At the same time, I am doing this with the realization that not all invitations to view a discourse as *tamasha* are taken up by the invitees because different people's responses will depend on a range of factors including their belief systems and social or political situations.

Thus, my research does not follow an approach that directly links cause with effect. At the same time, it acknowledges the relevance of small media.

The role played by songs, public speeches, notices, video recordings, web pages, as well as documentary films, in the history of the anti-nuclear movement at Kudankulam from the 1980s onwards has been a point of reference for the processes of *Nuclear Hallucinations*. In a personal interview, a 33-year-old woman from Idinthakarai, who actively participates in anti-nuclear protests, told me about how, in her childhood, a handful of anti-nuclear activists used to go around villages,

singing songs against the nuclear project (Personal Interview, 2014). I would argue that the 2012 protests, when several thousand people gathered to demand the closure of Kudankulam Atomic Power Project following the Fukushima nuclear disaster, were a formation which came into being through decade-long articulations that included documentary films, posters, protest songs as well as the readiness of bodies to face the violence of the Indian nuclear project's power/knowledge.

Through live performances as well as the edited film, my research situates itself in solidarity with such anti-nuclear formations through the prospects offered by the vantage point of *tamasha*. While it is possible to draw clear-cut distinctions between mediated and live audiences, in my work, live performances and filmed material have a fluid relationship. Here, Auslander's (2011) argument that the distinction between live and mediatized experiences should be viewed according to particular situations and not as an essential opposition becomes relevant. In the case of *Nuclear Hallucinations*, the live performances are closely linked to the possibilities offered by an approach that acknowledges the relevance of small media.

My approach closely follows the traditions of "political documentary practice in India" which have a "symbiotic relationship with social movements and campaigns" (Jayasankar & Monteiro, 2016, p. 39). However, these traditions have multiple trajectories and it is important to clarify the approach used by my research. With regard to the issue of censorship vis-à-vis controversial topics, one approach is to have highly visible contestations by filing cases, as in the case of the films of Anand Patwardhan (Ghosh, 2011). Many other documentary makers do not apply for a censor certificate and opt for non-theatrical screenings.⁵⁵ However, the recent example of right wing vandalism at a screening of the documentary *Muzaffarnagar Baki Hai* (Sawhney, 2015) about the anti-Muslim riot at Muzaffarnagar provides yet another example of "extra-legal forms of censorship" (Kaur & Mazzarella, 2012, p.

⁵⁵ However, this strategy can also lead to complications because of the ambiguities about the legal definition of public screenings (Jayasankar & Monteiro, 2016).

5).⁵⁶ This led to India-wide protest screenings of the film: the facebook event page for these screenings, hosted by Cinema of Resistance, begins with the line “You stop us at one place, we spring up everywhere!” (Cinema of Resistance, 2015).

Such very public confrontations with the legal as well as extra-legal efforts at censorship are not the only way in which independent documentary filmmakers deal with the problems posed by censorship. For example, during a university screening of her film on enforced disappearances in Kashmir, *Khoon Di Barav -Blood Leaves Its Trail* (2015), Iffat Fatima mentioned that her strategy was to position the film as a small one and not to draw too much publicity to it (Fatima, 2016). This did not prevent her from travelling extensively with the film and showing it widely in India through activist as well as university networks. I have tried to follow this approach of not actively soliciting maximum publicity for the film. Here, once again, I would like to draw parallels with the encounter my colleague and I had with police while we were filming near Kudankulam. The police personnel were very insistent on knowing whether there were any men with us. Being read as naïve women on a student project and hence not important enough to be perceived as a threat enabled us to get away. My argument is that, in a similar manner, practices of documentary films like *Khoon Di Barav* that circumvent censorship rely on being read as relatively insignificant; *Nuclear Hallucinations* follows this approach.

At the same time, not soliciting the maximum possible visibility for the film at the circulation stage does not mean that I am not interested in gathering an audience for it. A conversation with K C Santhosh Kumar, a veteran worker in the field of documentary and a close associate of documentary filmmaker Saratchandran, was very influential in shaping my approach towards audience. He mentioned that showing the film around was as important as making it. In his collaboration with Saratchandran, the latter paid more attention to the making of the film while he concentrated on the circulation part (Private Conversation, 2014). Based on this

⁵⁶ Sawhney did not apply for a censor certificate for the film and the screening was at an educational institution.

input, I have tried to gather an audience around the film using diverse strategies, including those from street theatre. The audience of the edited film ranges from students at UK universities who have never heard about Kudankulam to the villagers at Idinthakarai who appear in the film. Monterio and Jayasankar (2016) have written about the practice of political documentary filmmaking in India that interlinks production, circulation and activism. Forming a community of viewers around films through networks that are comprised of people's movements, civil society organizations and educational spaces has been a prevailing practice in the independent documentary landscape in India. The processes of *Nuclear Hallucinations*, including its circulation, are informed by this landscape.

As a practitioner, my approach is also a result of an engagement with the experiences of other filmmakers who work within the context of political documentaries in India. For example, Shohini Ghosh has written about the realisation she and many of her fellow documentary makers had that "films could very rarely change people's mind as easily as we had imagined" (Ghosh, 2006, p. 341). This observation was a useful reference point in my research. So while *Nuclear Hallucinations* aims to initiate a mode of engagement where the different activities that were part of the project would provide a context in which diverse individuals who encountered them could look at the state's nuclear rhetoric as a *tamasha*, this was done without any grand ambitions to change hearts and minds.

Though my research is not based on an approach which prioritises measurable impacts (Nichols, 2016), I understand that there could be arguments for the benefits of a kind of film that seeks wider audience engagement through broadcast and theatrical avenues. But, my work emerges from restrictions that include funding constraints as well as censorship regulations. Unfortunately, *Nuclear Hallucinations* cannot be that film which shuts down the Kudankulam Atomic Power Project with the help of humour and irony. At the same time, the success of the right wing Hindutva mobilisations which used videos as one of the constituent elements to

stage the credibility of the Hindu nationalist agenda (Brosius, 2005) points to the importance of contexts that lies beyond broadcast or theatrical networks.

In terms of audience response, a sizeable section of the audience⁵⁷ reacted well to the proposition to approach the pro-nuclear arguments as a *tamasha*. At the same time, I noticed that for audience members who held strong pro-nuclear opinions, the film and the performances did not make any difference. For example, at the JNU screening, as part of the post-film performance, Scientific Rational Security Intelligence officials invited an audience member to step forward as the filmmaker Fathima Nizaruddin to answer questions. In the discussion after the performance, this person said that while he found the film engaging, the state's nuclear project was important for the country's development.

I received different kinds of responses to the ironic outlook of *Nuclear Hallucinations*. The film presents an account of a future where the village of Idinthakarai has disappeared following a nuclear disaster. Such a filmic depiction is part of an attempt to prevent that future. This position is influenced by the Gandhian non-violent resistance that would “present a proposition in favour of the dignity of individual life by offering individual death as a foil”. (Seery, 1990, p. 324). As Seery stresses, such an ironic outlook is directed at the sceptic as well as supporters. In the case of *Nuclear Hallucinations*, during post-film interactions many audience members said that they could relate to its ironic position. At the same time, I also received criticisms that this approach, which does not rely on testimony or the evidential possibilities of image, underplays the sufferings endured by the protestors. In fact, at a screening in Delhi, one person asked me, “where is the reality of their sufferings?” (Audience member, AJK MCRC Screening, 2016). I understand that my preoccupation with the need to unpack the ‘real’ in documentary discourses may not resonate well with all audience members. Nevertheless, *Nuclear Hallucinations* attempts to be receptive to diverse audience positions.

⁵⁷ Here I am talking about the audience for the live performances as well as the screenings of the edited film where I was present. The film also has had screenings without my presence; such screenings are done without the accompanying performances.

5.6 Summary

In this chapter, I have attempted to provide an overview of the ways in which my research interacts with the audience at the sites of circulation of the edited film. Using an approach that looks at film as a process and not a product, the edited film and the performances around it evolved through inputs from the viewers at the stages of both production and circulation. This chapter also explains the interactive approach followed by the research and its relevance in forming sites of tamasha. Strategies from street theatre and performance art played a prominent role in developing such sites around the viewing contexts of the film. The significance of the live performances and their relation to the edited film has also been explained. The concluding chapter of this thesis will outline the findings from the research process about the possibilities offered by comic modes and irony to destabilise authoritarian knowledge claims in documentaries.

Chapter 6

Conclusion

Conclusions are like identity cards.

The police, paramilitary, PhD board...you pull it out before every suspicious glance, to prove your credentials.

This piece of paper; my allegiance to every rule.

Faithful, obedient citizen of fear.

6.1 Introduction

Earlier chapters of this thesis have outlined the various stages in my enquiry into the possibilities offered by comic modes and irony to create trouble within the processes of knowledge production in the pro-nuclear documentaries of Films Division and Vigyan Prasara. This chapter will provide a brief summary of my earlier arguments. It will also delineate the specific insights that emerged from my practice-based enquiry as well as the limitations of my work.

The first step in the research process was an examination of the authoritarian knowledge claims in the pro-nuclear documentaries produced by Films Division and Vigyan Prasara. The iterative practices employed by such films were studied to evaluate their role in the formulation of pro-nuclear assertions. This study was done

within a framework that linked the epistemic aspect of documentary with the historical factors, which authorised it as a valid site for knowledge production.

As indicated in the earlier chapters of this thesis, my research treats documentary assertions as performative claims. This approach does not find it fruitful to define documentary in any essential way. Instead, it focuses on the motivations behind the naming of a particular work as documentary by its producers or the networks in which it operates. The way in which *Nuclear Hallucinations* employs comic modes and irony is shaped by such an approach to the documentary form.

The enquiry in this project was not centred on finding definite answers to the subversive potential of comic and ironic strategies in all documentaries in all contexts. One of the main formulations my research produced was a specific conceptualisation of *tamasha*. Through satirical impersonations, hallucinatory voice-overs, comic appropriation of pro-nuclear graphics and other such tactics, *Nuclear Hallucinations* extends an invitation to the audience to approach the power/knowledge of pro-nuclear assertions as a *tamasha*. This invitation draws from the varied meanings of *tamasha* in South Asia to situate the production of peaceful and beneficial nuclear reactors in Films Division and Vigyan Prasara documentaries as a joke, spectacle or farce.

6.2 Research outcomes

Future researchers will be able to build on the notion of *tamasha* that was developed during the course of my research. Such future attempts that aim to subvert authoritarian knowledge claims in documentary could benefit from the specific insights gained during the course of my project as well as the difficulties faced by it.

One of the main realisations that I had during the course of the making of *Nuclear Hallucinations* was the importance of what Bell (2015) refers to as a humorous frame or key. The failure, at the production stage, of the JNU performance *Rational Radiation Awareness* to be read as *tamasha* led me to the writings of Nancy Bell on failed humour. This made me experiment with providing clear cues about the

humorous frame at the circulation stage. As a result, unlike during *Rational Radiation Awareness*, the audience members at the circulation stage did not respond from within a serious frame.

Another observation from the production phase was that comic strategies worked better with an audience who largely agreed with each other and the standpoint from which the comic message emerges. For example, the audience members who gathered around the satirical impersonations at Idinthakarai were sympathetic to the anti-nuclear viewpoint behind such impersonations. It was not difficult to elicit a response of *tamasha* from the audience at these events and this could be a result of their agreement with the humorous message (Hay, 2001). On the other hand, the diverse spectrums of opinions about the Indian nuclear project amongst the audience members at JNU during the staging of *Rational Radiation Awareness* could have contributed to the failure of that performance to become a site of *tamasha*. These insights from the production stage influenced the editing and circulation of *Nuclear Hallucinations*.

The audience responses at the circulation stage indicated that the decision to pay attention to the way the screenings were framed - as comic - were largely successful. At the same time, audience members who held strong pro-nuclear views were not affected by the film and the accompanying performances. As I have indicated earlier in this thesis, *Nuclear Hallucinations* is not part of an attempt to convert those who have a strong pro-nuclear position towards an anti-nuclear perspective. I am interested in offering the vantage point of *tamasha* to approach the authoritarian knowledge claims of pro-nuclear documentaries. Though I have tried to make it possible for a large section of the audience to engage with the film as *tamasha*, such attempts were also informed by the realisation that not every one would take up the proposition to approach the pro-nuclear assertions from the viewpoint of *tamasha*. My work is situated in a context in which opposing the pro-nuclear knowledge claims can result in serious consequences. In this scenario, the fluidity of the perspective of *tamasha* offers audience members the opportunity to

meet the apparent certainty of pro-nuclear arguments with irreverence rather than fear.

Another main outcome from my research is the use of street theatre practices as part of an attempt to use comic modes and irony to undermine the authoritarian knowledge claims of pro-nuclear documentaries. Such practices also helped to gather audience members around the processes initiated by the film. The way in which easily available materials are used in street theatre to solicit comic engagement guided the different stages of *Nuclear Hallucinations*. This helped to turn the financial and logistical constraints of the project into sources of humour. Based on this experience, I would argue that the use of similar strategies from street theatre could benefit films that prioritise the use of humour in their attempts to question authoritarian knowledge assertions in the field of documentary.

The use of satirical impersonations instead of traditional documentary interviews in my research also led to observations that could be relevant to other works of a similar nature. During the course of the making of *Nuclear Hallucinations*, I realised that the satirical impersonations worked only when I had a closer camaraderie with the performers. Gathering sound bites using standard interviewing techniques was easy even when the people I approached for such interviews were more or less strangers. But, when it came to satirical impersonations, the need for a more sustained relationship with the performers became evident. The anti-nuclear activists whom I approached in Delhi were more comfortable with giving traditional interviews and they did not agree to do satirical impersonations. On the other hand, at Idinthakarai, a closer association with the performers and the onlookers who gathered to watch the performances made it easier for me to stage satirical impersonations.

In terms of the practices that emerged from my research, the live performances at the screening stage of *Nuclear Hallucinations* are of particular relevance. They were a result of my attempts to place the knowledge claims of state documentaries within the wider context of expert claims, police violence and other elements that

constitute the pro-nuclear reality. The comic strategies that were employed in these performances were influenced by the responses to the satirical impersonations at the filming stage. Apart from the small media practices of independent Indian documentaries, these live performances were also influenced by the activities of Vigyan Prasar, which links the screening of its pro-nuclear documentaries with quiz competitions, workshops and suchlike on the topic of the clean and green nature of the Indian nuclear project. The responses I received for these performances indicate that they were useful to set up the register of *tamasha*. This strategy of combining film screenings with live performances might be of relevance to other projects with similar motives.

The idea of dissensus (Rancière, 2010) is central to the way in which my research attempts to achieve its aim of undermining the knowledge production of the pro-nuclear documentaries of Films Division and Vigyan Prasar. The permissible assertions around the Indian nuclear project can be viewed as “a distribution of the sensible” (Rancière, 2009, p. 12), in which the only arguments that count are those that can display their scientific credentials. The attempts by both pro-nuclear and anti-nuclear documentaries to gather the authority of science for their knowledge claims can be viewed as a part of this configuration. In the face of the ‘certainty’ of the knowledge that the state asserts, the ‘ignorant’ villagers who oppose the nuclear power complex at Kudankulam become a worthy target of violence. In this scenario, my call to approach such knowledge claims about the benign nature of the Indian nuclear project as a *tamasha* can create “scenes of dissensus” to “crack open the unity of the given and the obviousness of the visible, in order to sketch a new topography of the possible” (Rancière, 2009, p. 49). Herein lies the potential to disturb the authoritarian knowledge claims of documentary with the help of comic modes and irony. This is not the only way in which humour and irony can be employed to resist power/knowledge assertions that make use of the documentary form. I am putting forward the configurations and practices that emerged from my enquiry.

Paul Ward (2005) stresses the importance of the role of viewers in the interplay between comic modes and documentary. He points out that the onus of recognising and interpreting comic material that mocks or mimics is on the viewer. Apart from recognising and interpreting the use of the comic mode in documentary, my research also invites the viewers to utilize the comic mode to approach the authoritarian pronouncements of expertise in the documentary form as a *tamasha*. The vantage point of *tamasha* offers the possibility of forming a community of viewers who refuse to acknowledge the authority of such pronouncements. This in turn can contribute to a dislodging of the position of authoritarian documentary assertions from the networks of violence such as the one around the Indian state's nuclear project.

I understand that, at this point, I cannot avoid the question of how far the register of *tamasha* was successful in its attempts to create disruptions within the authoritarian knowledge claims of pro-nuclear documentaries. In response to such questions, I would like to stress that while talking about dissensus, Rancière does not put forward a cause and effect model that focuses on direct impact. From the responses I received from audience members I would argue that once someone engages with the invitation to approach the knowledge claims of the pro-nuclear films as a *tamasha*, it is possible to ridicule the networks of power/knowledge around such films. This irreverent attitude may not bring immediate tangible changes. But the new configurations sketched by this process have the possibility of destabilising the grounds of authority from which films ranging from *The Atom-Man's Most Powerful Servant* to *Clearly Nuclear* speak.

The potential of *tamasha* also has a broader scope. During the course of this project, I was directly confronted by the apparatuses of violence around the Indian nuclear project. During such encounters, the spirit of *tamasha* helped me to continue with this project despite my fear about the possible consequences. It has helped me to face the policemen who, at the production stage, ordered the filmed material to be erased, as well as the precariousness of screening *Nuclear Hallucinations* in India without a censor certificate. Similarly, the uneasiness I have about the approved

codes for doing a PhD and the power/knowledge of academia was also encountered with the help of the perspective of *tamasha*.

The comic and ironic strategies that were used by my project in its efforts to engender avenues of dissensus were informed by similar strategies to those employed by anti-nuclear films ranging from *War and Peace* (Patwardhan, 2002), *Radiation Stories Part2: Kalpakkam* (R.P, 2012) and *America America* (Sasi, 2005). While *Nuclear Hallucinations* places itself in solidarity with such films, it also offers a fresh vantage point of *tamasha* as theorised in this thesis. The interactive way in which the register of *tamasha* was produced, and the use of the live performances at the circulation stage, are other important contributions of this research to the practices that resist the certainty of pro-nuclear knowledge claims. Though the project uses the context of India, the processes and findings from it can be modified to suit other situations. Mapping the limitations of my research can contribute to future studies on the topic.

6.3 Limitations of the research and pointers for future work

During the course of this research, I realised that the conceptualisation of *tamasha* that it employed has certain limitations. In my work, both comic modes and irony are used to create sites of *tamasha*. But, the way in which irony is defined and used in the project resulted in mixed responses. As I have explained earlier, this research uses Seery's (1990) configuration of irony that treats it as a mode distinct from the comic in order to respect the sufferings faced by the protestors who oppose the Kudankulam Atomic Power Project. However, at least some of the audience members at the circulation stage of the edited film told me that an ironic positioning of observational material from the protests came in the way of the testimonial potential of such images. For me, this raised questions about whether irony needs to be employed differently so that it can problematize the iterative practices that lend the authority of testimony to images in a more comprehensive manner. Further research will be able to develop different ways of working with irony so that it has the potential to encourage more viewers to adopt the vantage point of *tamasha* vis-

à-vis authoritarian knowledge claims in documentary. However, efforts in this direction will need to be aware that the decision as to whether or not to adopt the viewpoint of *tamasha* remains a prerogative of the audience members.

Another aspect of this research that needs further exploration is the role of the audience in engaging with authoritarian knowledge claims in documentary as a *tamasha*. In this study, my focus was on creating sites of *tamasha*. Audience interaction was an important factor that determined the comic and ironic strategies that were employed in this endeavour. However, my experiences with making changes to the edited film following audience feedback suggest that this part of the research needs broader investigation. Ideally, I would have liked to continue re-editing the film after responses from each screening, in a similar way in which the live performances were reconfigured depending on audience reactions. However, this was not possible within the limitations of this PhD due to financial as well as time constraints. This forced me to reach a final version of the edited film after a certain number of screenings.

Similarly, while street theatre has been a major influence in shaping my research, I was not able to concentrate on the links that could be formed between folk humour traditions and the register of *tamasha*. In *Nuclear Hallucinations*, the Dalit poet Raj Kumar sings satirical songs (time code 35:24), which urge the viewers to call the anti-nuclear protestors terrorists. During our interactions he did talk at length about the folk influences in his work. Another form that shaped the processes of the film, especially the staging of the satirical impersonations at Idinthakarai, was Tamil film comedy. During such impersonations, both the performers and onlookers occasionally referred to comic actors in Tamil cinema and the specific comic scenes enacted by them. Examining these various influences and working with them could enrich the comic practices that can create sites of *tamasha*. My training in street theatre helped me to blend documentary techniques with strategies from street theatre. However, I do not have prior training in folk forms and this prevented me from following up the potential of folk humour in this project. In future, I would

like to collaborate with folk artists in a similar manner in which I worked with performance artist Victoria Nivedita or performer Saiam Hasan in this work.

Further research can also build on the live satirical performances at the circulation stage. Lack of resources prompted me to use minimal props during these performances. Doing more elaborate performances at the circulation stage, similar to the public art performance done by Victoria Nivedita at Idnithakarai and *Rational Radiation Awareness*, which was a result of my collaboration with Saiam Hasan, might help to create new practices at the circulation stage that have the potential to subvert authoritarian knowledge claims in documentaries. The live performances that were part of *Nuclear Hallucination's* circulation were done before and after the screening of the film. Using strategies from expanded cinema can help to form live performances that are more integrated with the screening. The use of multiple screens and live performances that happen during the course of the screening of the film are some of the possibilities.

In this work, I have concentrated on the output of Films Division and Vigyan Prasar. However, as I have clarified in chapter two, they do not operate in a vacuum. Further research can provide details about the role of other state media institutions in the formation of the pro-nuclear knowledge claims. In my research, I was able to note the similarities between the assertions about the Indian nuclear project in the state films and the accounts of certain sections of corporate news channels. The use of multiple screens and comic appropriation of news lingo in *Nuclear Hallucinations* were a result of this observation. An expanded study into the continuities between state and corporate media narratives about the nuclear project could provide a more comprehensive picture of the networks that contribute to the formation of the pro-nuclear reality. Such a study would also benefit from an analysis of the expert statements, political performances and state violence that are part of such networks.

My work adds to the limited academic writing on the role of comic modes and irony in documentary. The disruptive potential of humour and irony in the documentary

form requires further exploration. A transnational study that looks at diverse documentary traditions would be a much-needed addition to ascertain the scope and limitations of comic modes and irony in challenging authoritarian knowledge claims in documentaries. Such a study would be particularly significant because of the arguments about the relevance of cultural contexts in the reception of humour (Francis, 1994). During the course of my research, I have observed that while certain comic segments and performances worked well with specific audiences, there were other sections that resonated with a broader range of viewers. For example, the audiences at the screenings in such diverse locations as London, Berlin, Warsaw, Delhi, Bangalore and Idinthakarai were able to find the same sections in the film humorous. A more focused transnational study would be able to delineate the diverse factors that influence the reception of humour in the documentary form across various cultural contexts.

6.4 Summary

In this chapter, I have provided a brief account of the various stages of the research and the specific insights that emerged at each stage. The importance of the humorous frame or key (Bell, 2015) was one such insight from the processes of *Nuclear Hallucinations*. Another significant observation from the staging of satirical impersonations was the role played by a closer relationship between the filmmaker and performer to facilitate such impersonations. I have explained how the way in which the notion of *tamasha* is developed and employed in my research can be seen as a contribution to knowledge. The practice of combining the screening of the film with live performances that use humour and irony is another contribution of the project. The use of strategies from street theatre was also a significant output from this research. As I have argued in this thesis, Rancière's (2009) idea of dissensus can be used to understand the destabilisations that my research seeks to achieve through the use of comic modes and irony. I have also explained the limitations of my study and the scope for further research.

Within the landscape of critical independent documentary work from India (Jayasankar & Monteiro, 2016), the configurations formed by the vantage point of

tamasha offers new ways to use comic modes and irony to resist the networks of power that assist the formation of authoritarian knowledge claims. Further work will be able to develop the notion of *tamasha* further and to ascertain how this notion works in diverse transnational contexts. Future research will also help to determine the role of folk humour in forming sites of *tamasha*. Thus, the outlook of *tamasha* developed in this research remains open to further reformulations so that it can provide new ways to problematize the authority of rationalist documentary discourses.

Neatly defined endings.

Will camera please stand up and pixelate everything?

.....

Your words, your corridors of power, your rules.

Was she fishing? For what? A three lettered title? Mediocre
festival glories?

.....

Will books come to face the bullets? Will films sit on the
road with a bleeding head? Will the tenured revolutionary
hobbyists wipe away the blast of tear gas shells from skin?

.....

end, end, end, end, end, end, end, end, end, end,

'pna 'pna 'pna 'pna 'pna 'pna 'pna 'pna 'pna 'pna

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